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| In the Matter of | ) |
| :--- | :--- |
|  | ) |
| ADJUSTMENT OF RATES AND TERMS FOR | ) |
| PREEXISTING SUBSCRIPTION SERVICES | ) |
| AND SATELLITE DIGITAL AUDIO RADIO |  |
| SERVICES |  |

TESTIMONY OF

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## I. INTRODUCTION

My name is Yoram Wind. I am the Lauder Professor and Professor of Marketing at The Wharton School at the University of Pennsylvania, where since 1967 I have taught courses on marketing, marketing research, consumer behavior, and other related topics. I have held visiting professorships at the University of Tokyo, Erasmus University in the Netherlands, and the University of New South Wales, among other institutions. I have served as editor-in-chief of the Journal of Marketing, a leading journal in the field, and I have been on the editorial board of every major marketing journal. I received my Ph.D in Marketing from Stanford University in 1967.

I am the author of 21 books and over 250 papers in the field of marketing, including 111 on measuring consumer preference and marketing research. I have lectured widely on these topics, and I have acted as a consultant to nearly 100 major corporations, including Marriott, Bristol Meyers Squibb, Citibank, IBM, Pepsi, and Pfizer. I have designed and analyzed hundreds of marketing surveys. I have served as an expert witness on marketing survey issues in dozens of cases, including on behalf of AT\&T, Avis, Colgate-Palmolive, GlaxoSmithKline, Miramax Films, and others. A copy of my curriculum vitae is attached as Appendix A.

I was retained by SoundExchange, Inc. ("SoundExchange") to conduct a survey to examine the value that subscribers and potential subscribers to satellite radio place on the various types of programming and the non-programming features of satellite radio. As I explain in detail below, I designed the double-blind survey, oversaw its administration, and analyzed the results. 428 randomly selected individuals - either current subscribers to XM Satellite Radio ("XM") or Sirius Satellite Radio ("Sirius"), or individuals considering subscribing within 30 days - were asked a series of questions pertaining to how they valued satellite radio's music programming, as
well as other features of the service. The survey employed several different approaches to measure the relative value of music and other types of programming and non-programming features, but the results of each approach were remarkably consistent in showing that music programming is, by a substantial margin, the single attribute of satellite radio that current and prospective listeners consider most valuable, and is the most important reason they subscribed and have retained their subscription to satellite radio.

## II. SUMMARY OF SURVEY RESULTS

The survey results provide strong evidence that consumers value satellite radio music programming far more than other programming formats (e.g., talk, news, and sports) and satellite radio's non-programming attributes (e.g., lack of commercials, nationwide coverage or price).

According to every measure of value in the survey, music generally proved to be two to five times as valuable as any other programming offering or feature of satellite radio. Put simply, in the eyes of satellite radio subscribers and potential subscribers, music is the foundation of the service. The following are some of the key findings of the survey. ${ }^{1}$

- Cancellation. Almost half of all respondents (43 percent) said they would cancel their service (or would not subscribe in the first place) if satellite radio lacked music. That is triple the number of respondents who would cancel if any other type of programming were unavailable. (Figures 6-7).
- Willingness to pay. If music were not available, respondents on average would only be willing to pay $\$ 6.15$ for satellite service. That is, looking at all respondents, including those who would change (or cancel) and those who would pay full price, the average respondent would only pay $\$ 6.15$ for a service without music. Respondents would be willing to pay substantially more for a service that lacked talk (\$9.99), sports (\$9.99), or news programming (\$10.14) (Figure 8).
- General Draw. When asked to name the top reason that caused them to subscribe (or consider subscribing), respondents cited music more than any other programming type or price, coverage, or commercial-free, and more than three

[^0]times as often as any other programming type. (Figure 11).

- Programming Draw. Similarly, when asked to name the type of satellite radio programming that was most critical in causing them to subscribe (or consider subscribing), respondents cited music as their top choice 53 percent of the time, or more than five times as often as any other programming type. (Figures 12-13).
- Retention. When asked to name the type of programming that was most critical to their decision to continue to subscribe, music received more than four times the responses of any other type of programming. (Figures 14-15).
- Most Missed Aspect. When asked to name the aspect of satellite radio that they would miss most if the service were unavailable, music again received more than four times the responses of any other type of programming. (Figures 16-17).
- Importance. When asked to allocate 100 points among the seven different programming types in amounts that reflected their relative importance to their decision to subscribe (a constant sum methodology), respondents gave more than three times as many points to music as they did to any other type of content. On average, music received 44 points, while no other programming content received more than 13 points. Moreover, music was the top choice for 74 percent of respondents, and no other type of content was the top choice for more than 17 percent of respondents. (Figures 18-20).
- Usage. When asked to recall the percentage of time they spent listening to satellite radio programming types in a given week, respondents reported that they spent nearly half their time ( 49 percent) listening to music. No other programming type received more than 12 percent. (Figures 21-23).
- Value. Even when music was compared to non-programming features (such as price and number of commercials) in addition to other types of programming, respondents still found it at least twice as valuable as any other attribute of the service. And nearly half of all respondents cited it as the most valuable attribute, a number three times greater than the next highest attribute. (Figures 24-26).
- Choice. When asked to compare two satellite radio services - one identical to the current service, and one that was identical but lacked music programming, respondents rated the service with music nearly three times as high as the service without music. More than half of all respondents rated the service without music a " 0 " on a scale 0 to 10 in terms of their willingness to purchase it. (Figure 27).

In sum, all the data strongly point in the same direction: music clearly predominates as
the single most important attribute of satellite radio. Whether measured by draw, value, usage,
or any other means, music consistently outpaced all other satellite radio programming types and non-programming features by a large margin.

Figure 1 on the following page summarizes the extent to which music outpaces the next highest programming type for each of the key measures of value in the survey. ${ }^{2}$ Figure 1 expresses music's dominance in terms of the multiple by which it exceeded the next best programming choice for the question. For example, 3.1 times as many respondents would cancel their subscription if satellite radio contained no music programming, as compared to the next most popular programming types for that question, sports and talk/entertainment. And 4.1 times as many people cited music as the top reason why they have continued to subscribe as compared to the next highest programming type, talk/entertainment. Averaging these multiples together reveals that overall music performed 3.5 times better than the next best type of programming.

[^1]Figure 1. Multiple By Which Music Exceeds The Next Best Programming Type ${ }^{3}$


The survey reveals three other important results that further confirm music's importance.

- The Value of Music and Commercial-Free Music Programming. The survey results show that music is far more important to the consumer than commercial free programming. The conjoint analysis, which I describe below, shows that consumers value music more than twice as much as having no commercials. (Figure 24-25). This result is consistent with the answers provided to the openended questions on draw, retention, and aspect missed most in which music was cited far more often than commercial-free programming as a reason for
${ }^{3}$ For "willingness to pay," a lower price indicates a higher importance (i.e., it shows that a respondent would be wiling to pay less if a particular programming type were absent.). The multiple here therefore represents the degree to which the next lowest priced programming type exceeded the price respondents were willing to pay for the service without music. Similarly, "choice" measures the degree to which respondents would choose the current service over the current service without music, and thus rates music's value against all three other programming types.
subscribing (or considering subscribing). (Figures 9, 11, 12, 14, 16, 28).
- Recorded Content. It is my understanding that in addition to the programming on music channels, the sound performance rights for the vast majority of the recorded content on comedy and kids channels are owned by SoundExchange's members, and are subject to the compulsory license rate to be set in this proceeding. When these additional forms of Recorded Content ${ }^{4}$ are combined with music, they constitute an even larger share of the content valued by consumers. (Figures 29-30).
- Music v. Talk and Entertainment. Entertainers like Howard Stern and Oprah Winfrey have struck highly publicized and lucrative deals with satellite radio companies. Presumably, the high payments they have commanded on the market indicate the value of their programming to consumers. The survey results reveal, however, that consumers value music programming two, three, four, or even five times as much as talk and entertainment programming. This suggests that the market value of music rights is substantially higher than the market value of the talk and entertainment programming rights. (Figures 31-32).


## III. SURVEY DESIGN AND METHODOLOGY

## A. The Survey Objectives

The primary objective of this survey was to determine the value of satellite radio music programming to subscribers and potential subscribers to XM and Sirius. A secondary objective was to determine music programming's value relative to talk and entertainment programming.

## B. The Survey Design

As discussed in detail below, this survey is a double-blind consumer research study that uses a series of interrelated questions of different types (open-ended, constant sum, behavioral, and conjoint analysis) to accomplish the survey objectives. By assessing the value of music in multiple ways, we can obtain a more robust measure of its value than any one method could provide alone. The survey reports the results of 428 subscribers and those considering subscribing to XM or Sirius within 30 days.

[^2]
## C. The Survey Respondents

The universe for this survey is comprised of adults, 18 years of age or older, who currently subscribe to either the XM or Sirius satellite radio service, or who are considering subscribing in the next 30 days. Only respondents who indicated that they make or take part in making the decision to subscribe to satellite radio for their household were included in the universe. And only subscribers to a satellite radio service (as opposed to XM and Sirius's services over satellite television or the Internet) were included.

The survey was conducted using a mall-intercept method, which is a common method of obtaining survey data in the business world, and is recognized as valid. E.g., Diamond, Reference Guide on Survey Research, in Federal Judicial Center Reference Manual on Scientific Evidence (4th ed. 2002) 238, 239 n. 52 (citing statistic that " $95 \%$ of the in-person interview studies done in 1985 took place in malls or shopping centers."); Arlene Fink, The Survey Handbook 41 (2003). In accordance with standard survey practice, 24 markets (six from each of the four census areas) were randomly selected. Those markets are listed in Figure 2 below.

Figure 2. Survey Locations

| EAST | CENTRAL | SOUTH | WEST |
| :--- | :--- | :--- | :--- |
| Springfield, MA | Eau Claire, WI | Houston, TX | Seattle, WA |
| White Plains, NY | Indianapolis, IN | Raleigh, NC | Los Angeles, CA |
| Waterbury, CT | Chicago, IL | Atlanta, GA | San Francisco, CA |
| Yorktown Heights, <br> NY | St. Louis, MO | Memphis, TN | Denver, CO |
| Philadelphia, PA | Detroit, MI | Tallahassee, FL | Portland, OR |
| Baltimore, MD | Minneapolis, MN | Tulsa, OK | Las Vegas, NV |

In each of these markets, a mall with an interviewing facility was randomly selected. Potential survey respondents were then selected as randomly as possible from all parts of the mall. Half of all interviews were conducted on weekends and in the evenings to ensure the inclusion of working respondents. This methodology is the best approach for ensuring the generalizability of mall-intercept surveys and has been the methodology I have used in all my mall-intercept studies.

Potential respondents were initially screened to meet census age/sex quotas, i.e., to make sure that the pool of potential respondents was representative of the U.S. population as a whole. This pool of respondents was further screened to meet the universe definition, including whether they subscribe or intend to subscribe to XM or Sirius, and the regular security requirements (not working for an advertising agency or marketing research firm, etc.). A copy of the screening questionnaire and a summary of the screening results are attached as Appendix B.

Those respondents who qualified based on the screening questionnaire were invited to participate in the main survey. Respondents who accepted were taken to a separate interviewing facility within the mall so that they could complete the survey without distractions. Respondents were paid $\$ 10$ if they completed the entire survey. Such incentive payments are common for mall-intercept surveys and, given the double-blind nature of the survey, have no impact on the results of the survey.

Responses to the survey were obtained from 428 individuals, 307 of whom currently subscribe to a satellite radio service, ${ }^{5}$ and 121 of whom are considering subscribing to a satellite radio service within the next 30 days (the "considering subscribers"). 4,301 potential respondents were contacted. Of that number, 517 people qualified by meeting the universe

[^3]definition and the screening requirements. ${ }^{6}$ Of the 517 who qualified, 428 agreed to complete the survey, yielding a response rate of 83 percent, which is extremely high.

## D. The Survey Questionnaire

I designed this survey and wrote the survey questionnaire. The survey was designed to determine in an objective and valid way the value that respondents placed on satellite radio's music offerings. To this end, each respondent was asked a series of interrelated open-ended and closed-ended questions about his or her attitude and behavior with respect to the programming and the non-programming features of satellite radio. Respondents were also asked a series of questions that required them to trade off various programming and non-programming features of satellite radio, which permits us to employ a method known as "conjoint analysis." Lastly, the survey employed certain controls intended to determine whether respondents were answering without guessing or choosing answers at random. The survey questionnaire is attached as Appendix C.

## 1. The Open-Ended, Constant Sum, and Behavioral Questions

The questions designed to test the respondents' evaluations of and behaviors with respect to programming and non-programming features covered the following topics:

1. The reasons why respondents chose to subscribe to satellite radio (or consider subscribing). [Question 1]
2. The types of programming that were most critical to respondents' decisions to subscribe (or consider subscribing). [Question 2]
3. The types of programming that were the most critical to respondents' decisions to continue to subscribe. [Question 3]
4. What respondents would miss the most if satellite radio were not available. [Question 11]

[^4]5. Whether respondents would pay less than the full subscription fee, or even cancel their satellite radio subscription, if a particular type of programming were not available. [Question 9]
6. The relative importance of each satellite radio programming type as measured on a constant sum scale. [Question 4]
7. In a typical week, the percentage of time respondents listen to each programming type as measured on a constant sum scale. [Question 8]

The first four topics used open-ended questions - that is, questions to which the respondent supplies a narrative response. In each case, the respondent's answer to the question was recorded verbatim, and the respondent was then asked if he or she had anything else to add. Those verbatim answers then were content-analyzed and coded by an experienced coder who was not aware of the purpose of the study or its sponsor, which I then reviewed and approved for presentation here without modification. These questions provide critical information because they reveal, in the respondents' own words and without any framing or prompting by the interviewer, what the respondents value most about satellite radio. See generally Diamond, Reference Guide on Survey Research, in Federal Judicial Center Reference Manual on Scientific Evidence at 246 (discussing value of open-ended questions).

The fifth topic (what respondents would be willing to pay if satellite radio lacked certain types of programming) employed a two-part question. Respondents were first asked if the absence of one type of programming (e.g., music, news, sports, or talk and programming) would affect the amount he or she would pay for satellite radio. Respondents who responded in the affirmative were then asked how much they would be willing to pay if satellite radio lacked that type of programming. The same question was then repeated for the three other types of programming that are advertised most heavily by XM and Sirius. (As with all questions in the survey, the order of the programming types was rotated to ensure that the order did not influence
the results). These questions provide a useful measure of consumer value because they require the respondent to quantify the extent to which his or her own willingness to pay would be affected by the absence of each programming type.

The final two topics used questions that asked the respondent to allocate 100 points among specified options, a "constant sum" methodology. In question 4, each respondent was asked to allocate 100 points among seven categories of programming broadcast on satellite radio - music, news, sports, kids, comedy, talk and entertainment, and local news and weather programming - based on the importance to the respondent of each type of programming. In question 7, each respondent allocated 100 points among the seven types of programming, based on the percentage of satellite radio time the respondent spent listening to each type in a typical week. For example, an answer to question 4 might look like the table shown below in Figure 3.

Figure 3. Illustrative Answer To Constant Sum Question

| Programming type | Points |
| :--- | :---: |
| Comedy | 15 |
| Kids | 18 |
| Local Weather and Traffic | 10 |
| Music | 40 |
| News | 2 |
| Sports | 0 |
| Talk and Entertainment | 15 |
| Total | 100 |

These types of questions are known as "constant sum" questions because they require the respondent to allocate a fixed number of points across two or more options. The questions are a common survey tool that excels at showing how a respondent values options relative to each other beyond a mere ranking. Pamela Alreck \& Robert Settle, The Survey Research Handbook 137-38 (3d ed. 2004). Constant sum questions have been a fixture of the surveys presented in prior Copyright Royalty Tribunal and Copyright Arbitration Royalty Panel proceedings. For example, in CARP proceedings to distribute royalties among owners of various types of
television programming, cable system operators were asked to allocate 100 points among seven types of programming categories (movies, sports, etc.) in accordance with the value they placed on each for drawing customers and advertisers, and the CARP used the results of that constant sum survey to determine the relative marketplace value of the programming being studied. See Distribution of 1998 and 1999 Cable Royalty Funds, 69 Fed. Reg. 3606, 3608-09, 3617-18 (Jan. 26,2004 ) (describing and affirming decision of Copyright Arbitration Royalty Panel to primarily rely on constant sum survey data in determining the value of programming); Program Suppliers v. Library of Congress, 405 F.3d 395, 401-402 (D.C. Cir. 2005) (approving the Librarian's decision).

## 2. The Conjoint Analysis

In addition to the questions described above, respondents were also asked a series of tradeoff questions that formed the basis of the conjoint analysis.

Conjoint analysis is a sophisticated methodology that is used to determine how consumers value various attributes of a given product. Put simply, conjoint is a method that lets us separate out the various features of a product to see how the consumer values each feature against the others. Consumers are shown a series of examples of a product, each of which varies in some way, which allows us to determine which combination of a limited number of factors is valued most highly. For example, I have used conjoint analysis on behalf of the Marriott Corporation to help design the multi-billion dollar "Courtyard by Marriott" chain of hotels. Respondents were shown a series of descriptions of hypothetical hotels (e.g., one with larger rooms but fewer amenities and a given price, one with smaller rooms but more amenities at the same price, one with larger rooms and more amenities at a higher price, etc.). By seeing how the people rated the hypothetical choices, we could determine the relative value the respondents
placed on each attribute of the hotel (room size, amenities, staff size, price, etc.). This allowed us to design an optimal hotel based on people's choices.

As the above example suggests, conjoint analysis is a fixture in the commercial world. Thousands of conjoint studies have been administered in the 35 years since the technique was first introduced to marketing. Conjoint analysis underlies innumerable corporate decisions regarding product design, pricing, positioning, and segmentation decisions where millions and even billions of dollars are at stake. For example, conjoint analysis was used by AT\&T to design its first cellular phone, by FedEx to design their tracking services, and by the Port Authority of New York to design the EZ-Pass system. Conjoint analysis is also extremely well-established in the academic world. It is one of the most studied research methods in marketing, with hundreds of research papers having been written on the subject. I myself have written numerous papers on the subject, as well as co-authored two books, Multi-Attribute Decisions in Marketing: A Measurement Approach, which was the first book on conjoint analysis and marketing, and more recently an e-book, Adventures in Conjoint Analysis: A Practitioners Guide to Trade-Off Modeling and Applications. I discuss conjoint methodology in Appendix H.

The conjoint analysis used here drew upon the respondents' answers to a number of the survey questions, all of which in some fashion required respondents to assess the relative value of different types of programming and non-programming features of satellite radio. The "constant sum" questions discussed above - Questions 4 and 7 - were used in the conjoint analysis, as were Questions 5 and 6, which asked respondents to evaluate, on a scale of 1 to 10 , the desirability of different amounts of four types of programming (for example, for music, same, more, less, none), the desirability of different levels of non-programming features (for
example, for geographical coverage, typical FM coverage or complete nationwide coverage), and different levels of price.

Finally, respondents were asked to consider a series of cards with hypothetical "satellite radio offerings," and to rate on a scale of 0 to 10 their likelihood of buying each hypothetical offering. Each card contained a specific level of each of the seven different factors: ${ }^{7}$ four programming factors (the quantities of music, sports, news, and entertainment programming), ${ }^{8}$ and three non-programming factors (the geographic coverage provided, the number of commercials per hour of music programming, and the price). A given card would list each of the seven factors at a specific level. In other words, each of the cards described a hypothetical satellite radio service that offered a different constellation of features and price (for example, less music, but more talk, and a lower price), and respondents were asked to rate from 0 to 10 the likelihood they would purchase each offering. Figure 4 below presents the various factors and levels, and Figure 5 reproduces a sample conjoint card. The complete set of conjoint stimuli cards is included in Appendix D, and the master design is included in Appendix H.

[^5]
## Figure 4. Factors \& Levels for the Conjoint Analysis Task

A. Music Programming

1. No music programming
2. Substantially fewer channels and less variety of music than currently offered
3. The same number of channels and the same variety of music as currently offered
4. Substantially more channels and more variety of music than currently offered
B. News
5. No news programming
6. Substantially fewer channels and less variety of news than currently offered
7. The same number of channels and the same variety of news as currently offered
8. Substantially more channels and more variety of news than currently offered
C. Sports
9. No sports programming
10. Substantially fewer channels and less variety of sports than currently offered
11. The same number of channels and the same variety of sports as currently offered
12. Substantially more channels and more variety of sports than currently offered
D. Talk \& Entertainment
13. No talk and entertainment programming
14. Substantially fewer channels and less sports variety than currently offered
15. The same number of channels and the same talk and entertainment variety as currently offered
16. Substantially more channels and more talk and entertainment variety than currently offered
E. The Number of Minutes Of Commercials Per Hour on Music Channels
17. No commercials on music channels
18. $\mathbf{2}$ minutes of commercials per hour
19. 5 minutes of commercials per hour
20. $\mathbf{1 2}$ minutes of commercials per hour
F. Geographic Coverage
21. Typical FM coverage

2 Complete Nationwide Coverage
G. The Monthly Price for a Single Subscription

1. $\quad \$ 8.95$ per month
2. $\$ 10.95$ per month
3. $\$ 12.95$ per month
4. $\$ 14.95$ per month

## Figure 5. Example of Conjoint Analysis Stimulus Card

| Types of Programming | Amount of Programming Available: | Other Features |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Music <br> Programming: | The SAME number of channels and SAME variety of music as currently offered | Number of Minutes Per Hour Of Commercials On Music Channels: |  |  | No commercials |  |  |
| News <br> Programming: | Substantially LESS channels and LESS variety of news than currently offered | Cov |  |  |  | I | overage |
| Sports <br> Programming: | Substantially SAME channels and SAME variety of sports than currently offered | Monthly Price For A Single Subscription: |  |  |  | \$14.95 per month |  |
| Talk and Entertainment: | Substantially MORE channels and MORE variety of talk and entertainment than currently offered |  |  |  |  |  |  |
|  | Definitely Would Not Buy |  |  |  | Definitely Would Buy |  |  |
| Rating | $\begin{array}{llllll}0 & 1 & 2 & 3 & 4\end{array}$ | 5 | 6 | 7 | 8 | 9 | 10 |

Given that we have six different factors offered at four different levels, and a seventh factor offered at two levels, the number of potential combinations of these factors and levels exceeds 8,000 . We cannot realistically expect to show survey respondents 8,192 different cards with 8,192 different combinations of factors and levels. Therefore, I selected a subset of 64 of these potential combinations, using a statistical method known as fractional factorial design. This design allows me to estimate the importance of each level of each factor - the full set of 8,192 cases - even though the respondents have not seen all potential combinations. In addition, I broke the set of 64 combinations into 8 blocks of 8 cards each, so that each respondent saw only one of the blocks of 8 cards. Respondents also saw a ninth card that represented the current offerings of XM/Sirius, and a tenth card with the same offerings but without music. The
responses to the last two cards provided not only "controls" for the conjoint tasks but also an additional measure of the importance of music based on a comparison of the respondent's assessment of the current satellite radio offering versus that same offering without music.

## 3. The Controls

The survey employed five different controls to ensure the validity of the results, and to ensure that respondents were not given any clues to which answers were desirable. Diamond, Reference Guide on Survey Research, in Federal Judicial Center Reference Manual on Scientific Evidence at 249-52. First, the survey was administered, and its answers coded, in a double-blind process: neither the interviewers nor the respondents knew of the purpose of the survey or who commissioned it. Second, the open-ended questions, which were the first questions in the survey, were asked without any reference to music, again preventing the respondent from determining what answers were desirable. Third, the conjoint analysis always required the respondent to consider multiple attributes, and not just music by itself, which again ensured that the respondent could not simply give a high ranking to music (or any other attribute).

Fourth, as noted above one of the conjoint stimulus cards shown to each respondent reflected satellite radio's current offerings, and another reflected the current offerings without music. While the response to these two cards provided an independent measure of the value of music, they also served as control cards. That is because the responses to these two cards were not used in estimating the output of the conjoint analysis. Thus, one can predict the rating of the two control cards based on the conjoint results and compare these two predictions to the actual ratings of the two control cards that the respondent gave. For a discussion of this validation procedure and outcomes, see Appendix H. Fifth, the breadth of the range of questions asked
about music's value acts as a control. Multiple measures of value provide an opportunity to assess the convergence validity of the results.

## E. Data Collection

The respondents in this survey were interviewed between October 11 and October 17, 2006. The 72 interviewers and their 24 supervisors were trained by Data Development Worldwide ("DDW"). ${ }^{9}$ The survey was conducted on a double-blind basis; none of the interviewers and respondents was aware of the purpose of the survey or its sponsor. The interviewers were not given any information regarding the nature of the study. Moreover, all interviewers were trained to avoid presenting any bias in the administration of the survey. A copy of the field instructions given to the interviewers and supervisors is included as Appendix E.

The survey data were collected using Computer Assisted Personal Interviewing, which allows the responses to the questions to be directly input into a computer. Using this computer methodology ensures that the potential responses presented to respondents in the closed-ended questions were rotated in a random fashion, and also ensures that the survey questionnaires are filled out in their entirety with no questions skipped, and with each constant sum response totaling 100 points. Some questions - those that were open-ended - were asked orally by interviewers, with oral responses from the respondents recorded verbatim by the interviewers. After responding to the first set of open-ended questions, respondents were given the option to

[^6]enter their responses into the computer themselves, or to have the interviewer enter the responses. 61 percent of the respondents chose to enter the responses themselves.

## F. The Pre-Test

Before the survey was conducted, DDW conducted a pretest to determine whether survey respondents understood the questions or experienced any difficulty completing the survey. See Diamond, Reference Guide on Survey Research, in Federal Judicial Center Reference Manual on Scientific Evidence 243. During the pretest, which took place between September 29 and October 2, 2006, DDW administered the survey questionnaire in eight malls ${ }^{10}$ within the four census areas to 55 respondents ( 33 current subscribers and 22 considering subscribers). The pretest respondents were selected in precisely the same way that final survey respondents were. Except as noted below, the respondents had no difficulty completing the tasks, and therefore the answers were included in the final results.

During the pretest, three of the respondents who were considering subscribing experienced apparent difficulty with Question 9. Those three respondents each answered that they would be willing to pay more than the current subscription price if a certain type of programming currently offered by XM and Sirius became unavailable. Because I did not know if these answers reflected an accurate understanding of the question, I excluded these respondents from the final survey, removed the words "including price" from the question, and added questions 9(c) and 9(d) to the final survey questionnaire. (The pretest questionnaire is included in Appendix I).

[^7]The results from the pretest and the debriefing of the interviewers and supervisors indicated that all other questions were clear and unambiguous, and no changes were made to those questions as a result of the pretest.

## G. Verification

The survey results were verified by AVC Research, an independent marketing research firm located in New Jersey. Verification was conducted by telephone. A minimum of two attempts were made to contact each of the respondents. Had any significant problem been uncovered, verification of 100 percent of the interviews done by that interviewer would have been attempted. The Verification Questionnaire and Recording Form are attached as Appendix F.

In total, 54 percent of the respondents have been verified. This procedure is more rigorous and extensive than the industry standard of 20 percent verification. There were no problems found during the verification process.

## H. Analysis

Prior to any actual analysis, the questionnaires were reviewed to confirm that the interviewers administered the interview properly and the respondents understood the questions. Following this step, the analysis included a coding and examination of the open-ended responses, a tabulation of the results from both open and closed-ended questions, a statistical analysis reported in Appendix G, and an analysis of the conjoint data, which is reported in Appendix H .

The statistical analysis and the conjoint analysis were conducted under my supervision by Professor Abba Krieger, Chairman of the Statistics Department at Wharton, using the conjoint analysis software that he and Professor Paul Green developed.

## IV. MAIN RESULTS REGARDING THE VALUE OF MUSIC

This survey employed multiple measures of the value that consumers place on satellite radio's music offerings. Every single one of those measures shows that music is by far the most valuable programming type of satellite radio, generally by a two-fold, three-fold, or even fivefold order of magnitude. I will discuss the survey results in detail. Because the results are not substantially different when they are broken out by current subscribers versus considering subscribers, or XM subscribers versus Sirius subscribers, I do not discuss those subresults in the text. Tables containing that information can be found in Appendices J and K.

## A. Cancellation and Willingness to Pay (Question 9)

This question asked respondents if the absence of various types of programming (music, news, sports, and talk and entertainment) would affect their willingness to pay for satellite radio and, if so, by what amount. Nearly half of all respondents said they would cancel their service if music were not available. As Figures 6 and 7 on the following pages show, this is more than triple the percentage of any other programming type.

Figure 6. Effect On Willingness To Cancel If A Specific Programming Type Was Not Available (Q9)*

|  | No Music | No News | No Sports | No Talk and Entertainment |
| :---: | :---: | :---: | :---: | :---: |
|  | ( $\mathrm{n}=428$ ) | ( $\mathrm{n}=428$ ) | ( $\mathrm{n}=428$ ) | ( $\mathrm{n}=428$ ) |
|  | \% | \% | \% | \% |
| Would change amount willing to pay ${ }^{11}$ | $\begin{gathered} 61 \\ (55.58-65.15)^{12} \end{gathered}$ | $\begin{gathered} 39 \\ (34.63-43.88) \end{gathered}$ | $\begin{gathered} 37 \\ (32.80-41.97) \end{gathered}$ | $\begin{gathered} \hline 38 \\ (33.71-42.92) \end{gathered}$ |
| Would Cancel | $\begin{gathered} 43 \\ (37.84-47.21) \end{gathered}$ | $\begin{gathered} 13 \\ (10.10-16.54) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (11.15-17.82) \end{gathered}$ | $\begin{gathered} 14 \\ (11.15-17.82) \end{gathered}$ |
| Would reduce price | $\begin{gathered} 16 \\ (13.06-20.11) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (18.92-26.88) \end{gathered}$ | $\begin{gathered} 20 \\ (16.30-23.89) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (17.17-24.89) \\ \hline \end{gathered}$ |
| Would not change amount willing to pay | $\begin{gathered} 33 \\ (28.49-37.40) \end{gathered}$ | $\begin{gathered} 46 \\ (41.07-50.51) \end{gathered}$ | $\begin{gathered} 50 \\ (45.26-54.74) \end{gathered}$ | $\begin{gathered} 50 \\ (45.03-54.50) \end{gathered}$ |
| Don't know if would change amount willing to pay | $\begin{gathered} 6 \\ (2.09-10.99) \end{gathered}$ | $\begin{gathered} 15 \\ (10.23-19.67) \end{gathered}$ | $\begin{gathered} 13 \\ (7.88-17.35) \end{gathered}$ | $\begin{gathered} 12 \\ (7.18-16.65) \end{gathered}$ |

[^8]Figure 7. Percentage Who Would Cancel Without Specific Programming Type (Q9)


On average, respondents said that they would pay only $\$ 6.15$ per month for a satellite service without music. That amount is less than half of the $\$ 12.95$ per month price that satellite radio currently charges, and raises the question whether satellite radio could charge a sustainable price if it lacked music programming. In contrast, the absence of other types of programming had a much smaller effect on price, yielding a willingness to pay of $\$ 10.14$ (no news), $\$ 9.99$ (no sports), $\$ 9.99$ (no talk and entertainment).

The results are even more striking looking at the average price given by those respondents who said that they would pay a different price (i.e., not those who said they would pay the same amount). Without music, those individuals would pay only $\$ 2.45$ on average, a
figure far lower than the comparable numbers for no news (\$6.88), sports (\$6.04), or talk and entertainment (\$6.14).

## Figure 8. Effect On Willingness To Pay Without Specific Programming Type (Q9)*

|  | No Music | No News | No Sports | No Talk and <br> Entertainment |
| :--- | :---: | :---: | :---: | :---: |
|  |  | $\$ 6.15$ <br> $(\$ 5.54-\$ 6.67)^{14}$ <br> $n=400$ | $\$ 10.14$ <br> $(\$ 9.61-\$ 10.69)$ <br> $n=364$ | $\$ 9.99$ <br> $(\$ 9.48-\$ 10.50)$ <br> $n=374$ | | $\$ 9.99$ <br> $(\$ 9.48-\$ 10.50)$ <br> $n=377$ |
| :---: |
| Average Price Among All |
| Respondents $^{13}$ |

These results strongly suggest that music is the only "make or break" programming available on satellite radio. Music is the only programming type whose absence would cause more than a 50 percent reduction in subscription revenues ( $\$ 6.15 /$ month), and its absence would cause three times as many cancellations as any other programming type.

## B. Draw, Retention, and Most Missed Aspect (Questions 1-3, 11)

These results show the clear dominance of music in the minds of subscribers when it
comes to reasons to subscribe to satellite radio. Specifically, they were asked to state

1. Their top reason for subscribing or considering subscribing (Question 1).
2. The programming type that was most critical to the decision to subscribe or consider subscribing (Question 2).

[^9]3. For current subscribers, the programming type that was most critical to their decision to continue to subscribe (Question 3).
4. For current subscribers, the aspect of satellite radio they would miss the most if the service were no longer available (Question 11).

The results from these questions overwhelmingly demonstrate that music is the most important attribute of the service. As shown in the figures on the following pages, a full 68 percent of respondents cited music as their top choice to at least one of these questions, and 83 percent mentioned music as a top 3 answer in responding to at least one of these questions. See Figures 9 and 10.

No other answer came close. Talk and entertainment was the next highest programming type, and was cited first by just 16 percent of respondents, and mentioned in the top 3 by only 32 percent of respondents overall. These answers demonstrate that music is the only attribute of satellite radio that enjoys broad, indeed nearly universal, support from respondents. Given that the open-ended questions that did not call for any particular answer or even refer to music programming, it is a very powerful result that music would be cited so much more frequently than any other programming type.

Figure 9. Open-Ended Question Answers (Net ${ }^{15}$ for Q 1-3, 11)*

|  | Total (n=428) |  |  |
| :--- | ---: | ---: | ---: |
|  | \% Top <br> Mention |  |  |
| \% Top 3 <br> Mention | \% Any <br> Mention |  |  |
| Music programming (no mention of <br> commercial free) | $\mathbf{6 8}$ | $\mathbf{8 3}$ | $\mathbf{8 4}$ |
| -Commercial free (no mention of <br> music) | 23 | 35 | 36 |
| - Talk/Entertainment | 16 | 32 | 33 |
| - Sports | 14 | 29 | 30 |
| - Commercial Free music | $\mathbf{7}$ | $\mathbf{1 1}$ | $\mathbf{1 1}$ |
| - News | 6 | 19 | 21 |
| - Coverage | 5 | 12 | 13 |
| - Price | 4 | 9 | 10 |
| - Fewer/less commercials | 4 | 9 | 10 |
| - Comedy | 3 | 11 | 13 |
| - Kids | 1 | 3 | 4 |
| - Weather/traffic | 1 | 4 | 5 |
| - Any Music Mentions (Net) | $\mathbf{7 1}$ | $\mathbf{8 5}$ | $\mathbf{8 6}$ |
| - Any Commercial Mentions (Net) | 30 | 47 | 48 |
| - Any Commercial Free Mentions (Net) | 27 | 41 | 42 |

${ }^{15}$ Net results are presented to avoid double-counting, i.e., a respondent who mentioned music as his top response to all four questions is counted only once. Because the figure shows cumulative results from multiple questions, columns may sum to more than $100 \%$.
${ }^{*}$ See Appendix C for the text of these questions.
${ }^{16}$ Based $\mathrm{n}=428$, the 95 confidence interval is no bigger than $\pm .047$ [ $1.96 \times .5 /$ square root $\mathrm{f} n$ ].
${ }^{17}$ In addition to programming, price, commercials, and coverage, numerous other reasons were given by respondents. Typical answers, which are included in Appendix L, included "I like to try new stuff" (ID 20117 Q.1), "I like the radio" (ID 20146 Q.1), and "First year came free w/my car. Liked it and kept it." (ID 20154 Q.1), "Anything you want to hear at any time (ID 20054 Q.1), "It was a gift (ID 20092 Q.1), "Because it looks nice" (ID 20184 Q.1), "My husband wanted it. I also wanted it." (ID 20191 Q.1), "Its [sic] paid for already" (ID 20119 Q.3), "I really like the wide verity [sic] of programs, there is something for everyone" (ID 20144), "I would miss the variety of other stations I would be able to listen to if and when I wanted" (ID 20163 Q.11), "There was nothing that I would miss" (ID 20152 Q.11). Such answers, as well as "don't know" answers are not included in the figure above.

Figure 10. Open-Ended Question Answers (Net for Q1, Q2, Q3, and Q11)


The verbatim answers themselves indicate the importance of music to respondents.
Typical answers for why respondents subscribed or continued to subscribe included:

- "Because it was new plus more music stations. Because I listen to music all day." (ID 20175 Q.1)
- "Because I wanted to have a variety of music." (ID 20184 Q.1)
- "Well I wanted a larger selection of music" (ID 20114 Q.1)
- "Because on satellite radio there's more music and less talking and I can also listen to any genre of music that I'm in a mood for without hearing anything else at that point and time" (ID 20126 Q.1)
- "Music, its [sic] my life. I can record it on my Ipod and not have to put up with a bunch of talk." (ID 20143 Q.3)

As that last example indicates, in providing these responses, some respondents cited the fact that satellite radio would allow them to avoid buying music from other sources. For example, some verbatim responses included:

- "I have enjoyed XM radio. I only use it in my vehicles. I hardly listen to regular radio except for sports and rarely plat [sic] CD's anymore" (ID 10014 Q.11)
- "It will save money by not buying a lot of CD's" (ID 20040 Q.1)
- "More selection than regular radio and less hassle than CD's" (ID 20129 Q.1)

I now turn to the individual results for each open-ended question.

## 1. Draw (Questions 1-2)

General Draw. Respondents were asked to say why they chose to subscribe to satellite radio (or were considering subscribing). Music programming dominated over all other programming types. As Figure 11 on the following page shows, 17 percent of respondents gave music as their first answer to the question, and 34 percent gave it as a top 3 response to one of their answers to the question. No other programming type was given as a top mention by more than 5 percent of respondents, or was mentioned in the top 3 by more than 11 percent. Music's substantially higher value is particularly noteworthy here, as the question did not even call for the respondent to mention a type of programming, but merely to give a reason why s/he subscribed or was considering subscribing.

Figure 11. Top Reasons for Subscribing/Considering SubscribingGeneral Draw (Q1)*

|  | Total ( $\mathrm{n}=428)^{18}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | \% Top Mention | \% Top 3 Mention | \% Any Mention |
| - Music programming (no mention of commercial free) | 17 | 34 | 36 |
| - Commercial free (no mention of music) | 16 | 27 | 27 |
| - Talk/Entertainment | 5 | 11 | 13 |
| - Price | 4 | 6 | 6 |
| - Coverage | 3 | 6 | 7 |
| - News | 2 | 4 | 4 |
| - Fewer/less commercials | 2 | 4 | 5 |
| - Commercial Free music | 2 | 4 | 4 |
| - Sports | 1 | 4 | 4 |
| - Comedy | 0 | 1 | 1 |
| - Kids | 0 | 1 | 1 |
| - Weather/traffic | 0 | 0 | 1 |
| - Any Music Mentions (Net) | 18 | 38 | 39 |
| - Any Commercial Mentions (Net) | 20 | 35 | 35 |
| - Any Commercial Free Mentions (Net) | 18 | 31 | 31 |

Programming Draw. As with the open-ended question regarding reasons for subscribing,
respondents also heavily cited music programming when asked which type of satellite radio programming was most critical to their decision to subscribe (or to consider subscribing). As

[^10]shown in Figures 12-13 on the following pages, over half (53 percent) of respondents said that music programming was the type of programming that was most critical to their decision to subscribe. Sports programming came in a distant second with only 10 percent naming it their first choice. Similarly, only 9 percent of subscribers cited talk and entertainment programming as their first choice. These results show that music was five times more likely to be named as most critical to the decision to subscribe or consider subscribing.

Music's predominance continues when we consider the top 3 answers given in response to the question. 67 percent of respondents cited music as the type of programming that was most critical to their decision to subscribe; only approximately one-third as many respondents cited sports programming ( 22 percent) or talk and entertainment programming ( 21 percent). In other words, two-thirds of respondents cited music in causing them to subscribe; not even one-quarter of respondents cited any other programming type.

Figure 12. Programming Type Most Critical To Decision To Subscribe/Consider Subscribing-Programming Draw (Q2)*

| Subscribe/Consider Subscrid | Total ( $\mathrm{n}=428$ ) ${ }^{20}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | \% Top Mention | \% Top 3 Mention | \% Any Mention |
| - Music programming (no mention of commercial free) ${ }^{21}$ | 53 | 67 | 67 |
| - Sports | 10 | 22 | 23 |
| - Talk/Entertainment | 9 | 21 | 22 |
| - Comedy | 3 | 10 | 10 |
| - News | 3 | 13 | 14 |
| - Commercial free (no mention of music) | 2 | 4 | 4 |
| - Commercial Free music | 2 | 3 | 3 |
| - Weather/traffic | 1 | 3 | 4 |
| - Price | 1 | 2 | 2 |
| - Kids | 0 | 2 | 2 |
| - Coverage | 0 | 1 | 1 |
| - Fewer/less commercials | 0 | 1 | 1 |
| - Any Music Mentions (Net) | 55 | 69 | 69 |
| - Any Commercial Mentions (Net) | 4 | 7 | 8 |
| - Any Commercial Free Mentions (Net) | 4 | 6 | 7 |

[^11]Figure 13. Programming Type Most Critical To Decision To Subscribe/Consider Subscribing- Programming Draw (Q2)


## 2. Retention (Question 3)

This question gets at the slightly different issue of what type of satellite radio
programming was most important in convincing respondents to keep their satellite radio subscription once they purchased it. This question was germane only to current subscribers, and it shows that music programming is similarly important in causing respondents to maintain their subscriptions as it was in causing them to subscribe in the first place. As Figures 14-15 show on the following pages, respondents gave music programming as the first answer four times more often than any other programming type ( 45 percent versus 11 percent). And they mentioned music programming more times in the top 3 nearly three times more often than any other type of programming ( 59 percent versus 20 percent).

Figure 14. Programming Type Most Critical To Decision To Continue To Subscribe- Retention (Q3)*

|  | Total - Only Current Subscribers |  |  |
| :--- | ---: | ---: | ---: |
| $(n=307)^{2}$ |  |  |  |$)$

[^12]Figure 15. Programming Type Most Critical To Decision To Continue To Subscribe- Retention (Q3)


## 3. Most Missed Aspect (Question 11)

In this question, current subscribers were asked to name the feature of satellite radio they would miss the most if the service were not available. Again, features relating to music appeared at the top of the list by a sizeable margin, with 37 percent of respondents naming music as their first choice, and 50 percent mentioning music in their top 3 choices. As shown in Figures 16-17 on the following pages, no other aspect of satellite radio was mentioned as frequently. Instead, music was mentioned as the first choice four times as often as the next highest ranked aspect, talk and entertainment programming ( 37 percent versus 8 percent). It was the same with top 3 answers: music was mentioned in the top 3 by 50 percent of respondents, as compared to the 16 percent who mentioned talk and entertainment.

Figure 16. Aspects Of Satellite Radio That Would Be Missed Most If The Service Were Not Available (Q11)*

|  | Total - Only Current Subscribers |  |  |
| :--- | :---: | :---: | :---: |
| $(n=307)^{24}$ |  |  |  |$)$

[^13]Figure 17. Programming Type Of Satellite Radio That Would Be Missed Most If The Service Were Not Available (Q11)


## C. Importance (Question 4)

Respondents were asked to specify the relative importance of seven satellite radio types of programming to their decision to subscribe and retain their subscription to satellite radio. ${ }^{26}$ The respondents were asked to allocate 100 points among the different types of programming to reflect their relative importance to them and their families. The answers show that music strongly dominates over other types of programming, receiving 44 points on average from respondents.

No other programming type received more than 13 points on average, as Figures 18-19 below show.

[^14]Music was also far and away the programming type that the largest percentage of respondents -74 percent - chose as their most important. This is more than four times as many respondents as for any other programming type, including sports and talk and entertainment.

Figure 18. Importance Of Programming Type (Q4)*

| Type of Programming | Total |  |
| :---: | :---: | :---: |
|  | Relative importance as reflected in \# of allocated points |  |
|  | $\begin{gathered} \text { Share } \\ (\mathrm{n}=428) \\ \% \end{gathered}$ | Allocated Highest Number of $\frac{\text { Points }}{\%^{27}}$ |
| Music | $\begin{gathered} 44 \\ (40.93-46.27)^{28} \end{gathered}$ | $\begin{gathered} 74 \\ (69.42-77.77) \end{gathered}$ |
| Sports | $\begin{gathered} 13 \\ (11.12-14.44) \end{gathered}$ | $\begin{gathered} 17 \\ (13.71-20.87) \end{gathered}$ |
| Talk and Entertainment | $\begin{gathered} 12 \\ (10.54-13.63) \end{gathered}$ | $\begin{gathered} 15 \\ (12.00-18.84) \end{gathered}$ |
| Comedy | $\begin{gathered} 10 \\ (9.11-11.52) \end{gathered}$ | $\begin{gathered} 14 \\ (10.31-16.79) \end{gathered}$ |
| News | $\begin{gathered} 10 \\ (8.59-10.73) \end{gathered}$ | $\begin{gathered} 14 \\ (10.52-17.05) \end{gathered}$ |
| Local Weather and Traffic | $\begin{gathered} 7 \\ (6.30-8.24) \end{gathered}$ | $\begin{gathered} 7 \\ (4.39-9.16) \end{gathered}$ |
| Kids | $\begin{gathered} 4 \\ (3.34-5.24) \end{gathered}$ | $\begin{gathered} 5 \\ (3.24-7.51) \end{gathered}$ |
| Total | 100 |  |

* Q4: Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio
${ }^{27}$ Total sums to more than 100 because some respondents had two or more content types tied for their highest ranking.
${ }^{28}$ These numbers represent the $95 \%$ confidence interval.

Figure 19. Average Importance Of Programming Type (Q4)


Figure 20. Percent Of Respondents Selecting Each Programming Type As Most Important (Q4)


## D. Usage (Question 8)

Current subscribers were asked to state, out of the time they spent listening to satellite radio, the percentage of time they spent listening to each of seven types of satellite radio programming in a typical week.

Respondents, on average, spend nearly half ( $49 \%$ ) of their satellite radio time listening to music. That percentage is quadruple any other programming type, as shown in Figures 21-22.

Similarly, 77 percent of respondents recalled listening to music the most, a figure more than four times in excess of any other type of programming.

Figure 21. Usage Of Programming Type (Q8)*

|  | Total - Only Current Subscribers |  |
| :---: | :---: | :---: |
| Type of Programming | Time Allocation |  |
|  | $\frac{\text { Share (\%) }}{(\mathrm{n}=307)}$ | Allocated Highest Number of Points (\%) ${ }^{29}$ |
| Music | $\begin{gathered} 49 \\ \left(45.27-51.75^{30}\right. \end{gathered}$ | $\begin{gathered} 77 \\ (72.51-81.89) \end{gathered}$ |
| Talk and Entertainment | $\begin{gathered} 12 \\ (10.08-13.83) \end{gathered}$ | $\begin{gathered} 15 \\ (11.28-19.34) \end{gathered}$ |
| Sports | $\begin{gathered} 11 \\ (9.61-13.07) \end{gathered}$ | $\begin{gathered} 17 \\ (12.45-20.78) \end{gathered}$ |
| Comedy | $\begin{gathered} \hline 10 \\ (8.47-11.69) \end{gathered}$ | $\begin{gathered} \hline 12 \\ (8.13-15.33) \end{gathered}$ |
| News | $\begin{gathered} 8 \\ (6.79-9.30) \end{gathered}$ | $\begin{gathered} 9 \\ (5.63-11.96) \end{gathered}$ |
| Local Weather and Traffic | $\begin{gathered} 6 \\ (4.88-6.75) \end{gathered}$ | $\begin{gathered} 5 \\ (2.47-7.30) \end{gathered}$ |
| Kids | $\begin{gathered} 4 \\ (3.13-5.38) \end{gathered}$ | $\begin{gathered} 6 \\ (3.24-8.49) \end{gathered}$ |
|  | 100 |  |

[^15]Figure 22. Average Weekly Usage Of Programming Type (Q8)


Figure 23. Percent Of Respondents Indicating Highest Usage Of Each Programming Type (Q8)


## E. Value (Questions 4-7, 10)

Conjoint analysis, which is described above in Part III.D. 2 and in Appendix H, is another method used in the survey to determine the value respondents place on satellite radio's music offerings. The conjoint results, as outlined in Figures 24-26, strongly confirm music's high value to consumers.

The conjoint analysis compared music's value to all other important features of the satellite radio service - both other programming types as well as non-programming features, such as coverage, number of commercials, and price. Despite being compared to both programming and non programming features, music still was the top-ranked attribute by a large margin, as shown on the figure on the following page The analysis revealed that a full 30 percent of the value of satellite radio comes from music. The next highest attribute was price, which encompassed only 15 percent of the value. Similarly, the analysis reveals that music was the most important attribute of the service for approximately half of all respondents ( 47 percent). No other attribute was cited first by more than 14 percent of respondents.

Figure 24. Relative Importance Of The Programming and NonProgramming Attributes Of Satellite Radio Based On Conjoint Analysis- Value (Q4-7,10)*

|  | Average <br> Importance ${ }^{31}$ | Top <br> Mention ${ }^{32}$ |
| :---: | :---: | :---: |
| Type of Programming |  | $\%$ |
| A. Music | 30 <br> $(28.48-32.36)^{33}$ | 47 <br> $(44.14-49.06)$ |
| B. News | 70 <br> $(9.37-11.55)$ | 13 <br> $(5.33-7.77)$ |
| C. Sports | 11 <br> $(12.00-14.83)$ | 12 <br> $(10.47-13.20)$ |
| D. Talk and Entertainment | $112.46)$ |  |
| Other Satellite Radio Features and Price | 13 <br> $(11.74-14.27)$ | 6 <br> $(6.90-9.61)$ |
| E. Number of Minutes Per Hour of |  |  |
| Commercials on Music Channels | 6 <br> $(5.37-7.26)$ | 3 <br> $(2.08-3.74)$ |
| F. Geographic Coverage | 15 <br> $(13.08-16.02)$ | 14 <br> $(12.36-15.79)$ |
| G. The Monthly Price for a Single |  |  |
| Subscription |  |  |

[^16]Figure 25. Importance Of Satellite Radio Attributes Based On Conjoint Analysis (Q4-7,10)


Figure 26. Percent Of Respondents Who Selected Each Attribute As Most Important Based On Conjoint Analysis (Q4-7,10)


## F. Choice (Question 10)

In completing the conjoint section of the survey, respondents were asked to rate two different hypothetical satellite radio services. The first profile described the satellite radio service currently offered by XM and Sirius (e.g., similar music, talk, sports, and news programming, nationwide coverage, no commercials on music channels, and a price of $\$ 12.95 /$ month). The second profile was the same as the first but had no music programming.

Respondents were asked to rate each service on a scale from " 0 " to " 10 ," with " 0 " indicating "definitely would not buy" and "10" indicating "definitely would buy." As shown below in Figure 27, the current offering received an average score of 7.13 on this scale; the current offering without music scored substantially lower, 2.47 , or barely more than one third of the current offering's score. Measured another way, only 5 percent of respondents rated the current offering a " 0 ," but 57 percent of respondents gave a " 0 " to the current offering without music, indicating that a majority of respondents would not buy a satellite radio service that lacked music.

Figure 27. Relative Importance Of Music As Reflected In The Choice Of Current Offering With Music Versus Current Offering Without Music (Q10)


## V. ADDITIONAL RESULTS

## A. Music versus Commercial-Free

The conjoint analysis reveals another important result: music is a significantly more important attribute of satellite radio than is the number of minutes of commercials on music channels. As noted above, music received the highest score in the conjoint analysis - 30 percent of the value of the service. The number of commercial minutes on music channels (including no commercials) only accounted for 13 percent of the value. In other words, consumers valued music programming 2.31 times more than they valued the extent to which there were more commercials on the service.

The open-ended results corroborate this finding. As Figure 9 shows, 68 percent of respondents named music (without mentioning commercial free) as a top answer to at least one of the open-ended questions. Only 23 percent of respondents cited commercial free programming (without mentioning music) as their top choice. (And a few respondents -7 percent - stated that the hybrid "commercial free music" was their top choice). Thus, consumers cited music as their top choice to an open-ended question 2.96 times as often as they cited commercial free. The figure below shows these multiples for both the conjoint and open-ended questions, demonstrating that it is music, and not the lack of commercials, that consumers value primarily.

Figure 28. "Commercial Free" versus Music (Q 4-7, 10; 1-3, 11)


## B. Music versus Recorded Content

This proceeding will determine the compulsory license rate for sound recording performances on satellite radio. Up to this point, we have looked only at sound recordings performed on satellite radio music channels. It is my understanding, however, that the vast bulk of content on comedy and kids satellite radio channels also uses sound recordings for which the copyrights are owned by the SoundExchange members. To the extent this is true, the results above understate the value of the sound recordings copyrights at issue in this proceeding. For example, with respect to the constant sum question regarding the importance of the programming types, Recorded Content would amass 58 points, Music (44) + Comedy (10) + Kids (4). See Figure 29. And with respect to the constant sum question regarding typical usage, Recorded Content constitutes 63 percent of usage, Music (49) + Comedy (10) + Kids (4). ${ }^{34}$ See Figure 30.

[^17]Figure 29. Relative Importance of Recorded Content


Figure 30. Relative Usage of Recorded Content


## C. Music versus Talk and Entertainment

This survey has demonstrated that music is the satellite radio programming type that users value the most. The dominance of music gives interesting insight into the well-publicized deals satellite radio has struck with other content providers, such as Howard Stern and Oprah Winfrey. These deals, which were negotiated on the open market, presumably are keyed to the value that consumers place on talk and entertainment satellite radio programming. In setting a rate for sound recording licenses, it is useful to know that consumers value music programming far more than talk and entertainment programming. The figure below compares the value assigned to music versus talk and entertainment programming for several key measures in the survey. In each and every case (as well as the other survey measures not reported here), music scored higher, and often three, four, or more times as much as talk and entertainment. On
average, music scored 3.7 times higher than talk and entertainment. This suggests that the market rate for music would be considerably higher than the market rate for talk and entertainment programming.

Figure 31. Music versus Talk and Entertainment

|  | Total (N=428) |  |  |
| :--- | :---: | :---: | :---: |
|  | Music | Talk and <br> Entertainment | Multiple |
| 1. $\quad$ Cancel [Q9: Figure 7] | $43 \%$ | $14 \%$ | 3.1 |
| 2. $\quad$ Willingness to pay [Q9: Figure 8] | $\$ 6.15$ | $\$ 9.99$ | $1.6^{35}$ |
| 3. $\quad$ General Draw [Q1: Figure 11] | $17 \%$ | $5 \%$ | 3.4 |
| 4. $\quad$ Programming Draw [Q2: Figure 12] | $53 \%$ | $9 \%$ | 5.9 |
| 5. $\quad$ Retention [Q3: Figure 15] | $45 \%^{*}$ | $11 \%^{*}$ | $4.1^{*}$ |
| 6. $\quad$ Most missed aspect [Q11: Figure 16] | $37 \%^{*}$ | $8 \%^{*}$ | 4.6 |
| 7.Net cumulative open-ended questions <br> [Q1-3, 11: Figure 9] | $68 \%$ | $16 \%$ | 4.3 |
| 8. Importance [Q4: Figure 19] | $44 \%$ | $12 \%$ | 3.7 |
| 9. Usage [Q8: Figure 21] | $49 \%^{*}$ | $12 \%{ }^{*}$ | $4.1^{*}$ |
| 10. Value [Q4-7, 10: Figure 24] ${ }^{36}$ | $30 \%$ | $12 \%$ | 2.5 |
| Average |  |  |  |

*Asked only of Current Subscribers ( $\mathrm{n}=307$ )

[^18]Figure 32. Music versus Talk and Entertainment


## V. CONCLUSIONS

Based on the survey results, my conclusion is that music is overwhelmingly the programming attribute of satellite radio that consumers value the most in making their decision to subscribe or retain their subscription to satellite radio. Every one of the thirteen measures of value in the survey supports this conclusion. ${ }^{37}$ No other programming attribute of satellite radio - including talk and entertainment programming - nor the commercial-free programming, coverage, or price was valued nearly as much by consumers. To the contrary, respondents on average valued music 3.7 times as much as talk and entertainment programming.

[^19]I declare under penalty of perjury that the foregoing testimony is true and correct to the best of my knowledge and belief.


APPENDIX A

CV OF YORAM (JERRY) WIND

## YORAM (JERRY) WIND

Academic Positions: Jerry Wind is The Lauder Professor and Professor of Marketing at the Wharton School of the University of Pennsylvania. He is the founding director of The Wharton "think tank," The SEI Center for Advanced Studies in Management. The Center's mission is to assure through research and development the quality of management research and education and its relevance to the needs of management practice and society in the 21st century. Dr. Wind joined the Wharton staff in January 1967, upon receipt of his doctorate from Stanford University.

Program Development: Dr. Wind is the founder and academic director of The Wharton Fellows program. From 1983 to 1988, he was the founding director of The Joseph H. Lauder Institute of Management and International Studies, and from 1980 to 1983 the founding director of The Wharton Center for International Management Studies. Dr. Wind chaired the Wharton committees that designed The Wharton Executive MBA Program (1974), the new MBA curriculum (1991), and the School's globalization strategy (1995-1997), the MBA's, cross-functional integration efforts (2002-04). He also started The Wharton International Forum (1987) and served as the chairman of its faculty council until 1998. He was instrumental in establishing the Alfred West, Jr. Learning Lab and served as a member of its first advisory board (2001-05).

Publications: Dr. Wind is one of the most cited authors in marketing. He is a regular contributor to the professional marketing literature, which has included 21 books and over 250 papers, articles, and monographs encompassing the areas of marketing strategy, marketing research, new product and market development, consumer and industrial buying behavior, and international marketing. His recent books, The Power of Impossible Thinking: How Changing Your Mental Models Will Transform the Business of Your Life and the Life of Your Business, with Colin Crook (Wharton School Publishing, 2004), Convergence Marketing: Strategies for Reaching the New Hybrid Consumer with Vijay Mahajan (Financial Times/Prentice Hall 2002), Leveraging Japan: Marketing to the New Asia (Jossey-Bass 1999) and Driving Change (Free Press, 1998), received wide acclaim. Both The Power of Impossible Thinking and Convergence Marketing were selected by Executive Book Summaries as one of the thirty best business books of 2002 and 2004. His most recent edited books—New Product Diffusion Models (Kluwer 2000), Digital Marketing (Wiley 2001), and Marketing Research and Modeling: Progress and Prospects (Kluwer 2004) —include the works of the leading experts on these topics. Dr. Wind's books have been translated widely.

Editorship: Dr. Wind is the founding editor of Wharton School Publishing (Wharton's J.V. with Pearson/Financial Times), 2003. He has served as editor-in-chief of the Journal of Marketing, on the policy boards of the Journal of Consumer Research and Marketing Science, and has been on the editorial boards of all major marketing journals. He served as guest editor of special issues of the major marketing journals including Marketing Science (1996) on Empirical Generalization in Marketing (with Frank Bass), JMR (1997) on Innovation in New Product Development: Best Practice in Research, Modeling, and Applications, and Marketing Research (1998) on The State of the Art in Quantitative Research.

Business Experience: Dr. Wind has served as an advisor to many Fortune 500 firms and a number of non-U.S. multinationals in the financial services, pharmaceuticals, information, and consumer packaged goods industries. His consulting focuses on both overall global corporate and business strategy and transformation as well as marketing strategy and especially the development of new businesses. In addition, he has served as an expert witness in various legal cases. Dr. Wind is a member of the board of IDT, and an advisor of a number of start-ups including Mutual Arts and NetXentry (web for phone). He is a former director of Enhance Financial Services Corporation, Contel Corporation, CASA and a number of entrepreneurial ventures.

Professional Activities: Dr. Wind is an active member of the major marketing and management science professional associations. He is the former Chancellor of the International Academy of Management (IAM). He is a former academic trustee of the Marketing Science Institute and a member of a number of its steering committees. He is also a former chairman of the College of Marketing of the Institute of Management Science and a previous member of the Board of Directors of the Philadelphia AMA Chapter. He is one of the founders of the new Israeli university - The Interdisciplinary Center Herzliya (IDC) - chairman of its academic council, and member of its academic appointment and promotion committee. He is also a member of the board of the American Friends of IDC. He is a member of the board of a number of Wharton's research centers, including the Lauder Institute and the Ackoff Center. Dr. Wind is also a trustee of The Philadelphia Museum of Art and chair of its audience building committee, and a member of the Advisory Board of Business for Diplomatic Action. He is a frequent lecturer in faculty seminars and executive programs in over 50 universities worldwide.

Awards: Dr. Wind is the recipient of various awards, including the three major marketing awards - The Charles Coolidge Parlin Award (1985), the AMA/Irwin Distinguished Educator Award (1993) and the Paul D. Converse Award (1996). He is the recipient of the first Faculty Impact Award given by Wharton Alumni (1993). In 1984, he was elected as member of the Attitude Research Hall of Fame and has won a number of research awards, including two Alpha Kappa Psi Foundation awards and a recent inclusion in JAR Classics issue of one of 18 articles that have withstood the test of time. In 2001 he was selected as one of the 10 Grand Auteurs in Marketing. Most recently he was named as the 2003 recipient of the Elsevier Science Distinguished Scholar award of the Society for Marketing Advances and an Honorary Fellow of the Decade by the Interdisciplinary Center Herzliya (Israel), May 2004.

## ACADEMIC EXPERIENCE

## EDUCATION

Stanford University, Graduate School of Business. Ph.D. (Marketing), September 1964-December 1966.
Stanford University, International Center for Advancement of Management Education, Certificate in Marketing Management. September 1963-June 1964.

The Hebrew University, Jerusalem, School of Economics and Social Sciences, M.A. (Business Administration and Political Science), September 1960-June 1963; B. Soc. Sci. (Economics and Political Science), September 1958-June 1961.

## UNIVERSITY POSITIONS

## A. University of Pennsylvania, The Wharton School

## Faculty Positions:

The Lauder Professor, 1983-
Professor of Marketing, 1973-
Associate Professor of Marketing, 1970-1973
Assistant Professor of Marketing and International Business, 1967-1970

## Selected Administrative Positions:

Founding Editor, Wharton School Publishing (WSP), 2003-
Founding Academic Director, The Wharton Fellows platform and program, 2000-
Founding Director, The SEI Center for Advanced Studies in Management, 1988-
Founding Director, The Joseph H. Lauder Institute of Management and International Studies, 19831988
Founding Director, the 1st Title VI National Resource Center in International Management Studies, 1985-1988
Founding Director, The Wharton Center for International Management Studies, 1980-1983

## Secondary Faculty Appointments:

Member of the Graduate Group in International Studies (School of Arts \& Sciences), 1984-1998
Member of the OR Group, 1979-1984 and the OR affiliated faculty, 1984-1989
Senior Fellow of the Leonard Davis Institute, 1977-1980
Secondary Appointment as Professor of Management, 1981-1984
Member of the Extended Faculty of the Social Systems Sciences Dept. 1981-1986

## B. Other Universities

The Interdisciplinary Center (IDC) Herzliya Israel, Co-Founder (for specific activities since 1994, see p. 39)

University of Tokyo (Japan) Co-Director of the Marunouchi Global Center (MCG) program, 2002; The first Hakuhodo Visiting Professorship, Spring 1992 and 1993

Erasmus University (The Netherlands) The first visiting Unilever-Erasmus Professorship, Spring 1993

University of New South Wales (Australia) The first visiting Hoover Foundation Professor, 1977
University of California at Berkeley, School of Business Administration Visiting Professor, Fall 1975
University of Tel Aviv, The Leon Recanati Graduate School of Business Administration, Visiting Senior Lecturer, September 1968-August 1969

Stanford University, Graduate School of Business, Research Assistant, June 1965-October 1966

* Senior or sole author

The Hebrew University Jerusalem, Teaching Assistant in the Departments of Political Science and Business Administration, September 1961-June 1963

## PUBLICATIONS

## I. BOOKS

1.* The Power of Impossible Thinking: How Changing Your Mental Models Will Transform the Business of Your Life and the Life of Your BUsiness, with Colin Crook [and Robert Gunther], Wharton School Publishing, 2004, selected by Executive Book Summaries as one of the thirty best business books of 2004. Translated editions: Arabic, Bahasa Indonesia, Chinese (simplified and traditional), English (Singapore), Japanese, Korean, Portuguese, and Turkish. Selected by Executive Book Summaries as one of the thirty best business books of 2004; finalist in Fast Company Reader's Choice Award for the October book of the month; among CEO READ top 25 books of August 2004. A paperback edition was published in 2006.
2. Adventures in Conjoint Analysis: A Practitioners Guide to Trade-Off Modeling and Applications, with Abba Krieger and Paul E. Green, 2004 - e-book available at http://marketing.wharton.upenn.edu/people/faculty/green/green monograph.cfm.
3.* Convergence Marketing: Strategies for Reaching the New Hybrid Consumer, with Vijay Mahajan [and Robert Gunther] (Prentice Hall/Financial Times), 2001. Selected by Executive Book Summaries as one of the thirty best business books of 2002. Translated editions: Chinese (simplified), Tsingua University Press; Chinese (traditional), Prentice Hall Taiwan; Bahasa (Indonesia); Spanish; Portuguese; Italian [II Consumatore Centauro: Orvaro il Marketing Della Convergenza, ETAS LAB. IT. 2002; Korean; and Japanese.
4. Leveraging Japan: Marketing to the New Asia, with George Fields and Hotaka Katahira (San Francisco: Josse Bass), 1999. Translated Japanese edition by Pearson Education, Japan, 2000.
5.* Driving Change, with Jeremy Main (New York: The Free Press), 1997. Translated editions in U.K. by Kogan (Page Ltd.), 1998; China by Shanghai Jiao (Tong University Press), 1999; Hungary by Veres István (Geomeédia Szakkönyvek), 2000. Adaptation to local condition: Brazil by Luiz Felipe Monteiro Jr. (IBMEC Qualitymark Editoria), 2002.
6. The Silverlake Project, with Roy A. Bauer, Emilio Collar, Victor Tang and Patrick R. Houston. (New York: Oxford University Press), January, 1992. Translated to Chinese, Huaxia Publsihing, 2000.
7.* Product Policy: Concepts, Methods and Strategies (Reading, MA: Addison-Wesley), 1982. Reviewed Journal of Marketing, Summer 1981.
8.* Marketing and Product Planning (in Spanish) (Mexico: Expansion). This book is based in part on sections from Product Policy which was selected by the editors of Expansion as the "Book of the Year" 1979.
9. Multi-Attribute Decisions in Marketing: A Measurement Approach, with Paul E. Green (and contributions by Douglas Carroll). (Hinsdale, IL: The Dryden Press), 1973.
10. Organizational Buying Behavior, with Frederick E. Webster, Jr. (Englewood Cliffs, NJ: Prentice Hall, Foundations of Marketing Series), 1972. Translated to Portuguese (Editor, Atlas, Sao Paulo, Brazil, 1975). Reviewed JMR August, 1974.
11. Market Segmentation, with Ronald E. Frank and William F. Massy (Englewood Cliffs, NJ: Prentice Hall, International Series in Management), 1972. Reviewed JMR, November, 1972; August, 1974.
12. Advertising Measurement and Decision Making, with Homer Dalby and Irwin Gross (Boston, MA: Allyn \& Bacon), 1968.
13. Industrial Buying and Creative Marketing. Publication of the Marketing Science Institute (Boston, MA: Allyn \& Bacon), 1967. Contributed two chapters; co-authored with Patrick J. Robinson three chapters; and participated in the overall organization and preparation of the book.
14. Industrial Buying Behavior: Source Loyalty in the Purchase of Industrial Components. Unpublished Ph.D. dissertation, Stanford University, December 1966.

## II. EDITED BOOKS

1.* Marketing Research and Modeling: Progress and Prospects, A Tribute to Paul E. Green, with Paul E. Green (eds.). Boston: Kluwer, 2003.
2. * Digital Marketing, with Vijay Mahajan, New York: Wiley, 2000. An e-book version is scheduled for 2001. Translated: Japanese by Pearson Education, Japan, 2001; and Italian by ETAS-RCS Libri, SPA. Italy, 2002.
3. New Product Diffusion Models, with Vijay Mahajan and Eitan Muller, Boston: Kluwer, International series in Quantitative Marketing, 2000.
4. Innovation Diffusion Models of New Product Acceptance, with Vijay Mahajan, The IC ${ }^{2}$ Institute's Econometric \& Management Sciences Series (Cambridge, MA: Ballinger Publishing Co.), 1986.
5.* New Product Forecasting: Models and Applications, with Vijay Mahajan and Richard Cardozo. (Lexington, MA: Lexington Books), 1981.
6.* Advances in Organizational Buying Research: The Case of Acquisition of Scientific and Technical Information, with Robert J. Thomas (Washington, D.C.: National Science Foundation), 1979.
7. * Moving Ahead with Attitude Research: Proceedings of the Seventh Attitude Research Conference. Edited with Marshall Greenberg. (Chicago, IL: American Marketing Association), 1977. Designed, organized, and edited this book of eight invited position papers and eighteen application papers.
8. Behavioral Models of Market Analysis: Foundations for Marketing Action, edited with Francesco Nicosia (Hinsdale, IL: The Dryden Press), 1977.

## III. ARTICLES, CONTRIBUTED CHAPTERS, PAPERS IN PROCEEDINGS, AND WORKING PAPERS

The papers are grouped by the following topics:
A. Portfolio analysis and strategy
B. Marketing and business strategy
C. Marketing and product strategy
D. Research on industrial buying behavior
E. Research on consumer behavior
F. Marketing research and modeling
G. International marketing
H. International management education and the Lauder Institute
I. Management practice and education in the 21st Century
J. Convergence Marketing
K. Mental Models - Power of Impossible Thinking
L. Entries in Dictionaries and Encyclopedias

A number of papers can fit in more than one category. The division is, therefore, somewhat arbitrary and based primarily on the target audience of the paper.

## A. Portfolio Analysis and Strategy

1. "Product Portfolio: A New Approach to the Product Mix Decision," in Ronald C. Churhan, ed., Combined Proceedings AMA, August 1974, pp. 460-464.
2.|* "Planning Product Line Strategy: A Matrix Approach," with Henry Claycamp, Journal of Marketing, 40. January 1976, pp. 2-9.

3a.|* "An Analytic Hierarchy Process for the Allocation of Resources Within a Target Product/Market/Distribution Portfolio," with Daniel Gross, in D.B. Montgomery and D.R. Wittink, eds., Proceedings of the ORSA/TIMS Conference on Marketing Measurement and Analysis, Stanford, CA, March 1979. Sections of this paper were later incorporated in a paper by Wind and Saaty, "Marketing Applications of the Analytic Hierarchy Process," Management Science 26, July 1980, pp. 641-658.

3b.|* "Marketing Applications of the Analytic Hierarchy Process," with Thomas L. Saaty, Management Science, 26. July 1980, pp. 641-658.
4.|* "Designing Product and Business Portfolios," with Vijay Mahajan, Harvard Business Review, Vol. 59, No. 1, Jan-Feb, 1981, pp. 155-165. Based on a paper, "Measurement Issues in Portfolio Analysis," presented at the Second Market Measurement and Analysis Conference, University of Texas, Austin; March 1980.
5. "Stochastic Dominance Rules for Product Portfolio Analysis," with Vijay Mahajan and John W. Bradford. Marketing Planning Models, Special Issue of TIMS Studies in the Management Sciences, 1981. pp. 161-183.
6.|* "International Portfolio Analysis and Strategy: The Challenge of the 80s," with Susan P. Douglas, Journal of International Business Studies, Fall 1981. pp. 69-82.
7.| "A Model for the Analysis of Asymmetric Data in Marketing Research," with Richard Harshman and Paul E. Green, Marketing Science, Vol. 1, No. 2, Spring 1982. pp. 205-242.
8.|* "An Empirical Comparison of Standardized Portfolio Models," with Vijay Mahajan and Donald Swire, Journal of Marketing, Vol. 47, Spring 1983. pp. 89-99. This article is based on a paper presented at the 1981 conference on Analytical Approaches to Product and Marketing Planning.
9.| "Risk Return Approach to Product Portfolio Strategy," with Richard Cardozo, Long Range Planning, Vol. 18, No. 2, 1985. pp. 77-85.
10. "Integrating Financial Portfolio Analysis with Product Portfolio Models," with Vijay Mahajan, in H. Thomas \& D. Gardner, (eds.) Strategic Marketing and Management. (NY: J. Wiley \& Sons, 1985), pp. 193-212.
11.| "Corporate Growth Through Synergy: Concept, Measurement \& Applications," with Vijay Mahajan, Wharton School Working Paper, 1985.
12.| "Business Synergy Does Not Always Pay Off," with Vijay Mahajan, Long Range Planning, Vol. 21, No. 1, February 1988, pp. 59-65.

## B. Marketing and Business Strategy

1.* "A Research Program for a Marketing Guided Approach to Mergers and Acquisitions," in N. Beckwith et al., 1979 Educator's Conference Proceedings (Chicago, IL: AMA), 1979, pp. 207-256.
2.* "Marketing Oriented Strategic Planning Models," in R.L. Schultz and A. A. Zoltners, eds., Marketing Decision Models, (New York: Elsevier, North Holland), 1980, pp. 207-250.
3.* "Marketing and the Other Business Functions," in J. Sheth, ed., Research in Marketing, Vol. 5, 1980, pp. 237-264.
4.|* "Marketing and Corporate Strategy," in The Wharton Magazine, Summer 1982, pp. 38-45. Based on "Marketing and Corporate Strategy: Problems and Perspectives," The 13th Annual Albert Wesley Frey Lecture, Graduate School of Business, University of Pittsburgh, 1981.
5. "Marketing Strategy," with Thomas Robertson in Kenneth J. Albert, (ed.), The Strategic Management Handbook, (New York: McGraw Hill, 1982), Chapter 11, pp. 11.3-11.22.
6.| "Marketing Strategy: New Directions for Theory and Research," with Thomas Robertson, Journal of Marketing, Spring 1983. pp. 12-25.
7. "Analytic Hierarchy Process for Generation and Evaluation of Marketing Mix Strategies," with Elizabeth Dunn, in Contemporary Views on Marketing Practice, Gary Frazier and Jagdish Sheth (eds.), proceeding of the Stellner Symposium on Theories of Marketing Practice, Lexington Books, 1987, pp. 111-131.
8.* "Marketing for Top Executives: Problems and Prospects," Wharton School Working Paper, 1985.
9.* "Models for Marketing Planning and Decision Making," in Victor P. Buell, ed., Handbook of Modern Marketing 2nd Edition, 1985. Chapter 49, pp.49.1-49.12.
10.* "Expanding the Role of the Board of Directors," Wharton School Working Paper, 1986.
11.* "A Marketing Perspective for Competitive Strategy," in Harold E. Glass (ed.), Handbook of Business Strategy, 1988/1989 Yearbook (Boston: Warren, Gorham and LaMont), 1988, pp. 285291. Based on a paper presented at an international conference on Competitive Analysis at the University of Groningen, October 1986.
12.|* "An Analytic Hierarchy Process Based Approach to the Design and Evaluation of a Marketing Driven Business and Corporate Strategy," Mathematical Modeling, Vol. 9, No. 3-5, pp. 285-291, 1987.
13.* "Effective Competitive Strategies: A Marketing Perspective," Achieving Excellence in Managing, transcript of the SIA Regional Conference, March 25-26, 1986, pp. 62-80.
14.|* "Financial Services: Increasing Your Marketing Productivity and Profitability," The Journal of Services Marketing, Vol. 1, No. 2, Fall 1987, pp. 5-18.
15.* "Targeting Global Markets: Guidelines to Meet the Marketing Challenge," Directions, 1989, publication of Contel Corp.
16.| "New Perspectives on Strategy Research: A View from the Management Sciences," with Diana L. Day and John U. Farley, Management Science, Vol. 36., No. 10., October 1990.
17.* "Inducing Creativity and Innovation in Large Bureaucracies: Lessons from Marketing," in Proceedings of the RGK Foundation, 4th International Conference on Creative and Innovative Management, 1993.
18. "Don't Walk In, Just Log In! Electronic Markets and What They Mean for Marketing," with Arvind Rangaswamy, Wharton School Working Paper, December 1994.
19.* "Growth Strategies," Wharton School Working Paper, 1996.
20.* "Preemptive Strategies," in G. Day and D. Reibstein (eds.), Wharton on Dynamic Competitive Strategy, New York: John Wiley \& Sons, Inc., 1997.
21.* "Segmentation: Accomplishments, Issues, and Challenges of the Global Information Age," in J. Hess and K. Monroe (eds.), Proceedings of the $14^{\text {th }}$ Paul D. Converse Award Symposium, AMA, 1998.
22.* "Marketing Strategy in the Global Information Age," The Financial Times, pp. 131-150, Mastering Marketing Series, 1998.
23.*|"Customerization: The Next Revolution in Mass Customization," with Arvind Rangaswamy, Journal of Interactive Marketing, Vol. 15, No. 1, pp. 13-32. Reprinted as Marketing Science Institute working paper and summarized in Insight from MSI 2000. Reprinted in Pulses (publication of the Singapore Exchange), October 2000.
24.*|"Digital Marketing," with Vijay Mahajan, in Wind and Mahajan, eds., Digital Marketing, Wiley, 2001. A modified version "The Challenge of Digital Marketing," European Business Forum, Vol. 1 \#1, March 2000.
25.*|"The Challenge of 'Customerization' in Financial Services," Special issue of Communications of the ACM on electronic banking, 2001.
26. | "The Dot.com Retail Failures of 2000: Were There Any Winners?" with Vijay Mahajan and Raji Srinivasan, Proceedings of MSI Conference, 2001; Journal of the Academy of Marketing Science, Fall 2002 Special Issue.
27. "Winning the Digital Transformation Race," with Raffi Amit, Morris Cohen, and Jurgen Wunram, Wharton School Working Paper, October 2002.
28.*| "Marketing as an Engine of Business Growth: A Cross-Functional Perspective," The Journal of Business Research, 58 (7), 2005, pp. 863-873; Appears in ScienceDirect, http://authors.elsevier.com/sd/arcitle/S0148296304000141, subscription site.

29* "Beyond Stretch Objectives: Stretching Thinking, Strategy, and Organizational Design," with Louis Capozzi and Monita Buchwald, April 2005.
30. "Putting the Organization on Wheels: How SEI Uses Workplace Design and Art to Create a Corporate Culture that Drives Innovation and Growth," with AI West, California Management Review, forthcoming 2007.

## C. Marketing and Product Strategy

1.| "Innovation in Marketing: An Organizational Behavior Perspective," with Kenneth E. Knight, California Management Review, 11. Fall 1968, pp. 67-78.
2.|* "Management and Change," with Bent Stidsen and Kenneth E. Knight, Manpower and Applied Psychology, 2. Winter 1968, pp. 38-46.
3. "The Marketing Concept Revisited: A Decade Recap of Its Development and Meaning," with Thomas Schutte, Wharton School Working Paper, January 1968.
4.|* "Innovation as Marketing Orientation," Business Economics (Hebrew), 36. December 1969, pp. 5-11.
5.|* "A Marketing Approach to the Salesman Function," Organization and Administration (Hebrew), 15. September 1969, pp. 26-33.
6.|* "The Stepchildren of Marketing: Organizational and International Customers," The Wharton Quarterly, 7. Fall 1972, pp. 43-46.
7.* "A Note on the Operationalization of the Product Life Cycle Concept," Wharton School Working Paper, January 1975.
8. "Consumer Attitudes as Guidelines for the Evaluation of a New Distribution System," with Frank J. Cacchione, Jr., and Daniel Gross in Y. Wind and M. Greenberg, (eds.) Moving Ahead With Attitude Research. (Chicago, IL: AMA), 1977, pp. 139-143.
9.* "On the Use of Attitude Research in Product Policy," with Tyzoon Tyebjee, in Y. Wind and M. Greenberg, (eds.), Moving Ahead with Attitude Research. (Chicago, IL: AMA), 1977, pp. 147-156.
10.* "The Perception of a Firm's Competitive Position," in F. Nicosia and Y. Wind, (eds.), Behavioral Models of Market Analysis: Foundations for Marketing Action. (Hinsdale, IL: The Dryden Press, 1977). pp. 163-181.
11.|* "Toward a Change in the Focus of Marketing Analysis: From a Single Brand to an Assortment," Journal of Marketing, October 1977, pp. 12-13.
12.* "On the Multidimensionality of Market Share," with Peter T. FitzRoy, Wharton School Working Paper, April 1979.
13.* "Product-Marketing Planning Models: Concepts, Techniques, and Needed Development," in Allan D. Shocker, (ed.), Analytic Approaches to Product and Marketing Planning (Cambridge, MA: MSI), 1979. pp. 39-66.
14.|* "Going to Market: New Twists for Some Old Tricks," The Wharton Magazine, 4. Spring 1980, pp. 34-39. Based on "Product Positioning and Market Segmentation Marketing and Corporate Perspectives," Wharton School Working Paper, 1979.
15.|* "Market Share: Concepts, Findings, and Directions for Future Research," with Vijay Mahajan, Review of Marketing, and K. Roering, (eds.), Chicago: AMA, 1981, pp. 31-42.
16.|* "Significant Issues for the Future: Some Additional Perspectives," Journal of Product Innovation Management, 1984; 2:129-132.
17.* "The Contribution of Research to Product Management and New Product Development," ESOMAR Congress Proceedings, August 1983, pp. 1-15.
18.* "The Marketing Challenge," address given upon receipt of the Charles Coolidge Parlin Award, 1985. Wharton School Working Paper. Excerpts appeared in The Marketing News, August 1985.
19.|* "Marketing Hype: A New Perspective for New Product Research and Introduction," with Vijay Mahajan, The Journal of Product Innovation Management, Vol. 4, No. 1, pp. 43-49, March 1987.
20.|* "New Product Development Process: A Perspective for Reexamination," with Vijay Mahajan, The Journal of Product Innovation Management, December 1988, No. 5: pp. 304-310. Reprinted in IEEE Engineering Management Review, 1990.
21.* "Positioning Analysis and Strategy," in G. Day, B. Weitz and R. Wensley (eds.), The Interface of Marketing and Strategy, JAI Press, 1990.
22.* "Salespeople as Marketing Strategists," with Douglas Hill, Wharton School Working Paper, June 1988.
23.* "Innovative Distribution: The Neglected Dimension in Business Strategy," Wharton School Working Paper, August 1988.
24.|* "Getting a Read on Market-Defined Value," Journal of Pricing Management, Vol. 1, No. 1, Winter 1990, pp. 5-14.
25.* "A New Approach to the Determination and Allocation of the R\&D Budget," Wharton Working Paper, 1990.
26.* "A New Approach for Screening New Products and Service Concepts: Application to Financial Services," with Hoon Young Lee and Raymond Burke, August 1992.
27.* "New Product Models: Practice, Shortcomings, and Desired Improvements" with Vijay Mahajan, March 1991.
28. "New Product Success in the Japanese Consumer Goods Market" with Hotaka Katahira and Makoto Mizuno, Wharton School Working Paper, 1993.
29.|* "Introduction to the Special Issue: Empirical Generalizations in Marketing," with Frank Bass in Marketing Science special issue on Empirical Generalizations in Marketing, Vol. 14, No. 3, Part 2, 1995.
30.|* "Issues and Opportunities in New Product Development: An Introduction to the Special Issue," JMR special issue on Innovation in New Product Development: "Best Practice" in Research, Modeling and Applications, with Vijay Mahajan, February 1997, pp. 1-12.
31.* "Innovation as a Determinant of Firms' Financial Performance: The View of the Financial Analyst," with Ed Nifssen and Bernend Wierenga (manuscript under review).
32.| "Got Emotional Product Positioning? There's More to Positioning Than Just Features and Benefits," with Vijay Mahajan, Marketing Management, May/June 2002, pp. 36-41.
33.* "Creativity and Innovation: The Management Edge," The First Annual Zoltan Wind Lecture at IDC Israel, May 1996, forthcoming as part of IDC's Zoltan Wind Lecture Series, 2006.

## D. Research on Industrial Buying Behavior

1.|* "The Determinants of Vendor Selection: The Evaluation Function Approach," with Paul E. Green and Patrick J. Robinson. Journal of Purchasing, 4. August 1968, pp. 29-41.
2.|* "Applying the Behavioral Theory of the Firm to Industrial Buying Decisions," The Economic and Business Bulletin, 20. Spring 1968, pp. 22-28.
3.* "Integrating Attitude Measures in a Study of Industrial Buying Behavior," in Lee Adler and Irving Crespi, (eds.), Attitude Research on the Rocks. (Chicago, IL: American Marketing Association, 1968), pp. 58-77.
4.* "Mathematical Analysis of Perception and Preference for Industrial Marketing," in K. Cox and B.M. Enis, (eds.), A New Measure of Responsibility for Marketing. Proceedings of the International Marketing Conference of the American Marketing Association, June 1968, pp. 284-294.
5. "Generalized Simulation of the Industrial Buying Process," with Patrick J. Robinson, Marketing Science Institute Working Paper P-46-2, June 1968.
6.* "Simulating the Industrial Buying Process," with Patrick J. Robinson, in R.L. King, (ed.), Marketing and the New Science of Planning. Proceedings of the American Marketing Association, August 1968 Conference, pp. 441-448.
7.|* "Computer Simulation: Marketing Management Tool," with Patrick J. Robinson, Computer Operations, 3. January-February 1969, pp. 42-47.
8.|* "Industrial Source Loyalty," Journal of Marketing Research, 7. November 1970, pp. 450-457.
9.* "A Reward-Balance Model of Buying Behavior in Organizations," in George Fisk, (ed.), New Essays in Marketing Theory. (Boston, MA: Allyn \& Bacon, 1971), pp. 206-217.
10.* "Industrial Marketing Research," with Richard Cardozo. Paper presented at the AMA Workshop on Industrial Buying Behavior, Berkeley, California, April 1971.
11.| "A General Model for Understanding Organizational Buying Behavior," with Frederick E. Webster, Journal of Marketing, 36. April 1972, pp. 12-19.
12.|* "On the Study of Industrial Buying Behavior: Current Practices and Future Trends," with Frederick E. Webster, Industrial Marketing Management, 1. July 1972, pp. 411-416.
13.|* "Industrial Buying as Organizational Behavior: A Guideline for Research Strategy," with Frederick E. Webster, Journal of Purchasing, 8. August 1972, pp. 5-16.
14.* "Segmenting Media Buyers," with Steve Silver, Journal of Advertising Research, 8. December 1973, pp. 33-38.
15.* "The Industrial Customer," with Elmer Lotshaw, in Stuart H. Britt, (ed.), Marketing Handbook. (The Dartnell Corp., 1973), pp. 781-792.
16.* "Recent Approaches to the Study of Organizational Buying Behavior," in T.V. Greer, (ed.), Increasing Marketing Productivity. Proceedings of the American Marketing Association April 1973 Conference, pp. 203-206.
17.|* "Industrial Market Segmentation," with Richard N. Cardozo, Industrial Marketing Management, 3. March 1974, pp. 153-165. (Also appeared in the French Encyclopedie de Marketing, 1978).
18. "Marketing Research in the Design of STI Systems: A Case Study," with John F. Grashof, in R. Mason and J. Kreps, Jr., (eds.), Information Services: Economics, Management, and Technology (Boulder, CO: Westview Press), 1981, pp. 73-84.
19.|* "Emerging Models of Organizational Buying Processes," with Francesco M. Nicosia, Industrial Marketing Management, 6. 1977, pp. 353-369. Also in Nicosia and Wind, (eds.), Behavioral Models of Market Analysis: Foundations for Marketing Action (Hinsdale, IL: The Dryden Press), 1977, pp. 96-120.
20.* "Information Requirements on Buying and Usage of STI Services," in Current Research on Scientific and Technical Information Transfer. (New York: J. Norton Publishers, 1977), A Micropapers Edition.
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2.| "Definitions of Marketing Models," with David Schmittlein, in Peter D. Bennett (ed.), Dictionary of Marketing Terms, Chicago: American Marketing Association, 1988, pp. 1-30.
3.| "Information Technology in Marketing," with Arvind Rangaswamy, in A. Kent and J.G. Williams (eds.), Encyclopedia of Microcomputers, New York: Marcel Dekker Inc., 1992, pp. 1-33.
4.| "Marketing Strategy Models," with Gary L. Lilien, in Handbooks in OR \& MS: Marketing, Elsevier Science, Vol. 5, 1993, pp. 773-826.
5.| "Marketing," with Josh Eliashberg and Gary Lilien, Encyclopedia of OR/MS, Saul Gass and Carl Harris (eds.), Kluwer Publishers, 1994, pp. 1-15; revised 1998.
6. |* "Market Segmentation," Chapter 23 in Michael J. Baker (ed.), Companion Encyclopedia of Marketing, 1995, pp. 394-419. Reprinted in M. Baker (ed.), Marketing Theory: A Short Text, London: Business Press, a Division of Thompson Learning, 2000
7.|* "Conjoint Analysis: Methods and Applications," with Paul Green and Vithala Rao, in The Technology Management Handbook, CRC Press, 1999, pp. 12.65-12.72.
8.|* "Creating a Vision," in The Technology Management Handbook, CRCnet Base, 2000.
9.|* "The Ten Commandments of Marketing," in Joel Kurtzman, Glenn Rifkin and Victoria Griffith MBA in a Box, Crown Business, 2004. [An earlier draft was distributed as "Marketing Strategy," Wharton Working Paper, 2003.]

## IV. EDITOR OF SPECIAL ISSUES

- Journal of Marketing Research
- "Market Segmentation," August 1978.
- "Innovation and New Products," February 1997.
- Marketing Research - "Marketing Research Forum: The State of the Art in Quantitative Research," Winter 1997.
- Marketing Science - "Empirical Generalizations in Marketing" (with Frank M. Bass), Vol. 14, No. 3, Part 2, 1995.
- Management Science (with John Farley and Diana L. Day) - "The State of The Art in Theory and Methods for Strategy Research," 1990.
- The Wharton Quarterly, "Marketing," Fall 1972.


## V. EDITORIALS

| Journal of Consumer Research | June 1977: | "New Directions for JCR" |
| :---: | :---: | :---: |
| Marketing News | July 1978: | "New Directions for JM" |
| Journal of Marketing | Winter 1979: | "The Journal of Marketing at a Crossroad" |
|  | Spring 1979: | "Repositioning the Journal" |
|  | Summer 1979: | "Bridging the Gap Between Practitioners and Academicians" |
|  | Fall 1979: | "On the Status of Marketing Theory" |
|  | Winter 1980: | "Marketing in the 80's" |
|  | Spring 1980: | "Strategic Planning and Marketing: Time for a Constructive Partnership," with George Day |
|  | Summer 1980: | "International Marketing: The Neglect Continuous," with John Farley |
|  | Fall 1980: | "Industrial Marketing: The Sleeping Giant," with Frederick Webster |
|  | Winter 1981: | "Journals and the Development of a Discipline" |
|  | Spring 1981: | "Research and Management" |
|  | Summer 1981: | "A Positive Perspective on Marketing" |
|  | Fall 1981: | "Reflections" |
| The Lauder Quarterly | All editorials from | itiation in 1986 to July 1988. |

## VI. ILLUSTRATIVE RECENT OP ED AND COMMENTARIES

- Orchestra needs to change tune in contract negotiations: Settling the score must rest on the idea of working toward a collective goal, Philadelphia Inquirer, Commentary, November 4, 2004.
- The Wisdom of the Flip Flop, Wharton School Publishing Newsletter, November 2004.
- Rethinking our mental models for elections, Newsletter of the Wharton Fellows, November 2004.
- "E-Learning Crossfire," Information Week, February 26, 2001.
- "Reverse mentoring can solidify collaboration among functional groups, but it cannot be the only tool that enforces such teamwork or the sole catalyst for change." Commentator on HBR "Too Old to Learn?" Case Study. Harvard Business Review. November-December 2000.


## VII. EDITED PUBLICATIONS OF THE SEI CENTER - ILLUSTRATIVE LIST

- Creating and Implementing a Corporate Vision, January 1990.
- Human Resources: Management for the $21^{\text {st }}$ Century, January 1990.
- The Impact of Artificial Intelligence on Management Decision Making and Organizational Design, February 1990.
- Creating and Implementing Quality in Organizations, March 1990.
- Corporate Governance: Who's in Charge?, May 1990.
- Strategic Information Architecture: Increasing Productivity, Managing Risks, June 1993.
- Management in the $21^{\text {st }}$ Century: Predictions From Top Think Tanks, September 1990.
- The Individually Empowered Organization, November 1990.
- Innovation and New Product Development for the $21^{\text {st }}$ Century Enterprise, November 1990.
- Ethical Standards for Global Corporations? December 1990.
- Managing Infrastructure Costs; What is the Best Strategy for Long-Term Controls? February 1991.
- Lessons from the Malcolm Baldridge Award: Implications for Management Practice, Research, and Education, February 1991.
- Innovation in Services, May 1991.
- Visionary Leadership, October 1991.
- The Impact of Information Networking on Organizational Design and Strategy, November 1991.
- Frontiers in Electronic Commerce: Experimental Systems for Communication, Coordination, and Negotiation, February 1992.
- Innovation and Learning, March 1992.
- Historical Perspectives in Management Education, April 1992.
- Decision Making in Highly Uncertain Political Environments: Investing in the Russian Oil and Gas Industry, March 1992.
- Issues and Advances in New Product Development, June 1992.
- Rewarding the Workforce of the Future: Competence-Based Performance Measures and Incentives, October 1992.
- Designing Corporate Governance for the $21^{\text {st }}$ Century Global Enterprise: International Perspectives, January 1993.
- Dr. Peter Drucker on "The New Organization," April 1993.
- Corporate Performances: Beyond Financial Measures, April 1993.
- The Horizontal Organization, October 1993.
- The End of Diversity: Rights, Responsibility and the Communication Agenda November 1993.
- Deploying Strategic Assets: Beyond Core Capabilities, November 1993.
- Research Challenges in Linking Quality: Profitability and Organizational Architecture, December 1993.
- Empirical Generalizations in Marketing, February 1994.
- Beyond Quality: Organizational Transformation for the $21^{\text {st }}$ Century Enterprise, March 1994.
- Exploratory Conference on Business Ethics: Building the Common Ground, March 1994.
- Interactivity is Two-Way: Life on the Net April 1994.
- Interactive Industry 2000: Who's Gonna Buy this Stuff: Research for the Interactive Television Business, July 1994.
- Leadership in the $21^{\text {st }}$ Century Enterprise, November 1994.
- A New Management Paradigm for the $21^{\text {st }}$ Century, December 1994.
- The Virtual University, January 1995.
- Go West Young MBA, Far Far West: Adventures on the World's Business and Management Frontier, January 1995.
- Information Technology and the Changing Boundaries of the Firm, January 1995.
- EMU - The Road to Europe, February 1995.
- The New Science and Emerging Paradigms in Business, April 1995.
- Innovation in New Product Development: Best Practices in Research, Modeling and Applications, May 1995.
- The Bamboo Network, November 1995.
- Corporate Growth Engines, December 1995.
- A Trapezoidal Corporation, February 1996.
- The Impact of Computers and Information on Management: 1946-1996-2001, May 1996.
- European Venture Capital Industry, November 1996.
- The CEO Challenge: Implementing Strategy in a Constantly Changing Marketplace, December 1996.
- The Future of Impact of Information Management: A Lecture Series from July 1996-January 1997.
- New Media, February 1997.
- From Detection to Action: Processes and Insights Gained from an Early Warning Signal System, March 1997.
- Toward New Corporate Governance Models: Lessons from the Japanese and U.S. Experience, March 1997.
- When Is It Worthwhile Targeting the Majority Instead of the Innovators in a New Product Launch? November, 1997.
- Consumer Choice Behavior in On-line and Regular Stores: The Effects of Brand Name, Price, and Other Search Attributes, January 1998.
- The Systems Approach: The New Generation, February 1998.
- Managing Workteam Diversity, Conflict, and Productivity: A New Form of Organizing in the $21^{\text {st }}$ Century Workspace, September 1998 (by Etty Jehn, The Diversity Research program with Bob Holland).
- GM for the $21^{\text {st }}$ Century: From "Make and Sell" to "Sense and Respond," March 1999 (by Vince Barabba).
- The Limits of Privacy, March 1999 (by Amitai Etzioni).
- Japan at the Great Divide, April 1999 (by Yasuhisa Shiozaki).
- Into the $21^{\text {st }}$ Century: The First Decade and Beyond: A Report on the SEI Center for Advanced Studies in Management, 1990-2000.


## VIII. EDITOR: WHARTON SCHOOL PUBLISHING BOOKS

2006

1. Peter Navarro, The Well Timed Strategy: Executing Strategy Through the Business Cycle
2. Stuart Lucas, Wealth
3. Peter Killing, Thomas Malnight, and Tracey Keys, Must-Win Battles
4. Neil Bender, Paul Farris, Philip Pfeifer, and Dave Reibstein, 50+ Marketing Metrics Every Business Executive Should Know
5. Russell Ackoff, Herbert Addison, and Jason Magidson, Idealized Design
6. Lars Kolind, The Second Cycle
7. George Chacko, Credit Derivatives: Introduction to Credit Risk and Credit Instruments

2005

1. Randall Billingsey, Understanding Arbitrage: An Intuitive Approach to Financial Analysis
2. Tony Davila, Marc Epstein, and Robert Shelton, Making Innovation Work: How to Manage It, Measure It, and Profit from It
3. Sunil Gupta and Donald Lehmann, Managing Customers as Investments: The Strategic Value of Customers in the Long Run
4. Stuart Hart, Capitalism at the Crossroads: The Unlimited Business Opportunities in Solving the World's Most Difficult Problems
5. Lawrence Hrebiniak, Making Strategy Work: Leading Effective Execution and Change
6. Jon Huntsman, Winners Never Cheat: Everyday Values We Learned as Children (But May Have Forgotten)
7. Eamonn Kelly, Powerful Times:Rising to the Challenge of Our Uncertain World
8. Doug Lennick and Fred Kiel, Moral Intelligence: Enhancing Business Performance and Leadership Success
9. V. J. Mahajan and Kamini Banga, The 86 Percent Solution: How to Succeed in the Biggest Market Opportunity for the Next 50 Years
10. Alred Marcus, Big Winners and Big Losers: The 4 Secrets of Long-Term Business Success and Failure
11. Kenichi Ohmae, The Next Global Stage: Challenges and Opportunities in Our Borderless World
12. Michael Roberto, Why Great Leaders Don't Take Yes for an Answer: Managing for Conflict and Consensus
13. Arthur Rubinfeld and Collins Heminway, Built for Growth: Expanding Your Business Around the Corner or Across the Globe
14. David Sirota, Louis Mischkind, Michael Meltzer, The Enthusiastic Employee: How Companies Profit by Giving Workers What They Want.
15. Thomas Stallkamp, SCORE!: A Better Way to Do Busine\$\$: Moving from Conflict to Collaboration
16. Glen Urban, Don't Just Relate - Advocate!: A Blueprint for Profit in the Era of Customer Power.
17. Craig Vogel, Jonathan Cagan, and Peter Boatwright, The Design of Things to Come: How Ordinary People Create Extraordinary Products.

2004

1. Bernard Baumohl, The Secrets of Economic Indicators: Hidden Clues to Future Economic Trends and Investment Opportunities
2. Sayan Chatterjee, Failsafe Strategies: Profit and Grow from Risks that Others Avoid
3. Robert Mittelstaedt, Will your Next Mistake Be Fatal? Avoiding the Chain of Mistakes that Can Destroy your Organization
4. Mukul Pandya, Robbie Shell, Susan Warner, Sandeep Junnarkar, Jeffrey Brown (2004), Nightly Business Report Presents Lasting Leadership: What You can Learn from the Top 25 Business People of our Time
5. C.K. Prahalad, The Fortune at the Bottom of the Pyramid
6. Scott Shane, Finding Fertile Ground
7. Oded Shenkar, The Chinese Century: The Rising Chinese Economy and Its Impact on the Global Economy, the Balance of Power, and your Job
8. Jerry Wind and Colin Crook, The Power of Impossible Thinking

## IX. ILLUSTRATIVE PUBLISHED ABSTRACTS OF PAPERS DELIVERED IN PROFESSIONAL MEETINGS

- "Enduring Vs. Situation Dependent Customer Characteristics as Bases for Market Segmentation: An Evaluation," in David L. Sparks, (ed.), Broadening the Concepts of Marketing. Proceedings of the American Marketing Association, August 1970 Conference.
- "Preference of Relevant Others and Individual Choice Models," in W.L. Nichols, ed., Proceedings of the 1974 AAPOR Conference and in Public Opinion Quarterly, 38. Fall 1974, pp. 447.
- "Multivariate Decision-Making in the Setting of Pulmonary Outpatient Clinic," with Lawrence Spitz and Ronald Daniele. Paper presented at American College of Physicians, San Francisco, April 1975.
- "Diagnosis Consumer Behavior: A Quantitative Approach," in D. Rothwell, (ed.), Proceedings of the $30^{\text {th }}$ Annual AAPOR Conference May 1975 and in Public Opinion Quarterly, 39. Fall 1975, pp. 415.
- "Segmentation and Positioning of Health Insurance Services Under Conditions of Heterogeneous Health Insurance Portfolios," in TIMS/ORSA Bulletin for the S.F. Joint Meeting, May 1977, pp. 244.
- "Alternative Approaches to Industrial Market Segmentation," with Paul E. Green, in TIMS/ORSA Bulletin for the S.F. Joint Meeting, May 1977, pp. 234.
- "Innovation and the R\&D-Marketing Interface," with Joel Goldhar, in TIMS/ORSA Bulletin for the Atlanta Meeting, November 1977.
- "Measurement Issues in Portfolio Analysis," with Vijay Mahajan, in R.P. Leone, (ed.), Proceedings of Market Measurement and Analysis, TIMS, 1980, pp. 50-53.
- Aimagery Products: A Measurement Challenge," with Lew Pringle, in J. Keon, (ed.), Market Measurement and Analysis, TIMS/ORSA, 1981.
- "Standardized Portfolio Models: An Empirical Comparison of Business Classification," with Vijay Mahajan and Donald J. Swire in Allan D. Shocker and R. Srivastava, (eds.), Proceedings of the 1981 Analytical Approaches to Product and Marketing Planning Conference.


## X. CASE STUDIES

- During the academic year 1962-1963, I wrote a number of marketing cases at the Hebrew University, Jerusalem (Israel). One of these cases, The Ozi Ballpoint Pen III, was published in Harper W. Boyd, Jr. et al., (eds.), Marketing Management: Cases from the Emerging Countries (Reading, MA: Addison-Wesley Publishing Company), 1966.
- During the academic year 1968-1969, several marketing cases were written under my supervision at the Leon Recanati Graduate School of Business Administration, Tel Aviv University.


## CONSULTING EXPERIENCE

## A. Marketing, Business Strategy, and Marketing Research Consulting

## 1. Information and Telecommunication Industry

- AT\&T \& the Bell companies: Occasional consultant to various units, including:
- AT\&T Technologies Inc. - Design a market segmentation program (1986)
-AT\&T - Review and Design of Portfolio System (1981-1982)
- Bell Atlantic - Marketing \& pricing strategy (1983)
- Bell Canada - Design of a segmentation study and product portfolio (1979-1980)
- Geometric Data: Segmentation/positioning studies (1981-1982)
- IBM:
- ABS Division: Developing a procedure for Integrating Marketing and R\&D 19881989
- ES Division, Marketing Strategy and Segmentation (1991-1993)
- Motorola Broadband Sector: 1998-2004. Business Strategy consulting.
- Next Level Communication: Business strategy consulting (2000)
- Newsweek, Inc.: Marketing consulting (1979-1980)
- Northern Telecom: Value Pricing and Business Strategy Consulting (1993-1995)
- RCA, Government Communications Systems: Design of a research program to assess the market response to new Electronic Mail System (1978-1979)
- Samsung, Management of Technological Innovation (2006)
- Telenet, Strategies for "Getting More with Less" (2006)
- Xerox: Marketing consulting to a design integration program (coordinated by Jay Doblin Associates) and design of a market segmentation project (1982-1983)


## 2. Financial Services

- Chase Manhattan Bank: Process for evaluation of mergers and acquisitions and design of segmentation studies (1978-1979)
- CitiBank: Statistical consulting (1980); marketing strategy consulting (1996-1997)
- Colonial Penn Group: Design and evaluation of most of the firm's research activities and general consulting to marketing and top management (1973-1980)
- E. F. Hutton: Design and implementation of a marketing planning system and various marketing research projects (1979-1984)
- Edward Jones \& Co.: Marketing and Business Strategy consulting (1984-2004)
- Reliance Insurance Companies: Marketing research consulting (1980-1981)
- SEI Investments: Marketing, Business and Corporate Strategy consulting (since 1986)

3. Health Care

- Bristol-Myers Squibb (BMS): Marketing strategy consulting (1997-2002)
- Merck, Sharp, and Dome: General marketing research consulting (1981)
- Merck \& Co.: Marketing Strategy and Marketing Research and Modeling (1991-1996)
- Pfizer, Inc.: 1975-1990. Design and analysis of most of the marketing research projects of Pfizer Laboratories and Roerig. Occasional marketing strategy consultant to the Hospital Products Group (1984-1986) and Pfizer Pharmaceuticals (1987-1990).
- SmithKline Beckman: Marketing strategy development for TAGAMET (1987-1988); evaluation of strategy implementation (1989)
- SmithKline Clinical Laboratories: Marketing planning (1984)
- Sterling Drug, Inc.: Development of marketing driven portfolio of R\&D projects (19861991); Pricing study for innovative new product (1991-1992)
- Upjohn: Strategic planning consulting (1981)
- West Jersey Health System: Marketing and Business Strategy (1985)


## 4. Transportation

- Air Canada: Market segmentation, positioning and new product development (1973)
- Chrysler: Modeling the advertising budget (1978), advising regarding the analysis of customer satisfaction process (1995-1997)
- Conrail: Design of a positioning/segmentation study (1978-1979)


## 5. Consumer Goods

- American Dairy Brands and Schreiber Foods, Inc.: Arbitration (2004)
- Campbell Soup: Advertising Strategy, 91-96, 2005; Taste Tests (2001-2003)
- Coors Brewing Company, Pricing and positioning (2001)
- DAYMON: Marketing Strategy (since 2003)
- Eastman Kodak: New product research approaches (1978)
- R.J. Reynolds Tobacco Co.: Evaluation and design of a new product development system (1979-1980)
- S.B. Thomas: Marketing and research consultant (1979-1980)
- Simplicity Patterns, Inc.: Develop a business plan (1982)
- Pepsi: Research support for the Pepsi Challenge and related campaigns (1978, 1981, 1990, 1995, 1999)

6. Industrial Products and Services

- International Harvester: Designing a market segmentation process (1980)
- Stauffer Chemicals: General marketing consulting (1980)
- Exxon Chemicals: Marketing and Business Strategy (1985-1986)
- John Fluke Manufacturing Co., Inc.): Marketing and corporate strategy (1985-1988)
- ITT Water Technology Group (2004-)


## 7. Retailing

- Sears Roebuck \& Company: Advertising and marketing strategy (1972-1973)
- Wickes, plc: U.K. Marketing and Business Strategy Consulting (1988-1996).


## 8. Professional Service Firms

- Applied Communication Research (1974-1976)
- BBD\&O (on an occasional basis, 1974-1985)
- Cunningham and Walsh, Inc. (1978)
- DMB\&B (1993)
- Doyle Dane Bernbach: Evaluation of a campaign claim (1980)
- Gahagan Research Associates, Inc. (selected projects, 1972-1978)
- Hakuhodo. Marketing Strategy for the $21^{\text {st }}$ Century (1992-1995)
- IMS America (1997-)
- Market Research Corporation of America (MRCA) (1975-1987)
- McConnel Advertising (Montreal), (1974)
- Medicus (1989-1997)
- Morgan, Lewis \& Bockius: Development of Business Strategy (1992-1994)
- MS\&L: Marketing consulting (1995-1997; 2001-)
- National Analysts (1975-1976)
- Oxtoby-Smith (selected projects, 1972-1978)
- Price-Waterhouse Coopers LLP (marketing and corporate strategy consulting, 19962001).
- Professional Marketing Research, Inc. (1977-1978)
- Robinson Associates (1969-1975)
- Standard \& Poors (1997-2000)
- Whittlesey and Partners (1972-1973)
- $\quad$ Y \& R (1989)


## 9. Trading Companies, Real Estate Development

- Dewey Companies: 2003 Marketing and Business Strategy consulting
- Li \& Fung: Since 1998. Business Strategy consulting.


## B. Directorship

- IDT (2005-)
--------------- - -
- Ecquaria (2001-04)
- Enhance Financial Services (1997 until acquisition by Radian Group, Inc. in 2001)
- Credit 2B (2001)
- CASA - Center for Adaptive Systems Applications Inc. (1999 Until acquisition by HNC in 2000)
- Access Technologies Group, co-founder and chairman (1992-1996)
- Contel Corporation, member of the Board of Directors (1988 Until acquisition by GTE in 1991)
- Dover Regional Bank Shares, member of Board of Trustees (1986-1990)
- Shooting Stars, Inc., member of the Board of Directors (1986-1990)
- Reality Technologies, Inc. (1988-until acquisition by SEI Investments in 1990)
- The Cortlandt Group, Inc., Co-founder and Chairman of the Board of Directors, (1979-1986)
C. Illustrative Advisory Boards
- NetXentry (2000-)
- Mutual Arts (2003-)
---------------- -
- Ad4ever (2000-2003)


## D. Expert Witness: Marketing and Marketing Research Consulting in Legal Cases

- Alschuler, Grossman and Pines: Packard Bell vs. Compaq, 1995-1996
- Arent, Fox, Kitner, Plotkin \& Kahn: Marketing research consulting re: Estee Lauder, 1987
- Arnold, Whiite and Dunkee: The Clorox Co. vs. Dow Brands Inc. re: Smart Scrub v. Soft Scrub, 1995
- Arnold \& Porter:
(a) Schering v. Pfizer, Perceived sedation of Zyrtec, 2000
(b) Pfizer: Physicians' beliefs concerning prescription antihistamine products in terms of their sedating/non-sedating characteristics 2002
- Baker \& McKenzie:
(a) G.D. Searle \& Co. and subsidiaries litigation in the U.S. Tax Court, 1982
(b) American Republic Insurance Co. vs. Americare Inc. and American Dental Centers P.C., 1988
- Berle, Kass and Case: Evaluation of public attitude re: Burlington County Bridge Commission, 1992
- The Calorie Control Council vs. FTC re: the Saccharin case, 1979
- Covington and Burling:
(a) The Proprietary Association vs. FTC re: over-the-counter (antacids) drugs, 1979
(b) FTC Staff Report on cigarette advertising investigation 1981-1983 including appearance before congressional committee in hearing on H. R. 1824: "The Comprehensive Smoking Prevention Education Act"
(c) International Telecharge Inc. vs. AT\&T, 1992-1994
(d) Dream Team Collectibles vs. NBA Properties (re: Dream Team), 1996
(e) G. A. Modefine S.A. v. Armani.com, 2003-2004
- Cravath Swain and Moore:
(a) Amertech Corporation, et. AI. v. Lucent Technologies Corporation [Arbitration], 1997
(b) Louis Vuitton v. Dooney \& Bourke, Inc., 2004
- Crude Oil Resellers vs. U.S. Department of Energy Economic Regulatory Administration re: the proposed crude oil reseller price regulations, 1979, including presentation at public hearing
- Darby and Darby. Proctor \& Gamble vs. Colgate, Palmolive, and Y\&R re: China advertising, 1997
- Dechert Price \& Rhoads:
(a) The Mutual Assurance Co. vs. American Council of Life Insurance and Health Insurance Association of America (re: The Green Tree), 1983-1984
(b) INC vs. Manhattan, Inc., 1985
(c) Tunis Brothers Co. vs. Ford Motor Credit Co., 1988
(d) Allerest vs. Alleract, 1988-1990
(e) Campbell Soup Co. vs. Conagra, Inc. (Various deceptive advertising cases) 1991-1996
- Department of Justice, Antitrust Division: Consulting in a number of cases since 1996, including Microsoft Network, ski resorts, Echostar's proposed acquisition of DirecTV, and dental supplies
- Dilworth, Paxson, Kalish, Levy and Kauffman: Prince Castle vs. Le-Jo Enterprises, 1977-1978
- Forrest, Hainline III, American Pasta Co. vs. New World Pasta Co. (re: "America's favorite pasta"), 2002
- Fulbright \& Jahorski: Deere and Co. vs. MTD Holdings, 2003
- Gibson, Dunn, \& Crutcher:
(a) Pfizer, Inc. vs. International Rectifier Corp., 1982-1983
(b) Thompson vs. General Nutrition Corp., 1985
(c) New Vector vs. Metro Mobile, 1986;1992
(d) Air Passenger CRS Antitrust Litigation vs. American Airlines, 1987-1990
(e) Quintons/Mahurkar vs. Shiley
(f) McCaffrey vs. Pfizer re: Plax, 1990
(g) The Travel Difference vs. The Time Mirror Co. (LA Times), 1992
(h) Toyota re: class action defense vs. Staples Stillwell on the "destination charge" on Monronery Stickers,1995-1996; 1999-
(i) Hewlett-Packard vs. Nu-Kote Int. Inc., Anti-trust, 1998-1999
(j) LA Cellular AT\&T Wireless class action defense, 2002, 2004-
(k) Hewlett Packard defense vs. Staple Stilwell in class action suit re economy cartridge, 2003
- Gold, Farrel \& Marks: Miramax Film Corp. vs. Columbia Pictures Entertainment, re: I Know What You Did Last Summer (1997)
- Goodwin, Proctor and Hoar: FTC vs. New Balance re: "made in USA", 1995-1996 [FTC Hearing] and consulting 1998
- Hapgood, Calimafole, Kalil, Blaustein \& Judlowe: Merrill Lynch vs. Paine Webber (re. RMA), 1985
- Heller, Ehrman, White, and McAuliffe: Apple Computer Securities Litigation, 1985-1986.
- Herling, Lindeman, Goldstein and Siegal: Roli Boli vs. Pizza Hut, 1997
- Hill, Betts, and Nash: Fender Musical Instruments Inc. vs. E.S.P. Co., 1985
- Howrey, Simon, Arnold \& White:
(a) Sands, Taylor and Wood vs. The Quaker Oats Co. re: Thirst-Aid, 1987
(b) Syntex, Inc. vs. Schering-Plough Healthcare Products, Inc. re: Femcare, 1992
(c) Anheuser Busch (re Bud Dry commercials), 1993
(d) Anheuser Busch vs. Labbatt (re: Ice Beer), 1994-1995
(e) Anheuser Busch vs. Samuel Adams, 1995
(f) Anheuser Busch vs. United Guiness Distillers (regarded Red Label from Budweiser), 2002
(g) Nissan North America vs. BMW (re: "Z"), 2002
- IT\&T Continental Baking vs. FTC re. Fresh Horizons advertising, 1977-1978
- Jenner \& Block:
(a) General Dynamics vs. AT\&T. re: Antitrust litigation, 1987-1990
(b) AT\&T vs. MCI re: Telemarketing Practices 1990
- Kaye, Scholer, Fierman, Hays \& Handler:
a. Automated Bread Dist. Corp. vs. General Foods Corp. (Re: Freihofer Baking Co.), 19911992
b. Zone Perfect Nutrition Co. vs. Hershey Foods Co., 2004
- Kenyon \& Kenyon:
(a) Mead Data Control, Inc. vs. Toyota Motor Sales, U.S. re: Lexis vs. Lexus, 1988
(b) Hiram Walker and Sons vs. White Rock Distilleries re: Kapala-Kahlua
(c) America Online vs. AT\&T Corp. re: ATT\&T's "You Have Mail", 1999
(d) Twentieth Century Fox Film vs. Marvel Enterprises, Inc. (re: Mutant X), 2002
- Kirkland and Ellis
(a) Kraft Foods Inc. and Capri Sun vs. Minute Maid, 1997
(b) Time Inc. vs. Peterson Publishing Co. re: Teen vs. Teen People, 1997-1998
(b) Brach and Brock vs. James River re: Royals candies, 1998-1999
(c) Hermes vs. Lederer, re: the Kelly Handbag, 1998-2001
- Kirkpatrick and Lockhart: McPalland et al v. Keystone Health Plan Central, Inc. (re: class certification of SeniorBlue Customers, 2001-2002
- Kleinfeld, Kaplan and Becker: re: Iron-Kids Bread Package, 1991
- Lee, Toomey, and Kent Pfizer Pharmaceuticals vs. the IRS, 1978-1979
- Lempres \& Wulfsberg and Kutak, Rock, \& Campbell: Evaluation of Expert Reports, re: International Pharmaceutical Products, Inc., 1985-1990
- Liddy, Sullivan, Galway, and Begler:
(a) Coopervision, Inc. vs. CTL, Inc. (re: Permatint), 1985
(b) Johnson \& Johnson, Inc. vs. Oral-B Laboratories (re: Minute-Gel), 1987
(c) Soft Sheen's Care Free Curl vs. Revlon's I of Nature (Trademark), 1986-1987.
(d) Oral-B Laboratories, Inc. vs. Johnson \& Johnson, Inc. (re: Reach Advertising), 1986-
- Lowenstein, Sandler: Princeton Economics Group vs. AT\&T (re: class action defense of spirit), 1994-1995
- Mitchell, Silberberg \& Knupp: Stella Foods Inc. vs. Cacique IC, re: Ranchero, 1997-1999
- Morgan, Lewis and Bockius: Scott paper defense in the Turnabout Marketing Case, 1983
- Morison, Cohen, Siner, and Weinstein, Hertz v. Avis, 1994.
- Munger, Tolles and Olson:
(a) FTC vs. Polygram Holdings et al. re: Three Tenors Case 2001-2002
(b) Universal vs. MGM (re: Rollerball) 2002
- Pattishall, McAuliffe, Newbury, Hilliard, \& Geraldson:
(a) S.C. Johnson and Son, Inc. vs. Carter Wallace ("Edge" vs. "Rise"), 1983
(b) Anheuser Busch vs. Stroh Brewery Co. and vs. Miller and Heillman, (re: LA beer), 19841985
(c) S. C. Johnson \& Son Inc., re: L'envie, 1986-1987.
(d) Shelby Motor vs. Ford, 1988.
(e) GFA Brands Inc. and Fitness Foods Inc. vs. Canbra Foods Ltd. and Campbell Mithun/Esty, Inc. re Heartlight, 1990-1991.
(f) AT\&T vs. MCl (various deceptive advertising cases) 1991-
(g) Walt. Disney vs. Good Times, 1993
(h) Car Freshener Corp. vs. S.C. Johnson and Son, Inc. (re:Glade Plug Ins Air Freshener Design), 1994
(i) International Telecharge, Inc. vs. AT\&T, 1992-1994
(j) S.C. Johnson and Son, Inc. vs. Avon (re: Skin So Soft) 1996
(k) GTE Card Services Inc. vs. AT\&T, 1996
(I) SunAmerica Corp. vs. Sun Life Assurance Co. of Canada 1993-1995, 1997-1998 [W.H. Covington and Burling]
(m) Blue Cross Blue Shield vs. American Medical Association, re: CPT, 1998
(n) Encyclopedia Britannica, Inc. vs. Britannica Home Fashions, Inc., 1999
(o) Simon Property Group, L.P. v. mySimon Inc., 2001-
(p) Montblanc - Simplo Gmblt v. Savonerie et Parfumerie Bernard, 2001
(q) Old World Industries, Inc. vs. AutoMeter Products, 2002
(r) JLJ Inc. v. Santa's Best Craft (Christmas tree lights), 2004
- Paul, Weiss, Rifkin, Wheaton and Grasser:
(a) Revlon vs. L'OREAL re: Colour Endure Commercials 1995
(b) Revlon vs. Cover Girl self renewing lipstick advertising, 1996 [NAD]
- Pepper, Hamilton and Scheetz:
(a) Del Monte Corp. vs. Sunkist Growers, Inc. Arbitration, 1990-1991
(b) Sun Oil Company defense against class action certification, 1996-1997
- Pennie \& Edmonds IT\&T Continental Baking (C\&C Cola): defense against Coca Cola re: C\&C Cola, 1978
- Pillsbury, Madison \& Sutro: Consulting re:
(a) Thrifty Rent-A-Car vs. Elder, 1991-1992
(b) Green Giant American Mixtures, 1994
(c) Chrysler Corp. vs. Replacement Sheet Metalparts Distributors, 1992-1993
- Pillsbury Winthrop LLP
(a) Mulligan v. Pacific Bell Telephone Co. (inside wiring), 2004
(b) State of California vs. Tri-Union Seafoods, et al. (Canned Tuna, Proposition 65)
- Rogers and Wells [and the Italian Trade Commission], re: Italian pasta dumping case, 1996
- Sidley and Austin:
(a) Industrial Gas litigation, 1986
(b) Land O'Lakes, Inc. vs. Bakers Franchise Ltd., 1987
(c) Ultramar, Inc. vs. CITGO Petroleum Corporation, 1997
(d) AT\&T vs. US West Communications, re: US West advertising, 1998
- Sills, Cummis, Zuckerman, Radin, Tischman, Epstein and Gross: E.R. Squibb and Sons, Inc. vs. Stuart Pharmaceuticals, 1991.
- Skadden, Arps, Meagher, \& Flom:
(a) American Home Products vs. Beecham re: Delicare commercials, 1986
(b) Tambrands, Inc. vs. Warner-Lambert Co. re: EPT commercials, 1986-1987
(c) Beecham Inc. vs. Yankelovich, Clancy, Shulman and Saatchi \& Saatchi Holdings, Inc., re: projections for Delicare, 1986-1988
(d) American Express vs. MasterCard re: Goldcard, 1988
(e) Challenge to the networks by Sterling Drug re: Bristol Myers Tribuffered Bufferin commercials, 1988
(f) Challenge by Dow Brands, Inc. of the TV advertisement for Reynolds Metals Company's "SURE-SEAL" food storage bags, 1989
(g) Anheuser-Busch Company vs. Coors Brewing Company (various deceptive advertising cases) 1991-1993
(h) R.H. Donnelley vs. Sprint Publishing and Adv. Inc., re: Sprint Yellow Pages, 1996
(i) Anheuser Busch vs. Boston Beer re: A-B advertising [NAD], 1997
- Sullivan \& Cromwell: Remington Rand Corp. vs. Amsterdam-Rotterdam Bank N.V., 1991
- Van Hagey \& Bogan, Ltd.: Consulting re: The Quaker Oats Co, 1991
- Weil, Gotshal and Manges:
(a) Johnson \& Johnson vs. SmithKline Beecham, Re: Tums Advertising, 1991
(b) Schering-Plough Healthcare Products vs. Johnson and Johnson, Inc. re: Neutrogena Chemical-Free Sun Block, 1996
(c) Pharmacia Corp. vs. Glaxosmith Kline Consumer Healthcare (re: NicoDerm advertising), 2002-2003
(d) Priceline.com re: NAD, 2003
- White \& Case:
(a) Trovan Ltd. and Electronic Identification Devices vs. Pfizer Inc. re: Trovan's trademark, 1999
(b) Frederick E. Bouchat v. Baltimore Ravens, Inc. and NFL Properties Inc., (re: the Ravens Logo), 2001-2002
(c) Oakland Raiders vs. TBB and NFL, 2003 [with Bingham McCutchen]
- Whiteman, Breed, Abbott \& Morgan:
c. Pepsi Cola Company: Defense against Coca Cola Co. re: The Pepsi Challenge, 1978; 1981;1995 [Mostly with the NAD]
d. Burger King Comparative Advertising Campaigns vs. McDonald's and Wendy's, 19821990
- Winston \& Stawn, LLP: Verizon Directories Corp. v. Yellow Book USA, Inc., 2004


## E. Illustrative Marketing Research Clients:

1. Air Canada (1973)*
2. American Cyanamid (1972-1973)*
3. Atlantic Richfield Company (1971-1972)*
4. Bankers Trust Company (1973-1974)*
5. Bell Telephone Company of Pennsylvania $(1974 ; 1977)$
6. BBD\&O (1974-1982)
7. Bissell, Inc. (1969-1971)*
8. Bristol Myers Squibb (1998-)
9. Brown \& Williamson Tobacco Corp. (1978-1979)
10. Bureau of Newspaper Advertising (1974)*
11. CBS (1972)
12. Campbell Soup Company (1972-1973)*
13. Chrysler (via BBD\&O) (1975-1978)
14. Clorox Company (1975-1976)
15. Colonial Penn Group, Inc. (1973-1979)
16. Commercial Union Assurance Companies (1974-1975)
17. Connecticut Bank and Trust Company (1972)*
18. Downe Publishing, Inc. (1972-1973)
19. Eastman Kodak Company (1973)*
20. E.F. Hutton (1981-1984)
21. Edward D. Jones (1985-1987)
22. First Pennsylvania Banking and Trust Company (1971-1972; 1974-1975)*
23. General Electric (via BBD\&O 1977) (1982)
24. General Foods Corporation: the Jell-O and Kool-Aid divisions and various departments of the corporate product development division (1969-1972)*
25. Geometric Data (1981)
26. International Air Transport Association (1973-1975)*
27. International Harvester Credit Corporation (1973-1974)*
28. International Harvester Company (1975)
29. IT\&T Continental Baking Company (1972-1978;1982)
30. Lever Brothers Company (1971-1973)*
31. Marriott Corp. (1982)
32. Modern Medicine (1970)*
33. MRCA (1975-1987)
34. Pacific Bell (1981-1982)
35. Pepsi Cola (1981)
36. Pfizer Pharmaceuticals, Inc. (1975-)
37. Pillsbury (1975)
38. Pioneer Electronics of America (1978)
39. RCA Computer Division (1972)*
40. Sears Roebuck \& Company (1972-1973)*
41. SEI Investments (1988-)
42. Singer (1973)
43. SmithKline and French (1971)*
44. Snelling and Snelling, Inc. (1973-1974)
45. Sterling Drugs (1985-1986; 1990-1992)
46. Stroh Brewery Company (1970)*
47. Sun Oil Company (1972)*
48. Syntex Laboratories, Inc., (1976-1977)
49. Twentieth Century Fox (via the Data Group, Inc.) (1972)
50. UNICOM (1973)
51. U.S. Dept. of Commerce, Office of Telecommunications (1972)
52. The Wool Bureau, Inc. (1975)
53. Western Airlines (via BBD\&O) (1979)

The research projects designed and conducted for these firms covered variety of consumer and industrial marketing problems including product positioning and market segmentation, new product development, generation and evaluation of new products, and promotional concepts. Projects with * were conducted via Robinson Associates.

## F. Illustrative Marketing Research Program Evaluation and Redesign:

1. IT\&T Continental Baking: copy and concept testing, segmentation studies (1972-1978)
2. Brown and Williamson: copy and concept testing (1978-1979)
3. Colonial Penn: all aspects of research (1973-1980)
4. Pfizer Pharmaceuticals: image studies, new product selection models, etc. (1975-1990)
5. R.J. Reynolds Tobacco: new product development system (1979-1980)
6. Bristol Meyer Squibb: Redesign of the Marketing Research function and various research and modeling procedures (1999-)

## G. Illustrative Intra-Company Marketing Strategy (and Marketing Research) Workshops:

1. American Medical International (1978)
2. Amoco Fabrics Co. $(1984 ; 1988)$
3. ARA (1983)
4. Associacion Mexicana de Ejecutivos en Planeacion (1979)
5. Atlantic Richfield Company (1971)
6. AT\&T (1972-1978)
7. Bank of East Asia (2005)
8. BBD\&O (1974-1983)
9. Bell Atlantic (1983)
10. Bell Canada (1980)
11. Black and Decker (1981)
12. Bristol Myers Squibb (1998)
13. The Bunge Group (1982)
14. Campbell Soup (1972)
15. Career Futures, Inc. (1975)
16. Certain-Teed Corporation (1983)
17. The Clorox Company (1975)
18. Colonial Penn Group (1975-1980)
19. Computer Science Corporation (1975)
20. Contel (1989)
21. Daymon (2004)
22. Di Giorgio Corp (1980-1981)
23. Deutsche Bank (2004)
24. Edward D. Jones \& Co. (1983)
25. E.F. Hutton (1979-)
26. Ethicon, Inc. (1979)
27. The Executive Forum (1979)
28. General Foods (1970)
29. Gray Advertising, Inc. (1977)
30. IBM - Applied Business Systems (1988)
31. International Harvester (1974-1975)
32. Intermountain Health Care, Inc. (1978)
33. ITT Water Technology Group (2004)
34. Li \& Fung (2005)
35. Los Angeles Times (1993)
36. Machinist Publishing Co., Ltd., Japan (1977)
37. Miles Laboratories Ltd., Canada (1973)
38. MRCA (1978)
39. New York Telephone Company (1976)
40. Pfizer Pharmaceutical, Inc. (1975-1987)
41. Phillips Petroleum Company (1992-1993)
42. The Pillsbury Company (1976)
43. Rhodia, Brazil (1979)
44. Schlachman Research, U.K. (1975)
45. SEI Corporation (1990-)
46. SmithKline \& French (1970)
47. Spectra-Physics (1983)
48. Standard \& Poors (1998)
49. Syntex Laboratories, Inc. (1976)
50. 3M's Marketing Council(1986)
51. Tektronix, Inc. (1978)
52. Unilever, U.K. (1975)
53. Union Mutual (1981)
54. Wyeth International Ltd. (1980)
55. Xerox (1981)

## H. Selected International Consulting

1. UNIG, Singapore, Business Strategy (2000)
2. Li \& Fung, Hong Kong: Business Strategy (1998-)
3. Wickes, plc., UK: Marketing and business consulting (1988-1996)
4. Hakuhodo, Japan: Design of a $21^{\text {st }}$ Century Advertising Agency (1993-1997)
5. McKinsey, Milan: New Developments in Marketing Strategy, Research, and Modeling (1988)
6. Sunstar, Japan: Marketing and Business Strategy (1985)
7. Bunge Group, Brazil: Marketing planning (1982-1986)
8. Meridian Group U.K.: Marketing and Business Strategy (1985-1986)
9. P.E. Consulting Group, South Africa: Strategic planning \& Marketing Consulting and Conducting Executive Seminars (1982)
10. Bell Canada, Canada: Market Segmentation Study (1979-1981)
11. Cooperative de Seguros de Vida, Puerto Rico: Design of a marketing planning system (1980)
12. Discount Bank, Israel: Marketing planning (1980)
13. Bank Leumi Ltd., Israel: Marketing planning (1978)
14. Fuji electric, Japan: Design of a management planning process (1977)
15. Koor Industries, Israel: Designing and organizing the marketing function for the corporation's 34 companies (1968-1969)

## I. Consulting to Government Agencies

1. FinCen/BENS project on Terrorist Financing, 2003-2004
2. U.S. AIR FORCE: Evaluation of the Air Force resource allocation procedure (1980-1981)
3. CANADIAN GOVERNMENT: Industry, Trade \& Commerce Design and execution of a study for evaluation of the U.S. market potential for selected Canadian medical diagnostic and therapeutic products (1980-1981)
4. U.S. PATENT AND TRADEMARK OFFICE: Designing a strategic planning system (1981)
5. NASA: Evaluation of NASA's IAC's 1976 advertising campaign and recommendations for its future advertising and marketing strategy (1977)
6. ISRAEL DEFENSE MINISTRY: Analyze and evaluate the marketing system of the Administered Areas (Arab territory prior to the 6-Day War). The findings and recommendations of this study were submitted in classified report to the Israeli Defense Ministry (1968-1969)

## J. Consulting/Advising to Research Organizations

1. Member of the advisory committee of the Diebold Institute study of the impact of public policy on entrepreneurial startup companies: the U.K. and U.S. in biotech and IT, 1998 -
2. Institute of Business and Economic Research, University of California, Berkeley. Consultant on the Coping Behavior (an empirical study of the consumer-technology interface) project, sponsored by the National R\&D Assessment Program, NSF. (1976-1981)
3. Pennsylvania Science and Engineering Foundation, Temple University/Applied Communication Research, Inc. Research consultant for design, analysis, and evaluation of an NSF (Office of Science Information Services) sponsored project concerning the design and evaluation of experiments for the marketing of scientific and technical information services. (1974-1977)
4. EDUCOM: Inter-university Communications Council, Inc. Participant in an interdisciplinary seminar to identify and measure special interest audiences for public television. (1974)
5. The John and Mary R. Markle Foundation.
6. Participated in a workshop for design of "Quality Ratings of TV Programs." (1979)
7. Participated in the design of a study on special interest audiences. (1975)
8. Marketing Science Institute Consultant from February 1967 to December 1968. Conduct and plan research projects primarily in the areas of industrial buying behavior, advertising, and international marketing.
9. Marketing Science Institute U.S. Department of Agriculture Study Group on Marketing Performance Principle investigator, March-December 1968. Developed a model for the evaluation of the performance of the U.S. marketing system.
10. Management Science Center University of Pennsylvania Senior staff member September 1967 to July 1968. Engaged in the development of a marketing model for Anheuser-Busch.

## UNIVERSITY ACTIVITIES

## University of Pennsylvania, The Wharton School

## A. Program Development

1. The MBA X-Functional Integration Initiative (2003-2005)
2. The Wharton Fellows platform including The Wharton Fellows program and the e-Curriculum R\&D Initiatives. Initiator/Chair of the Committee that designed the new program platform and the e-Curriculum R\&D Initiatives (1999-2000) and continued direction and reinvention of the program including its shift to the Wharton Fellows as a Decision Support Network (2001-). Wharton Fellows Master classes included:

- November 27-December 2, 2000: Philadelphia
- January 7-January 12, 2001: Silicon Valley
- February 18-February 24, 2001: Barcelona
- March 15-March 17, 2001: Philadelphia
- May 6-May 12, 2001: Philadelphia, Wharton Fellow in e-Business
- June 3-June 7, 2001: Barcelona
- June 8-June 9, 2001: Helsinki
- July 8-July 14, 2001: Silicon Valley
- March 17-March 22, 2002: CEO Forum \& Foundations I: Philadelphia
- April 21-April 25, 2002: Foundations II: Silicon Valley/San Francisco
- June 9-June 11, 2002; Munich
- November 3-November 8, 2002: Foundations I: Philadelphia
- January 5-January 9, 2003: Foundations II: San Francisco
- September 7-Spetember 9, 2003: Top Line Growth in Turbulent Times: Philadelphia
- January 7-January 9, 2004: Success: What’s Next?: Seattle
- April 25-April 28, 2004: Milken \& the Media: Los Angeles
- June 1-June 8, 2004: Leveraging Japan: Tokyo; China: Transformation from the Inside: Shanghai
- September 12-September 14, 2004: Toward a New Europe: Prague, Czech Republic
- December 12-December 14, 2004: Merger, Acquisition and Renewal: New York
- March 6-March 9, 2005: Market \& Sourcing Opportunities in India: Mumbai \& Bangalore, India
- June 26-June 27, 2005: Working with Government, Washington D.C.
- September 22-September 27, 2005: Design, Innovation and Strategy: Copenhagen/Milan
- December 4-December 6, 2005: Opportunities in Latin America and the US Hispanic Markets: Miami

3. A number of Executive Development Programs including:

- Winning in the Next Millennium: Strategies for Driving Change: Initiator and Director, December 1998.
- Wharton on the New Reality of Business: Co-Academic Director with Bob Mittlestaedt, December 2001.

4. The Advanced Management Program (AMP) Design Team (1998).
5. Wharton's Information Management Initiatives (1998-1999). Founder and co-chair (with Paul Kleindorfer) of its faculty council.
6. The Revised MBA Curriculum (1990-1991). Chaired the committee that developed the new curriculum.
7. The SEI Center for Advanced Studies in Management, founding Director. Develop and direct all Center activities and chair its faculty council, 1988-.
8. The Joseph H. Lauder Institute of Management and International Studies, founding Director and chairman of its faculty council. Designed and directed all the Institute's programs, including the establishment of the Institute MBA/MA program which admitted its first class of 50 students in May 1984, February 1983-July 1988.
9. Wharton International Forum. Initiated and designed the original program and chairman of its faculty council, 1987-1998.
10. Wharton Ph.D. with M.A. in International Studies. Initiated the joint program, 1988.
11. Wharton Center for International Management Studies (renamed as the Wurster Center, 1988) founding director. Designed/directed all the Center's activities aimed at the stimulation of international research at Wharton and the internationalization of the faculty and programs, 1980-1983.
12. The Wharton/SIA (Security Industry Association) Marketing Program. Initiated and designed the program which held sessions on April 1982 and November 1982.
13. The Wharton Recanati Multinational Marketing and Management Program, Co-founder, 1978.
14. The Wharton Executive MBA (WEMBA) program, chaired the committee that developed the program, 1974.
15. Marketing Programs, participated in the redesign of the marketing MBA programs, 1970; Ph.D. 1971; and Undergraduate, 1973 and 1981; including the initiation of The Wharton Dual MBA Major in Marketing/Multinational Enterprise.

## B. Courses Developed and Taught

a. Developed (courses developed by me are indicated by an *), modified and taught courses and seminars in:

Advertising Management (MBA)
Channel Management (MBA)
Communication Processes in Marketing* (MBA)
Consumer Behavior* (MBA and Ph.D.)
Creating an e-Business (MBA)*[A binational electronically delivered course to Wharton and IDC students)
Creativity* (MBA)
Health Care Marketing* (MBA)
Industrial Marketing* (MBA)
Integrating Marketing and Operations* (MBA) [developed jointly with P. Kleindorfer]
International Marketing* (MBA)
Marketing Management (MBA)
Marketing Methods and Applications for Business Consulting* (MBA) [with P. Green]
Marketing Research (MBA and Evening School)
Marketing Strategy (WEMBA*, MBA)
Multinational Management
Planning Marketing Strategy Projects (MBA)
Product Policy* (MBA)
Promotion Policy (MBA)
Research Seminar (MBA and Undergraduate)
b. Course head: MBA advanced study project (1967-1968, 1974-1979), Marketing Management for non-majors (1967-1968, 1970-1971), the MBA Core Marketing Management Course (1970-1971, 1971-1972), Marketing Strategy Seminar (1974-1975)
c. Guest lecturer in various departments of the Wharton School including the Multinational Enterprise Unit, the Leonard Davis Institute of Health Economics, the Management Department, Management of the Arts Program, Decision Science, Public Policy and Management.

## C. Committee Responsibility:

1. Marketing Department Committees:

- 5 Year Plan Committee (chair), 2004-2005.
- Initiator and Chair of a Committee to develop a marketing certification program, 2004-2005
- Recruiting/Personnel Committee, since 1971. Chairman Recruiting Committee, 1978-1979; 1981-1983; 1987-1988.
- Curriculum Committee, Member of Committee and Chairman of a number of its subcommittees 1967-1978, and 1996-1998. Chairman of the committee 1970-1971,1973-1975, 1976-1978, and 1980.
- Ph.D. Program Coordinator, 1972-75. Doctoral Committee, 1988-1989.
- External Boards/Affairs Committee, 1987/88; Chair 1988-1989.
- Member and Chairman of various departmental Committees, including all the department's advisory committees since 1971, Marketing Fund Committee since 1983, and its Long Range Planning Committee, 1970-1971.
- $\quad$ Senior Faculty Recruiting, Chairman 1995-1997.

2. Wharton School Committees:

- Initiator and developer of Wharton School Publishing in conjunction with Pearson/FT, Founding Editor and member of the Faculty Editorial Board (2003-)
- Chairman, Dean's Committee on Cross-Functional Integration (2002-2004)
- Member of the Executive Development Faculty Advisory Board (2002-2004)
- Member of the Alfred West, Jr. Learning Lab Faculty Committee (2001-2005)
- Chairman of a Faculty Committee to assure cross program dissemination of e-Curriculum Developments (2000)
- Member of the Dean's Advisory Council (since its inception in 1983 to 2000)
- Member of the Strategic Planning Steering Committee, 1999-2000
- Member of the Committee to prepare the strategy for "Management, Leadership, and Organizational Priority" area of the University's Agenda for Excellence, 1998
- Senior Faculty Committee to Review the Global Presence strategy (Summer 1997)
- Chairman of the Graduate Curriculum Committee focusing on a critical examination of the MBA program and its appropriateness for preparing the leaders of the $21^{\text {st }}$ century enterprises. The Committee developed the new MBA curriculum which was tested in 1991/1992 and 1992/1993 and which was fully implemented starting in 1993/1994.
- Initiated and organized the Management Education Council - the vehicle for corporate support and funding of the new MBA curriculum, 1992-
- The Wharton International Committee: Chairman, 1978-1981, 1982/1983, 1995-1997. [The 1995-1997 committee developed the Wharton globalization strategy.] Member: 1967-1968, 1983-1987, 1989-1991.
- Member of Boards of the following Wharton Centers:

The SEI Center for Advanced Studies in Management (Founder), 1988The Lauder Institute (Founder) 1983-

The Alfred West, Jr. Learning Lab (Initiator of the Lab and Founder of the External Advisory Committee), 2001-2005
Risk and Decision Process Center, 1984-
The Manufacturing and Logistics Forum, 1992-2000

The Wharton/PIMS Research Center (Co Founder), 1985-1998
U.S. Japan Management Studies Center, 1989-1992

Wharton Emerging Economics Program, 1992-1995
The Wharton Center of International Management Studies (Founder), 1981-1983

- Member of the Advisory Committee on Faculty Personnel, 1976-1978; 1984-1985; 19871989; 1994-1995.
- Dean's Planning Task Force (1986).
- Member of the School's Executive Education Policy Committee, 1987-1989.
- Member or chairman of a number of Chair Search Committees, including seven chairs in Marketing (1985, 1987, 1988-1990, 1992, and 1997), Entrepreneurship (1984-1985, 19971998), International Management (1984-1985), Operations Management (1986), the chair and director of the US-Japan Center (1988-1991), the chair in Managerial Economics (1989), the chair in Information Technology (1996-1997), and the chair in Electronic Commerce (1999).
- Member of the (ad hoc) Committees to Review Various Units and Departments:

The Snider Entrepreneurial Research Center, 2004-2005
Finance Department, 2001-2002
The Real Estate Center, 1988
Social Systems Science, 1985-1987
U.S. Japan Center, 1985-1986

Multinational Enterprise Unit, 1977-1978

- Member of the School's Faculty Personnel Committees of:

The Health Care Systems Unit, 1974-1975.
The Multinational Enterprise Unit, 1978-1979.

- Member of the Committee on Academic Freedom, 1977-1978.
- Chairman of the Advisory Committee for the Wharton Executive MBA Program, 1974-1975.
- Chairman of the Wharton School Doctoral Admissions Committee, 1974-1975.
- Graduate Academic Standards Committee, 1969/1970 - 1971-1972. Chairman of its subcommittee for the evaluation and redesign of the school's grading system.
- A number of Ad Hoc Committees and task forces for the:
- development of a core Ph.D. Behavioral Science Course, 1972-1973,
- redesign of the International Business program, 1971,
- review of the Economic Offerings for Business and Applied Economic doctoral students, 1970-1971,
- development of a Continuing Education Program in Health Care Administration, November 1971-October 1973.
- Evening School Committee, 1972-1973.
- Behavioral Lab Planning and Implementation Committee, 1989-1990.


## D. Doctoral Dissertations Supervised

Bent Stidsen (1972); Yehoshua Buch (1972); Kathy Villani (1973); Rene Y. Darmon (1973); Arun K. Maheshwari (1973); Chris Hetzel (1973) winner of the AMA Doctoral Dissertation Competition; Arun K. Jain Honorable mention at the AMA Doctoral Dissertation Competition; Joel Huber (1974); Irwin D. Reid (1975); Chris Buss (1979) winner of the AMA Doctoral Dissertation Competition; Robert J. Thomas (1980) Winner of the Academy of Marketing Doctoral Dissertation Competition; Cynthia Fraser (1980); Joel Steckel (1981) Honorable Mention AMA Doctoral Dissertation Competition; John Deighton (1983); Rajeev Kohli (1984); Oliver Heil (1988); Kamel Jedidi (1988); Bari Harlam (1989); Kris Helsen (1990); Nino Buran (1991); Hoon Young Lee (1992); Rajeev K. Tyagi (1994); Amy Kallianpar (1998).

## E. Addresses to Alumni Club and Other Groups Regarding The Joseph H. Lauder Institute

Illustrative addresses to alumni clubs and other groups on the changing needs for management education and the University's response -- The Joseph H. Lauder Institute.

1. Alumni Clubs addressed include:

- Dallas (December 1984)
- Cleveland (April 1986)
- Hong Kong (July 1985)
- London (May 1984)
- Long Island (January 1984, March 1986)
- Milan (October 1987)
- Philadelphia (January 1984, January 1986)
- Paris (December 1983)
- San Francisco (November 1983)
- Taipei (July 1985)
- Tokyo (June 1985)
- Toronto (August 1987)

2. University Groups:

- Board of Directors of the Association of Alumnae, March 1984
- The Vice Provost Advisory Board, February 1984
- Wharton Board of Overseers, January 1984, 1997
- Trustees (October 1983, January 1984)

3. Other Groups (partial list):

- University of Pennsylvania Trustee Committee on Academic Policy (January 1988).
- $40^{\text {th }}$ National Conference of the Council on International Education Exchange, San Francisco (November 1987)
- Title VI Center Lauder conference on International Studies and Foreign Language for Management. Philadelphia (May 1986)
- University of Pennsylvania Alumni (Alumni day, Philadelphia, May 1985)
- Delaware Valley Faculty Exchange Program on International Business and Language Studies (December 1984)
- AIESEC-Northeast regional conference (October 1984)
- Deans of 50 schools in an AACSB seminar on Internationalizing the Business Curriculum (March 1984)
F. Illustrative presentations to alumni groups and others regarding the Management 2000 project, the SEI Center for Advanced Studies in Management, and the revised MBA curriculum
- Wharton-Recanati Program, 1993
- International Forum, 1993
- Erasmus University - Faculty and Administration, 1993
- Marketing Advisory Board Meeting, 1993
- Board of Directors of the Wharton Alumni Association, September 1988; May, 1993
- The Wharton Board of Overseers, April 1988
- Wharton Advanced Management Program Participants, 1990, 1991
- The Wharton Graduate Advisory Board 1990
- Wharton's European Advisory Board 1991
- Alumni attending the May 1991 Alumni Reunions
- The SEI Center Board of Directors 1990-1991
- The Joseph H. Lauder Institute Board of Governors 1991
- College of Business Administration, University of Texas at Austin C Advisory Board and Faculty, February 1992
- INSEAD Faculty and Administration, February 1992
- Security Industry Institute, $40^{\text {th }}$ Anniversary Program, Wharton, March 1992


## G. Illustrative presentations regarding Wharton's Globalization Strategy

- Dean's Advisory Board, February 1997
- Wharton Board of Overseers, March 1997
- Wharton Graduate Executive Board, March 1997
- Wharton Executive Education Advisory Board, May 1997
- European Advisory Board 1997
H. Illustrative presentations regarding Wharton's Information Management Initiatives (IMI)
- Dean's Faculty Lunch, April 1998
- All Wharton Departments 1998-2001
- The $1^{\text {st }}$ Conference of the Wharton Alumni Club of Israel March 2001
I. Illustrative presentations regarding Cross-Functional Integration of the MBA Curriculum
- Wharton Faculty (Feb 2003)
- Graduate Executive Board (March 2003)
- CEO Panel for the entering 2004 class (August 2003)
- Ph.D. Proseminar (Fall 2003)
J. Illustrative presentations regarding the Wharton Fellows Program
- Wharton Executive Education Advisory Board (April 2004)
- Wharton Alumni Club of Atlanta (November 2001) and Israel (December 2001)
K. Illustrative presentations regarding Wharton School Publishing
- Wharton School External Affairs group (February 2004)
- Wharton Executive Education Group (January 2005; May 2006)
- Jay H. Baker Retailing Initiative Board (October 2005)
L. Illustrative presentations regarding The Power of Impossible Thinking
- Washington, D.C. Clubs of Wharton and AFLSE (2004)
- Miami Wharton Club (December 2004)
- EMTM Alumni Council (February 2005)
- Wharton Fellows Event, Singapore (March 2005)
- Merrill Lynch, Investment Banking Institute at Wharton (August 2005)
- Jay H. Baker Retailing Initiative Board (October 2005)
- LinKS@Wharton (November 2005; August 2006)
- Wharton Sports Business Initiative (May 2006)
- The Wharton Club of New Jersey (July 2006)
- CEIBS @ Wharton (July 2006)


## University of Pennsylvania - University Committees:

- Member of the Faculty Advisory Group to Campus Development Planning Committee, 2005-
- Member of the Committee on International Programs, 2002-.
- Member of The Ackoff Center Advisory Board, 2001-
- Research Foundation Committee, Social Science and Management Review Panel, 1999-
$\qquad$
- Member of the Provost Art and Culture Committee, 2002-2004
- Faculty Senate Committee on Administration, 1995-1998.
- Chair, Subcommittee of the Faculty Senate Committee on Faculty Teaching Evaluations, 19971998.
- Chairman of Special Presidential Committee on Borderless Education, 1997-1998.
- Provost's Task Force on the University of the Global Information Age, 1996-1997.
- Faculty Editorial Board, University of Pennsylvania Press, 1996-1997.
- Member of the Provost's Committee on Information Science and Technology, 1996-1997.
- Member of the Provost's Committee on Distance Learning, 1996-1997.
- Chairman of a new university committee focusing on innovative revenue generation, 1992/1993 and 1993/1994. Members include the President, Provost, Chairman of the Board of Trustees, 3 deans, 3 trustees, and 3 faculty members.
- Member of the Provost International Council, 1990-1992.

Chairman of a Subcommittee for the Evaluation of the University Office of International Programs, 1990-1991 and of a Subcommittee to Evaluate the University's Off-Campus Programs, 1991-1992.

- Member of the Provost Task Force on International Programs (1992/1993; 1993/1994).
- Member of the Commission for the $250^{\text {th }}$ Anniversary Celebration of University of Pennsylvania (1987-1990)
- Advisory Board of the PBS series on The Global Economy, 1990.
- University of Pennsylvania correspondent for PBS program on Geo-economy, moderated by Ted Koppel, May 1990.
- Chairman of the Faculty Council of the Joseph H. Lauder Institute, 1983-1988.
- Member of the Board of Directors of the Joseph H. Lauder Institute, 1983 to present.
- Member of the Advisory Board of the office of International Programs, 1980 to present.
- Chairman, the Wharton Dean Search Committee, (selected Russ Palmer)1982/1983.
- The Senate Committee on the Economic Status of the Faculty, 1978/1979 (member); 1979/1980 (chairman).
- Member of the FAS - Wharton Committee, 1975-1977.
- Member of the University's Committee on Research, 1977/1978. Chairman of its subcommittee for evaluation of the University's Policy and Conduct of Research Programs.
- Member of the subcommittee of the University's Academic Planning Committee for the Measurement of Academic Performance, 1972/1973.


## The Interdisciplinary Center (IDC), Herzliya, Israel

- Co-founder (1994)
- Chairman, International Academic Advisory Board, 1994-
- Faculty Appointment Committee: Chairman 1999-2005; Member 2005-
- Chairman, Higher Academic Council 1999-
- Delivered the first Graduation Address, October, 1998
- Delivered the first Zoltan Wind lecture, 1996
- Delivered the first graduation address of the Wharton IDC Marketing Communication Program, March 1999
- Occasional lectures in various courses, faculty seminars, and public addresses since 1995
- Founder of the American Friends of IDC 1998 and a Member of the Board, 2003-
- Designed the week-long programs at Wharton for its visiting MBA class (2002, 2003, and 2004) and the Zell Entrepreneurial Program, (2002)
- Member, Advisory Board of IDC's New School of Communication (2005-)


## Other Universities

## 1. Courses Taught

- Erasmus University (The Netherlands) - A variety of courses on marketing strategy and marketing science (1993).
- University of Tokyo (Japan) - marketing science (1992).
- University of New South Wales (Australia) - Doctoral Seminar in Marketing (1977).
- University of California at Berkeley - Product Policy, Doctoral Seminar (1975).
- University of Tel Aviv (Israel) - Consumer Behavior, Marketing Seminar (1968).


## 2. Faculty Promotion Review - Illustrative Universities

Columbia University, Harvard University, Massachusetts Institute of Technology, New York University, Pennsylvania State University, Stanford University, Tel Aviv University, University of California at Los Angeles and at Berkeley, University of Chicago, University of Georgia, University of Illinois, University of Pittsburgh, University of Rochester, University of Southern California, University of Texas, Yale, and others.

## 3. Program/School Review

- Indian School of Business - Organization of the Wharton Planning Meeting, April 2002.
- Rice University - member of the external review committee, 1996.
- University of Santa Clara - member of a Site Review Team for the evaluation of the school's marketing department, 1981.
- University of Tel Aviv - Initiator and organizer of the school's faculty colloquium, working paper series, planned and organized a number of the school's executive development programs and various other activities, 1968/1969.
- The Technion, Israel Institute of Technology - Outside examiner at the Graduate Division of the Technion - The Israel Institute of Technology, Haifa, 1969.


## OTHER PROFESSIONAL ACTIVITIES

## A. Development of Research Programs [Illustrative List]

1. SEI Center project Toward a New Theory of the Firm (2004- )
2. SEI Center project with Business Executives for National Security and FINCEN using the Suspicious Activity Reporting System (SARS) for identifying terrorist financing, 2003-2004
3. SEI Center project, Assessing the True Value of the Firm, Co-Directed with David Larcker (20022003)
4. The Wharton Office of Homeland Security (OHS) Project, Economic Vulnerability to Terrorism: Assessment, Prioritization and Action Implications, Co-Directed with Paul Kleindorfer (20012002)
5. Digital Transformation Project in Collaboration with McKinsey, WeBI and the Fishman-Davidson Center for Service and Operations Management (2001-)
6. e-Curriculum R\&D Initiatives (2000-2002) and Curriculum R\&D for the Wharton Fellows Decision Support Network (2001-)
7. The SEI Center's research program on Creating a $21^{\text {st }}$ Century Enterprise. (1990-)
8. Established the Value of Marketing program. (1993-1997)
9. Initiated (with Frank Bass) the Empirical Generalizations in Marketing program. (1993-1995)
10. Co-founded (with Greg Farrington) the Virtual University Lab program (1995-1997)
11. Initiated the Computers and Art program for the ENIAC at 50 celebration (1998-1999)
12. Co-developed (with Bob Holland) the SEI Center's George Harvey Program on Value Creation Through Diversity (1996-)
13. Co-founded (with Paul Kleindorfer) the Information Management Initiatives Research Program (1998-1999)

## B. Editorial Activities

1. Founding editor, Wharton School Publishing, 2003- [published books are listed on pages 23-24]
2. Initiator and editor of Advances in Marketing Research and Modeling: Progress and Prospects A Tribute to Paul E. Green, Kluwer Academic Publishers, 2002.
3. Initiator and editor of The Wharton School Publishing Newsletter (monthly since July 2005)
4. Initiator and Co-Editor of the Wharton Fellows Newsletter (quarterly 2003-4; monthly JanuaryDecember 2005).
5. Initiator and editor of Wharton Executive Library (published by Oxford University Press), 1984-1987. The series was aimed at familiarizing top management with recent developments in the various management disciplines. Books published include:

- Gerard Adams, The Business Forecasting Revolution, Nation-Industry-Firm, 1986.
- Leonard M. Lodish, The Advertising and Promotion Challenge, Vaguely Right or Precisely Wrong?, 1986.
- David Solomons, Making Accounting Policy: The Quest for Credibility in Financial Reporting, 1986
- James C. Emery, Management Information Systems: The Critical Strategic Resource, 1987.

6. Initiator and editor of the Scientific Press Computer Based Marketing Series. 1984-90. The series offers short books on specialized marketing topics with accompanying PC software. Books published include:

- Paul E. Green, CAPPA Electronic Questionnaire Display and Analysis, 1986
- Gary Lilien, Marketing Mix Analysis with Lotus 1-2-3, 1987
- John Hauser, Applying Marketing Management: Four PC Simulations, 1987
- Darral G. Clarke, Marketing Analysis and Decision Making: Text and Cases with Lotus 1-2-3, 1987.
- Gary Lilien, Marketing Management: Analytical Exercise with Lotus 1-2-3, 1988.

7. Editor-in-Chief, The Journal of Marketing 1978-1981 (Vol. 43-45)
8. Area Editor, Marketing Science, 1981-83 (Vol. 1-2); occasional Area Editor (2002-)
9. Advisory Editor of the Addison-Wesley Marketing Series, 1974-1981. Books published under my editorship include:

- G. David Hughes, Marketing Management, 1978.
- James Bettman, An Information Processing Theory of Consumer Choice, 1979.
- Richard N. Cardozo, Product Policy: Cases \& Concepts, 1979.
- F.E. Brown, Marketing Research: A Structure for Decision Making, 1980.

10. Member of the Editorial Boards of:

- Journal of Business to Business Marketing, 2004
- Journal of Interactive Marketing, 1998-
- Journal of Global Marketing, 1986-
- Journal of Product Innovation Management, 1982-
- Annual Review of Marketing, 1980-1982
- Computer Operations, 1968-1970
- Journal of Business Research, 1974-1977
- Journal of Consumer Research, 1973-1984
- Journal of High Technology Management and Market Research, 1988
- Journal of Marketing Research, 1978-1981
- Journal of Marketing, 1971-1978
- Journal of Organizational Behavior and Statistics, 1983
- Journal of Pricing Management, 1989
- Journal of Segmentation in Marketing, 1997

11. Occasional reviewer for:

- Decision Sciences
- IEEE Transactions on Engineering Management
- Journal of Management Studies
- Journal of Marketing
- Management Science
- Marketing Science
- Operations Research
- Public Opinion Quarterly
- R\&D Management
- The Journal of Economics and Business
- The Wharton Quarterly

12. Screening editor, Journal of Consumer Research, 1973-1974.
13. A judge of competitive research papers submitted to the National Conference of The AMA

Academic (August) Conference in - Minnesota (1971), Houston (1972), Washington (1973),

Portland (1974), Rochester (1975), Memphis (1976), Chicago (1980), Chicago (1984).
14. A judge of Ph.D. dissertations submitted to the AMA Doctoral Dissertation Competition, 1974, 1976, 1977, 1981, 1982, 1983. And the MSI Dissertation, and other award competitions 1984, 1985, 1990
15. Reviewer of papers submitted to the Market Measurement and Analysis Conference (renamed Marketing Science Conference) since 1981.
16. Occasional reviewer of applications for research grants for the Social Science Research Council (London, England) since 1972; and the National Science Foundation, Division of Science Information and Advanced Productivity Research and Technology, since 1977.
17. Reviewer of manuscripts for a number of publishers and universities, including the MacMillan Company, the Center for Research of the College of Business Administration of Pennsylvania State University, the Graduate School of Business, Columbia University, Prentice Hall, Jose Bass and others.

## C. Offices Held in Professional Associations

## AMA

1. Member of the Board of Directors, The Philadelphia Chapter of the AMA, 1979-1983.
2. Program Chairman of:
a) The 1977 AMA Doctoral Consortium Philadelphia, August 1977.
b) The 1975/1976 AMA Attitude Research Conference, Hilton Head, SC, February 1976.
c) The National Educators AMA Conference, Washington, D.C., August 1973.
3. Member of a number of AMA councils including the Advisory Council of the National Marketing Honorary Society of the AMA - Alpha Mu Alpha, 1980/1981 and the Educational Policy Council, 1977/1978.

## TIMS

1. Chairman, 1974/1975; Chairman Elect, 1973/1974; and Vice Chairman, 1971/1972 of the Institute of Management Science College of Marketing.
2. Program Chairman of:
a) Marketing track on "Marketing Science for Increased Competitiveness of Firms and Countries," 1988 Washington, D.C., TIMS/ORSA Conference.
b) The 1981 Market Measurement and Analysis Conference (with Vijay Mahajan).
c) The Delaware Valley Chapter, 1967/1968.
3. Member of the Program Committees of the Market Measurement and Analysis Conference: University of Texas, 1980; New York University, 1981; and the Marketing Science Conference: University of Chicago, 1983; Vanderbilt University, 1985; University of Texas at Dallas, 1986; Centre HEC-ISA, Jouy-en-Josas, France, 1987; Washington University, 1988.
4. Member of the Advisory Board of Marketing Science, 1983-

## IAM - The International Academy of Management

1. Chancellor, 2000-2006.
2. Vice Chancellor for the Americas, 1995-2000.
3. Program chairman, the Americas Conference, 1994, 1998.

## MSI - Marketing Science Institute

1. Chair of a task force on e-business evaluation (part of the Metrics program), 1999.
2. Academic Trustee (1989-1995 ).
3. Member of the Academic Advisory Council (1983-1987).
4. Member of a number of steering groups, including

- Marketing Strategies Steering Group, 1983-1987.
- The International Advisory Steering Committee (1985-1987).
- Information Technology Steering Committee (1990-1992).


## Other

1. The Diebold Institute Entrepreneurship and Public Policy Project, Committee of Advisors (1999).
2. World Management Council. Member of the Academic Advisory Board (1988-1989).
3. Member of the interdisciplinary task force (organized by AMA) for the design of the Journal of Consumer Research, (October 1971-July 1972). Founding member of the Policy Board of the Journal of Consumer Research, 1972-1983; Chairman of the Board 1977/1978; Chairman of the 1976 and 1981 Editor Search Committees.
4. Member of the Philadelphia's International City Steering Committee, 1983-1985, 19871988.
5. Member of the Publication Committee of AAPOR, 1973/1974.
6. Member of Program Committee of 1979 ACR Conference.

## D. Planning and Organizing Professional Programs at the University

1. Initiated and chaired a task force to develop a Marketing Certification Program (2003-)
2. Co-Designed with Bob Mittelstaedt an executive education program on "Wharton on the New Reality of Business," December 2001 [including the design of the "Wharton Post 9/11 Business Scenario" (October 2001-)] and May 2002.
3. Designed and directed the executive programs, "Winning in the Next Millennium," December 1998.
4. Initiated "The Impact of Computers and Information Technology on Management: 1946, 1996, 2001," May 13-14, 1996 program for the ENIAC at 50 celebration (1994-).
5. Initiated the "Computers and Art" program for the ENIAC at 50 celebration (1994-).
6. Participated in the original design of the Wharton - AT\&T Marketing Management Program. Taught in the 1973, 1975 -1980 programs.
7. Developed, organized and taught a Marketing Research Seminar for U.P. Clinical Scholars Group (February-May 1975 and February-April 1976).
8. Planned and taught the marketing management section of a number of advanced management programs of the University of Pennsylvania:

- Dean Witter - Wharton Account Executive Program, 1986.
- Securities Industry Association Program, annually since 1982.
- Advanced Management Program for Overseas Bankers, 1975, 1976.
- Program for Health Care Executives, 1973, 1975, 1982.

9. Participated in various executive development programs of the Marketing Department of the University of Pennsylvania:

- Marketing for the Postal Service, 1983.
- Marketing Strategy Seminar, since 1981 (January \& May).
- Pharmaceutical Advertising Council, 1980/1981.
- Wharton Salesforce Management Seminar, since 1980 (January \& May).
- Dixie/Marathon (American Can Company), May 1977.
- Marketing Research Seminar 1977-1983.
- General Building Contracting Association, Inc., January 1977.
- Center de Promotion du Commerce International, Chambre de Commerce et d'Industrie de Nantes, 1976, 1978-1980.

10. Planned and taught (with Thomas Robertson) a number of seminars on Health Care Marketing for:

- The Virginia Hospital Association, February 1978.
- The New York Management Center, September and November 1977.
- The Wharton School's Lifelong Education Program, October 1976.

11. Co-founder, organizer of the Wharton teaching component, and frequent lecturer in the Wharton/Israel Binational Marketing Management Program [The Consulting Practicum] 1979-1995.

## E. Award Committees

1. Member of the Parlin Board of Governors, 1978-1983, 1995-; Chairman of the Board, 1980/1981.
2. Member of the selection committee for MIT's Sloan Management Review/Price-Waterhouse Company, 2003 - Best article award
3. Nominator for the Marketing Communications Award of the World Technology Network, 2002-.
4. Initiator of the Lauder Institute Award for the Research Paper that Best Advances the Theory \& Practice of International Management Science. Administered by TIMS and Chairman of the first award, 1989.
5. Member of the W. Arthur Cullman Executive Award Selection Committee (Ohio State University), 1985 -.
6. Member of a panel of judges for the evaluation of nominees for the Paul D. Converse Awards for Outstanding Contributions to the Development of Theory and Science in Marketing, 1974, 1977, 1981, and 1986.

## F. Planning and Organizing Professional Programs Outside the University

1. KMDC Program, Kuala Lumpur, The Power of Impossible Thinking and Its Implications for Marketing Innovations, March 15-16, 2005.
2. Co-director (with Hotaka Katahira) of the Marunouchi Global Center Management Program, 2002.
3. Planned and taught a number of two-day seminars on "Recent Developments in Marketing Research Methodology" for:

- The Management Center, University of Bradford, February 1975 and May 1976.
- The University of Laval, Canada, November 1973.
- The University of Social Sciences at Grenoble, France with (Paul E. Green), May 1973.

4. Planned and taught various AT\&T Executive Development Seminars on:

- "Multivariate Analysis in Marketing," March and August 1975.
- "Market Analysis," December 1974, and June 1975.
- "Market Segmentation," September 1974, November 1975 and March 1976.
- "How to get the Most Out of Your Marketing Research," Spring 1974.
- "Consumer Behavior," October 1972, January 1978.

5. Planned and taught two one-day executive seminars on Conjoint Analysis and New Product Policy at the University of New South Wales (Australia), June 1977.
6. Planned and taught a number of executive seminars at the University of Tel Aviv: Marketing Strategy (1969); Product Policy (1977); Marketing and Corporate Strategy (1978, 1980); New Development in Product and Marketing Research (1980).
7. Planned and taught the marketing research section of the Bank Marketing Program of the Graduate School of Bank Marketing, April 1977.
8. Planned and taught a series of two-day seminars on Marketing Strategy for the New York Telephone Company, February and April 1976.
9. Initiated, planned and organized a number of two day workshops on:

- Concept Testing, University of Pennsylvania, March 1972.
- Industrial Buying Behavior (with Frederick E. Webster and Richard N. Cardozo), sponsored by the AMA \& the University of California at Berkeley, April 1971.
- Research Utilization, (with Steve Greyser and Randy Batsell), sponsored by the AMA and MSI, April 1979.
- Advances and Applications in New Product Forecasting: Innovation Diffusion Models (with Vijay Mahajan) sponsored by MSI, October 1983.

10. Organizer and chairman of various sessions at annual conferences of various professional associations (illustrative list):

- "Marketing science: Accomplishments and challenges in the global information age," plenary session at Informs, Philadelphia, November 1999.
- "Consumer Labs," Marketing Science Conference, March 1997.
- "Global Marketing Strategy," 1991 ORSA/TIMS Meeting
- "Creation of Innovative Marketing Knowledge: An Interdisciplinary Perspective," 1989 AMA Marketing Educators Conference, August 1989.
- Strategic Alliances," TIMS Osaka, Japan, July 1989.
- "Industrial and New Technologies Marketing: Lessons from Industry," International Research Seminar in Marketing, La Londe les Maures, France, May 1989.
- "New Product Development Models," ORSA/TIMS, San Diego, October 1982.
- "Product/Market Portfolio Models," ORSA/TIMS, Colorado Springs, November 1980.
- "The Role of Multivariate Analysis in Consumer Research," APA, Toronto, 1978.
- "Applications of Management Science to Market Segmentation," TIMS, Miami, 1976.
- "Recent Developments in Management Science Application in Marketing," TIMS, Las Vegas, 1975.
- "Multidimensional Scaling and Conjoint Measurement in the Study of Multidimensional Psychophysics," ACR, Boston 1973.
- "Implementation of Management Science in Marketing," TIMS, Houston 1972.
- "On the Teaching of Consumer Behavior," AMA, Houston, 1972.
- "Family and Industrial Buying Behavior," AMA, Minneapolis, 1971.
- "Multidimensional Scaling in the Study of Consumer Behavior," ACR, 1970.

11. Planned, organized and taught a Marketing Management Program for the top executives of the Union of Cooperative Societies (Israel), April to July 1969.
12. Planned and taught marketing courses at a Graduate Program for Marketing Consultants at the Israel Institute of Productivity, September 1968 to January 1969.
13. Academic advisor to a number of organizations engaged in Management Training in Israel. Primarily the Israel Institute of Productivity, and the Technion Research and Development Foundation Ltds., January to August 1969.

## G. Lecturing

Illustrative Keynote Addresses at various conferences including:

- "The Power of Impossible Thinking," Opening Session: Transform Your Business with New Thinking and New Models, The $51^{\text {st }}$ Annual ARF Convention, Research Powered Marketing: New Models for Growth, April 2005.
- "The Power of Impossible Thinking," A Wharton Fellows Dinner Event, Kuala Lumpur, March 2005.
- "The Power of Impossible Thinking in Meeting the Jim Stargel Challenge," ARF Breakthrough Conference, November 4, 2004.
- "Should We Challenge Our Mental Models for Building Better Brands?" Med Ad News Conference on Building Better Brands, Philadelphia, July 28, 2004.
- "The Changing Nature of Marketing: Implications for Research, Teaching, and Practice," The Elsevier Science Distinguished Scholar Award Lecture at the Society for Marketing Advances, November 6, 2003, New Orleans.
- "The Challenge of Corporate Governance," IAM Conference, Barcelona, Fall 2003.
- "Corporate Transformation: Lessons for Japan," Marunouchi Global Center First Executive Program, November 2002.
- "Convergence Marketing: The Challenge for the On-Demand Era," IBM's 2002 WW Summit for the On-Demand Era, 2002.
- "Leading Transformation Lessons for Mexico," TeleTech's Top Executive Program, October 2002.
- "Disruptive Technology—Rethinking Your Mental Models," Forbes Global CEO Conference, Singapore, September 19-21, 2001.
- "e-Business: The Lessons to Date and Implication to Management Practice, Research and Education," opening lecture of the PriceWaterhouseCoopers Management Consultants
e-Bus Chair at the Graduate School of Business Studies at Katholieke Universiteit Leuven, Belgium, February 2001.
- "Reinventing Training for the Global Information Age," Delphi e-Learning Summit, Phoenix, AZ, January 2001.
- "Customerization: The New Management Challenge," The President's Forum of the Interdisciplinary Center in Herzliya, Israel, September 2000.
- "e-Transforming an 'Old Economy' Business," Wharton-Singapore Management University Conference: e-Business in the New Millennium, July 2000.
- "Creating a University for the Global Information Age," The Inaugural Lecture of the Wharton-Singapore Management University, July 2000.
- "Implications of the New e-Business Environment and Models for Management Research and Education," International Academy of Management, Barcelona Meeting, March 2000.
- "New Trends in Marketing Research," IDC, Herzliya, March 2000.
- "Reinventing the Business School for the Global Information Age," plenary session, The EFMD Deans and Directors Meeting 2000, Helsinki, Finland, January 2000.
- "Digital Marketing: Implication for the Future of Marketing Management Research and Research in Marketing," plenary session presentation AMA Marketing in the $21^{\text {st }}$ Century, San Francisco, August 1999.
- "Towards a New Marketing Paradigm," AMA Winter Marketing Educators' Conference, February 1998.
- "Creating a 21st Century Enterprise: Implications for Marketing Practice, Research and Education," Keynote Address, 2nd International Workshop on Economics and Management, Santiago, Chile, October 1996.
- "Marketing in the Pharmaceutical Industry: Emerging Challenges and Opportunities," P.A.C. Pharmaceutical Meeting: New Thinking, New Customers. February 28, 1995.
- "Marketing in the Pharmaceutical Industry: Emerging Challenges and Opportunities," The Keynote address of The International Conference on AHP Washington, DC, July 11, 1994.
- "AHP in Top Management Decisions," The Keynote address of The International Conference on AHP Washington, DC, July 11, 1994.
- Neuhauf Lecture, "The Impact of Marketing Science on Industry and Academia: Applications, Results and Lessons," at Rice University, March 23, 1994.
- Third Workshop on Marketing and Competitive Advantages with Ambrosetti Group, Milan on "The Customer Driven Company: From Concept to Reality," November 27-28, 1992.
- Amoco Fabrics and Fibers Co-Leadership Council, address on "What a Difference a Difference Can Make," May 1988.
- A special meeting of the Chinese Management Association and the Taiwan Ministry of Trade, address on "Marketing to the U.S." (Taipei), July 1985.
- MRCA Conference on "The Affluent Market: New Data and Methodologies in Financial Services Planning," November 1984.
- The 1983 ESOMAR congress August 1983 at Barcelona. Keynote address on "The contribution of Research to Product Management and New Product Development.
- The 1983 Research and Planning Conference of the Bank Marketing Association. Keynote address on the Integration of Marketing into Strategic Planning," April 1983.
- The 1982 AMA Faculty Consortium on "Industrial Marketing and the Changing Environment." Ohio State University, July 1982.
- S.F. Chapter of the AMA, address on "Increasing Marketing Productivity, March 1982.
- Philadelphia Chapter of the AMA, Conference on Market Segmentation, January 1981.
- The First Delaware Valley Meeting of the Product Development and Management Association (PDMA), December 1980.
- AMA International Conference Workshop, Philadelphia, June 1978.
- National Agricultural Marketing Association, Philadelphia, March 1977 and February 1978.
- Marketing Planning Conference, The AMA Western Michigan Chapter, Grand Rapids, March 1976.
- The 11th Annual "New Horizons in Science," Conference of the Council for the Advancement of Science Writing, New York, November 1973.

Presented papers at various national conferences of the American Marketing Association, December 1967; June and August 1968; August 1969; August 1970; June and August 1974; April and August 1975; August 1976; August 1977; June and August 1978; June and August 1979; June and August 1980; August 1981-1990, March 1990, August 1991; August 1991, April 1993; February \& August 1994, August 1995, August 1996, August 1997, February 1998, August 1999.

Speaker in various conferences and workshops of:

- Association for Consumer Research (ACR), 1968, 1970/1973, 1975, 1977, 1984.
- The Institute of Management Science (TIMS), 1969, 1972, 1974-1978, 1980-.
- American Institute of Decision Sciences (AIDS), 1974, 1976.
- American Association of Public Opinion Research (AAPOR), 1974/1975.
- American Psychological Association (APA) DIV 23, 1978.
- American Statistical Association (ASA), 1978.
- AMA Philadelphia Chapter, 1980/1981.
- Annual Conference of the Strategic Management Society, 1984.
- Annual Conference of the Pharmaceutical Marketing Research Group (PMRG), 1986, 1987.
- Annual Conference of the World Future Society Assembly, Washington, D.C., 1993.

Speaker in a number of the AMA Attitude Research Conferences, 1967, 1971, 1973, 1976, 1987.

## Member of the Faculty of the AMA Doctoral Consortiums

- University of Colorado, 1996
- University of Santa Clara, 1994
- University of Southern California, 1991
- New York University, 1987
- University of Notre Dame, 1986
- University of Michigan, 1983
- University of Minnesota, 1982
- Pennsylvania State University, 1980
- University of Maryland, 1981
- University of Wisconsin, 1979
- University of Chicago, 1978
- University of Pennsylvania, August 1977
- University of Texas, August 1976
- University of Illinois, September 1971


## Member of the AMA Faculty Consortium, Chicago 1997

Illustrative papers delivered in various professional workshops

- Applications of Multidimensional Scaling to Marketing and Business, sponsored by the University of Pennsylvania and Bell Laboratories, June 1972.
- Planning Data for STI Managers, Sponsored by NSF office of Science and Information, December 1976.
- Synthesis of Knowledge of Consumer Behavior, sponsored by the RANN Program National Science Foundation, April 1975.
- Multinational Product Management, sponsored by the Marketing Science Institute and the AMA International Marketing Division, January 1976.
- Consumer and Industrial Buying Behavior, sponsored by the University of South Carolina, March 1976.
- Organizational Buying Behavior, sponsored by the University of Pittsburgh, April 1976.
- Consumer Research for Consumer Policy, sponsored by the MIT Center for Policy Alternatives, July 1977.
- Analytical Approach to Product-Marketing Planning, sponsored by the AMA and MSI, University of Pittsburgh, November 1977, October 1981.
- Interfaces Between Marketing and Economics, sponsored by the University of Rochester, 1978, 1983.
- Industrial Marketing, Penn State University, May 1982.
- Market Measurement and Analysis, renamed Marketing Science Conference sponsored by ORSA/TIMS:

Centre HEC-ISA, Jouy-en-Josas, France, 1987.
University of Texas at Dallas, 1986
Vanderbilt University, 1985
University of Chicago, 1984
University of Southern California, 1983
Wharton, March 1982
New York University, March 1981
University of Texas, Austin, March 1980
Stanford University, March 1979
Illustrative addresses at various top management conferences and meetings in the U.S. and abroad:

- "Getting More with Less," Telenet CEO Strategy Review, June 19-20, 2006.
- "Advances in the Management of Technological Innovation," Executive Briefing at Samsung Electronics, June 2, 2006.
- "The Changing Nature of Corporations: Competing in a Flat World," organizer and chair of a panel at the Milken Institute Global Conference, April 2006.
- "Challenging Your Mental Models," Microsoft's Latin America Financial Services CEO Roundtable, March 2006.
- "Brand Names and Logos," Penn Humanities Forum on Word and Image, February 2006.
- "New Frontiers in the Practice of Management" with Paul Kleindorfer, CEO Workshops at IDC Israel, January 2006.
- "Strategic Trends on the Global Marketplace," The Sixth Herzliya Conference on The Balance of Israel's National Security, January 2006.
- "Recent Developments in Marketing and Branding Strategies," presented to the Board and top management of IDT HK, August 2005.
- "Tapping Opportunity in the Developing World: Innovative Solutions for Companies and Communities," Milken Institute Global Conference, April 2005.
- "Return on Marketing Investment: Progress, Problem, and Prospects," Council of Marketing Executives, The Conference Board, October 6, 2004.
- "The Power of Impossible Thinking: A Prerequisite for Profitable Growth," Milken Institute Global Conference, April 27, 2004.
- "The Transformation Challenge," YPO at SEI, March 2004.
- "Technology for Profitable Growth: Progress, Problems, and Prosperity, eBRC Board of Directors meeting, Philadelphia, May 2003.
- "Business and the Pending Wars," a global senior executive Web conference, February 2003.
- "e-Business Revolution: R2R (Return to Reality)," World Leadership Forum of the Foreign Policy Association, New York, September 2000.
- "UNIG Top Executive Forum," Singapore, August 2000.
- "The Future of the Marketing Organization," MSI Board of Trustees Meeting, April 2000.
- "Preparing for 2002: Creating a Leading Global Medical Communication Company for the $21^{\text {st }}$ Century," Top Management of Medius Group Int. Paris, May 1997.
- "The Next Enterprise: Creating a Successful $21^{\text {st }}$ Century Enterprise," The Hong Kong Management Association, January 1996.
- "Building the 21st Century Corporation Today: A Marketing Perspective," A one day session for CEOs who participate in the MASTERSHIP program (LA) January 1990.
- "Growth Outlook for Consumer Products and Services" to the policy committee of Anheuser-Busch Company, 1986.
- "Marketing Management in Securities Firms" SIA Regional conference, 1986.
- "Recent Developments in Marketing Strategy," to Dutch top executives by Horringa \& DeKoning, October 1986.
- A number of 1-day Top Management Seminars organized by Studio Ambrosetti (Italy)
- Developing and Launching New Products (1986)
- Marketing and Corporate Strategy (1987)
- Marketing for Financial Institutions (1987)
- Domestic and International New Business Entry Strategies 1988)
- Strategic Marketing and New Product Development (1989)
- How to Develop Products More Often and Get Them to Market Faster (1991)
- The Consumer Goods Scenario: The Challenge (1992)
- Marketing Driven Bus Strategy in the Global Information Age (2000)
- "The Challenge of Marketing" Board of directors and top management of Grand Metropolitan, 1985.
- "Advances in marketing and Business Strategies" Top management group of the John Fluke Manufacture Co., 1985.
- "Global Marketing Strategies" YPO Chapter of Hong Kong, 1985.
- "Marketing for Hospitals" Hospital presidents program of the J\&J Leonard Davis Institute program, 1985.
- "Global Marketing Strategies" Top executive group of MARS pet food business, 1984.
- "Marketing for the Evolving Company" Conference on "Financing \& Managing the Evolving Company" sponsored by Arthur Andersen \& Co. and the GSB University of Texas at Austin, April 1984.


## Illustrative Other Top Management groups addressed:

- MSI Trustees, Cambridge, Massachusetts, October 1983.
- Securities Industry Association Fall Meeting, N.Y., October 1982, Spring Meeting, April 2000, Homestead, Virginia, May 1982: keynote speaker.
- Three sessions at the 1979 YPO Central Area Conference, Williamsburg, October 1979.
- Two sessions at the YPO International University, Rio de Janeiro, May 1979.
- Two sessions at the 1978 YPO, Eastern/Northeastern Area Conference, Sea Island, Georgia, November 1978.
- Eastern Pennsylvania Chapter of YPO, October 1978.
- Two-day seminars for top executives of Latin American countries sponsored by Expansion Publishing Group, Mexico City, June 1978, (Marketing Strategy); June 1979 (the Marketing Audit); and December 1980 (Marketing for Top Executives).


## Guest lecturer at faculty research seminars and executive development programs of various universities and research institutes, including:

Bell Laboratories (Applied Statistics Area), 1978
Columbia University, 1974, 1976-1978
Drexel University, 1977, 1984
Erasmus University, The Netherlands, 1993

Escola de Administrao de Empresas de Sao Paulo, Brazil, 1979
European Institute for Advanced Studies in Management, Brussels 1981
Florida Atlantic University, 1972
Harvard University, 1981
IESE Universidad de Navarra, 1999
Indian Institute of Technology (IIT) Bombay, 1989
INSEAD, France, 1992, 2000
Institut Superieur des Sciences Economiques et Commerciales, Paris, 1981
Interdisciplinary Center Herzliya, 1996, 1997, 1998, 1999, 2000
Kōc University, Turkey, 2000
Laval University, Canada, 1973
Katholieke Universiteit, Leuven, 2001
Monash University, Australia, 1977
Nanzan University, Nagoya, Japan, 1977
New York University, 1979, 1984
Northwestern University, 1980
Norwegian School of Management, Norway, 1993
Pennsylvania State University, 1978
Southern Methodist University, Texas, 1982, 1984, 1986
Stanford University, 1976, 1982
State University of New York at Buffalo, 1975
University of Bradford, 1975/6
University of California at Berkeley, 1975
University of California at Los Angeles, 1976, 1980, 1990
University of Capetown, S.A., 1982
University of Chicago, 1981
University of Groningen, 1986
University of Houston, 1977
University of Illinois, 1985
University of Iowa, 1971
University of Minnesota, 1973
University of New South Wales, Australia, 1977
University of Ottawa, 1974
University of Pittsburgh, 1988
University of Social Sciences, Grenoble, France, 1973
University of Southern California, 1979
University of Tel Aviv, 1977-80, 1982
University of Texas at Austin, 1984, 1997
University of Tokyo, Japan, 1992, 1993, 1995, 1997
University of Washington, 1979
Yale University, 1982

## Speaker at various executive programs of the University of Pennsylvania (illustrative list):

- "Advances in Innovation Management and New Product Innovation," Quad-C Executive Session, July 10, 2006.
- "A View from the Top: The Perspective of the Enlightened CEO," Wharton Executive Leadership Program for AICPCU, April 2005.
- "Challenging Your Industry's Mental Models," KPMG Global Insurance Institute, December 2003 and November 2004.
- "Market-Driven Organization," AICPCU and IIA Advanced Executive Education, Wharton, September 10, 2003.
- Strategy Discussion with Telenet's Top Management, March 11, 2003.
- "Organizational Change: Problems, Progress, and Prospect," Price-WaterhouseCoopers Strategy Master Class, July 26, 2002.
- "Capturing Business Opportunities in a Changing World," SIA Institute, $50^{\text {th }}$ Anniversary Program, March 2002.
- "Marketing Driven Strategies in a Global Economy," IBM's Managing Director Executive Development Program, February 2002.
- "Enhancing Creativity and Innovation," The Wharton e-Fellows I Program, March 2001.
- "World Class Marketing: Implications for Spencer Stuart," The Wharton/Spencer Stuart Leadership Assessment Program, June 2000.
- "Preparing for Leadership in the Changing e-Business Environment," CEO Circle, May 2000.
- "Innovation and Change in the Turbo-Global Environment: Lessons from the Transformation of 'Old Economy' Firms [and Universities] and the Challenges to Congress," Stennis Congressional Staff Fellows Program on Leadership in e-Business Environments: What Congress Might Learn, May 2000.
- Winning in the Next Millennium, "Driving Change," 1998.
- Stennis Congressional Fellows Program at Wharton, "Driving Change: Creating Winning $21^{\text {st }}$ Century Organizations," 1997.
- Competitive Marketing Strategies, "Preemptive Strategies," 1997, 1998.
- Sales Force Management Program, "Segmentation and Positioning for Sales Force Effectiveness," 1987, 1990, 1997.
- Healthcare Marketing and Communications, 1996.
- Re Engineering Pharmaceutical Marketing, 1994.
- Executive Development 1992, 1993.
- AMP -- Advanced Management Program, 1988, 1989, 1990, 1991, 1997, 1998.
- "Marketing Strategy" in the J\&J-Wharton Fellows Program in Management for Nurses, 1983, 1984, 1985, 1986.
- "Marketing Strategy" in the Delaware Valley Hospital Strategic Planning Program, May 1980.
- "New Developments in Social Research," in the Symposium on Corporate Awareness, February 1977.

Speaker at various local and regional meetings of the American Marketing Association, 1967 to
present, and national meetings of other marketing associations such as the National Account
Marketing Association, 1973; the International Pharmaceutical Marketing Research Group, 1973;
The National Association of Children's Hospitals and Related Institutions, 1976; American
Management Association's advanced Marketing Research Seminars, 1967/1968; and the Marketing Science Institute conferences and management seminars, 1968-1994.

## Guest speaker at special seminars:

- The Australia and New Zealand Marketing Societies in Sydney and Melbourne, June 1977.
- Various conferences of the Israel Advertisers' Association, The Technion Research and Development Foundation, Ltd., The Ministry of commerce and Industry, 1968/1969.
- Foreign market entry and import protection strategies, The Israel Institute of Management, October 1984.


## Illustrative Presentations

- "Does Korean Marketing Need Reform?" Korean Marketing Club, Seoul, June 5, 2006.
- "Redefining Marketing for the $21^{\text {st }}$ Century," Wharton Club of Korea, Seoul, June 3, 2006.
- "Creativity - A Must for Marketing Success," back-to-class session at the 2005 Wharton Marketing Conference, October 2005.
- "Decision Aiding Technologies and the New Theory of the Firm," with Paul Kleindorfer, Mack Center for Technological Innovation Conference on Using Technology to Improve Decision Making, May 27, 2005.
- The Silver Lining: Seeing Opportunities in Risk," Recent Advances in Operations and Risk Management Conference in Honor of Paul Kleindorfer, May 2005.
- "Effective Marketing Planning: What It Is and How to Produce It," JCCA Conference, April 2005.
- "Strategic Shifts and the Balance of National Security: Summation," J. K. Herzliya Conference, Israel, December 2004.
- "The Power of Impossible Thinking," Wharton Cub of South Florida, December 3, 2004.
- "The Power of Impossible Thinking," Advertising Research Foundation BreakThrough Conference, Keynote Breakfast Address, November 4, 2004.
- "Return on Marketing Investment: Progress, Problems and Prospects," Address to the CMO Group of the conference board, October 6, 2004.
- "Challenges of Identifying, Developing, and Capturing Opportunities: A Fresh Look at Marketing," SEI Center Board Meeting, October 1, 2004.
- "Thought Leadership Survey Results," Presentation to WSP Editorial Board, October 2004.
- "The Power of Impossible Thinking," Wharton and AFLSE Clubs of DC, Washington, DC, September 29, 2004.
- "The Power of Impossible Thinking: Implications for Deutsche Bank," Deutsch Bank External Insights, New York, September 2004.
- "The Power of Impossible Thinking: Implications for Federal Express and its People," Executive Briefing to Federal Express, September 7, 2004.
- "Challenging the Mental Models of Marketing," A State of Marketing Symposium, Does Marketing Need Reform? Boston, August 9, 2004.
- "Growth Strategies and New Mental Models," Wharton Fellows, August 2003.
- "The Interdisciplinary Challenge of Marketing," Ph.D. Proseminar, February 2003.
- "Business and the Coming War on Iraq," Webcast with Wharton Fellows, February 2003.
- "Convergence Marketing: Strategies for Reaching the New Hybrid Consumers," a Webcast of the University of Wisconsin Consortium for Global e-commerce, January 2003 and a Soundview Teleconference, May 2003.
- "Managing the Complexities of the Convergent and Multi-Channel Marketing," CMO Summit, October 30, 2002.
- "Assessing Vulnerabilities," System Approaches to Terrorism Conference at George Washington University, July 15, 2002.
- "Marketing Driven Strategies for Today's Economy," presentation at Alumni Weekend, May 2002.
- "Pioneer and Late Entrants: Winning Strategies," Viagra, Cardura, Darifenacin WWT Meeting, April 9, 2002.
- "Wharton on the New Reality of Business: Insights from Our Experience," presentation with Robert Mittelstaedt to the Wharton Combined Boards, March 8, 2002.
- "The Interdisciplinary Challenge of Convergence Marketing," Wharton Ph.D. Proseminar, March 8, 2002.
- "Marketing Driven Strategies in a Global Economy," IBM's Managing Director's Executive Development Program, February 13, 2002.
- "Should You Have a Chief Marketing Officer?" January 2002.
- "Target Audience, Public Opinion and Foreign Policy - A Marketing Perspective," Balance of National Strength and Security - The Herzliya Conference, December 2001.
- "Capturing Opportunities and Developing New Mental Models," Wharton on the New Business Reality, December 2001.
- "Capturing Opportunities in the Post 9/11 Reality," The Wharton Club of Israel, December 2001.
- "Research Challenges in the Management of Extreme Events: The Case of the Office Homeland Security," with Paul Kleindorfer, Advisory Board Meeting of the Wharton Managing and Financing Extreme Event Project, December 2001.
- "The 5 Cs of Marketing: Capitalizing on the New Opportunities of Convergence Marketing," The Wharton Club-Atlanta, GA, November 2001.
- "Advances in Customer Focused Marketing and Business Strategy: The 5 Cs of Convergence Marketing," The International Academy of Management, Claremont Graduate University, November 2001.
- "Capturing Internet Opportunities Above the Low-Hanging Fruit," Business Week "Rethinking the Internet," Conference, Chicago, October 2001.
- "What Keeps Us Up At Night?: Post 9/11 Survey of US CEOs - Top Line Results," SEI Center Board, October 2001.
- "Disruptive Technology—Rethinking Your Mental Models," Forbes Global CEO Conference, Singapore, September 2001.
- "Making Strategy Happen: Problems, Progress and Proposed Actions for Winning in the Changing Global Information Age," Li \& Fung Distribution Annual Conference, Hong Kong, July 2001.
- "Convergence Marketing: A New Marketing Strategy for the Global e-Business Environment," The Wharton European Forum, May 2001.
- "The e-Bus Challenge," the Top Executives of the Bank of East Asia, March 2001.
- "Globalization of Technology Startups," Wharton-Israel Global Alumni Conference on the Globalization of Technology Intensive Business-Panel 5, March 2001.
- "Global Business Strategy of a Technology Start Up," Wharton-Israel Global Alumni Conference, March 2001
- "Developing a Strategy," ICA Board, March 2001.
- "e-Bus: The Curriculum and Research Challenge: A Discussion with Jerry Wind," Faculty Seminar, Graduate School of Business Studies, Katholieke Universiteit Leuven, Belgium, February 2001.
- "Driving Change: New Business Models for the Global Digital Age," Opening Lecture of the PriceWaterhouse Coopers Management Consultants, e-Business Chair, Graduate School of Business Chair, Graduate School of Business Studies, Katholieke Universiteit Leuven, Belgium, February 2001.
- "Reinventing Training for the Global Information Age," Delphi e-Learing Conference, January 2001.
- "The Impact of the e-Bus Revolution on the Marketing Discipline," Wharton Fellows in eBusiness, The Impact on the Discipline, December 2000.
- "Whither System Thinking: Will Taking a Marketing Perspective be an Oxymoron? ," Inaugural Conference of the Achoff Center for Advanced Systems Appraisal, September 2000.
- "New Marketing Rules for e-Business Success," UNIG, Singapore, August 2000.
- "New Marketing Rules for the Global Information Age," IBM Global Services Academic Conference, August 2000.
- "Creating an e-Business," Wharton-Singapore Management University Conference: eBusiness in the New Millennium, July 2000.
- "Marketing Driven Business Strategy in the Global Information Age," Managing Change in the New Millennium, Wharton-Singapore Management University Conference, July 2000.
- "Digital Marketing: Towards a New Paradigm for the Global Information Age," Faculty Session-INSEAD, France, June 2000.
- "Innovation and Change in the Turbo-Global Environment: Lessons from the Transformation of 'Old Economy' Firms [and Universities] and The Challenges to Congress," Stennis Congressional Staff Fellows Program on Leadership in e-Business Environments: What Congress Might Learn, Washington D.C., May 2000.
- "A New Marketing Paradigm for the Global e-Business Environment: A Catalyst for Bridging the Gaps," Building Bridges \& Broadening Perspectives: A Paradigm for the Next Millennium, $29^{\text {th }}$ EMAC Conference, Rotterdam, May 2000.
- "Preparing for Leadership in the Changing e-Business Environment," CEO Circle, May 2000.
- "Building Communities," Virtual Communities and the Internet, April 2000.
- "Valuation: Valuable or Value Less," Entering the Virtual Millennium, Wharton North American Regional Forum, April 2000.
- "The Future of the Marketing Organization," The Future of the Marketing Organization, MSI Board of Trustees Meeting, Cambridge, Massaschusetts, April 2000.
- "Research Priorities in e-Commerce and Internet Marketing," Web Consortium, Pennsylvania State University's ISBM, March 2000.
- "Marketing Driven Business Strategy in the Global Information Age," Studio Ambrosetti's top executive seminar in Padova and Milan, March 2000.
- "Customization Strategies for Financial Services in the Global Information Age," the Citigroup and Simon Graduate School conference on Electronic Banking Commerce, New York. February 17-18, 2000.
- "Emerging Trends in the Pharmaceutical Industry and the Expected Scenarios," Innovative Managed Care Contracting, January 2000.
- "Marketing Science: Accomplishments and Challenges in the Global Information Age," Informs, November 1999.
- "Towards a Research Agenda in E-Commerce and Internet Marketing," AMA Educators' Conference, San Francisco, August 1999.
- "Creativity and Innovation," in Wharton Workshop on Creativity and Knowledge Creation, April 1999.
- "Innovation Strategy," New Product Development and Launch, April 1999.
- "Marketing Strategy in the Global Information Age: Implications for Research and Modeling," PhD. And Faculty Seminar IESE Universidad de Navarra, Barcelona, March 8, 1999.
- "Marketing Research in the Global Information Age: Practice, Problems, and Prospects," Wharton-IDC Marketing Communications Program, March 1999.
- "Implementation and Feasibility Issues of New Forms of Organizations: A Marketing Perspective," Wharton Impact Conference, March 1999.
- "Implementation and Feasibility Issues of New Forms of Organizations: A Marketing Perspective," Wharton Impact Conference, March 1999.
- "A Marketing Perspective on Communitarian Policies," The Communitarian Summit, Washington, D.C., February 28, 1999.
- "The Information Revolution and the Emerging Management Education Paradigm," On Line Educa, Berlin, December 1998.
- "Towards a New Management Education Paradigm," IDC Faculty Workshop, June 1998.
- "An Extended Marketing Perspective on Corporate Architecture for the $21^{\text {st }}$ Century," Japan Marketing Association, World Marketing Conference, Tokyo, April 1998.
- "Winning the high Tech Wars: Strategies for Driving Change," NEC Management Team, Tokyo, April 1998.
- "The Challenge of Customer-Driven Product and Service Customization," Senior management of Convatec, March 1998.
- "Towards a New Marketing Paradigm," AMA Winter Marketing Educators= Conference, February 1998.
- "Positioning and Segmentation in the Global Information Age," IMS Marketing Management Meeting, January 1998.
- "The Challenge of Market Leadership," Bristol-Myers Squibb Medical Devices Group, January 1998.
- "Driving Change: Preparing for the $21^{\text {st }}$ Century," Business Writers= Seminar, December 1997.
- "Marketing Strategy in the Global Information Age," AMP Program, October 1997.
- "Integration of Marketing and other Business Functions: The Wharton Experience," AMA: 1997 Faculty Consortium B Chicago, August 1997.
- "Positioning and Segmentation Opportunities for Synergy and Growth," Cognizant Group's Marketing Council, July 1997.
- "Preemptive Strategies," Wharton Executive Education Competitive Marketing Strategies, June 1997.
- "Creative Joint Ventures and the Potential Role of the University," Philadelphia-Israeli Chamber of Commerce, June 1997.
- "Communicating and Marketing Your Excellence," Volunteer Committees of Art Museums - VCAM Conference, Philadelphia, April 1997.
- "The Challenge of Information Technology to Marketing and Retailing in the 21st Century," University of Tokyo, April 1997.
- "Toward a New Corporate Governance Model: Lessons from the Japanese and U.S. Experience," With Masaru Yoshitomi, the Corporate Governance Workshop, March 1997.
- "Creating a Leading Global Medical Communication Company for the 21st Century," Medicus Group International, Inc., March 1997.
- "Segmentation and Positioning for Sales Force Effectiveness," Sales Force Management, Wharton Executive Education, March 1997.
- "Marketing Strategy in the Global Information Age: Implications for Modeling and Research," Ph.D. Proseminar, March 1997.
- "Choices and Strategies for Universities in the Global Information Age," Provosts Seminar on Information, February 1997.
- "The Use of Conjoint Analysis-Based Survey to Determine Consumer Price Elasticities," Debriefing Session for the Anti-Trust Division, Washington, D.C., February 1997.
- "The Challenge of Competitive Strategies in the Global Information Age," The Interdisciplinary Center for the Study of Business, Law and Technology, Herzliya, Israel, December 1996.
- "Innovation and New Product Development," Tutorial at the 2nd International Workshop, Santiago, Chile, October 1996.
- "Creating a 21st Century Enterprise," Universidad Adolfo Ibanez, Vina del Mar, Chile, October 1996.
- "Marketing: The State of the Art," Conference of the 2nd International Workshop on Economics and Management, Santiago, Chile, October 1996.
- The Technology Challenges for Family Business," Technology Day: The Web, The Future and You, the 1996 Family Firm Institute Conference, October 1996.
- "Innovative New Product and Service Development: Best Practice and Opportunities for Experimentation," The Israel-North America Business Conference, New York, October 1996.
- "Creating a 21st Century Enterprise: Implications for Boards of Directors," Enhance Board of Directors, September 1996.
- "Innovation in New Product Development: Best Practice in Research, Modeling and Applications," Presentation to the JMR Editorial Board on the Special issue, August 1996.
- "Marketing Strategy in the Global Information Age: Implications for Research and Modeling," AMA 1996 Doctoral Consortium, July 1996.
- "Creativity and Innovation: The Management Edge in the Technological Age," the First Wind Lecture at the Interdisciplinary University of Law, Management and Technology (ISRAEL), May 1996.
- Address on Issues in Marketing Research for Legal Cases: Necessity of Using controls and the Propriety and Risk of Repetitive Probes," Marketing and Public Policy Conference, Washington, D.C., May 1996.
- "Innovation and New Product and Business Development," CEO Circle, May 10, 1996.
- "Segmentation in the Global Information Age: Accomplishments, Problems and Challenges," The 1996 Converse Award Presentation, May 7, 1996.
- "Advances in Marketing," Janssen Pharmaceutica, April 18, 1996.
- "Marketing in the Pharmaceutical Industry: Emerging Challenges and Opportunities," Keynote Address, Healthcare Marketing and Communications Council and Wharton Executive Education, Wharton School, April 8, 1996.
- "The Stakeholder Challenge for Increased European Competitiveness," Wharton European Forum, (London, England), March 29, 1996.
- "Product Launch," Software Development and Marketing for Competitive Advantage, IC" ${ }^{2}$, The University of Texas Conference, March 20, 1996.
- "The Next Enterprise: Creating a Successful 21st Century Enterprise Today," The Hong Kong Management Association, January 12, 1996.
- "Toward Virtual Management Education," International Academy of Management (Boston, MA), December 8, 1995.
- "Business in the Global Information Age," The Interdisciplinary Center of Business, Law and Technology, December 3, 1995.
- "Marketing Issue in the Global Economy," Wharton Doctoral Consortium, August 11, 1995.
- "A View of Marketing Through the Prism of the 1977 and 1995 Doctoral Consortia," Wharton School, Doctoral Consortium, August 8, 1995.
- "Toward a New Marketing Paradigm," Ambrosetti Group's A.F. Meeting (Rome, Italy), March 8, 1995.
- "Toward a New Marketing Paradigm: Lessons From and Implications to the Marketing of Services," Ambrosetti Group's Chief Executive Seminar (Milan, Italy), March 7, 1995.
- "The Value of Marketing Program," Janssen Pharmaceutica, January 9, 1995.
- "The Virtual University: Research and Action Agenda," The Virtual University Conference, SEI Center, January 12, 1995.
- "Marketing 2000," AIMSE/Wharton Investment Institute, January 13, 1995.
- "Beyond Brand Management," Wharton MBA Marketing Club, January 23, 1995.
- "A New Management Paradigm for the 21st Century Enterprise," Conference of the International Academy of Management, December 9, 1994.
- "Research Priorities in Marketing as Derived From the SEI Center for Advanced Studies in Management Work on Creating Successful 21st Century Enterprises," Doctoral Proseminar, November 16, 1994.
- "Creating a Successful 21st Century Enterprise: Implications for Business and Marketing Theory, Practice, Research and Education," The University of Tokyo, November 4, 1994.
- "State of the World: Trades, Problems and Prospects," YPO Philadelphia Chapter University, The Cloister, September 1994.
- "Is Your Marketing Obsolete? Implications of the New Marketing Paradigm for Business and Non-profit Organizations," YPO Philadelphia Chapter University, The Cloister, September 1994.
- "The Value of Marketing: A Research Agenda," Value of Marketing Conference, Stanford University, August 9, 1994.
- "Electronic Commerce: Progress and Prospects," AMA Conference, San Francisco, August 8, 1994.
- "Determining the Value of Marketing: A New Challenge to the Discipline," San Francisco AMA Conference, August 8, 1994.
- "JMR Special Issue on Innovation in New Product Development: Best Practice in Research, Modeling and Applications," JMR Editorial Board Meeting, San Francisco, August 7, 1994.
- "Entering the U.S. Consumer Durable Markets," Nijenrode Executive MBA Program, August 4, 1994.
- "A New Approach for Estimating the Demand for Interactive TV Products and Services, Interactive Industry 2000: Market Research for the Interactive Television Business," July 28-29, 1994.
- "Creating a 21st Century Enterprise," Poon Kam Kai Institute of Management, The University of Hong Kong, June 16, 1994.
- "Advances in U.S. Marketing and Their Implications to China," Joint faculty seminar of the School of Economics and Management, Tsinghua University and the School of Management, Peking University, June 15, 1994.
- "Toward a New Marketing Paradigm," a faculty seminar at the Hong Kong University of Science and Technology, School of Business and Management, June 14, 1994.
- "Empirical Generalizations in Marketing: Opportunities for MSI Research Program," MSI Board of Trustees Meeting, April 29, 1994.
- "Textbook of the Future: A Perspective From the Virtual University Lab," April 8, 1994.
- "The Impact of Marketing Science on Industry and Academia," The Oscar W. Neuhaus Lecture, Rice University, March 23, 1994.
- "The Challenge of a New Marketing Paradigm," University of Texas at Austin, March 23, 1994.
- "Market Driven Quality," at the Beyond Quality: Organizational Transformation to the 21st Century Enterprise, March 17-18, 1994.
- "The Marketing Challenges for the Philadelphia Orchestra," Presentation to the Board of Trustees of the Philadelphia Orchestra, March 1, 1994.
- "Pharmaceutical Marketing: Emerging Challenges and Opportunities," Pharmaceutical Advertising Council and Wharton Executive Education Conference on Reengineering Pharmaceutical Marketing, February 25, 1994
- "Role of Marketing in the New MBA Curriculum: Lessons from the Wharton Experience," AMA Winter Conference, February 21, 1994.
- "Empirical Generalizations in Marketing: Some Observations," Wharton Conference on Empirical Generalizations in Marketing, February 16-18, 1994.
- "Increasing Marketing Effectiveness," Executive Conference of Schering-Plough Int., January 18, 1994.
- "The Value of Pharmaceutical Advertising and Promotion," Coalition of Healthcare Communication Conference, Marketing Conference in an Era of Change, New York October 27, 1993.
- "Advances in Marketing Strategies," Nijenrode University Executive Program, August 6, 1993.
- "Global Consumer Brand Strategies: Problems and Prospects," Seminar for the Business Partners of the Norwegian School of Management, June 11, 1993.
- "Determinants of New Product Success: Lessons from the U.S. and Japan," Faculty and Ph.D. students seminar at Erasmus University, June 10, 1993.
- "Getting the Most out of Benchmarking," Board of Directors of Wharton=s Alumni Association, May 14, 1993.
- "Determinants of Successful Entry to the U.S. Market," Wharton-Recanati Program, May 12, 1993.
- "Marketing Opportunities in Japan and East Asia," with Hotaka Katahira and the International Forum Participants, April 18, 1993.
- "Toward a New Marketing Paradigm: Implications for Marketing Departments," Advisory Board Meeting of the Wharton's Marketing Department, April 8, 1993.
- "The New Wharton MBA Curriculum," Faculty seminar at Erasmus University, March 10 and June 10, 1993.
- "Marketing Science at a Crossroad," Inaugural Presentation as the first holder of the Unilever-Erasmus Marketing Professorship, Erasmus University, February 18, 1993.
- "The Strategic Impact of Market Driven Quality," with Paul R. Kleindorfer. ORSA/TIMS, San Francisco, Session on Customer Satisfaction and its Role in Global Competition. November 1992.
- "Issues and Advances in New Product Development and Management: A U.S. Perspective," Advanced Industrial Marketing Strategy Seminar, September 18, 1992.
- "The Market Driven 21st Century Enterprise: Implications for Law Departments," Presentation at the SmithKline Beecham U.S. Law Department Conference on Customer Focus Continuous Improvement, April 28, 1992.
- "New Product Development: Problems, Advances and Prospects," Wharton's Advanced Industrial Marketing Strategy, March 19, 1992.
- "Preparing for the 21st Century Today," Securities Industry Institute, 40th Anniversary Program, March 1992.
- "The Successful 21st Century Enterprise as Customer Driven: Implications for Marketing and Management Science," University of Texas at Austin, Faculty Colloquium, February 1992.
- "Time Based Competition: Implications for Marketing Science," INSEAD Faculty Presentation, January 1992.
- "A New Management Paradigm for Israel's Schools of Management: Lessons from the New Wharton MBA Curriculum," Conference on the Future of Management Education in Israel, Jerusalem, Israel, October 16, 1991.
- "Designing \& Implementing an Innovative MBA Program: Lessons from the Wharton Experience," Conference on the Future of Management Education in Israel, Jerusalem, Israel, October 16, 1991.
- "How to Develop Products More Often and Get Them to Market Faster: Guidelines for Functional Management," Ambrosetti Group, Milan, Italy, May 9-10, 1991.
- "Management in the 21st Century: Implications to the Fragrance Industry," Summit 2000 Conference of the Fragrance Association, April 8, 1991.
- "Marketing Research and Modeling for the 21st Century Enterprise: The Emerging Crisis and its Challenges," Management Science Roundtable, February 17, 1991, Redington Beach, FL.
- "Inducing Creativity and Innovation in Large Bureaucracies: Lessons from Marketing," RGK 4th International Conference on Creativity and Innovative Management, August 810, 1991, Los Angeles, CA.
- "Concept Testing for Generating and Evaluating Positioning Strategies," PDMA Positioning Conference, March 6, 1990, New York, NY.
- "Research Priorities in the Information Technology Area," MSI, Information Technology Steering Group, January 18, 1990.
- "Building the 21st Century Corporation Today: A Marketing Perspective," MASTERSHIP, January 9, 1990, Los Angeles, CA.
- "Globalization: Opportunities for Innovative Research and Modeling," UCLA, January 9, 1990, Los Angeles, CA.
- "Marketing Skills and Strategies for the 1990's," Pfizer International Marketing Managers, December 1989, Lambertville, NJ.
- "Increasing the Effectiveness of Your New Product Development," Indian Institute of Technology, November 1989, Bombay, India.
- "Competitive Advantage Through Strategic Marketing," Contel Corporation, October 1989, Lake of the Ozarks, MO.
- "Management in the 21st Century," Wharton Advanced Management Program, September 1989, Philadelphia, PA.
- "The Contributions of Strategy and Other Business Functions to the Creation of Innovative Marketing Knowledge," AMA Marketing Educators Conference, Chicago, August 1989.
- "The Current and Potential Contributions of Strategy and the Other Business Functions to the Creation of Innovative Marketing Knowledge," AMA Summer Conference, August, 1989, Chicago, IL.
- "Selecting and Negotiating International Strategic Alliances: Applications of the AHP," TIMS Osaka, July 1989.
- "Improving the Effectiveness of the Industrial New Product Development Process: Lessons from Industry - The AS 400 Case," 16th International Research Seminar in Marketing, La Londe les Maures, France, May 19, 1989.
- "Strategic Marketing," Studio Ambrosetti AP Milan Group, May 17, 1989.
- "Developing and Launching New Products: Costs, Risks, and Conditions for Success," Studio Ambrosetti, AF Marketing Group, May 16, 1989.
- "The Marketing Challenge for Top Management:, Promises and Pitfalls of Expert Systems," University of California, Irvine, April 27, 1989.
- "Management in the 21st Century: Implications for Management Research and Education," University of California, Irvine, April 27, 1989.
- "The Globalization of Management Education: Options, Trade-Offs, and an Agenda for Implementation," AACSB Annual Meeting, April 18, 1989, Montreal.
- "A Contrarian Approach to Effective Pricing," The Pricing Institute, March 7, 1989, New York.
- "Achieving Competitive Advantage in Marketing," Securities Industry Association, March 6, 1989, Philadelphia, PA.
- "Courtyard by Marriott: Designing a Hotel Facility with Consumer Based Marketing Models," presented to the TIMS/AMA seminar Marketing Science: A Developmental Tool for Management Scientists, New York, November 16, 1988.
- "Technology and Marketing-Driven Global Portfolio of R\&D Projects," with Robert DeLuccia presented at the ORSA/TIMS Joint National Meeting in Denver, Co, October 26, 1988.
- "Pitfalls and Challenges of Global Marketing," Second International Conference on Marketing and Development, Karl Marx University, Budapest, Hungary, July 12, 1988.
- "Information Technology and Marketing Strategy," with Eric Clemons, presented at IS, TC and Strategy Plenary Meeting, January 1988.
- "A New Challenge for Human Resource Management: Incorporating a Marketing Perspective," The Lauder Institute: International Human Resource Conference, December 1987.
- "Advances in Marketing Strategy and Research," Wharton Alumni Club, Milan, October 1987.
- "Marketing and Corporate Strategy," Studio Ambrosetti, Milan, October 1987.
- "Marketing for Financial Institutions," Studio Ambrosetti, Milan, October 1987.
- "Proactive Marketing Research and Modeling: Pitfalls and Prospects," PMRG Fall 1987 meeting, Captiva Island, Florida, October 1987.
- "Turning Salespeople and Non-Marketing Executives into Marketing Strategists," AMA Marketing Educators' Conference, Toronto, August 1987.
- "International Marketing," Wharton Alumni Club, Toronto, August 1987.
- "Marketing and Technology: Progress, Problems, and Prospects," European-American Symposium, Enschede, The Netherlands, June 29-July 1, 1987.
- "Second Generation Expert Systems: Incorporating Enhanced Explanation and Learning," Marketing Science Conference, Jouy-en-Josas, France, June 24-26, 1987.
- "Market Segmentation: Shortcomings and Opportunities," 1987 Attitude Research Conference, West Palm Beach, Florida, May 1987.
- "Advances in Marketing Research and Modeling," Studio Ambrosetti, Milan, December 1986.
- "Advances in Management Strategy: A Marketing Perspective," The Institute of Management Consultants, March 1986.
- "The Marketplace of the Future: Global Consumers," Advertising Research Foundation 50th Anniversary Conference, March 1986.
- "A Marketing Perspective for Public Management: Research Implications," Wharton Department of Public Policy and Management Brown Bag Seminar, January 1986.
- "Advances in Global Marketing Strategy: Concepts, Methods, and Applications," International Symposium on Recent Developments in Management Research, Helsinki, Finland, 1986.
- "Expert Systems in Marketing," TIMS October 1986 Conference, Miami.
- "Advances in Portfolio Analysis and Strategy," Chinese Management Association, Taipei, July 1985.
- "New Development in Marketing and Planning," WEFA/Lauder Seminar, June 1985, Tokyo, Japan. Sessions on Advances in Market Segmentation, Product Positioning and Portfolio Analysis and Strategy.
- "Advances in Portfolio Analysis and Strategy," University of Illinois, Theories of Marketing Practice Conference, May 1985
- "Micro Computers in Marketing," Marketing Science Conference, March 1985.
- "Global Marketing Strategies," New York University, 1985.
- "Diffusion Models: The State of the Art," ASA conference, 1984.
- "Management Education in a Global Context," University of Pennsylvania Conference on Management Education and Foreign Languages, December 1984;
- "Generating and Evaluating Industrial Marketing Strategies Using the AHP," TIMS Conference, November 1984;
- A Innovation Diffusion and New Product Forecasting," TIMS Conference, November 1984;
- "Foreign Market Entry and Import Protection Strategies," Israel Institute of Management, October 1984.
- "The Contribution of Consulting to the Consumer Research Discipline," ACR conference, October 1984.
- "The CEO and the Board," Strategic Management Conference, October 1984.


## PROFESSIONAL AFFILIATIONS AND AWARDS

## Professional Affiliations

1. Fellow of the International Academy of Management (since 1989), Chancellor 2000-, Vice Chancellor for the Americas, 1996-2000
2. Academy of International Business
3. American Marketing Associations
4. American Association for Public Opinion Research
5. American Psychological Association, Division of Consumer Psychology (Div. 23)
6. Association for Consumer Research
7. International Communication Association
8. Product Development and Management Association
9. Psychometric Society
10. Strategic Management Society
11. INFORMS - The Institute of Management Sciences
12. The Market Research Society (London)

## Professional Awards

## 1. Honorary Degrees

M.A. Honors, University of Pennsylvania, 1971

## 2. Awards

- Honorary Fellow of the Decade, Interdisciplinary Center, Herzliya (Israel), May 2004.
- The 2003 Elsevier Science Distinguished Scholar Award of the Society for Marketing Advances
- One of the 10 Grand Auteurs in Marketing. [Alain Jolbert, EMS Management and Societe, 2000]
- One of 18 JAR articles in the Special Classics Issue of articles that have withstood the test of time. Nov./Dec. 2000.
- The Paul D. Converse Award, 1996.
- American Marketing Association/Irwin Distinguished Educator Award, 1993.
- First Faculty Impact Award, Wharton Alumni Association, 1993.
- First Runner-Up in the 1988 Franz Edelman Award for Management SciencelAchievement.
- The 1985 Charles Coolidge Parlin Award.
- Elected as the 1984 member of the Attitude Research Hall of Fame.
- Delivered the 13th (1981) Albert Wesley Frey Lecture, University of Pittsburgh.
- My Product Policy book won the 1979 Book of the Year Award given by the editors of Expansion (Mexico).
- Winner of two Alpha Kappa Psi Foundation Awards for the best article published in the Journal of Marketing in 1973 and 1976.
- Runner up of the 1983 William O'Dell Award for "the article published 5 years earlier in JMR which stood the test of time and made the most significant long run contribution to Marketing Theory, methodology and practice".
- Winning paper (with Paul E. Green) of American Psychological Association Division of Consumer Psychology, 1972 Research Design Competition.
- A finalist (top 5) for the 1980 Wharton Award for teaching excellence.


## 3. Citations

- Third highest ranked Marketing Scholar in the University of Maryland's Kirkpatrick and Locke Faculty Scholarship Study, 1985 (based on number of publications, citations, and peer ratings).
- 10th highest ranked marketing Scholar in the Cote, Leong and Cote "Assessing the Dissemination and Utilization of Marketing Research in the Social Sciences: A Citation Analysis Approach," 1990.


## 4. Research Grants

- National Science Foundation: U.P. Research Grant (Summer 1970);
- General Foods, the Jell-0 Division (1971);
- N.W. Ayer (1972) - (with Paul E. Green);
- Downe Communication, Inc. (1972);
- Lever Brothers (1972) - (with Paul E. Green);
- Thomas Jefferson University Hospital (1973);
- AT\&T (1973);
- The Robert Wood Johnson Foundation Clinical Scholar Fund (1974);
- The John and Mary R. Markle Foundation with R.E. Frank (1975-1976);
- National Science Foundation (Grant No. 51575-12928) (1975);
- The National Health Care Management Center of the Leonard Davis Institute with Thomas Robertson (1977).


## 5. Fellowships

- Hebrew University Awards 1959/1960; 1964/1965; 1965/1966;
- Ford Foundation Fellowship 1963/1964;
- Owen D. Young: General Electric Fellowship in Marketing 1964/1965; 1965/1966;
- Bankendorf Fellowship 1964/1965;
- Stanford University Fellowship 1964/1965; 1965/1966.


## 6. Illustrative Recent Media Coverage

- Knowledge@Wharton citations:
o Farewell, Peter Drucker: A Tribute to an Intellectual Giant [November 16, 2005]
o Should Your Next CEO Be a Philosopher? [interview, February 9, 2005]
o What's the Buzz About Buzz Marketing? [interview, January 12, 2005], reprinted in Wharton Alumni Magazine, Winter 2005
o Amazon's Multiple Personalities [interview, January 14, 2005]
o Back to the Drawing Board: Is the Traditional Theory of the Firm Obsolete? [interview, October 6, 2004]
o The Power of Impossible Thinking [book, August 25, 2004]
o What's Behind the 4-Minute Mile, Starbucks, and Moonlanding? The Power of Impossible Thinking [book, July 14, 2004]
o A Lofty Take on Leadership: Mountain Climbing and Managing Companies [book, September 24, 2003]
o How Business Can Prepare for War [conference, February 9, 2003]
o Could a Cyber-Terrorist Take Down Your Company? Don't Wait to Find Out [conference, August 28, 2002]
o The New Business Reality [conference, January 30, 2002]
o What Webvan Could Have Learned from Tesco [interview, October 10, 2001]
o What's in Store for Capital Markets and the Economy? [interview, September 26, 2001]
o Did Terrorists Blow Up the Recovery? [interview, September 13, 2001]
o Dotcom Bomb Hits the Publications that Covered It [interview, August 29, 2001]
o Can Priceline Remain Profitable? [interview, August 15, 2001]
o Good vs. Great Leaders: The Difference is Humility, Doubt, and Drive [conference, June 20, 2001]
o It's Not Easy Being Paul Green [interview, November 8, 2000]
0 Three Marketing Lessons from the Love Bug [interview, May 24, 2000]
o Just-in-Time Education: Learning in the Global Information Age [paper, August 30, 2000]
o New Rules of Digital Marketing [interview, October 13, 1999]
o Who's Buying on the Internet? [paper, September 1, 1999]
o Who Is Buying on the Internet? [paper, November 4, 1999]
o Marketing Strategy in the Global Information Age [lecture, July 23, 1999]
o The Knowledge Edge [conference, June 23, 1999]
- Goh, Dr. Sunny T.H. "How to Make the Impossible Possible." The Star Online. July 10, 2006. thestar.com.my/news/story.asp?file=/2006/7/10/business/14512212\&sec=business.
- A link has been placed for the book The Power of Impossible Thinking on the website, www.worksavvy.ws/organization.htm\#yourself as a recommendation to entrepreneurs and the diagram from page xxiv of the book is shown in the section of the website, "Organizing Yourself: Your Mind, Your Attitude, Time and Planning."
- "How Business Ideas are Born," MoneyControl.com, June 2, 2006.
- "Think You Know More Than Your Boss? You Just Might," Beepcentral.com, April 24, 2006.
- "Creativity Comes to B-Schools," Business Week Online, March 26, 2006.
- Thomas Group Review. The Power of Impossible Thinking: A conversation with Yoram (Jerry) Wind and Jim Taylor. Also appeared at Knowledge Leadership @ Thomas Group.
- The Power of Impossible Thinking selected as one of the five outstanding books on "Thinking Outside the Box" by the Swiss Journal CASH on March 16, 2006.
- "Marketing Prof. Gives Crash Course in Brand Image," Daily Pennsylvanian, February 9, 2006.
- "Churning Out Books for the Bigwigs," Daily Pennsylvanian, November 10, 2005.
- Inaugural Thought Leader interview, The Brand Strategy Roundtable Journal, November 2005.
- A number of radio interviews re The Power of Impossible Thinking, including:
o Something You Should Know with Mike Carruthers, March 2006.
o Mix 92.9 Morning Show, Nashville, March 2006.
o KRMB Radio, Strategies for Living, Shrevesport, LA, August 11, 2004.
o WKCT Radio, Drive Time, Bowling Green, KY, August 20, 2004.
o WABJ Radio, John Sabastian Morning Show, Detroit, MI, August 18, 2004.
o WKNO Radio, Smart Copy, Memphis, TN, August 17, 2004.
o KIKK Radio, Salt Lake City, UT, November 6, 2004.
- "Winds of Change," The Economic Times, Brand Equity, June 1, 2005, front page.
- "From Ink to Implementation: New Press Wharton School Publishing Co-Editors Say They Aim for Sound Management Titles that You Can Do Something With," BusinessWeek Online, April 11, 2005.
- "Power of Mental Models," Asia Inc. April 2005, pp. F14-15.
- "Challenge Your Mental Models," The Edge Malaysia, March 21, 2005.
- "Meet the Master-Minds: Jerry Wind Reveals the Power of Impossible Thinking," Management Consulting News, March 3, 2005.
- "Mental Power Tool," Automotive Design and Production, 2004.
- "Read All About It: Q\&A with Jerry Wind about Wharton School Publishing," Wharton Alumni Magazine, Spring 2004.
- "Comment s'addresser au consummateur "Post-bull"? D'apres Convergence Marketing Strategies for Reaching the Hybrid Consumer, Business Digest 127 (February 2003), pp. 19-20.
- "Wealth is Created During Periods of Uncertainty," Fast Company, April 2002, pp. 87-88.
- "Thought Leaders: Convergence Marketing: Preview an excerpt from the book by Wharton Professor Jerry Wind and Professor Vijay Mahajan of the University of Texas," Wharton's EBuzz, October 2001; and Knowledge@Wharton, October 2001.
- "Wind of Change," The Peak, Volume 17, Number 1, 2001.
- "Conversation with Jerry Wind," Singapore, October 2000; abstract reproduced in http://can.mediacorpnews.com/analysis prog/incon/incon wind1.htm.
- "You Can't Be An Extremist," Globs March 8, 2001 (Hebrew).


## PERSONAL DATA

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Tel: (215) 898-8267
Fax: (215) 898-1703
E-mail: windj@wharton.upenn.edu
Marital Status: Married to Vardina Wind, Artist, (BA in Sociology, MA in Communications); Two children, 38 and 44.

## Illustrative Pro Bono Activities

The Philadelphia Museum of Art. Trustee (1992-); Member of the Corporate Executive board of the Museum (1996-); Led a trustee committee and the management and curatorial staff of the museum in the development of a market driven strategy, (1990); Member of the Nominating Committee (1999-2002 ); Member of Trustee Committees for Development (1993-1997); Special Exhibitions (1993-1995); and Strategy (1997-1998); Chairman, Audience Building Committee (2004-);

The Interdisciplinary Center, Herzliya (Israel), all planning activities and other involvement (as outlined on p. 40), since 1994.

American Friends of IDC - Founding President (1998-2002); Member (2003-).
National Constitution Center, Member, Strategic Planning Steering Committee (2005-)
Business for Diplomatic Actions, Member, Advisory Board and Coordinator of the Wharton research efforts in this area (2005-)

Lauder Institute Alumni Association, Advisory Board (2005-)
Institute of Contemporary Art (ICA). Help guide a strategic planning process (2001).
University of Pennsylvania Museum of Archeology and Anthropology. Help establish a vision and revenue generation strategies (1999).

The Philadelphia Orchestra: Advisor regarding the development of Marketing Strategy (1994-1997).
The Jewish Federation of Greater Philadelphia: Member of the Financial Resource Development Committee, 1990-1992.

Operation Independence, Israeli Management School Oversight Committee, 1991-1992.

## Affiliations:

The Philadelphia Museum of Art - Trustee (Philadelphia)
The Institute of Contemporary Art of the University of Pennsylvania (Philadelphia)
Pennsylvania Academy of the Fine Arts (Philadelphia)
The Museum of Modern Art (New York)
American Craft Museum (New York)
Whitney Museum of American Art (New York)
The Jewish Museum (New York)
Guggenheim Museum (New York)
U.S. Holocaust Memorial Museum (Washington D.C.)

## APPENDIX B

## SCREENER AND SCREENING RESULTS

## SATELLITE RADIO STUDY TOP SHEET

(THIS IS A PERSONAL INTERVIEW)

- SCREENER -

RESPONDENT I.D. \#: $\qquad$
(RECORD AT END OF INTERVIEW. PLEASE PRINT.)

RESPONDENT'S NAME: $\qquad$ TEL. \# ( ) $\qquad$
ADDRESS: $\qquad$
CITY: $\qquad$ STATE: $\qquad$ ZIP: $\qquad$
INTERVIEWER: $\qquad$ DATE: $\qquad$

120 Fifth Avenue
New York, NY 10011
T: 212. 633.1100
Field Fax: 212. 633. 6621
www.datadw.com
Time Main Interview Begins: $\qquad$ am/pm
Time Main Interview Ends: $\qquad$ am/pm
Length of Main Interview: $\qquad$ (7)(8)

| Study \#02-629 | ID \#: | $1-5$ |
| :--- | :--- | :--- |
| September, 2006 | CARD \#: | $6-1$ |

## RECORD QUOTA:

1 Satellite Radio Subscriber Sirius
2 Satellite Radio Subscriber XM
3 Satellite Radio Considering Subscribing Sirius
4 Satellite Radio Considering Subscribing XM
(9)

## SATELLITE RADIO STUDY

## - SCREENER -

Hello, I'm $\qquad$ of Data Development Worldwide. We are a national marketing research firm and are currently conducting a survey and would like to include your opinions. Let me assure you we are doing this for research purposes only and that no one will sell you anything as a result of this study. Your answers will be held in the strictest confidence.

NOTE: RECORD ALL TERMINATIONS WHICH OCCUR IN ANY QUESTION A - D BY CIRCLING THE NEXT AVAILABLE NUMBER IN GRID AT BOTTOM OF THIS BOX. RECORD ONLY ONE TERMINATION PER CONTACT. RE-USE SCREENER UNTIL YOU REACH A QUALIFIED RESPONDENT.
A. (IF RESPONDENT HAS LANGUAGE/HEARING PROBLEM, ETC., IS IN A HURRY, REFUSES INTERVIEW OR APPEARS INTOXICATED, TERMINATE.)
B. (IF YOU KNOW THE RESPONDENT AT ALL, TERMINATE.)
(HAND RESPONDENT CARD 1)
C. Are you or any members of your household employed in any of the industries listed on this card?

|  | YES | NO |
| :---: | :---: | :---: |
|  | An insurance company ................................................... [ ] | [ ] |
| 'YES" TO ANY BOXED | A marketing research firm.................................................. |  |
| INDUSTRY, TERMINATE | An advertising agency ...................................................... | ] |
| AND RECORD BELOW.) | The entertainment industry ................................................ | ] |
|  | A satellite radio provider ..................................................... | ] |
|  | A cable TV provider ......................................................... [ | [ |
|  | An Internet service provider.............................................. [ ] | [ ] |

(TAKE BACK CARD 1)
D. During the past three months have you taken part in any market research survey other than a political poll? (IF "YES," TERMINATE.)

## RECORD TERMINATIONS WHICH OCCUR IN ANY QUESTION A - D HERE:

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | $(10)$ |$(11) ~($

## (HAND RESPONDENT CARD 2)

E. I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age?
(RECORD ONE ANSWER.)
(TERMINATE IN FIRST BOX BELOW) $\longleftarrow$ A. Under 18 years .......................... a


> IF AGE SCREENING QUOTA OPEN, CONTINUE. IF FILLED, TERMINATE IN APPROPRIATE BOX BELOW.
B. 18-24 years ............................. 1
C. 25-34 years ............................. 2
D. 35-49 years ............................. 3
E. 50-64 years ............................. 4
F. 65 or over................................... 5

(TAKE BACK CARD 2)
IF "UNDER 18" OR "REFUSED AGE", TERMINATE. CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (13) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA MALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND REUSE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (14) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA MALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND REUSE SCREENER.
$\begin{array}{cccccccccccc}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12\end{array}$ (15) USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (16) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA MALES - 50-64 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND REUSE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (17) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA MALES $\mathbf{- 6 5 +}$-- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND REUSE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA FEMALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | RE-USE SCREENER.

$\begin{array}{lllllllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & \text { () }\end{array}$
TERMINATE -- OVER QUOTA FEMALES - $35-49$-- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\begin{array}{cccccccccccc}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12\end{array}$ RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA FEMALES $-65+$-- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
1
23
$3 \quad 4 \quad 5$

| 6 | 7 | 8 |
| :--- | :--- | :--- |

9
10
11
12
(HAND RESPONDENT CARD 3)
F. Which, if any, of the following decisions do you make or take part in making for your household? (CIRCLE ALL THAT APPLY.)

(TAKE BACK CARD)
RESPONDENT MUST BE A BOXED ANSWER IN Q. F. IF NOT, TERMINATE IN APPROPRIATE BOX BELOW.
 TERMINATE -- MALE 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE | -- | MALE | $35-49$ | -- | CIRCLE | NEXT | AVAILABLE NUMBER | BELOW. | ERASE AND RE-USE |  |  |  |
| SCREENER. |  |  |  |  |  |  |  |  |  |  |  |  |



## TERMINATE -- FEMALE 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE -- FEMALE 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| SCREENER. |  |  |  |  |  |  |  |  |  |  |  |  |

TERMINATE -- FEMALE 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\left.\begin{array}{lccccccccccc}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12\end{array}\right]()$

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- FEMALE 65+ -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

G. Which of these services, if any, do you or your household currently subscribe to? (CIRCLE ALL THAT APPLY.)
$\square$
Cable TV ................................................ 1
Satellite TV ............................................ 2
Broadband Internet................................. 3
Satellite radio ....................................... 4
Wireless phone service.......................... 5
None of these ........................................ 6
Don't know............................................. 0
(ASK Q. H IF "SATELLITE RADIO" CIRCLED IN Q. G ABOVE. OTHERWISE, SKIP TO INSTRUCTIONS BEFORE Q.I)
(HAND RESPONDENT CARD 5)
H. Which of the folowing best describes the type of satellite radio you or your household currently subscribes to? (RECORD ONE ANSWER)

A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius. 1
Part of a package from a third party (such as through DirecTV, DiSH Network or AOL).................. 2
Both................................................................................................................................................... 3
Don't know ..................................................................................................................................... 0
(ASK Q. I FOR EACH ITEM NOT CIRCLED IN Q. G.)
I. Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? (RECORD ONE ANSWER FOR EACH LISTED ITEM)

| - | Yes | No | Don't Know |
| :---: | :---: | :---: | :---: |
| Cable TV.. | 1 | 2 | 3 |
| Satellite TV | 1 | 2 | 3 |
| Broadband Internet. | 1 | 2 | 3 |
| Satellite radio .............................. | 1 | 2 | 3 |
| Wireless phone service ................. | 1 | 2 | 3 |

```
(ASK Q. J IF "YES" TO "SATELLITE RADIO" CIRCLED IN Q. I ABOVE. OTHERWISE, SKIP TO INSTRUCTIONS BEFORE Q. K)
(HAND RESPONDENT CARD 5)
```

J. Which of the folowing best describes the type of satellite radio you or your household are considering? (RECORD ONE ANSWER)

(ASK Q. K IF BOXED ANSWER IN Qs. G AND H - SATELLITE RADIO SUBSCRIBER)(HAND RESPONDENT CARD 6)
K. Which satellite radio service do you or your household currently subscribe to? (RECORD ONE MENTION.)

|  |  | () |
| :---: | :---: | :---: |
|  | Sirius | 1 |
|  | XM | 2 |
|  | Both.. | 3 |
| (TERMINATE) | Don't | * |

TERMINATE -- DON'T KNOW SERVICE - MALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DON'T KNOW SERVICE - MALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DON'T KNOW SERVICE - MALES - 65+ -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## TERMINATE -- DON'T KNOW SERVICE - FEMALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

12
34
$\begin{array}{llll}5 & 6 & 7 & 8\end{array}$
9
10
11
12
()

TERMINATE -- DON'T KNOW SERVICE - FEMALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE -- DON'T KNOW SERVICE - FEMALES - 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |

TERMINATE -- DON'T KNOW SERVICE - FEMALES - 50-64 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DON'T KNOW SERVICE - FEMALES - 65+ -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(ASK Q. L IF BOXED ANSWER IN Qs. I AND J -- SATELLITE RADIO CONSIDERING) (HAND RESPONDENT CARD 6)
L. Which satellite radio service are you currently considering subscribing to? (RECORD ONE MENTION.)

|  | () |
| :---: | :---: |
| Sirius |  |
| XM. |  |
| Both. |  |
| Don't know/have not decided |  |

## QUOTA QUALIFICATIONS

SATELLITE SUBSCRIBER: MUST BE SATELLITE RADIO CIRCLED IN Q.G AND BOXED ANSWER CIRCLED IN Q.H AND "SIRIUS", "XM" OR "BOTH" IN Q.K.
SATELLITE RADIO CONSIDERING SUBSCRIBING: MUST BE "YES" TO SATELLITE RADIO CIRCLED IN Q.I AND BOXED ANSWER CIRCLED IN Q.J.
REFER TO QUOTA QUALIFICATION ABOVE. IF RESPONDENT DOES NOT QUALIFY FOR EITHER QUOTA GROUP, TERMINATE AND CIRCLE NEXT AVAILABLE NUMBER IN APPROPRIATE BOX BELOW..

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - MALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - MALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - MALES - 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE | -- | DOES | NOT SUBSCRIBE/CONSIDER | SUBSCRIBING | MALES | $-50-64$ | -- | CIRCLE NEXT |  |  |  | AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE | - | DOES | NOT SUBSCRIBE/CONSIDER | SUBSCRIBING | MALES | $-65+$ | - CIRCLE $^{2}$ | NEXT |  |  |  |  |
|  | AVAILABLE | NUMBER | BELOW. | ERASE AND RE-USE SCREENER. |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - FEMALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| TRMINAT |  |  |  |  |  |  |  |  |  |  |  |  |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - FEMALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - FEMALES - 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMNST |  |  |  |  |  |  |  |  |  |  |  |  |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - FEMALES - 50-64 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.


IF QUOTA FOR WHICH RESPONDENT QUALIFIES IS FILLED, TERMINATE AND RECORD IN APPROPRIATE BOX BELOW.

OVER QUOTA - SATELLITE RADIO SUBSCRIBER -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

```
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20}221 22 23 24 25
26
```

OVER QUOTA - SATELLITE RADIO CONSIDERING SUBSCRIBING -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

```
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 19 20 21 22 23 24 25
26
```

M. Do you wear glasses or contact lenses when you read?
$(A S K ~ Q . ~ N) ~$
$($ SKIP TO Q. O) $\longleftarrow$ Yes ........................................................ 2

## (ASK ONLY IF "YES" IN Q. M)

N. Do you have your glasses with you or are you wearing your contact lenses today?
(CONTINUE WITH Q. O) $\longleftarrow$ Yes ........................... 1

TERMINATE -- NO GLASSES/CONTACTS - SATELLITE RADIO SUBSCRIBER -- CIRCLE NEXT
AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |

TERMINATE -- NO GLASSES/CONTACTS - SATELLITE RADIO CONSIDERING SUBSCRIBING -CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

$\begin{array}{llllllllllllllllllllllll}26 & 27 & 28 & 29 & 30 & 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 & 41 & 42 & 43 & 44 & 45 & 46 & 47 & 48 & 49 \\ 50\end{array}$
O. RECORD GENDER OF RESPONDENT

Male
Female 2

## (ASK EVERYONE)

P. We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study?
(CONTINUE WITH Q. Q) $\longleftarrow$ Yes, will participate
(TERMINATE IN APPROPRIATE BOX BELOW) $\longleftarrow$ No, will not participate

TERMINATE -- REFUSED TO PARTICIPATE - SATELLITE RADIO SUBSCRIBER -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



TERMINATE -- REFUSED TO PARTICIPATE - SATELLITE RADIO CONSIDERING SUBSCRIBING -CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Q. May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study.
(RECORD ADDRESS AND PHONE \#, THEN CONTINUE) $\longleftarrow$ Gave phone number .................. 1 (TERMINATE IN APPROPRIATE BOX BELOW) $\longleftarrow$ Refused phone number..............

TERMINATE -- REFUSED PHONE NUMBER - SATELLITE RADIO SUBSCRIBER -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\begin{array}{lllllllllllllllllllllllll}01 & 02 & 03 & 04 & 05 & 06 & 07 & 08 & 09 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 & 21 & 22 & 23 & 24 & 25\end{array}$
$\begin{array}{lllllllllllllllllllllll}26 & 27 & 28 & 29 & 30 & 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 & 41 & 42 & 43 & 44 & 45 & 46 & 47 & 48 \\ 49 & 50\end{array}$

TERMINATE -- REFUSED PHONE NUMBER - SATELLITE RADIO CONSIDERING SUBSCRIBING -CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\begin{array}{lllllllllllllllllllllllll}01 & 02 & 03 & 04 & 05 & 06 & 07 & 08 & 09 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 & 21 & 22 & 23 & 24 & 25\end{array}$
$\begin{array}{lllllllllllllllllllllll}26 & 27 & 28 & 29 & 30 & 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 & 41 & 42 & 43 & 44 & 45 & 46 & 47 & 48 \\ 49 & 50\end{array}$

## BRING RESPONDENT TO INTERVIEWING AREA. DO NOT DISCUSS THE SUBJECT MATTER OF THE STUDY WITH THE RESPONDENT WHILE WALKING TO FACILITY.

## NOTE: IF RESPONDENT WEARS GLASSES/CONTACT LENSES, BE SURE HE/SHE IS WEARING THEM WHEN ADMINISTERING MAIN QUESTIONNAIRE.

PN: INSTRUCTIONS FOR DETERMINING WHICH QUESTIONNAIRE VERSION TO ADMINISTER

- SATELLITE RADIO SUBSCRIBER SIRIUS VERSION:

MUST BE SATELLITE RADIO IN Q G AND BOXED ANSWER IN Q.H AND "SIRIUS" IN Q K

- SATELLITE RADIO SUBSCRIBER XM VERSION:

MUST BE SATELLITE RADIO IN Q G AND BOXED ANSWER IN Q.H AND "XM" IN Q K
(NOTE IF SATELLITE RADIO SUBSCRIBER IN Q G. AND "BOTH" IN Q K ROTATE BETWEEN THE TWO SUBSCRIBER VERSIONS ABOVE

- SATELLITE RADIO CONSIDERING SUBSCRIBING SIRIUS VERSION:

MUST BE " YES" TO SATELLITE RADIO IN Q I AND BOXED ANSWER IN Q.J AND "SIRIUS" IN Q L

- SATELLITE RADIO CONSIDERING SUBSCRIBING XM VERSION:

MUST BE " YES" TO SATELLITE RADIO IN Q I AND BOXED ANSWER IN Q.J AND "XM" IN Q L
(NOTE IF " YES" TO SATELLITE RADIO CONSIDERING SUBSCRIBING AND " DON'T KNOW" OR "BOTH" IN Q L, ROTATE BETWEEN THE TWO CONSIDERING SUBSCRIBING VERSIONS ABOVE

## Screening Results

## Total Contacts <br> 4,301 <br> \#

## Terminated

Security 288
Under 18/Refused age 321
Over quota initial age screening 186
Does not make decision to subscribe to satellite radio 603
Does not know service subscribe to 204
Does not subscribe/consider 2,019
Over quota 130
Wear glasses/contacts to read, but don't have them along 33
Refused to participate 50
Refused to give phone number 39
Completed interviews $\underline{428}$

## APPENDIX C

## MAIN QUESTIONNAIRES

## SATELLITE RADIO

## - MAIN QUESTIONNAIRE -

- SUBSCRIBERS -


## (INTERVIEWER: RECORD ANSWERS TO QUESTIONS FROM PAPER SCREENER INTO PROGRAM BEFORE CONTINUING WITH Q. 1a.)

## (READ VERBATIM:)

Thank you for agreeing to participate in our study. We would like to talk to you today about satellite radio. All of your answers will remain strictly confidential. No one will attempt to sell you anything as a result of participating in this study. We are only interested in your opinions. If you don't know an answer or don't have an answer to a particular question, please don't guess. Just tell me you don't know and we will go on to the next question. If, at anytime, you do not understand a question or do not understand what is being asked of you, just say so and I will repeat the question.

READ AND RECORD THE ANSWERS TO Q. 1a-3b. THIS PART IS NOT SELF-ADMINISTERED.

1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe?
(RECORD COMPLETE ANSWERS VERBATIM)
1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM)
2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM)

NOTE: IF RESPONDENT ASKS WHAT IS MEANT BY PROGRAMMING, SAY:
By programming we mean both categories of programs or specific programs or channels.

2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM)
3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM)

3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM)

## INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS.

IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS.
RECORD:
1 Respondent entering answers
2 Interviewer entering answers

## (ASK EVERYONE)

4. Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio.

If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100. Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.)
()

1 Yes (CONTINUE)
2 No
3 Don't know $\rightarrow$ (REPEAT EXPLANATION)

## INTERVIEWER NOTE: IF RESPONDENT ASKS HOW TO CATEGORIZE A PARTICULAR SHOW, REFER TO APPROPRIATE PROGRAMMING GUIDE (i.e., SIRIUS OR XM) AND CLASSIFY ACCORDINGLY.

[PN: ROTATE PROGRAM TYPES]

| Types of Programming | Relative Importance As Reflected In \# Of Allocated Points |
| :---: | :---: |
| Comedy ........................... |  |
| Kids.............................. |  |
| Local Weather and Traffic... |  |
| Music ........................... |  |
| News............................... |  |
| Sports .............................. |  |
| Talk and Entertainment....... |  |
|  | TOTAL MUST EQUAL 100 |

5. Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? (RECORD
ONE ANSWER FOR EACH BELOW)
()

1 Yes (CONTINUE)
$\begin{array}{ll}2 & \text { No } \\ 3 & \text { Don't know }\end{array} \rightarrow$ (REPEAT EXPLANATION)
[PN: ROTATE PROGRAM TYPES USING SAME ROTATION USED IN Q. 4. RESPONDENT CAN NOT GIVE the same number to options " 1 " AND " 4 " WITHIN A GIVEN TYPE OF PROGRAMMING. ONLY SHOW ONE PROGRAMMING TYPE ON THE SCREEN AT A TIME, i.e., SHOW ALL OF MUSIC PROGRAMMING, THEN ALL OF NEWS, ETC.]
A. Music Programming (Current Offering includes A.)

1. No music programming..................................
2. Substantially fewer channels and less variety of music than currently offered
3. The same number of channels and the same variety of music as currently offered..
$\begin{array}{lr}\text { Extremely } & \text { Extremely } \\ \text { Undesirable } & \text { Desirable }\end{array}$
4. Substantially more channels and more variety of music than currently offered.
B. News (Current Offering includes B)
5. No news programming
6. Substantially fewer channels and less variety of news than currently offered.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |

A. For Sirius : 66 Music Channels, For XM : 74 Music Channels
B. For Sirius : 15 News Channels, For XM : 13 News Channels
C. For Sirius : 8 Sports Channels and Live Game Channels for NBA, NFL, etc. For XM : 13 Sports Channels and Live Game channels for Major League Baseball, NASCAR, etc.
D. For Sirius :22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc, For XM : 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.

6(a) Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that nonprogramming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and nonprogramming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. (RECORD ONE ANSWER FOR EACH BELOW)
[PN: ROTATE FEATURES. FOR STUB A. BELOW RESPONDENT CAN NOT GIVE THE SAME NUMBER TO OPTION 1 AS GIVEN TO OPTIONS 2 - 4]


6(b) Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. (RECORD ONE ANSWER FOR EACH BELOW)


6(c) Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? (RECORD ALL MENTIONS)
[PN: ROTATE LIST]

- The number of minutes of commercials per hour on music channels
- Geographic coverage
- The monthly price for a single subscription
( )
1 Other (RECORD VERBATIM AND PROBE: Anything else?)
0 No others considered

7. Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio.

As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio.

The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.)
[PN: SHOW OTHERS FROM Q. 6c. USE SAME ROTATION USED IN Q. 6a.]

| Non-programming Type Features Of Satellite Radio | Relative Importance As Reflected In \# Of Allocated Points |
| :---: | :---: |
| The Number of Minutes of Commercials Per Hour on Music Channels. |  |
| Geographic Coverage........................ |  |
| The Monthly Price for A Single Subscription.. |  |
| Other (FROM Q. 6c).......................... |  |
| Other (FROM Q. 6c)............................ |  |
|  |  |
|  |  |
|  | TOTAL MUST EQUAL 100 |

8. Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the \% of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to 100\%. (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100)
[PN: ROTATE PROGRAM TYPES USING SAME ROTATION AS IN Q. 4]

| Type of Programming | Percentage of Time Spent Listening |  |
| :---: | :---: | :---: |
| Comedy ........................... |  | ( ) |
| Kids ... |  | ( ) |
| Local Weather and Traffic... |  | ( ) |
| Music .... |  | ( ) |
| News ... |  | ( ) |
| Sports .............................. |  | ( ) |
| Talk and Entertainment....... |  | ( ) |
|  | TOTAL MUST EQUAL 100\% |  |

## ASK Q. 9a FOR EACH PROGRAMMING TYPE LISTED BELOW. ASK Q. 9a - 9d FOR EACH ONE BEFORE GOING ON TO THE NEXT PROGRAMMING TYPE. SHOW ONE AT A TIME. ROTATE ORDER.

9(a) As you know, the single subscription price per month for satellite radio is $\mathbf{\$ 1 2 . 9 5}$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, remain the same. If (INSERT PROGRAMMING TYPE) were not available, would it affect the amount you would be willing to pay for satellite radio? (RECORD YES, NO OR DON'T KNOW FOR EACH.)
(ASK Q. 9b IF "YES" IN Q. 9a. OTHERWISE, SKIP TO NEXT PROGRAMMING TYPE.)
9(b) How much would you be willing to pay for satellite radio if (INSERT PROGRAMMING TYPE) were available? Please assume that all other programming and non-programming features of the service, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. (TYPE IN AMOUNT IN DOLLARS AND CENTS. NOTE: ANSWER IN Q. 9b MUST NOT BE \$12.95)

|  | Q. 9a |  |  |  | Q. 9b |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Don't <br> Know |  | Would Be Willing to Pay | Would Cancel Subscription |
| If no music programming .......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no news programming........... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no sports programming.......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no talk and entertainment programming | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |

(ASK Q. 9c IF ANSWER IN Q. 9b IS "MORE THAN" \$12.95.)
9(c) Are you willing to pay more than the current price of $\$ 12.95$ per month if (INSERT PROGRAMMING TYPE) were available but all other programming and non-programming features of the service remain the same? (RECORD "YES" OR "NO" FOR EACH TYPE)
(ASK Q. 9d IF "NO" IN Q. 9c)
9(d) How much would you be willing to pay for satellite radio if (INSERT PROGRAMMING TYPE) were available? (TYPE IN AMOUNT IN DOLLARS AND CENTS. NOTE: ANSWER MUST BE LESS THAN \$12.95)

|  | Q. 9c |  |  |  | Q. 9d |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Don't Know |  | Would Be Willing to Pay | Would Not Cancel Subscription |
| If no music programming .......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no news programming........... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no sports programming.......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no talk and entertainment programming | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |

10. Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering.

If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. (SHOW ONE PROFILE AT A TIME AND RECORD 0-10 FOR EACH PROFILE. EACH RESPONDENT WILL SEE 8 PROFILES WITHIN A BLOCK RANDOMIZED. IN ADDITION, ALL RESPONDENTS WILL SEE THE TWO PROFILES IN BLOCK 9.)

```
PN: RECORD BLOCK #: \((1-8), 9\)
```


## (ASK EVERYONE)

11(a) And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? (RECORD COMPLETE ANSWER VERBATIM)
11(b) (PROBE:) Anything else? (RECORD COMPLETE ANSWER VERBATIM)

## RESPONDENT

## RESPONDENT: PLEASE READ AND SIGN:

I acknowledge that I was interviewed on this date. During this interview I was asked questions about satellite radio.

SIGNATURE: $\qquad$ DATE: $\qquad$
TELEPHONE \#: $\qquad$ (FOR VERIFICATION PURPOSES ONLY)

## INTERVIEWER

INTERVIEWER: PLEASE READ AND SIGN:
I hereby certify that all of the above information was obtained by me from the respondent named above who is not personally known to me. I agree to provide this affidavit under oath, immediately upon request.

SIGNATURE: $\qquad$ DATE: $\qquad$

THANK YOU VERY MUCH FOR YOUR COOPERATION !

## SATELLITE RADIO

## - MAIN QUESTIONNAIRE -

## - CONSIDERING SUBSCRIBING -

## (INTERVIEWER: RECORD ANSWERS TO QUESTIONS FROM PAPER SCREENER INTO PROGRAM BEFORE CONTINUING WITH Q. 1a)

## (READ VERBATIM:)

Thank you for agreeing to participate in our study. We would like to talk to you today about satellite radio. All of your answers will remain strictly confidential. No one will attempt to sell you anything as a result of participating in this study. We are only interested in your opinions. If you don't know an answer or don't have an answer to a particular question, please don't guess. Just tell me you don't know and we will go on to the next question. If, at anytime, you do not understand a question or do not understand what is being asked of you, just say so and I will repeat the question.

READ AND RECORD THE ANSWERS TO Q. 1a-3b. THIS PART IS NOT SELF-ADMINISTERED.

1(a) Why are you considering subscribing to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM)

1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM)
2(a) What types of satellite radio programming are most critical to your decision whether to subscribe?
(RECORD COMPLETE ANSWERS VERBATIM)

## NOTE: IF RESPONDENT ASKS WHAT IS MEANT BY PROGRAMMING, SAY:

By programming we mean both categories of programs or specific programs or channels.

2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM)

THERE IS NO Q. 3 ON THIS VERSION

## INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS.

IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS.
RECORD:
1 Respondent entering answers
2 Interviewer entering answers

## (ASK EVERYONE)

4. Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's ultimate decision whether to subscribe to satellite radio.

If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision is likely to be affected by only one of the types of programming and none of the others are likely to be important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming to your decision whether to subscribe to satellite radio. Please make sure that the total adds to 100. Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) ()

1 Yes (CONTINUE)
2 No
3 Don't know $\rightarrow$ (REPEAT EXPLANATION)

## INTERVIEWER NOTE: IF RESPONDENT ASKS HOW TO CATEGORIZE A PARTICULAR SHOW, REFER TO APPROPRIATE PROGRAMMING GUIDE (i.e., SIRIUS OR XM) AND CLASSIFY ACCORDINGLY.

[PN: ROTATE PROGRAM TYPES]

| Types of Programming | Relative Importance As Reflected In \# Of Allocated Points |
| :---: | :---: |
| Comedy ............................ |  |
| Kids.................................. |  |
| Local Weather and Traffic.... |  |
| Music ............................... |  |
| News................................ |  |
| Sports ............................... |  |
| Talk and Entertainment........ |  |
|  | TOTAL MUST EQUAL 100 |

5. Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? (RECORD
ONE ANSWER FOR EACH BELOW)
()

1 Yes (CONTINUE)
$\begin{array}{ll}2 & \text { No } \\ 3 & \text { Don't know }\end{array} \rightarrow$ (REPEAT EXPLANATION)
[PN: ROTATE PROGRAM TYPES USING SAME ROTATION USED IN Q. 4. RESPONDENT CAN NOT GIVE THE SAME NUMBER TO OPTIONS "1" AND "4" WITHIN A GIVEN TYPE OF PROGRAMMING. ONLY SHOW ONE PROGRAMMING TYPE ON THE SCREEN AT A TIME, i.e., SHOW ALL OF MUSIC PROGRAMMING, THEN ALL OF NEWS, ETC.]
A. Music Programming (Current Offering includes A.)

1. No music programming..................................
2. Substantially fewer channels and less variety of music than currently offered
3. The same number of channels and the same variety of music as currently offered...
$\begin{array}{lr}\text { Extremely } & \text { Extremely } \\ \text { Undesirable } & \text { Desirable }\end{array}$
4. Substantially more channels and more variety of music than currently offered
B. News (Current Offering includes B)
5. No news programming
6. Substantially fewer channels and less variety of news than currently offered.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |

A. For Sirius : 66 Music Channels, For XM : 74 Music Channels
B. For Sirius : 15 News Channels, For XM : 13 News Channels
C. For Sirius : 8 Sports Channels and Live Game Channels for NBA, NFL, etc. For XM : 13 Sports Channels and Live Game channels for Major League Baseball, NASCAR, etc.
D. For Sirius :22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc, For XM : 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.

6(a) Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that nonprogramming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and nonprogramming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. (RECORD ONE ANSWER FOR EACH BELOW)
[PN: ROTATE FEATURES. FOR STUB A BELOW RESPONDENT CAN NOT GIVE THE SAME NUMBER TO OPTION 1 AS GIVEN TO OPTIONS 2-4.]

Extremely
Extremely
Undesirable

## A. The Number of Minutes of <br> Commercials Per Hour on Music Channels

1. No commercials on music

| channels..................... | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( )( ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2. 2 minutes of commercials per hour $\qquad$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( )( ) |
| 3. 5 minutes of commercials per hour. $\qquad$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( )( ) |
| 4. 12 minutes of commercials per hour. $\qquad$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( ) ) |
| Geographic Coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Typical FM coverage ...... | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( ) ( ) |
| 2. Complete nationwide coverage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | )( |

6(b) Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. (RECORD ONE ANSWER FOR EACH BELOW)


6(c) Please review the list below and tell me if there are any other non-programming features besides the ones listed that would likely impact your decision whether to subscribe to satellite radio? (RECORD
ALL MENTIONS)
[PN: ROTATE LIST]

- The number of minutes of commercials per hour on music channels
- Geographic coverage
- The monthly price for a single subscription
()

1 Other (RECORD VERBATIM AND PROBE: Anything else?)
0 No others considered
7. Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's ultimate decision whether to subscribe to satellite radio.

As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision whether to subscribe to satellite radio.

The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.)
[PN: SHOW OTHERS FROM Q. 6c. USE SAME ROTATION USED IN Q. 6a.]

| Non-programming Type Features Of Satellite Radio | Relative Importance As Reflected In \# Of Allocated Points |
| :---: | :---: |
| The Number of Minutes of Commercials Per Hour on Music Channels. |  |
| Geographic Coverage........................ |  |
| The Monthly Price for A Single Subscription |  |
| Other (FROM Q. 6c)..... |  |
| Other (FROM Q. 6c)........................ |  |
|  |  |
|  |  |
|  | TOTAL MUST EQUAL 100 |

(THERE IS NO Q. 8 ON THIS VERSION)

ASK Q. 9a FOR EACH PROGRAMMING TYPE LISTED BELOW. ASK Q. 9a - 9d FOR EACH ONE BEFORE GOING ON TO THE NEXT PROGRAMMING TYPE. SHOW ONE AT A TIME. ROTATE ORDER.

9(a) As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, remain the same. If (INSERT PROGRAMMING TYPE) were not available, would it affect the amount you would be willing to pay for satellite radio? (RECORD YES, NO OR DON'T KNOW FOR EACH.)
(ASK Q. 9b IF "YES" IN Q. 9a. OTHERWISE, SKIP TO NEXT PROGRAMMING TYPE.)
9(b) How much would you be willing to pay for satellite radio if (INSERT PROGRAMMING TYPE) were available? Please assume that all other programming and non-programming features of the service, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to prevent you from subscribing please say so. (TYPE IN AMOUNT IN DOLLARS AND CENTS. NOTE: ANSWER IN Q. 9b MUST NOT BE \$12.95)

|  | Q. 9a |  |  |  | Q. 9b |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Don't <br> Know |  | Would Be Willing to Pay | Would Not Subscribe |
| If no music programming .......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no news programming........... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no sports programming.......... | 1 | 2 | 3 | ( ) | \$ | 0 ( |
| If no talk and entertainment programming | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |

(ASK Q. 9c IF ANSWER IN Q. 9b IS "MORE THAN" \$12.95.)
9(c) Are you willing to pay more than the current price of $\$ 12.95$ per month if (INSERT PROGRAMMING TYPE) were available but all other programming and non-programming features of the service remain the same? (RECORD "YES" OR "NO" FOR EACH TYPE)
(ASK Q. 9d IF "NO" IN Q. 9c)
9(d) How much would you be willing to pay for satellite radio if (INSERT PROGRAMMING TYPE) were available? (TYPE IN AMOUNT IN DOLLARS AND CENTS. NOTE: ANSWER MUST BE LESS
THAN \$12.95)

|  | Q. 9c |  |  |  | Q. 9d |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Don't <br> Know |  | Would Be Willing to Pay | Would Not Subscribe |
| If no music programming .......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no news programming........... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no sports programming.......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no talk and entertainment programming $\qquad$ | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |

10. Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering.

If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. (SHOW ONE PROFILE AT A TIME AND RECORD 0-10 FOR EACH PROFILE. EACH RESPONDENT WILL SEE 8 PROFILES WITHIN A BLOCK RANDOMIZED. IN ADDITION, ALL RESPONDENTS WILL SEE THE TWO PROFILES IN BLOCK 9.)

$$
\text { PN: RECORD BLOCK \#: _(1-8), } 9
$$

Q. 11 DOES NOT APPEAR ON THIS VERSION

## RESPONDENT

## RESPONDENT: PLEASE READ AND SIGN:

I acknowledge that I was interviewed on this date. During this interview I was asked questions about satellite radio.

SIGNATURE: $\qquad$ DATE: $\qquad$
TELEPHONE \#: $\qquad$ (FOR VERIFICATION PURPOSES ONLY)

## INTERVIEWER

INTERVIEWER: PLEASE READ AND SIGN:
I hereby certify that all of the above information was obtained by me from the respondent named above who is not personally known to me. I agree to provide this affidavit under oath, immediately upon request.

SIGNATURE: $\qquad$ DATE: $\qquad$

THANK YOU VERY MUCH FOR YOUR COOPERATION !

## APPENDIX D

## CONJOINT STIMULI CARDS

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS <br> CARD: 1 BLOCK: 1

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: 12 minutes of commercials per hour

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 12.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS <br> CARD: 2 BLOCK: 1

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and <br> Entertainment: | The SAME number of channels and <br> SAME variety of talk and <br> entertainment as currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: \$14.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS <br> CARD: 3 BLOCK: 1

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and | The SAME number of channels and <br> SAME variety of talk and <br> Entertainment: |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: \$8.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS <br> CARD: 4 BLOCK: 1

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and | Substantially MORE channels and <br> MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: 2 minutes of commercials per hour

Coverage: Complete nationwide coverage
Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS <br> CARD: 5 BLOCK: 1

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | Substantially MORE channels and <br> MORE variety of talk and <br> entertainment than currently offered |

## Other Features

| Number of Minutes Of <br> Commercials Per Hour <br> On Music Channels: | Not applicable |
| :--- | :--- |
| Coverage: | Typical FM coverag |
| Monthly Price For A <br> Single Subscription: | $\$ 12.95$ Per month |


|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS <br> CARD: 6 BLOCK: 1

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS <br> CARD: 7 BLOCK: 1

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels: No Commercials

Coverage: Complete nationwide coverage

Monthly Price For A
Single Subscription: \$14.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS <br> CARD: 8 BLOCK: 1

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: No Commercials
Coverage: Complete nationwide coverage
Monthly Price For A
Single Subscription: \$8.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS <br> CARD: 9 BLOCK: 2

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: 12 minutes of commercials per hour

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: \$8.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 10 BLOCK: 2

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

| Number of Minutes Of <br> Commercials Per Hour <br> On Music Channels: | 12 minutes of commercials per hour |
| :--- | :--- |
| Coverage: | Complete nationwide coverage |
| Monthly Price For A <br> Single Subscription: | $\$ 14.95$ Per month |


|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 11 BLOCK: 2

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and | Substantially MORE channels and <br> Entertainment: |
| MORE variety of talk and |  |
| entertainment than currently offered |  |, |  |
| :--- |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription:
\$10.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 12 BLOCK: 2

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | The SAME number of channels and <br> SAME variety of talk and <br> entertainment as currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 8.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 13 BLOCK: 2

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 12.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 14 BLOCK: 2

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: No Commercials

Coverage: Complete nationwide coverage
Monthly Price For A
Single Subscription: $\quad \$ 14.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 15 BLOCK: 2

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and <br> Entertainment: | Substantially MORE channels and <br> MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour
Coverage: Typical FM coverage
Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 16 BLOCK: 2

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | No sports programming |

## Other Features

| Number of Minutes Of <br> Commercials Per Hour <br> On Music Channels: | 2 minutes of commercials per hour |
| :--- | :--- |
| Coverage: | Complete nationwide coverage |
| Monthly Price For A <br> Single Subscription: | $\$ 12.95$ Per month |


|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 17 BLOCK: 3

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and | Substantially FEWER channels and <br> Entertainment: |
| LESS variety of talk and entertainment |  |
| than currently offered |  |$|$

## Other Features

Number of Minutes Of

Commercials Per Hour
On Music Channels:
No Commercials

Coverage:
Typical FM coverage

Monthly Price For A
Single Subscription: \$12.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 18 BLOCK: 3

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
12 minutes of commercials per hour

Coverage:
Typical FM coverage

Monthly Price For A
Single Subscription: \$10.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 19 BLOCK: 3

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
2 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: \$14.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 20 BLOCK: 3

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | No news programming |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | Substantially MORE channels and <br> MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable
Coverage: Complete nationwide coverage

Monthly Price For A
Single Subscription: \$12.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 21 BLOCK: 3

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | The SAME number of channels and <br> SAME variety of talk and <br> entertainment as currently offered |

## Other Features

Number of Minutes Of

Commercials Per Hour
On Music Channels: No Commercials

Coverage: Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 22 BLOCK: 3

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | Substantially MORE channels and <br> MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

Coverage:
Typical FM coverage

Monthly Price For A
Single Subscription: \$8.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 23 BLOCK: 3

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: \$8.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 24 BLOCK: 3

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | The SAME number of channels and <br> SAME variety of talk and <br> entertainment as currently offered |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels: 2 minutes of commercials per hour

## Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 14.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 25 BLOCK: 4

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | The SAME number of channels and <br> SAME variety of talk and <br> entertainment as currently offered |

## Other Features

| Number of Minutes Of <br> Commercials Per Hour <br> On Music Channels: | Not applicable |
| :--- | :--- |
| Coverage: | Complete nationwid |
| Monthly Price For A <br> Single Subscription: | $\$ 12.95$ Per month |


|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 26 BLOCK: 4

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | Substantially MORE channels and <br> MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: No Commercials

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: \$14.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 27 BLOCK: 4

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: 12 minutes of commercials per hour

## Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 8.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 28 BLOCK: 4

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels: 2 minutes of commercials per hour

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 29 BLOCK: 4

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and | Substantially MORE channels and <br> Entertainment:MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of

Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 14.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 30 BLOCK: 4

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 8.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 31 BLOCK: 4

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
12 minutes of commercials per hour

Coverage: Complete nationwide coverage
Monthly Price For A
Single Subscription: $\quad \$ 12.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 32 BLOCK: 4

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and | The SAME number of channels and <br> Entertainment: |
| SAME variety of talk and <br> entertainment as currently offered |  |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 33 BLOCK: 5

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | No news programming |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | Substantially MORE channels and <br> MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

## Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: \$8.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 34 BLOCK: 5

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: No Commercials

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: \$10.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 35 BLOCK: 5

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of

Commercials Per Hour
On Music Channels:
2 minutes of commercials per hour

Coverage:
Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 12.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 36 BLOCK: 5

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
2 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 8.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 37 BLOCK: 5

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and | Substantially MORE channels and <br> Entertainment:MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels: 12 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: \$14.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 38 BLOCK: 5

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable
Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 39 BLOCK: 5

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | The SAME number of channels and <br> SAME variety of talk and <br> entertainment as currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

## Coverage: <br> Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 14.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 40 BLOCK: 5

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and | The SAME number of channels and <br> Entertainment: |
| SAME variety of talk and <br> entertainment as currently offered |  |

## Other Features

Number of Minutes Of

Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: \$12.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 41 BLOCK: 6

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and | The SAME number of channels and <br> Entertainment: |
| SAME variety of talk and <br> entertainment as currently offered |  |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: 12 minutes of commercials per hour

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 42 BLOCK: 6

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

Coverage:
Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 12.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 43 BLOCK: 6

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | No news programming |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

Coverage: Complete nationwide coverage
Monthly Price For A
Single Subscription: $\quad \$ 14.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 44 BLOCK: 6

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and | Substantially MORE channels and <br> Entertainment:MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: No Commercials

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 45 BLOCK: 6

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | No news programming |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable
Coverage: Complete nationwide coverage
Monthly Price For A
Single Subscription: \$8.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 46 BLOCK: 6

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: 2 minutes of commercials per hour

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: \$14.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 47 BLOCK: 6

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and | Substantially MORE channels and <br> Entertainment:MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: No Commercials

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: \$12.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 48 BLOCK: 6

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | No sports programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: 12 minutes of commercials per hour

Coverage: Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 8.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 49 BLOCK: 7

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and | Substantially MORE channels and <br> Entertainment: |
| MORE variety of talk and <br> entertainment than currently offered |  |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 14.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 50 BLOCK: 7

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

| Number of Minutes Of <br> Commercials Per Hour <br> On Music Channels: | Not applicable |
| :--- | :--- |
| Coverage: | Complete nationwide coverage |
| Monthly Price For A <br> Single Subscription: | $\$ 10.95$ Per month |


|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 51 BLOCK: 7

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: No Commercials

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 14.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 52 BLOCK: 7

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and | The SAME number of channels and <br> SAME variety of talk and <br> entertainment as currently offered |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels: 12 minutes of commercials per hour

Coverage: Complete nationwide coverage
Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 53 BLOCK: 7

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels: 2 minutes of commercials per hour

## Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: \$12.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 54 BLOCK: 7

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: \$12.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 55 BLOCK: 7

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and | Substantially MORE channels and <br> Entertainment:MORE variety of talk and <br> entertainment than currently offered |

## Other Features

Number of Minutes Of

Commercials Per Hour
On Music Channels:
2 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 8.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 56 BLOCK: 7

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and | The SAME number of channels and <br> Entertainment: |
| SAME variety of talk and <br> entertainment as currently offered |  |

## Other Features

Number of Minutes Of Commercials Per Hour On Music Channels: No Commercials

Coverage:
Typical FM coverage

Monthly Price For A
Single Subscription: \$8.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 57 BLOCK: 8

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and | Substantially MORE channels and <br> Entertainment: |
| MORE variety of talk and <br> entertainment than currently offered |  |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
2 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 8.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 58 BLOCK: 8

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

Coverage: Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 14.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 59 BLOCK: 8

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | Substantially FEWER channels and <br> LESS variety of talk and entertainment <br> than currently offered |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels: No Commercials

## Coverage: <br> Typical FM coverage

Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 60 BLOCK: 8

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | Substantially MORE channels and <br> MORE variety of sports than currently <br> offered |
| Talk and <br> Entertainment: | No talk and entertainment <br> programming |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: Not applicable

Coverage: Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 10.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 61 BLOCK: 8

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | Substantially FEWER channels and <br> LESS variety of news than currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and | The SAME number of channels and <br> SAME variety of talk and <br> entertainment as currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
2 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: \$14.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 62 BLOCK: 8

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | Substantially FEWER channels and <br> LESS variety of sports than currently <br> offered |
| Talk and | Substantially FEWER channels and <br> Entertainment: |
| LESS variety of talk and entertainment |  |
| than currently offered |  |$|$

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels: 12 minutes of commercials per hour

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 12.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 63 BLOCK: 8

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially MORE channels and <br> MORE variety of music than currently <br> offered |
| News Programming: | No news programming |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | The SAME number of channels and <br> SAME variety of talk and <br> entertainment as currently offered |

## Other Features

Number of Minutes Of
Commercials Per Hour
On Music Channels:
5 minutes of commercials per hour

## Coverage: Typical FM coverage

Monthly Price For A
Single Subscription:
\$12.95 Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS STIMULUS CARD FOR SIRIUS CARD: 64 BLOCK: 8

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | Substantially FEWER channels and <br> LESS variety of music than currently <br> offered |
| News Programming: | Substantially MORE channels and <br> MORE variety of news than currently <br> offered |
| Sports <br> Programming: | No sports programming |
| Talk and <br> Entertainment: | Substantially MORE channels and <br> MORE variety of talk and <br> entertainment than currently offered |

## Other Features

| Number of Minutes Of <br> Commercials Per Hour <br> On Music Channels: | 12 minutes of commercials per hour |
| :--- | :--- |
| Coverage: | Typical FM coverage |
| Monthly Price For A <br> Single Subscription: | $\$ 8.95$ Per month |


|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 |  |  |  |  |  |  |  |  |  |  |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 65 BLOCK: 9

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | The SAME number of channels and <br> SAME variety of music as currently <br> offered |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and | The SAME number of channels and <br> SAME variety of talk and <br> Entertainment: |

## Other Features

Number of Minutes Of Commercials Per Hour
On Music Channels: No Commercials

Coverage:
Complete nationwide coverage

Monthly Price For A
Single Subscription: $\quad \$ 12.95$ Per month

|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## ILLUSTRATIVE CONJOINT ANALYSIS <br> STIMULUS CARD FOR SIRIUS <br> CARD: 66 BLOCK: 9

## A Satellite Radio Offering

| Types of <br> Programming | Amount of <br> Programming Available: |
| :--- | :--- |
| Music Programming: | No music programming |
| News Programming: | The SAME number of channels and <br> SAME variety of news as currently <br> offered |
| Sports <br> Programming: | The SAME number of channels and <br> SAME variety of sports as currently <br> offered |
| Talk and | The SAME number of channels and <br> Entertainment: |
| SAME variety of talk and <br> entertainment as currently offered |  |

## Other Features

| Number of Minutes Of <br> Commercials Per Hour <br> On Music Channels: | Not applicable |
| :--- | :--- |
| Coverage: | Complete nationwid |
| Monthly Price For A <br> Single Subscription: | $\$ 12.95$ Per month |


|  | Definitely <br> Would Not <br> Buy |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |

## APPENDIX E

## FIELD INSTRUCTIONS

## SATELLITE RADIO STUDY

INTERVIEWER INSTRUCTIONS

STUDY DESIGN: This is a Central Location, computer assisted personal interview about satellite radio.
Potential respondents will be screened on the mall with answers and terminates recorded on a hard copy (paper) screener. Qualified respondents will then be interviewed in your facility with answers recorded directly into a CAPI Program using a personal computer with a mouse and high-speed access.

Eligible respondents for this study are males and females who:

- do not have a language/hearing problem or appear intoxicated (Q. A).
- do not know you (Q. B).
- do not, nor does any member of their immediate household, work for any of the boxed industries (Q. C).
- have not participated in any marketing research survey other than a political poll in the past three months (Q. D).
- are at least 18 years of age (Q.E)
- must have a boxed answer: make or take part in making decision to subscribe to satellite radio (Q. F)
- must currently subscribe or household currently subscribe to satellite radio or considering subscribing (Q. G/H-I/J)
- know which satellite radio service they currently subscribe to (Q. K)
- if they usually wear glasses or contact lenses when they read, are wearing the contacts or have the glasses with them ( $\mathbf{Q} . \mathbf{M} / \mathbf{N}$ )
- are willing to participate (Q.P)
- are willing to give their full name, address and TELEPHONE NUMBER (Q. Q)

Note: There can only be one respondent from a household.

SCREENING QUOTA:

For this study, you will be assigned an INITIAL SCREENING QUOTA. This quota will be by age. There is NO quota for completed Main Questionnaires by age. You will simply take those "as they fall".

Your Initial Screening Quotas will be assigned by your supervisor.
If we fall short of the number of completed interviews we expect, we will ask you to do additional Screenings in the same age proportions.

All Screeners must be returned to DDW including those with only terminations which do not result in a completed interview ("Screener only").

SCREENER: The paper Screeners will be used to screen respondent on the mall.

* DO NOT RECORD TERMINATIONS ON TALLY SHEETS; THEY MUST BE RECORDED DIRECTLY ON TO SCREENERS.


## QUOTA:

## MATERIALS:

## RECORDING

OPEN-END RESPONSES:

PRACTICE INTERVIEW:

You must record the respondents' answers verbatim. The accurate recording of answers is vital to the study design. Never abbreviate or paraphrase a respondent's answer. Never leave off any letter(s) at the end of any word(s). Always record exactly what the respondent says. Use probes that are not leading such as: "Anything else"? Whenever probing, be sure to write the letter ( P ) before the response. Do not guess. If you are unclear, ask the respondent to repeat the answer.

Each interviewer working on this study is to complete a practice interview. Be sure all skip patterns are followed and that you completely understand how to administer the questionnaire. If you have any questions, ask your supervisor immediately.

Be certain also that you understand the screening/recruiting methodology and the recording of terminates on the Screener.

## POTENTIAL

 PROBLEMS:If you have any problems or questions, or anything isn't clear, or if a respondent expresses a problem or concern, please tell your supervisor immediately.

DAILY REPORT: It is very important that the Report Form be filled out accurately and that each item is totaled correctly.

## VALIDATIONS:

DDW conducts a $\mathbf{1 0 0 \%}$ telephone validation on all completed interviews. Therefore, we are enclosing Validation Forms and ask that you (the interviewer) fill out your own Validation Forms.
Record information for all respondents who completed an interview.
Validation Forms must be filled out in BLACK ink and you are to follow the procedures listed below:

1. Record the area code, city, and your name (BOTH PRINTED AND SIGNED), the name of the Field Service and the total number of completed interviews.
2. Record the respondent's name, company name, address, telephone number and the date the interview took place for $100 \%$ of the interviews conducted by you. NOTE: IT IS VERY IMPORTANT THAT YOU RECORD PHONE NUMBERS ACCURATELY AND LEGIBLY.
3. Record the questionnaire \# (found on the first page of the screening) in "respondent \#" column.
4. You must record the exact time the interview began and ended in the appropriate column.
5. Be sure to write in the correct code for the respondent's quota.

> You MUST have a valid telephone number for each respondent. You must confirm that the number is a working number. Interviews for respondents we cannot reach to validate may be pulled from the study.

## SPECIFIC QUESTIONNAIRE INSTRUCTIONS

Do not forget to record the time the screening interview begins and main interview ends in the upper right hand corner of the screening questionnaire.

Read all questions verbatim. Please do not paraphrase a question or reword it. If a respondent doesn't understand something, simply reread the question slowly and carefully. If at any time the respondent seems not to understand the meaning of a particular question, do not attempt to interpret the meaning; reread the question from the questionnaire.

Detailed instructions appear on the questionnaire itself so we have covered below only those questions where further explanation was thought to be necessary.

## SCREENING QUESTIONNAIRE

## SCREENING

RECORDING: We use the following procedures on our studies to establish accurate incidence rates. You will record your ineligible respondents on the Screening Questionnaire.
You will note that there are boxes under the termination points. These boxes contain a series of printed numbers.
If, when you administer a screening questionnaire, the respondent is ineligible, you will record this on the screening questionnaire itself by circling the first available number in the appropriate box below the question where the respondent terminates. Erase answers previously given by that respondent and re-use the screener. DO NOT EVER erase circles previously placed on the termination boxes.
Q. A-D: If respondent has a language problem or knows the interviewer, is in a related field or has done a survey other than political in the past 3 months, TERMINATE.
Q. E: If respondent is under 18 years of age or is in an over quota for a specific age, TERMINATE.
Q. F: If respondent has no part of the decision to subscribe to satellite radio, TERMINATE.
Q. G/H \& I/J: If respondent or their household does not currently subscribe to satellite radio or would not consider subscribing to satellite radio, TERMINATE.
Q. K: If respondent does not know which satellite radio service they or their household subscribe to, TERMINATE.
Q. M/N: If respondent wears glasses or contact lenses and they don't have them with them, TERMINATE.
Q. P: If respondent refuses to participate, TERMINATE.
Q. Q: If respondent refuses to give a phone number, TERMINATE.

## MAIN QUESTIONNAIRE

There are four versions of the Main Questionnaire:

## Subscribe

- Sirius Version
- XM Version

Considering Subscribing

- Sirius Version
- XM Version
(INTERVIEWER: RECORD ANSWERS FROM PAPER SCREENER INTO PROGRAM AND THE COMPUTER WILL TAKE YOU TO THE VERSION THE RESPONDENT QUALIFIES FOR. DURING THE INTERVIEW THE COMPUTER WILL CHOOSE THE QUESTIONS TO BE ASKED.)

READ AND RECORD THE ANSWERS TO Q. 1a-3b. THIS PART IS NOT SELF-ADMINISTERED.
Q. 1a: Read question. Record answer verbatim.
Q. 1b: Probe for any other reasons. Record verbatim.
Q. 2a: Read question. Record answer verbatim.
Q. 2b: $\quad$ Probe for any other reasons. Record verbatim.
Q. 3a: ONLY ON SUBSCRIBER. Read question. Record answer verbatim.
Q. 3b: ONLY ON SUBSCRIBER. Probe for any other reasons. Record verbatim.

NOTE: IF RESPONDENT ASKS WHAT IS MEANT BY PROGRAMMING, SAY:
By programming we mean both categories of programs or specific programs or channels.

```
INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS.
IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS.
RECORD:
1 Respondent entering answers
2 Interviewer entering answers
```


## MAIN QUESTIONNAIRE

(Continued)
Q. 4: Read question. If it is unclear, repeat question. Record an answer for each. Total must equal 100. If respondent needs help in classifying a specific type of programming refer to Programming Channel Guide. For XM use blue and for Sirus use Yellow.
Q. 5: $\quad$ Read question. If it is unclear, repeat question. Record one answer for each option.
Q. 6a: Read question. Record one answer for each question.
Q. 6b: Read question. Record one answer for each option.
Q. 6c: Read question. Record all mentions.
Q. 7: $\quad$ Read question. Record an answer for each. Total must equal 100.
Q. 8: (ONLY ON SUBSCRIBER) Read question. Record an answer for each. Total must equal 100.
Q. 9a/b: Ask Q's. 9a \& 9b for each programming type before going on to the next type. Q. 9b will only be asked for those answered "Yes" in Q. 9a.
Q. 9c: Read question. Record answer.
Q. 9d: Read question. Record answer.
Q. 10: Read question. Record answer for each profile shown (8 profiles will be shown)
Q. 11a: (ONLY ON SUBSCRIBER) Read question. Record answer.
Q. 11b: (ONLY ON SUBSCRIBER) Probe for anything else.

MAKE SURE INTERVIEWER AND RESPONDENT SIGN THE LAST PAGE OF THE INTERVIEW.

## CONCLUSION:

THANK RESPONDENT.
BE SURE THAT ALL INFORMATION IS ACCURATELY FILLED IN ON THE VALIDATION SHEET.
BE SURE TO DEBRIEF RESPONDENT IN TERMS OF REACTIONS, COMPLAINTS OR CONCERNS WITH THE QUESTIONNAIRE. REPORT IMMEDIATELY TO YOUR SUPERVISOR.

## GOOD LUCK!

## Data Development Worldwide

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www.datadw.com

## SATELLITE RADIO STUDY

REPORT FORM

MARKET:
SUPERVISOR: $\qquad$

| Date: |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Total Screened (Completes + Q's. F - Q) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Completed Interviews |  |  |  |  |  |  |  |
| Questionnaire Version |  |  |  |  |  |  |  |
| Subscriber Total |  |  |  |  |  |  |  |
| Sirius |  |  |  |  |  |  |  |
| XM |  |  |  |  |  |  |  |
| Both |  |  |  |  |  |  |  |
| Considering Total |  |  |  |  |  |  |  |
| Sirius |  |  |  |  |  |  |  |
| XM |  |  |  |  |  |  |  |
| Both |  |  |  |  |  |  |  |
| Don't Know |  |  |  |  |  |  |  |

## MARKET:

MALL: $\qquad$

Terminations:
Q. A-D: Security
Q. E: Under 18/ Refused Age

| Over Quota Males 18-24 |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Over Quota Males 25-34 |  |  |  |  |  |  |  |
| Over Quota Males 35-49 |  |  |  |  |  |  |  |
| Over Quota Males 50-64 |  |  |  |  |  |  |  |
| Over Quota Males 65+ |  |  |  |  |  |  |  |
| Over Quota Females 18-24 |  |  |  |  |  |  |  |
| Over Quota Females 25-34 |  |  |  |  |  |  |  |
| Over Quota Females 35-49 |  |  |  |  |  |  |  |
| Over Quota Females 50-64 |  |  |  |  |  |  |  |
| Over Quota Females 65+ |  |  |  |  |  |  |  |


| Q. F: (Not Boxed Answer: Does Not Make Decision To Subscribe To Satellite Radio) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males 18-24 |  |  |  |  |  |  |  |
| Males 25-34 |  |  |  |  |  |  |  |
| Males 35-49 |  |  |  |  |  |  |  |
| Males 50-64 |  |  |  |  |  |  |  |
| Males 65+ |  |  |  |  |  |  |  |
| Females 18-24 |  |  |  |  |  |  |  |
| Females 25-34 |  |  |  |  |  |  |  |
| Females 35-49 |  |  |  |  |  |  |  |
| Females 50-64 |  |  |  |  |  |  |  |
| Females 65+ |  |  |  |  |  |  |  |

MARKET: $\qquad$
MALL: $\qquad$

Terminations: (Continued)



## MARKET:

$\qquad$
MALL: $\qquad$

## Terminations: (Continued)

| Our Quota Satellite Radio Subscriber |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Our Quota Satellite Radio Considering Subscribing |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Q. N: No Glasses or Contacts Satellite Radio |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Subscriber |


| Q. N: No Glasses or Contacts Satellite Radio |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Considering Subscriber |  |  |  |  |  |  |  |

Q. P: Refused to Participate Satellite Radio Subscriber
Q. P: Refused to Participate Satellite Radio Considering Subscriber

| Q. Q: Refused Phone Number - Satellite Radio Subscriber |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Q. Q: Refused Phone Number - Satellite Radio <br> Considering Subscriber |  |  |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Incidence:

| Qualified (Qualified Completes + Qualified <br> Refusals) |  |  |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Contacts (Qualified + Terminations at Q F, G/H, I, <br> K/L, O) |  |  |  |  |  |  |  |
| Incidence (Qualified/Contacts) |  |  |  |  |  |  |  |


| Length |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## TO: SUPERVISORS <br> FROM: KATHY ROMANO <br> RE: SATELLITE RADIO STUDY

DATE: OCTOBER, 2006

STUDY DESIGN: This is a Central Location, computer assisted personal interview about satellite radio.
Potential respondents will be screened on the mall with answers and terminates recorded on a hard copy (paper) screener. Qualified respondents will then be interviewed in your facility with answers recorded directly into a CAPI Program using a personal computer with a mouse and high-speed access.

SCHEDULE: Wednesday, October $11^{\text {th }} \ldots \ldots . . . . . . . . . . . . . . . . .$. Receive field materials.
DDW conference call to brief study, train interviewers including role-playing.
Begin to interview.
Sunday, October $15^{\text {th }}$................................ Finish interviewing.
Monday, October $16^{\text {th }}$
Final Data to DDW.

QUOTAS: Your quota of completed interviews varies by market (see Quota Sheet).

## AT LEAST 50\% OF THE INTERVIEWING MUST BE CONDUCTED OVER THE WEEK-END AND/OR DURING EVENING HOURS.

## RECRUITING

RESPONDENTS \&
INTERVIEWING
AREA:
After they have been screened for eligibility, all qualified respondents will be invited to your "test" location where the remainder of the questionnaire will be administered.

When setting up your interviewing areas, keep in mind that they must be set up so that no respondent can see or overhear another respondent. It is also essential that a passerby not be able to see or overhear interviews in progress. You will be using a personal computer with high-speed Internet access.

There must be a small table next to each computer which is large enough for two trays.
NOTE: AT NO TIME CAN THE RESPONDENT BE LEFT ALONE IN THE ENCLOSED AREA WITH THE PC. THE INTERVIEWER MUST REMAIN WITH EACH RESPONDENT THROUGHOUT THE ENTIRE MAIN INTERVIEW.

SCREENER: The paper Screeners will be used to screen respondents on the mall.

* DO NOT RECORD TERMINATIONS ON TALLY SHEETS; THEY MUST BE RECORDED DIRECTLY ON TO SCREENERS.

Because you have screening quotas by age, terminated Questions F - Q as well as completes DO count toward your Screening Quota. Q's. A, B, C, D and E do NOT count toward your screening quota.

NOTE: It is important that when terminating a respondent, you circle the number in the appropriate age group for that respondent. This will be the only way you can accurately keep track of your screening quotas by age. DO NOT RECORD TERMINATIONS ON TALLY SHEETS; THEY MUST BE RECORDED DIRECTLY ONTO SCREENERS.

All Screeners must be returned to DDW including those with only terminations which do not have a main questionnaire ("Screener only").

## MAIN

QUESTIONNAIRE: The questionnaire is a web program.
Before you work on this study, you must attend a briefing which will be conducted by DDW and be fully familiar with the CAPI Program Instructions. You must complete a Practice Interview. (Screener and Main Questionnaire.

Please note that the paper screener information will need to be input into the program by the interviewer.

The main questionnaire portion of the study will be done on the computer. Respondents will be given a choice as to whether they want to enter their answers on the computer or whether they prefer to have the interviewer do it for them. In either case, the interviewer must remain with respondent during the entire interview.

TRAINING: Use only professional interviewers with whom you have worked before. All interviewers working on this study must attend a formal briefing and training session. You must discuss the following:

1. Screening procedures
2. Quotas
3. Main Questionnaire is on the computer and the interviewers must know how to work the computer.
4. The critical importance of completely and accurately recording all answers and especially the responses to the open-ended questions. Ask respondent to repeat answer if it is not clear.
5. Debriefing of respondents and of interviewers

Each interviewer must complete a practice interview and be familiar with the study.
You, the supervisor, must review each practice interview before the interviewer goes into the field. You must check that the interviewer knows how to administer the questionnaire. These practice interviews must be edited, discussed thoroughly and reviewed with the interviewers, and returned with the completed work. They must be clearly identified as practice interviews.

If you must replace any interviewers, they must be formally briefed and trained, covering all of the above procedures and they must conduct a practice interview.

Please use only experienced interviewers who have been trained in interviewing procedures (including reading questions verbatim and writing clearly) and with whom you have worked before.

DDW personnel will be on the phone with you, the supervisor, when you train and brief the interviewers.

SUPERVISION: You, the Supervisor, should:
(a) Check that the interviewers are screening potential respondents in all parts of the mall
(b) Supervise the actual interviewing both during the screening process and the main interview
(c) Monitor the first few interviews of each interviewer and continue to monitor on a random basis throughout the interviewing process
(d) Serve as a coach to ensure the quality of the interviewing and that the correct stimulus is being shown.

INTERVIEWERS: You must have three or four interviewers working on this study, each completing 3 to 5 interviews.

DEBRIEFING: $\quad$| You must debrief your interviewers after each interview and after each day's work to |
| :--- |
| determine whether there are any problems with administering the questionnaire or |
| working with the stimuli and on any reactions, complaints or questions from respondents. |
| If there are any problems, report them IMMEDIATELY to DDW. |
| You must call DDW at the end of the first day to give us a debriefing. |

## POTENTIAL

## PROBLEMS

OR QUESTIONS:
If you have any problems or questions, please do not hesitate to call me at (212) 6331100 ext. 266 during business hours on weekdays. In the evenings or on the weekend, if there are any questions or problems, please call 212-917-434-5035.

REPORTS: Reports must be faxed on a daily basis each weekday during the course of this study. Fax daily to (212) 633-6621.

## VALIDATION:

You must obtain home telephone numbers, not beeper numbers or voice mail numbers. We must be able to reach these respondents in order to validate. Business numbers are okay if they are identified as business numbers on the questionnaire and validation forms.

YOU MUST CONFIRM RESPONDENT PHONE NUMBERS. BE CERTAIN THAT THE RESPONDENTS UNDERSTAND THAT WE MUST BE ABLE TO CALL THEM TO VERIFY THEIR PARTICIPATION IN THE STUDY. ASK FOR IDENTIFICATION AND DIAL THE PHONE NUMBER, VERIFYING THAT IT IS A WORKING NUMBER. LISTINGS ON THE VALIDATION SHEET WHICH DO NOT HAVE A VALID TELEPHONE NUMBER MIGHT BE CONSIDERED INVALID INTERVIEWS AND BE PULLED FROM THE STUDY.

MAKE SURE THE INTERVIEWER AND RESPONDENT HAVE SIGNED THE SURVEY.

THE VALIDATION FORM WILL BE E-MAILED TO YOU. YOU MUST FILL IN INFORMATION FOR EACH RESPONDENT. THERE MUST BE A SEPARATE SHEET/TAB FOR EACH INTERVIEWER. E-MAIL TO DDW.

## RETURNING

WORK:

## BILLING:

You must return the following to DDW:

1. Completed Screeners.
2. Validation Forms e-mailed to DDW
3. Screeners Only (Screeners with terminations which did not result in a completed interview)

Please bill at agreed upon rate.

THANK YOU IN ADVANCE FOR YOUR HELP ON THIS STUDY!

## APPENDIX F

VERIFICATON

## SATELLITE RADIO STUDY

## VERIFICATION QUESTIONNAIRE

Hello, I'm $\qquad$ calling from Data Development Worldwide, a national market research company. Recently we conducted a study in your area and l'm calling to confirm a few points in the survey.

1. Were you recently approached in a mall and asked questions, and then asked to go to a facility to do a survey?
$\qquad$ Yes
$\qquad$ No
2. Did you tell the interviewer that you currently have satellite radio in your household?
$\qquad$ Yes
$\qquad$ No
3. When you went to the facility were you seated at a computer to answer questions about satellite radio?
$\qquad$ Yes
$\qquad$ No

Thank You For Your Cooperation!

Data Development Worldwide
120 Fifth Avenue
New York, NY 1001
T: 212. 633.1100
Field Fax: 212. 633. 662
VALIDATION FORM

```
QUOTA
A - Satellite Radio Subscriber Sirius
```

| Study Name: | SATELLI |
| :--- | :--- |
| Job \#: | \#02-629 |

Field Service (Company Name):
Market:
ALL RESPONDENT ID \#'S MUST BE FILLED IN !!! (INTERVIEWER FILL IN)

Area Code:
City \& State:
$\qquad$

Field Interviewer:
Total No. of Completed Interviews:
(OFFICE USE ONLY)

| SCREENER ID \# | QUOTA | RESPONDENT'S NAME | ADDRESS | PHONE\# | INTERVIEW <br> DATE | Q1 | Q2 | Q3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  |  |

1

## APPENDIX G

## BASIC STATISTICAL ANALYSIS

## Basic Statistical Analysis

There are two types of data, quantitative data (e.g., weights) and qualitative data (e.g., does the respond rate music to be the most important attribute or not).

## I. Quantitative Data

A. We used the sample average as the estimate for the population average.
B. Confidence intervals were obtained in the standard way by:
x -bar $-/+1.96 * \mathrm{~s} / \sqrt{n}$, where n is the sample size and s is the sample standard deviation. ${ }^{1}$

The above approach is standard and taught in every basic statistics course. The only less than standard confidence interval is for a sample correlation. We used this to obtain the confidence interval for the correlation between the predicted and given scores for cards 65 and 66, the holdout profiles.
C. It is known that the sample correlation r can be transformed to a normal random variable via Fisher's z-transform
$\mathrm{t}=.5^{*} \operatorname{Ln}((1+\mathrm{r}) /(1-\mathrm{r}))$ is approximately normal with mean $\tau=.5 * \operatorname{Ln}((1+\rho) /(1-\rho))$ and variance of $1 /(n-3)$ where $n$ is the sample size.

We can then use the following to obtain a $95 \%$ confidence interval for $\rho$.
i) Obtain a confidence interval for $\tau$ by letting $\mathrm{t}_{\mathrm{L}}=\mathrm{t}-1.96 / \sqrt{n}-3$ and $\mathrm{t}_{\mathrm{U}}=\mathrm{t}+1.96 / / \sqrt{ } \mathrm{n}-3$
ii) When we solve for $\rho$ in terms of $\tau$ we get
$(\mathrm{A}-1) /(\mathrm{A}+1)$ where $\mathrm{A}=\exp (2 * \tau)$
Substituting $\mathrm{t}_{\mathrm{L}}\left(\mathrm{t}_{\mathrm{U}}\right)$ for $\tau$ gives the lower (upper) end of the confidence interval for $\rho$.

## II. Qualitative Data

A. We use sample proportion $p$ to estimate the population proportion.
B. We use the standard confidence interval of $p+/-$ error

$$
\text { Error }=1.96^{*}\left[p^{*}(1 .-\mathrm{p}) / \mathrm{n}\right]^{1 / 2} .
$$

[^20]APPENDIX H

## A BRIEF DESCRIPTION OF CONJOINT ANALYSIS

## A BRIEF DESCRIPTION OF CONJOINT ANALYSIS

Conjoint analysis is one of the leading methods used by marketing researchers to find out how consumers make decisions among competing products and services and to determine the value consumers place on product attributes. Through the use of conjoint analysis, market researchers are able to predict how buyers will choose among products and services and determine the relative importance of each of the attributes being studied. Thus, for example, conjoint analysis can be used to predict whether consumers would prefer (and thus be willing to pay more for) a movie theater ticket to a theater with a seat that is wider and has a cup-holder than for a theater ticket to a theater with no pre-show commercials.

## History of Conjoint Analysis

Conjoint analysis has been used by market researchers for 35 years since its introduction by Paul Green, a colleague of mine at The Wharton School, in an article in the Journal of Marketing Research (1971). In the preface to our 1972 book, Multiattribute Decisions in Marketing: A Measurement Approach (Green and Wind 1972) we introduced the topic by stating, "One of the most tantalizing problems in decision theory - one that has occupied the attention of economists, statisticians, psychologists, sociologists, and others for a long time - is how people make decisions when the options under evaluation are multiattribute." The book and much of the literature that followed in marketing focused on the theories, techniques, and applications of conjoint analysis as they related to various facets of empirical research in multiattribute decision making.

Conjoint analysis was rapidly adopted by market researchers as a superior method of answering three critical and interrelated questions:

1. How important are specific factors (attributes) in the consumer decision process?
2. What specific products and service offerings (specific levels on the selected attribute) are the "best"?
3. What will happen to the provider share of choices if they change their offerings -- a "what if" analysis?

The ability to answer these questions, the flexibility in design and ability to address a variety of products and services, and the improved tools for data collection and analysis have led to its rapid adoption.

Conjoint analysis is, by far, the most used marketing research method for analyzing consumer trade-offs. Surveys conducted by Wittink and Cattin [1989] and Wittink, Vriens, and Burhenne [1994] attest to its world-wide popularity. Literally hundreds (if not thousands) of research papers and thousand of applications of conjoint analysis have been conducted. Conjoint analysis has spawned more applications and has led to more major decisions than any other technique in Marketing over the last thirty-five years.

## Validation of Conjoint Analysis

At least as critical as the widespread use of the conjoint methodology is its validation. The continued and repeated use of conjoint analysis by industry is the best indication of its proven validity. In addition, conjoint analysis has been validated by studies that compare different research methods. Several papers have compared so-called self-explicated models (see infra) to classical full profile approaches. For a validation study of conventional conjoint methods, self-explicated models and a blending of these two approaches into hybrid models see for example, Green, Krieger and Agarwal (1991).

Many other authors, such as Wittink, have engaged in research that validates the results one obtains from a conjoint study such as the one described below.

## Practical Applications of Conjoint Analysis

Since its introduction, businesses and governments and numerous academic researchers, consulting firms, and marketing research firms have embraced conjoint analysis as a reliable and valid method of analyzing consumer preferences when introducing new products or studying markets. Indeed, businesses and governments regularly make billions of dollars of decisions based on the results of conjoint analyses. There is an obvious reason for this popularity - conjoint analysis enables consumers to make tradeoffs among competing products and product configurations, which is often the fundamental question posed in many strategic marketing and business decisions. These decisions include optimal pricing, optimal configuration of products, game theory reactions to competitors' decisions, segmentations of the market, and introduction of new products.

There have been many high-profile applications of conjoint analysis that have led to major successful business outcomes. Among the most visible applications of conjoint analysis have been Courtyard by Marriott and E-Z Pass.

- Courtyard by Marriott: The Marriott International Corporation employed conjoint analysis to make business decisions regarding the design of its new Courtyard by Marriott chain of hotels. Marriott used a massive conjoint analysis to test dozens of major aspects of the hotel design (a total of 50 factors were tested), including building design, shape of the pool, the level of service from room service, the inroom toiletries, and the atmosphere of the hotel lounge. As a result of the design
suggested by the conjoint analysis, Courtyard by Marriott became the fastest growing, moderately priced hotel chain in the United States. Even more impressively, Courtyard by Marriott achieved a market share within four percentage points of that predicted by the conjoint analysis. This validation of the conjoint analysis in the context of a multi-billion dollar investment by a major corporation demonstrates the exceptional power of the conjoint methodology. A description of this application of the conjoint analysis was published (Wind et al, 1989) and was the runner up for the Adelman Prize, the most prestigious award for applications of management science.
- E-Z Pass: The Port Authorities in the New York City area were skeptical whether enough motorists would be willing to pay tolls via an automated toll-taking device placed in their cars to justify the expenditure of millions in taxpayer dollars on the E-Z Pass infrastructure. The Port Authorities believed that 15-20\% of motorists needed to subscribe to E-Z Pass to make the adoption of E-Z Pass successful. A conjoint analysis was performed to determine whether enough motorists would sign up for E-Z Pass. The conjoint analysis was complicated by the fact that the individuals, prior to its introduction, were totally unfamiliar with the E-Z Pass concept. Respondents were provided with videos that demonstrated the concept and allowed respondents to determine the attractiveness of the concept - i.e., their willingness to subscribe - and the optimal configuration of the E-Z Pass service. Based on the respondent's answers, the conjoint analysis predicted that E-Z Pass would obtain a market share in the mid- $40 \%$ range. The Port Authorities proceeded with the E-Z Pass project based on this analysis. Again, the results of
the conjoint analysis were verified by consumer behavior - the E-Z Pass subscription rate in the New York metropolitan area is between 40 and $50 \%$. Conjoint analysis has also been used in myriad other applications for all types of products or services. To name a few, it was used for AT\&T's first cellular telephone, designing the tracking services at FEDEX, and performance and reliability features for an IBM workstation. Furthermore, conjoint analysis has been used in the financial industry in many ways, including analyzing the features of credit cards and bank services (e.g., annual fees, frequent flier miles, etc). The pharmaceutical industry has used conjoint extensively for pricing and positioning studies (for determining efficacy, safety and dosing features) for various drugs (e.g., antihypertensives). Perhaps most relevant to the conjoint analysis prepared in this proceeding, a conjoint analysis was employed to determine the role that price and various features play in subscribing to cable TV in Japan.

Table 1 presents an illustrative list of products and services studied by conjoint analysis while Table 2 identifies some of the decision areas in which conjoint analysis has been used.

## Description of the Conjoint Analysis in the Context of this Application

The objective of conjoint analysis is to evaluate the importance of various aspects of products or services in the decision process of "buyers". The decision maker has to choose among a set of "offerings" that vary with respect to the specific levels of a specified set of attributes (factors). The list of attributes in this study and the corresponding levels are given in Table 3 below.

## Table 1

## Illustrative Products and Services Studied by Conjoint Analysis Studies

| Consumer Nondurables | Other Services | Business Strategy |
| :---: | :---: | :---: |
| Bar soaps | - Courtyard by Marriott | McKinsey |
| - Hair shampoos | - Car rental agencies | - Booz-Allen |
| - Carpet cleaners | - Telephone services and pricing | A.D. Little |
| - Synthetic-fiber garments | - Employment agencies | BCG |
| - Gasoline pricing | - Information retrieval services | - Bain |
| - Panty hose | - Employee benefits packages | - Andersen Consulting |
| - Lawn chemicals |  |  |
| Facial tissues | Health Care/Pharmaceuticals |  |
|  | - Ethical drugs | Brand Equity |
|  | - Diagnostic equipment | - Shell/Texaco Merger |
| Financial Services | - Health maintenance organizations |  |
| - Bank services |  | Quality Function Deployment |
| - Auto insurance policies |  | - Xerox Copies |
| Health insurance policies | Industrial Goods |  |
| Credit card features | - Copying machines |  |
| Consumer discount cards | - Printing equipment | Customer Satisfaction |
| - Travel and entertainment packages | - Facsimile transmission | IBM |
| - Financial planning | Data transmission | - Chrysler |
|  | - Portable computer terminals | - FedEx |
|  | - Diagnostic x-ray equipment | UPS |
| Consumer Durables | - Computers |  |
| - Automotive styling |  | Legal Cases |
| Automobile and truck tires |  | - AA Source Position |
| - Pickup truck design | Transportation | - Chrysler - Windshield |
| Car batteries | - Domestic airlines | Wiper |
| - Apartment design | - Transcontinental airlines | - Italian Trade Com. - |
| Toasters | - Passenger train operations | pasta's country of |
| Commercial lawn mowing | - Freight train operations | origin |

## Table 2

## Illustrative Area of Applications of Conjoint Analysis Studies

- Market Segmentation
- As a basis for segmentation"benefit" segmentation
- As a descriptor of segments
- Flexible segmentation
- Componential segmentation and models for simultaneous evaluation (i.e. SIMPOT)
- Product Decisions
- Positioning
- Concept evaluation
- Product development guidelines
- Quality function development
- Pricing Decisions
- Price sensitivity
- Value of different models of pricing
- Promotional Decisions
- Semantic equivalents
- Distribution Decisions
- Value of different outlets
- Design of a product/service mix for distribution outlets
- Management: Decision Criteria
- Product portfolio
- New product evaluation
- Allocation of resources
- Business strategy brand equity
- Consumer Behavior
- Consumer choice of items and item collections
- Allocation of time and money among activities
- Satisfaction / referenceability


## Table 3

## List of Attributes and Levels for the Conjoint Task of the Satellite Radio Study

## A. Music Programming

1. No music programming
2. Substantially fewer channels and less variety of music than currently offered
3. The same number of channels and the same variety of music as currently offered
4. Substantially more channels and more variety of music than currently offered
B. News
5. No news programming
6. Substantially fewer channels and less variety of news than currently offered
7. The same number of channels and the same variety of news as currently offered
8. Substantially more channels and more variety of news than currently offered
C. Sports
9. No sports programming
10. Substantially fewer channels and less variety of sports than currently offered
11. The same number of channels and the same variety of sports as currently offered
12. Substantially more channels and more variety of sports than currently offered
D. Talk \& Entertainment
13. No talk and entertainment programming
14. Substantially fewer channels and less sports variety than currently offered
15. The same number of channels and the same talk and entertainment variety as currently offered
16. Substantially more channels and more talk and entertainment variety than currently offered
E. The Number of Minutes Of Commercials Per Hour on Music Channels
17. No commercials on music channels
18. 2 minutes of commercials per hour
19. $\mathbf{5}$ minutes of commercials per hour
20. $\mathbf{1 2}$ minutes of commercials per hour

## F. Geographic Coverage

1. Typical FM coverage
2. Complete Nationwide Coverage

## G. The Monthly Price for a Single Subscription

1. $\$ 8.95$ per month
2. $\$ 10.95$ per month
3. $\$ 12.95$ per month
4. $\$ 14.95$ per month

A conjoint analysis typically has three phases:

1. Creating the survey and collecting the data
2. Estimating the parameters from the results of the survey
3. Incorporating the estimates of the parameters into a "simulator"

## Data Collection

At the heart of conjoint analysis is the presentation of profiles to each individual. A profile is a potential offering. For example, in the application used here one such profile is an offering that includes the same number of channels and variety as currently offered for sports and talk and entertainment, no news programming, substantially more music channels and variety than is currently offered, five minutes of commercials on music channels with typical FM coverage. This offering is priced at $\$ 12.95$ per month.

Note that the number of possible profiles is the product of the number of levels. In our application six of the attributes have four levels and the other attribute has two levels, hence the number of possible profiles is $4^{6} * 2=8192$. Respondents, however, see only a small subset of all possible profiles. The selected profiles are generated in a statistical way that enables one to estimate the importance of each level of each attribute independent of other levels of attributes. The set that is generated is referred to in the literature as a fractional factorial design and special software was used to create this set of 64 profiles. This set was further divided into eight blocks of eight profiles, and each respondent saw one of the eight blocks. The master design of 64 profiles is included in Table 4.

## TABLE 4 <br> The Master Design

|  | Music Programming | News | Sports | Talk \& Entertainment | \# of Minutes of Commercials | Geographic Coverage | Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $3^{1}$ | 4 | 4 | 2 | 4 | 1 | 3 |
| 2 | $1^{2}$ | 2 | 3 | 3 | 5 | 2 | 4 |
| 3 | 2 | 3 | 3 | 3 | 3 | 1 | 1 |
| 4 | 4 | 1 | 4 | 4 | 2 | 2 | 2 |
| 5 | 1 | 2 | 2 | 4 | 5 | 1 | 3 |
| 6 | 4 | 4 | 1 | 2 | 3 | 1 | 2 |
| 7 | 2 | 3 | 1 | 1 | 1 | 2 | 4 |
| 8 | 3 | 1 | 2 | 1 | 1 | 2 | 1 |
| 9 | 4 | 2 | 4 | 1 | 4 | 1 | 1 |
| 10 | 2 | 4 | 1 | 2 | 4 | 2 | 4 |
| 11 | 3 | 3 | 2 | 4 | 3 | 2 | 2 |
| 12 | 1 | 4 | 4 | 3 | 5 | 1 | 1 |
| 13 | 1 | 3 | 2 | 2 | 5 | 1 | 3 |
| 14 | 4 | 1 | 3 | 1 | 1 | 2 | 4 |
| 15 | 3 | 1 | 3 | 4 | 3 | 1 | 2 |
| 16 | 2 | 2 | 1 | 3 | 2 | 2 | 3 |
| 17 | 4 | 3 | 3 | 2 | 1 | 1 | 3 |
| 18 | 3 | 3 | 3 | 1 | 4 | 1 | 2 |
| 19 | 3 | 4 | 4 | 2 | 2 | 2 | 4 |
| 20 | 1 | 1 | 1 | 4 | 5 | 2 | 3 |

${ }^{1}$ The numbers here refer to the levels stated in Table 3 (e.g., for music, " 1 " means no music, and " 4 " means substantially more music).
${ }^{2}$ Note that a " 1 " in column 1 (no music) is accompanied by a " 5 " (not applicable) in column 5 (number of minutes of commercials on music programs).

|  | Music Programming | News | Sports | Talk \& Entertainment | \# of Minutes of Commercials | Geographic Coverage | Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 4 | 4 | 1 | 3 | 1 | 2 | 2 |
| 22 | 2 | 2 | 4 | 4 | 3 | 1 | 1 |
| 23 | 1 | 2 | 2 | 1 | 5 | 2 | 1 |
| 24 | 2 | 1 | 2 | 3 | 2 | 1 | 4 |
| 25 | 1 | 4 | 2 | 3 | 5 | 2 | 3 |
| 26 | 3 | 2 | 1 | 4 | 1 | 1 | 4 |
| 27 | 2 | 1 | 3 | 2 | 4 | 1 | 1 |
| 28 | 2 | 4 | 3 | 1 | 2 | 1 | 2 |
| 29 | 4 | 3 | 2 | 4 | 3 | 2 | 4 |
| 30 | 3 | 2 | 1 | 2 | 3 | 2 | 1 |
| 31 | 4 | 1 | 4 | 1 | 4 | 2 | 3 |
| 32 | 1 | 3 | 4 | 3 | 5 | 1 | 2 |
| 33 | 1 | 1 | 1 | 4 | 5 | 1 | 1 |
| 34 | 2 | 2 | 3 | 2 | 1 | 2 | 2 |
| 35 | 4 | 2 | 4 | 2 | 2 | 1 | 3 |
| 36 | 3 | 4 | 2 | 1 | 2 | 2 | 1 |
| 37 | 2 | 3 | 4 | 4 | 4 | 2 | 4 |
| 38 | 1 | 3 | 1 | 1 | 5 | 1 | 2 |
| 39 | 3 | 1 | 2 | 3 | 3 | 1 | 4 |
| 40 | 4 | 4 | 3 | 3 | 3 | 2 | 3 |
| 41 | 4 | 2 | 2 | 3 | 4 | 1 | 2 |
| 42 | 2 | 4 | 2 | 1 | 3 | 1 | 3 |
| 43 | 1 | 1 | 4 | 2 | 5 | 2 | 4 |
| 44 | 3 | 4 | 3 | 4 | 1 | 1 | 2 |
| 45 | 1 | 1 | 3 | ${ }^{2}$ | 5 | 2 | 1 |


|  | Music <br> Programming | News | Sports |  <br> Entertainment | of Minutes <br> of <br> Commercials | Geographic <br> Coverage | Price |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

There are three major research designs and corresponding types of data collection procedures:

1. Full Profile: In full profile techniques, respondents are given profiles (one level for each attribute; as described above) and asked to rate each profile on a $0-10$ likelihood-of-purchase scale. Alternatively, in choice based conjoint, the respondent is simply asked whether this profile (product offering) would be purchased by him/her or not.
2. Self Explicated: In compositional techniques (sometimes referred to as self explicated), each respondent rates the desirability of each level of each attribute and then rates the attributes by dividing 100 points to indicate the relative importances of attributes.
3. Hybrid: Since in large scale conjoint analysis, such as the EZ Pass application and this study, it is not practical to collect a sufficient number of profiles to estimate the effects of each level of each attribute at the individual level, hybrid techniques have become popular. In essence, both full profile data and self-explicated data (as described in (1) and (2)) are collected (Green 1984, and Green and Krieger 1996).

## Parameter Estimation

Once the data are collected the next task is to build a conjoint model that relates the likelihood of purchase to the description of the products as described by its levels (e.g., the profiles). "Partworths" are derived that reflect the role of each level of each attribute in the decision making process.

Since individuals have different preferences and it is not feasible to collect a sufficient number of profile data, the approach, which was used in EZ Pass and other successful applications, is to build a hybrid model that combines the self- explicated data with the full profile. That is what was done here. Various forms of hybrid conjoint models
are employed and the one chosen is based on its ability to validate to a holdout set of profiles. In The Satellite Radio study two "control" profiles were included one presenting the current market offering and the other, the current offering but with no music offering. Thus, each respondent received 10 profiles - the eight from one of the blocks of the master design + the two control profiles.

We followed the same approach for arriving at partworths that was followed in the EZ Pass study. Studies have shown that the self-explicated desirabilities (which at least provides a ranking of the levels) are often accurate. In fact, in ACA implementations (a commonly-used commercial software package), it is assumed that the desirabilities are equally-spaced typically when the ordering of the levels is clear. In our analysis, that would assume that the difference between each level for a given attribute is the same (e.g., with music, it would assume that the difference in desirabilities between no music, substantially less music, the same amount of music, and substantially more music are the same). Since we did not want to have such a restrictive assumption, we provide respondents the opportunity to indicate the spacing among the levels of any given attribute to reflect their preferences. Thus, the desirability questions 5 and 6 in our study go a step further by eliciting the actual desirabilities thereby allowing for differential spacings.

Where a self-explicated model fails, however, is in the weights for these attributes. The approach that uses only the self explicated data although used by some, is not sufficient. The self-explicated model treats the partworth as the product of the desirability for that level of the offering multiplied by the weight that the respondent gives that offering. It has been shown in validation studies that the self-explicated weights that individuals assign to each of the attributes are more equal than their selections would
imply (i.e. underestimating the importance of the most important attributes and overestimating the importance of the less important attributes).

The desirabilities for the programming attributes, non-programming attributes, and price are given in questions Q5, Q6a and Q6b respectively. The importance of the programming attributes are in Q4 and the non-programming and price attributes in Q7. This self-explicated data at the individual level is then blended with the responses to the 8 profiles, which were rated in question 10. Combining the self-explicated data and the profile data leads to a more accurate measure of the value (i.e., the partworth) that an individual assigns an attribute by adjusting it (within constraints) until it best predicts the value that individual gave in the profile questions. Hence for each individual, we adjust the partworths by solving the following optimization problem.

We find the partworths that best predict the profile data subject to the constraint that the revised partworths differ from the self explicated partworths by no more than a prespecified amount. As shown below, this method leads to a more conservative result than if one used a constraint of 0 , i.e., where no change is allowed. We chose a maximum difference of .25 as in the EZ Pass application.

The partworths are scaled to be between 0 and 1 . Sensitivity analysis to this constraint was done to assess its impact on the implied relative importance of the various attributes. In this case the algorithm looks to change one partworth by . 01 (small step) to make the sum of the absolute errors of the predicted scores over the eight profiles and the actual scores as small as possible. Each of the twenty six possible levels to choose from (six of the attributes have four levels and one attribute has two levels) are considered and the one which does best is changed. Then all twenty six possibilities are considered and
one of the partworths is changed to again make the predicted scores closest to the actual scores as described above. This approach is repeated until no change is available to improve the accuracy of the predictions.

As noted, we used a constraint of .25 . We ran the optimization program, however, for four values of the constraint: $0,1, .25$ and .5 . The results did not vary very much when the value for the constraint was changed. For example, the value for music was:
$0=35.2$
$.1=31.9$
$.25=29.8$
$.50=29.9$

In consulting projects a value of .25 is typically used which might be viewed as high. It should be noted that as the value of the constraint increases it tends to give marginally less weight to music; hence a choice of .25 may be thought of as being conservative.

We chose the above method (prior to seeing the data) for the following reasons:

1. It is exactly the same method that we would recommend if we were asked to solve the problem as a consulting exercise rather than in a litigation setting.
2. The number of profiles that each individual can comfortable evaluate relative to the number of parameters (levels across all attributes) is such that regression at the individual level is not feasible.
3. Other methods for combining profiles across individuals have serious limitations. For example, assuming that there are k different types of people and allowing the data to solve for the optimal k and the common partworths within type, has been shown in the literature to perform worse in validation studies. Furthermore, this
would tend to distort the results if inferences are to be drawn for a subset of respondents.

## The Simulator

Once the partworths are estimated they are then input into a simulator that allows for estimating the market share for any profile. This is not restricted to the 64 profiles in our design, but rather to all of the possible 8,192 profiles in the satellite application.

The standard approach to map the partworths into shares is to take the partworths associated with each level of each attribute and add them up. This is sometimes referred to as the utility of the profile. A constant intercept is added in to ensure that the utilities scale properly to the shares given for the profiles. This utility is most often converted into share by taking $\exp ($ utility $) /(1+\exp ($ utility $))$.

The shares are computed at the individual level and then aggregated to the entire sample. If the survey allowed for differential sample weights for each individual then these weights can be incorporated in the final overall market share. For example, if older people are over-sampled, to ensure a sufficient sample size in that group, these people would then be given less weight (as is standard in sample survey methodology) to adjust for this.

## This Study

The main focus in this study is not on the optimal profile, or the performances of potential profiles, but rather on the importance of the music offering. The conjoint data offers three ways to measure this:

We can compare the weights that individuals give to each of the attributes.
a. Using the self-explicated weights.
b. Using the implied weights as given by the self-explicated partworths. The weight of attribute " i " is the maximum difference of the partworths over the levels of attribute " i " over the sum of these quantities across all attributes. ${ }^{3}$
c. Using the implied weights once the partworths are revised after the hybrid conjoint analysis.

Approach (c) can be tried for different implementations of the hybrid conjoint to see how sensitive the results are to the settings that were used.

In all cases the results can be reported for the entire sample or for subsets of individuals. Averages and standard deviations of importances may also be calculated. In addition, we can determine the number of individuals that give each attribute the highest importance, second highest importance etc.

Finally, the results are given with associated confidence intervals measuring the accuracy of the results. Since, in any study, we only observe a sample of individuals, the extent to which the importances vary across individuals reflects the uncertainty in using these importances to infer the results in the entire population.

## Inclusion

We used two measures as a basis to include individuals in the analysis. The first measure computes the predicted utilities for the eight profiles each person received (not including the two holdout profiles, cards 65 and 66) using the self explicated partworths (the desirability for each level of attribute was multiplied by the weight the individual gave

[^21]to that attribute). These eight utilities were correlated with the eight scores the individual gave to the eight profiles. Respondents who did not have positive correlations had inconsistent responses, as explained below.

The second measure we used was based on the final partworths using the scores for eight profiles as well as the self explicated data. These partworths give predicted scores for the two holdout profiles 65 and 66 . If the preferred card ( 65 or 66 ) in terms of the predicted score agreed with the stated preference when the profile was seen then this person qualifies on this basis. The few respondents who gave equal score to cards 65 and 66, qualified if the predicted score was within one unit (the smallest gradation on the scale).

Cross tabulating these two criteria resulted in the following table:

|  |  | (2) Predicted rank of the two control cards based on the estimated partworths |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Positive | Negative |  |
| (1) Correlation between the estimated eight utilities and the actual data for the eight profiles | Positive | 312 | 40 | 352 |
|  | Negative | 60 | 16 | 76 |
|  | Total | 372 | 56 | 428 |

As can be seen from the table only 16 respondents did not qualify on both measures.
These 16 individuals were deleted from the conjoint analysis task in the written testimony.
We did perform, however, full analyses for the conditions of:
a. The full sample of $\mathbf{4 2 8}$
b. The sample of $\mathbf{4 1 2}$ in which we eliminated the 16 respondent who did not qualify on the two measures
c. The sample of $\mathbf{3 2 8}$ in which we eliminated the 100 respondents ( 40 and 60 ) who did not meet one of the two conditions
d. The sample of $\mathbf{3 1 2}$ in which we eliminated the 116 respondents who did not qualify on at least one of the two conditions (40 and 60) and on both (16).

The results of the four samples are summarized below.

# Comparison Of The Four Samples On The Relative Importance Of The Seven Conjoint Factors 

|  | $(1)$ |  |  |  |  | (2) (used in <br> testimony) | (3) | (4) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{N}=428$ | $\mathrm{~N}=412$ | $\mathrm{~N}=328$ | $\mathrm{~N}=312$ |  |  |  |  |
| Music | $\mathbf{2 9 . 8}$ | $\mathbf{3 0 . 4}$ | $\mathbf{3 2 . 4}$ | $\mathbf{3 3 . 3}$ |  |  |  |  |
| News | 10.7 | 10.5 | 10.8 | 10.5 |  |  |  |  |
| Sports | 13.3 | 13.4 | 12.5 | 12.6 |  |  |  |  |
| Talk-Entertainment | 11.9 | 11.8 | 11.2 | 11.1 |  |  |  |  |
| Commercials | 13.2 | 13.0 | 13.7 | 13.5 |  |  |  |  |
| Coverage | 6.5 | 6.3 | 6.2 | 6.0 |  |  |  |  |
| Price | 14.6 | 14.6 | 13.3 | 13.1 |  |  |  |  |

## Comparison Of The Four Samples On The \% Of Respondents Who Selected One Of The Factors As Their Most Important One

|  | $(1)$ | (2) (used in <br> testimony) | $(3)$ | (4) |
| :--- | :---: | :---: | :---: | :---: |
| Music | $\mathrm{N}=428$ | $\mathrm{~N}=412$ | $\mathrm{~N}=328$ | $\mathrm{~N}=312$ |
| News | $\mathbf{4 4 . 9}$ | $\mathbf{4 6 . 6}$ | $\mathbf{5 2 . 4}$ | $\mathbf{5 5 . 1}$ |
| Sports | 7.2 | 6.6 | 7.0 | 6.1 |
| Talk-Entertainment | 10.8 | 10.9 | 8.8 | 9.0 |
| Commercials | 10.8 | 10.7 | 9.2 | 9.0 |
| Coverage | 8.6 | 8.3 | 8.8 | 8.3 |
| Price | 3.3 | 2.9 | 2.7 | 2.2 |

As can be seen from examination of these tables, the selection of option 2 in my written testimony - deletion of the 16 respondents resulting in 412 respondents - is a conservative approach.

Once we obtained the final partworths for each individual, we can create utilities for any profile by adding up the partworths for the levels that comprise the profile. This gives us a predicted score for a profile. These scores are computed for each individual for each of cards 65 and 66 . The predicted scores for card 65 are correlated to the actual scores the individual gave to card 65 . Note that card 65 was not used in creating these partworths so this is a true validation of the approach. Confidence intervals for these correlations show that there is a statistical significant relationship (at the 5\% significance level) between the predicted scores and the actual scores that were given to these profiles.

The correlation for the $\underline{412}$ respondents were:
for card 65.37 (from .28 to .45 )
for card 66.63 (from . 57 to .69)

## Summary

In our study, a hybrid conjoint analysis was employed as one of the various methods to determine the relative importance of music in the decision to subscribe to satellite radio. We chose the hybrid conjoint approach as one of the approaches because that is what we would have used if this was a consulting project. We found in our research that it validates better than most other procedures. If there is a bias, as in most conjoint analyses, too much weight is given to the least important attributes and too little weight to the most important attributes. Given that music turned out to be the most important attribute in the analysis, this suggests that the method underestimated its importance.

## Illustrative References ${ }^{4}$

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## APPENDIX I

## PRE-TEST QUESTIONNAIRE

Data Development Worldwide
120 Fifth Avenue
New York, NY 10011
T: 212. 633.1100
Field Fax: 212. 633. 6621
www.datadw.com

## SATELLITE RADIO STUDY TOP SHEET

(THIS IS A PERSONAL INTERVIEW)

- SCREENER -

RESPONDENT I.D. \#: $\qquad$
(RECORD AT END OF INTERVIEW. PLEASE PRINT.)

RESPONDENT'S NAME: $\qquad$ TEL. \# ( ) $\qquad$
ADDRESS: $\qquad$
CITY: $\qquad$ STATE: $\qquad$ ZIP: $\qquad$
INTERVIEWER: $\qquad$ DATE: $\qquad$
$\qquad$

120 Fifth Avenue
New York, NY 10011
T: 212. 633.1100
Field Fax: 212. 633. 6621
www.datadw.com

## RECORD QUOTA:

1 Satellite Radio Subscriber Sirius
2 Satellite Radio Subscriber XM
3 Satellite Radio Considering Subscribing Sirius
4 Satellite Radio Considering Subscribing XM

Length of Main Interview: $\qquad$ (7)(8)

Study \#02-629 ID \#:
September, 2006
CARD \#:

| $1-5$ |
| :---: |
| $6-1$ |

RESPONDENT I.D. \#: $\qquad$
(9) $\qquad$

## SATELLITE RADIO STUDY

## - SCREENER -

Hello, I'm $\qquad$ of Data Development Worldwide. We are a national marketing research firm and are currently conducting a survey and would like to include your opinions. Let me assure you we are doing this for research purposes only and that no one will sell you anything as a result of this study. Your answers will be held in the strictest confidence.

NOTE: RECORD ALL TERMINATIONS WHICH OCCUR IN ANY QUESTION A - D BY CIRCLING THE NEXT AVAILABLE NUMBER IN GRID AT BOTTOM OF THIS BOX. RECORD ONLY ONE TERMINATION PER CONTACT. RE-USE SCREENER UNTIL YOU REACH A QUALIFIED RESPONDENT.
A. (IF RESPONDENT HAS LANGUAGE/HEARING PROBLEM, ETC., IS IN A HURRY, REFUSES INTERVIEW OR APPEARS INTOXICATED, TERMINATE.)
B. (IF YOU KNOW THE RESPONDENT AT ALL, TERMINATE.)
(HAND RESPONDENT CARD 1)
C. Are you or any members of your household employed in any of the industries listed on this card?

|  | YES | NO |
| :---: | :---: | :---: |
|  | An insurance company ................................................... [ ] | [ ] |
| "YES" TO ANY BOXED | A marketing research firm................................................. | [ ] |
| INDUSTRY, TERMINATE | An advertising agency ................................................... | [ ] |
| AND RECORD BELOW.) | The entertainment industry .............................................. | [ ] |
|  | A satellite radio provider .................................................... [ ] | [ ] |
|  | A cable TV provider ....................................................... [ ] | ] |
|  | An Internet service provider............................................... [ ] | [ ] |

(TAKE BACK CARD 1)
D. During the past three months have you taken part in any market research survey other than a political poll? (IF "YES," TERMINATE.)

## RECORD TERMINATIONS WHICH OCCUR IN ANY QUESTION A - D HERE:

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | $(10)$ |$(11)$

## (HAND RESPONDENT CARD 2)

E. I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age?
(RECORD ONE ANSWER.)
(TERMINATE IN FIRST BOX BELOW) $\longleftarrow$ A. Under 18 years .......................... a


> IF AGE SCREENING QUOTA OPEN, CONTINUE. IF FILLED, TERMINATE IN APPROPRIATE BOX BELOW.
B. 18-24 years ............................. 1
C. 25-34 years ............................. 2
D. 35-49 years ............................. 3
E. 50-64 years ............................. 4
F. 65 or over................................... 5

(TAKE BACK CARD 2)
IF "UNDER 18" OR "REFUSED AGE", TERMINATE. CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (13) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA MALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND REUSE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (14) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA MALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND REUSE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (15) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA MALES - 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND REUSE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (16) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA MALES - 50-64 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND REUSE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (17) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA MALES $\mathbf{- 6 5 +}$-- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND REUSE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA FEMALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | RE-USE SCREENER.


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA FEMALES - 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\begin{array}{cccccccccccc}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12\end{array}$ RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- OVER QUOTA FEMALES $-65+$-- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\begin{array}{llllllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12\end{array}$
(HAND RESPONDENT CARD 3)
F. Which, if any, of the following decisions do you make or take part in making for your household? (CIRCLE ALL THAT APPLY.)

(TAKE BACK CARD)
RESPONDENT MUST BE A BOXED ANSWER IN Q. F. IF NOT, TERMINATE IN APPROPRIATE BOX BELOW.

TERMINATE -- MALE 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- MALE 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE | -- | MALE | $35-49$ | -- | CIRCLE | NEXT | AVAILABLE NUMBER | BELOW. | ERASE AND RE-USE |  |  |  |
| SCREENER. |  |  |  |  |  |  |  |  |  |  |  |  |


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE | - MALE | 50 | -64 | - | CIRCLE |  |  |  |  |  |  |  | TERMINATE -- MALE 50-64 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.


| 12 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE -- MALE 65+ -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |

TERMINATE -- FEMALE 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE -- FEMALE 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER. |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| SCREENER. |  |  |  |  |  |  |  |  |  |  |  |  |

TERMINATE -- FEMALE 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\left.\begin{array}{lccccccccccc}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12\end{array}\right]()$

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- FEMALE 65+ -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
G. Which of these services, if any, do you or your household currently subscribe to? (CIRCLE ALL THAT APPLY.)
$\square$
Cable TV ................................................ 1
Satellite TV ............................................ 2
Broadband Internet................................ 3
Satellite radio ....................................... 4
Wireless phone service.......................... 5
None of these ........................................ 6
Don't know............................................. 0
(ASK Q. H IF "SATELLITE RADIO" CIRCLED IN Q. G ABOVE. OTHERWISE, SKIP TO INSTRUCTIONS BEFORE Q.I)
(HAND RESPONDENT CARD 5)
H. Which of the folowing best describes the type of satellite radio you or your household currently subscribes to? (RECORD ONE ANSWER)

A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius. 1
Part of a package from a third party (such as through DirecTV, DiSH Network or AOL).................. 2
Both................................................................................................................................................... 3
Don't know ..................................................................................................................................... 0
(ASK Q. I FOR EACH ITEM NOT CIRCLED IN Q. G.)
I. Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? (RECORD ONE ANSWER FOR EACH LISTED ITEM)

| - | Yes | No | Don't Know |
| :---: | :---: | :---: | :---: |
| Cable TV.. | 1 | 2 | 3 |
| Satellite TV | 1 | 2 | 3 |
| Broadband Internet. | 1 | 2 | 3 |
| Satellite radio .............................. | 1 | 2 | 3 |
| Wireless phone service ................. | 1 | 2 | 3 |

```
(ASK Q. J IF "YES" TO "SATELLITE RADIO" CIRCLED IN Q. I ABOVE. OTHERWISE, SKIP TO INSTRUCTIONS BEFORE Q. K)
(HAND RESPONDENT CARD 5)
```

J. Which of the folowing best describes the type of satellite radio you or your household are considering? (RECORD ONE ANSWER)

A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius. 1
Part of a package from a third party (such as through DirecTV, DiSH Network or AOL).................. 2
Both................................................................................................................................................. 3
Don't know ..................................................................................................................................... 0

\title{

(ASK Q. K IF BOXED ANSWER IN Qs. G AND H - SATELLITE RADIO SUBSCRIBER) (HAND RESPONDENT CARD 6) <br> K. Which satellite radio service do you or your household currently subscribe to? (RECORD ONE MENTION.) <br> |  |  | () |
| :---: | :---: | :---: |
|  | Sirius | 1 |
|  | XM | 2 |
|  | Both.. | 3 |
| (TERMINATE) | Don't | * |

TERMINATE -- DON'T KNOW SERVICE - MALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DON'T KNOW SERVICE - MALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE | -- DON'T KNOW SERVICE | MALES | $-35-49$ | -- | CIRCLE NEXT | AVAILABLE NUMBER BELOW. |  |  |  |  |  |  |
| ERASE AND | RE-USE SCREENER. |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |

TERMINATE -- DON'T KNOW SERVICE - MALES - 50-64 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE | T- DON'T KNOW SERVICE | - MALES | $-65+$ | -- | CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE |  |  |  |  |  |  |  |
| AND RE-USE SCREENER. |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |

TERMINATE -- DON'T KNOW SERVICE - FEMALES - 18-24 -- CIRCLE NEXT AV AILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
12
34
$\begin{array}{llll}5 & 6 & 7 & 8\end{array}$
9
10
11
12
()

TERMINATE -- DON'T KNOW SERVICE - FEMALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE -- DON'T KNOW SERVICE - FEMALES - 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW |  |  |  |  |  |  |  |  |  |  |  |  |
| ERASE AND RE-USE SCREENER. |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |

TERMINATE -- DON'T KNOW SERVICE - FEMALES - 50-64 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DON'T KNOW SERVICE - FEMALES - 65+ -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
1
$\begin{array}{llll}2 & 3 & 4 & 5\end{array}$
$5 \quad 6$
7
$7 \quad 8$
$8 \quad 9 \quad 10$
1
$11 \quad 12$
()
(ASK Q. L IF BOXED ANSWER IN Qs. I AND J -- SATELLITE RADIO CONSIDERING) (HAND RESPONDENT CARD 6)
L. Which satellite radio service are you currently considering subscribing to? (RECORD ONE MENTION.)

|  | () |
| :---: | :---: |
| Sirius | 1 |
| XM | 2 |
| Both. | 3 |
| Don't | 4 |

## QUOTA QUALIFICATIONS

SATELLITE SUBSCRIBER: MUST BE SATELLITE RADIO CIRCLED IN Q.G AND BOXED ANSWER CIRCLED IN Q.H AND "SIRIUS", "XM" OR "BOTH" IN Q.K.
SATELLITE RADIO CONSIDERING SUBSCRIBING: MUST BE "YES" TO SATELLITE RADIO CIRCLED IN Q.I AND BOXED ANSWER CIRCLED IN Q.J.
REFER TO QUOTA QUALIFICATION ABOVE. IF RESPONDENT DOES NOT QUALIFY FOR EITHER QUOTA GROUP, TERMINATE AND CIRCLE NEXT AVAILABLE NUMBER IN APPROPRIATE BOX BELOW..

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - MALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - MALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - MALES - 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - MALES - 50-64 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER. |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - MALES - $65+$-- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - FEMALES - 18-24 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - FEMALES - 25-34 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - FEMALES - 35-49 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMNAT |  |  |  |  |  |  |  |  |  |  |  |  |

TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - FEMALES - 50-64 -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERMINATE -- DOES NOT SUBSCRIBE/CONSIDER SUBSCRIBING - FEMALES - $65+$-- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER. |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | () |

IF QUOTA FOR WHICH RESPONDENT QUALIFIES IS FILLED, TERMINATE AND RECORD IN APPROPRIATE BOX BELOW.

OVER QUOTA - SATELLITE RADIO SUBSCRIBER -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

```
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
26
```

OVER QUOTA - SATELLITE RADIO CONSIDERING SUBSCRIBING -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

```
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 19 20 21 22 23 24 25
26
```

M. Do you wear glasses or contact lenses when you read?
$(A S K ~ Q . ~ N) ~$
$($ SKIP TO Q. O) $\longleftarrow$ Yes ........................................................ 2

## (ASK ONLY IF "YES" IN Q. M)

N. Do you have your glasses with you or are you wearing your contact lenses today?
(CONTINUE WITH Q. O) $\longleftarrow$ Yes ........................... 1

TERMINATE -- NO GLASSES/CONTACTS - SATELLITE RADIO SUBSCRIBER -- CIRCLE NEXT
AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |

TERMINATE -- NO GLASSES/CONTACTS - SATELLITE RADIO CONSIDERING SUBSCRIBING -CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\begin{array}{lllllllllllllllllllllllll}01 & 02 & 03 & 04 & 05 & 06 & 07 & 08 & 09 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 & 21 & 22 & 23 & 24 & 25\end{array}$
$\begin{array}{llllllllllllllllllllllll}26 & 27 & 28 & 29 & 30 & 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 & 41 & 42 & 43 & 44 & 45 & 46 & 47 & 48 & 49 \\ 50\end{array}$
O. RECORD GENDER OF RESPONDENT

Male
Female 2

## (ASK EVERYONE)

P. We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study?
(CONTINUE WITH Q. Q) $\longleftarrow$ Yes, will participate
(TERMINATE IN APPROPRIATE BOX BELOW) $\longleftarrow$ No, will not participate

TERMINATE -- REFUSED TO PARTICIPATE - SATELLITE RADIO SUBSCRIBER -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



TERMINATE -- REFUSED TO PARTICIPATE - SATELLITE RADIO CONSIDERING SUBSCRIBING -CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Q. May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study.
(RECORD ADDRESS AND PHONE \#, THEN CONTINUE) $\longleftarrow$ Gave phone number .................. 1 (TERMINATE IN APPROPRIATE BOX BELOW) $\longleftarrow$ Refused phone number..............

TERMINATE -- REFUSED PHONE NUMBER - SATELLITE RADIO SUBSCRIBER -- CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\begin{array}{lllllllllllllllllllllllll}01 & 02 & 03 & 04 & 05 & 06 & 07 & 08 & 09 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 & 21 & 22 & 23 & 24 & 25\end{array}$
$\begin{array}{lllllllllllllllllllllll}26 & 27 & 28 & 29 & 30 & 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 & 41 & 42 & 43 & 44 & 45 & 46 & 47 & 48 \\ 49 & 50\end{array}$

TERMINATE -- REFUSED PHONE NUMBER - SATELLITE RADIO CONSIDERING SUBSCRIBING -CIRCLE NEXT AVAILABLE NUMBER BELOW. ERASE AND RE-USE SCREENER.
$\begin{array}{lllllllllllllllllllllllll}01 & 02 & 03 & 04 & 05 & 06 & 07 & 08 & 09 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 & 21 & 22 & 23 & 24 & 25\end{array}$
$\begin{array}{lllllllllllllllllllllll}26 & 27 & 28 & 29 & 30 & 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 & 41 & 42 & 43 & 44 & 45 & 46 & 47 & 48 \\ 49 & 50\end{array}$

## BRING RESPONDENT TO INTERVIEWING AREA. DO NOT DISCUSS THE SUBJECT MATTER OF THE STUDY WITH THE RESPONDENT WHILE WALKING TO FACILITY.

## NOTE: IF RESPONDENT WEARS GLASSES/CONTACT LENSES, BE SURE HE/SHE IS WEARING THEM WHEN ADMINISTERING MAIN QUESTIONNAIRE.

PN: INSTRUCTIONS FOR DETERMINING WHICH QUESTIONNAIRE VERSION TO ADMINISTER

- SATELLITE RADIO SUBSCRIBER SIRIUS VERSION:

MUST BE SATELLITE RADIO IN Q G AND BOXED ANSWER IN Q.H AND "SIRIUS" IN Q K

- SATELLITE RADIO SUBSCRIBER XM VERSION:

MUST BE SATELLITE RADIO IN Q G AND BOXED ANSWER IN Q.H AND "XM" IN Q K
(NOTE IF SATELLITE RADIO SUBSCRIBER IN Q G. AND "BOTH" IN Q K ROTATE BETWEEN THE TWO SUBSCRIBER VERSIONS ABOVE

- SATELLITE RADIO CONSIDERING SUBSCRIBING SIRIUS VERSION:

MUST BE " YES" TO SATELLITE RADIO IN Q I AND BOXED ANSWER IN Q.J AND "SIRIUS" IN Q L

- SATELLITE RADIO CONSIDERING SUBSCRIBING XM VERSION:

MUST BE " YES" TO SATELLITE RADIO IN Q I AND BOXED ANSWER IN Q.J AND "XM" IN Q L
(NOTE IF " YES" TO SATELLITE RADIO CONSIDERING SUBSCRIBING AND " DON'T KNOW" OR "BOTH" IN Q L, ROTATE BETWEEN THE TWO CONSIDERING SUBSCRIBING VERSIONS ABOVE

## SATELLITE RADIO

Sirius....... 1
XM 2

## - MAIN QUESTIONNAIRE -

## - SUBSCRIBERS -

## (INTERVIEWER: RECORD ANSWERS TO QUESTIONS FROM PAPER SCREENER INTO PROGRAM BEFORE CONTINUING WITH Q. 1a.)

## (READ VERBATIM:)

Thank you for agreeing to participate in our study. We would like to talk to you today about satellite radio. All of your answers will remain strictly confidential. No one will attempt to sell you anything as a result of participating in this study. We are only interested in your opinions. If you don't know an answer or don't have an answer to a particular question, please don't guess. Just tell me you don't know and we will go on to the next question. If, at anytime, you do not understand a question or do not understand what is being asked of you, just say so and I will repeat the question.

READ AND RECORD THE ANSWERS TO Q. 1a-3b. THIS PART IS NOT SELF-ADMINISTERED.

1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM)

1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM)
2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM)

NOTE: IF RESPONDENT ASKS WHAT IS MEANT BY PROGRAMMING, SAY:
By programming we mean both categories of programs or specific programs or channels.

2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM)
3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM)

3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM)

## INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF COMPUTER AND ANSWER

 QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS.IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS.
RECORD:
1 Respondent entering answers
2 Interviewer entering answers

## (ASK EVERYONE)

4. Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio.
If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100. Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.)
()

1 Yes (CONTINUE)
2 No
3 Don't know $\rightarrow$ (REPEAT EXPLANATION)

## INTERVIEWER NOTE: IF RESPONDENT ASKS HOW TO CATEGORIZE A PARTICULAR SHOW, REFER TO APPROPRIATE PROGRAMMING GUIDE (i.e., SIRIUS OR XM) AND CLASSIFY ACCORDINGLY.

[PN: ROTATE PROGRAM TYPES]

| Types of Programming | Relative Importance As Reflected In \# Of Allocated Points |
| :---: | :---: |
| Comedy ............................ |  |
| Kids.................................. |  |
| Local Weather and Traffic .... |  |
| Music ................................ |  |
| News............................. |  |
| Sports .............................. |  |
| Talk and Entertainment..... |  |
|  | TOTAL MUST EQUAL 100 |

5. Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? (RECORD
ONE ANSWER FOR EACH BELOW)
()

1 Yes (CONTINUE)
$\begin{array}{ll}2 & \text { No } \\ 3 & \text { Don't know }\end{array} \rightarrow$ (REPEAT EXPLANATION)
[PN: ROTATE PROGRAM TYPES USING SAME ROTATION USED IN Q. 4. RESPONDENT CAN NOT GIVE the same number to options " 1 " AND " 4 " WITHIN A GIVEN TYPE OF PROGRAMMING. ONLY SHOW ONE PROGRAMMING TYPE ON THE SCREEN AT A TIME, i.e., SHOW ALL OF MUSIC PROGRAMMING, THEN ALL OF NEWS, ETC.]
A. Music Programming (Current Offering includes A.)

1. No music programming..................................
2. Substantially fewer channels and less variety of music than currently offered
3. The same number of channels and the same variety of music as currently offered..
$\begin{array}{lr}\text { Extremely } & \text { Extremely } \\ \text { Undesirable } & \text { Desirable }\end{array}$
4. Substantially more channels and more variety of music than currently offered.
B. News (Current Offering includes B)
5. No news programming
6. Substantially fewer channels and less variety of news than currently offered.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |

A. For Sirius : 66 Music Channels, For XM : 74 Music Channels
B. For Sirius : 15 News Channels, For XM : 13 News Channels
C. For Sirius : 8 Sports Channels and Live Game Channels for NBA, NFL, etc. For XM : 13 Sports Channels and Live Game channels for Major League Baseball, NASCAR, etc.
D. For Sirius :22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc, For XM : 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.

6(a) Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that nonprogramming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and nonprogramming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. (RECORD ONE ANSWER FOR EACH BELOW)
[PN: ROTATE FEATURES. FOR STUB A. BELOW RESPONDENT CAN NOT GIVE THE SAME NUMBER TO OPTION 1 AS GIVEN TO OPTIONS 2 - 4]


6(b) Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. (RECORD ONE ANSWER FOR EACH BELOW)


6(c) Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite
radio? (RECORD ALL MENTIONS)
[PN: ROTATE LIST]

- The number of minutes of commercials per hour on music channels
- Geographic coverage
- The monthly price for a single subscription
( )
1 Other (RECORD VERBATIM AND PROBE: Anything else?)
0 No others considered

7. Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio.

As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio.

The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.)
[PN: SHOW OTHERS FROM Q. 6c. USE SAME ROTATION USED IN Q. 6a.]

| Non-programming Type Features Of Satellite Radio | Relative Importance As Reflected In \# Of Allocated Points |
| :---: | :---: |
| The Number of Minutes of Commercials Per Hour on Music Channels.. |  |
| Geographic Coverage........................ |  |
| The Monthly Price for A Single Subscription. |  |
| Other (FROM Q. 6c)......................... |  |
| Other (FROM Q. 6c)......................... |  |
|  |  |
|  |  |
|  | TOTAL MUST EQUAL 100 |

8. Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the \% of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to 100\%. (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100)
[PN: ROTATE PROGRAM TYPES USING SAME ROTATION AS IN Q. 4]

| Type of Programming | Percentage of Time Spent Listening |  |
| :---: | :---: | :---: |
| Comedy ............................ |  | ( ) |
| Kids |  | ( ) |
| Local Weather and Traffic.... |  | ( ) |
| Music..... |  | ( ) |
| News ................ |  | ( ) |
| Sports .............................. |  | ( ) |
| Talk and Entertainment........ |  | ( ) |
|  | TOTAL MUST EQUAL 100\% |  |

## ASK Q. 9a FOR EACH PROGRAMMING TYPE LISTED BELOW. ASK Q. 9a AND 9b FOR EACH ONE BEFORE GOING ON TO THE NEXT PROGRAMMING TYPE. SHOW ONE AT A TIME. ROTATE ORDER.

9(a) As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If (INSERT PROGRAMMING TYPE) were not available, would it affect the amount you would be willing to pay for satellite radio? (RECORD YES, NO OR DON'T KNOW FOR EACH.)
(ASK Q. 9b IF "YES" IN Q. 9a. OTHERWISE, SKIP TO NEXT PROGRAMMING TYPE.)
9(b) How much would you be willing to pay for satellite radio if (INSERT PROGRAMMING TYPE) were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. (TYPE IN AMOUNT IN DOLLARS AND CENTS)

|  | Q. 9a |  |  |  | Q. 9b |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Don't Know |  | Would Be Willing to Pay | Would Cancel Subscription |
| If no music programming ........ | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no news programming......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no sports programming........ | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no talk and entertainment programming | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |

10. Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from "0" meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering.

If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. (SHOW ONE
PROFILE AT A TIME AND RECORD 0-10 FOR EACH PROFILE. EACH RESPONDENT WILL SEE 8 PROFILES WITHIN A BLOCK RANDOMIZED. IN ADDITION, ALL RESPONDENTS WILL SEE THE TWO PROFILES IN BLOCK 9.)

$$
\text { PN: RECORD BLOCK \#: (1-8), } 9
$$

## (ASK EVERYONE)

11(a) And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? (RECORD COMPLETE ANSWER VERBATIM)
11(b) (PROBE:) Anything else? (RECORD COMPLETE ANSWER VERBATIM)

## RESPONDENT

## RESPONDENT: PLEASE READ AND SIGN:

I acknowledge that I was interviewed on this date. During this interview I was asked questions about satellite radio.

SIGNATURE: $\qquad$ DATE: $\qquad$
TELEPHONE \#: $\qquad$ (FOR VERIFICATION PURPOSES ONLY)

## INTERVIEWER

INTERVIEWER: PLEASE READ AND SIGN:
I hereby certify that all of the above information was obtained by me from the respondent named above who is not personally known to me. I agree to provide this affidavit under oath, immediately upon request.

SIGNATURE: $\qquad$ DATE: $\qquad$

THANK YOU VERY MUCH FOR YOUR COOPERATION !

## SATELLITE RADIO

|  |  |
| :--- | :--- |
|  |  |
| Sirius....... | 3 |
| XM ......... | 4 |

- MAIN QUESTIONNAIRE -
- CONSIDERING SUBSCRIBING -


## (INTERVIEWER: RECORD ANSWERS TO QUESTIONS FROM PAPER SCREENER INTO PROGRAM BEFORE CONTINUING WITH Q. 1a)

## (READ VERBATIM:)

Thank you for agreeing to participate in our study. We would like to talk to you today about satellite radio. All of your answers will remain strictly confidential. No one will attempt to sell you anything as a result of participating in this study. We are only interested in your opinions. If you don't know an answer or don't have an answer to a particular question, please don't guess. Just tell me you don't know and we will go on to the next question. If, at anytime, you do not understand a question or do not understand what is being asked of you, just say so and I will repeat the question.

READ AND RECORD THE ANSWERS TO Q. 1a-3b. THIS PART IS NOT SELF-ADMINISTERED.

1(a) Why are you considering subscribing to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM)

1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM)
2(a) What types of satellite radio programming are most critical to your decision whether to subscribe? (RECORD COMPLETE ANSWERS VERBATIM)

NOTE: IF RESPONDENT ASKS WHAT IS MEANT BY PROGRAMMING, SAY:
By programming we mean both categories of programs or specific programs or channels.

2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM)

THERE IS NO Q. 3 ON THIS VERSION

## INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF COMPUTER AND ANSWER

 QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS.IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS.
RECORD:
1 Respondent entering answers
2 Interviewer entering answers

## (ASK EVERYONE)

4. Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's ultimate decision whether to subscribe to satellite radio.

If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision is likely to be affected by only one of the types of programming and none of the others are likely to be important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming to your decision whether to subscribe to satellite radio. Please make sure that the total adds to 100. Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) ()

1 Yes (CONTINUE)
2 No
3 Don't know $\rightarrow$ (REPEAT EXPLANATION)

## INTERVIEWER NOTE: IF RESPONDENT ASKS HOW TO CATEGORIZE A PARTICULAR SHOW, REFER TO APPROPRIATE PROGRAMMING GUIDE (i.e., SIRIUS OR XM) AND CLASSIFY ACCORDINGLY.

[PN: ROTATE PROGRAM TYPES]

| Types of Programming | Relative Importance As Reflected In \# Of Allocated Points |
| :---: | :---: |
| Comedy ........................... |  |
| Kids................................ |  |
| Local Weather and Traffic ... |  |
| Music ............................ |  |
| News............................... |  |
| Sports .............................. |  |
| Talk and Entertainment....... |  |
|  | TOTAL MUST EQUAL 100 |

5. Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? (RECORD
ONE ANSWER FOR EACH BELOW)
()

1 Yes (CONTINUE)
$\begin{array}{ll}2 & \text { No } \\ 3 & \text { Don't know }\end{array} \rightarrow$ (REPEAT EXPLANATION)
[PN: ROTATE PROGRAM TYPES USING SAME ROTATION USED IN Q. 4. RESPONDENT CAN NOT GIVE the same number to options " 1 " AND " 4 " WITHIN A GIVEN TYPE OF PROGRAMMING. ONLY SHOW ONE PROGRAMMING TYPE ON THE SCREEN AT A TIME, i.e., SHOW ALL OF MUSIC PROGRAMMING, THEN ALL OF NEWS, ETC.]
A. Music Programming (Current Offering includes A.)

1. No music programming..................................
2. Substantially fewer channels and less variety of music than currently offered
3. The same number of channels and the same variety of music as currently offered..
$\begin{array}{lr}\text { Extremely } & \text { Extremely } \\ \text { Undesirable } & \text { Desirable }\end{array}$
4. Substantially more channels and more variety of music than currently offered.
B. News (Current Offering includes B)
5. No news programming
6. Substantially fewer channels and less variety of news than currently offered.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $(x)$ |

A. For Sirius : 66 Music Channels, For XM : 74 Music Channels
B. For Sirius : 15 News Channels, For XM : 13 News Channels
C. For Sirius : 8 Sports Channels and Live Game Channels for NBA, NFL, etc. For XM : 13 Sports Channels and Live Game channels for Major League Baseball, NASCAR, etc.
D. For Sirius :22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc, For XM : 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.

6(a) Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that nonprogramming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and nonprogramming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. (RECORD ONE ANSWER FOR EACH BELOW)
[PN: ROTATE FEATURES. FOR STUB A BELOW RESPONDENT CAN NOT GIVE THE SAME NUMBER TO OPTION 1 AS GIVEN TO OPTIONS 2-4.]

Extremely
Extremely
Undesirable
A. $\frac{\text { The Number of Minutes of }}{\text { Commercials Per Hour on }}$

1. No commercials on music

| channels..................... | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( )( ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2. 2 minutes of commercials per hour $\qquad$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( )( ) |
| 3. 5 minutes of commercials per hour. $\qquad$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( )( ) |
| 4. 12 minutes of commercials per hour. $\qquad$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( ) ) |
| Geographic Coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Typical FM coverage ...... | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ( ) ( ) |
| 2. Complete nationwide coverage | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | )( |

6(b) Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. (RECORD ONE ANSWER FOR EACH BELOW)


6(c) Please review the list below and tell me if there are any other non-programming features besides the ones listed that would likely impact your decision whether to subscribe to satellite radio? (RECORD
ALL MENTIONS)
[PN: ROTATE LIST]

- The number of minutes of commercials per hour on music channels
- Geographic coverage
- The monthly price for a single subscription
()

1 Other (RECORD VERBATIM AND PROBE: Anything else?)
0 No others considered
7. Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's ultimate decision whether to subscribe to satellite radio.

As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision whether to subscribe to satellite radio.

The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.)
[PN: SHOW OTHERS FROM Q. 6c. USE SAME ROTATION USED IN Q. 6a.]

| Non-programming Type Features Of Satellite Radio | Relative Importance As Reflected In \# Of Allocated Points |
| :---: | :---: |
| The Number of Minutes of Commercials Per Hour on Music Channels. |  |
| Geographic Coverage..... |  |
| The Monthly Price for A Single Subscription .. |  |
| Other (FROM Q. 6c).. |  |
| Other (FROM Q. 6c).. |  |
| - |  |
| $\qquad$ |  |
|  | TOTAL MUST EQUAL 100 |

(THERE IS NO Q. 8 ON THIS VERSION)

## ASK Q. 9a FOR EACH PROGRAMMING TYPE LISTED BELOW. ASK Q. 9a AND 9b FOR EACH ONE BEFORE GOING ON TO THE NEXT PROGRAMMING TYPE. SHOW ONE AT A TIME. ROTATE ORDER.

9(a) As you know, the single subscription price per month for satellite radio is $\mathbf{\$ 1 2 . 9 5}$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If (INSERT PROGRAMMING TYPE) were not available, would it affect the amount you would be willing to pay for satellite radio? (RECORD YES, NO OR DON'T KNOW FOR EACH.)
(ASK Q. 9b IF "YES" IN Q. 9a. OTHERWISE, SKIP TO NEXT PROGRAMMING TYPE.)
9(b) How much would you be willing to pay for satellite radio if (INSERT PROGRAMMING TYPE) were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to prevent you from subscribing please say so. (TYPE IN AMOUNT IN DOLLARS AND CENTS)

|  | Q. 9a |  |  |  | Q. 9b |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Don't <br> Know |  | Would Be Willing to Pay | Would Not Subscribe |
| If no music programming .......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no news programming........... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no sports programming.......... | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |
| If no talk and entertainment programming | 1 | 2 | 3 | ( ) | \$ | 0 ( ) |

10. Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering.

If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. (SHOW ONE PROFILE AT A TIME AND RECORD 0-10 FOR EACH PROFILE. EACH RESPONDENT WILL SEE 8 PROFILES WITHIN A BLOCK RANDOMIZED. IN ADDITION, ALL RESPONDENTS WILL SEE THE TWO PROFILES IN BLOCK 9.)

PN: RECORD BLOCK \#: $(1-8), 9$
Q. 11 DOES NOT APPEAR ON THIS VERSION

## RESPONDENT

## RESPONDENT: PLEASE READ AND SIGN:

I acknowledge that I was interviewed on this date. During this interview I was asked questions about satellite radio.

SIGNATURE: $\qquad$ DATE: $\qquad$
TELEPHONE \#: $\qquad$ (FOR VERIFICATION PURPOSES ONLY)

## INTERVIEWER

INTERVIEWER: PLEASE READ AND SIGN:
I hereby certify that all of the above information was obtained by me from the respondent named above who is not personally known to me. I agree to provide this affidavit under oath, immediately upon request.

SIGNATURE: $\qquad$ DATE: $\qquad$

THANK YOU VERY MUCH FOR YOUR COOPERATION !

## APPENDIX J

## RESULTS BY CURRENT AND CONSIDERING SUBSCRIBERS

Figure 1. Effect On Willingness To Cancel If A Specific Programming
Type Was Not Available (Q9)*

|  | Current Subscribers |  |  |  | Considering Subscribing |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No Music | No News | No Sports | No Talk and Entertainment | No Music | No News | No Sports | No Talk and Entertainment |
|  | ( $\mathrm{n}=307$ ) | ( $\mathrm{n}=307$ ) | ( $\mathrm{n}=307$ ) | ( $\mathrm{n}=307$ ) | ( $\mathrm{n}=121$ ) | ( $\mathrm{n}=121$ ) | ( $\mathrm{n}=121$ ) | ( $\mathrm{n}=121$ ) |
|  | \% | \% | \% | \% | \% | \% | \% | \% |
| Would change amount willing to pay*1 | 57 | 35 | 36 | 38 | 69 | 51 | 42 | 39 |
| Would Cancel | 42 | 11 | 12 | 15 | 44 | 19 | 21 | 14 |
| Would reduce price | 14 | 20 | 21 | 21 | 23 | 29 | 18 | 21 |
| Would not change amount willing to pay | 36 | 49 | 52 | 50 | 26 | 38 | 45 | 50 |
| Don't Know if would change amount willing to pay | 7 | 16 | 12 | 12 | 5 | 11 | 13 | 11 |

[^23]Figure 2. Effect On Willingness To Pay Without Specific Programming Type (Q9)*

|  | Current Subscribers |  |  |  | Considering Subscribers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No Music | No News | No Sports | No Talk and Entertainment | No Music | No News | No Sports | No Talk and Entertainment |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Average Price Among All Respondents ${ }^{2}$ | 6.39 | 10.45 | 10.40 | 9.97 | 5.56 | 9.44 | 8.95 | 10.03 |
|  | ( $\mathrm{n}=286$ ) | ( $\mathrm{n}=256$ ) | ( $\mathrm{n}=269$ ) | ( $\mathrm{n}=269$ ) | ( $\mathrm{n}=144$ ) | ( $\mathrm{n}=108$ ) | ( $\mathrm{n}=105$ ) | ( $\mathrm{n}=108$ ) |
| Average price among all respondents who would change (including zero) | 2.29 | 6.87 | 6.66 | 6.10 | 2.80 | 6.84 | 4.71 | 6.24 |
|  | ( $\mathrm{n}=176$ ) | ( $\mathrm{n}=106$ ) | ( $\mathrm{n}=109$ ) | ( $\mathrm{n}=117$ ) | ( $\mathrm{n}=83$ ) | ( $\mathrm{n}=62$ ) | ( $\mathrm{n}=51$ ) | ( $\mathrm{n}=47$ ) |
| Average price among those who would pay less (not including zero) | 7.12 | 9.24 | 8.86 | 9.03 | 7.26 | 9.40 | 8.93 | 8.63 |
|  | ( $\mathrm{n}=42$ ) | ( $\mathrm{n}=61$ ) | ( $\mathrm{n}=63$ ) | ( $\mathrm{n}=63$ ) | ( $\mathrm{n}=28$ ) | ( $\mathrm{n}=35$ ) | ( $\mathrm{n}=21$ ) | ( $\mathrm{n}=26$ ) |

[^24]Figure 3. Open-Ended Question Answers
( Net $^{3}$ for Q 1-3, 11)*

|  | Current Subscribers ( $\mathrm{n}=307$ ) |  |  | Considering Subscribing ( $\mathrm{n}=121$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Top Mention | \% Top 3 Mention | \% Any Mention | \% Top Mention | \% Top 3 Mention | \% Any Mention |
| - Music programming (no mention of commercial free) | 70 | 87 | 87 | 61 | 74 | 74 |
| - Commercial free (no mention of music) | 24 | 37 | 38 | 18 | 31 | 31 |
| - Talk/Entertainment | 20 | 36 | 37 | 7 | 22 | 24 |
| - Sports | 15 | 31 | 32 | 11 | 22 | 25 |
| - Commercial Free music | 9 | 13 | 13 | 3 | 6 | 7 |
| - News | 7 | 19 | 20 | 6 | 19 | 21 |
| - Coverage | 5 | 14 | 14 | 3 | 7 | 9 |
| - Price | 5 | 11 | 11 | 3 | 6 | 7 |
| - Fewer/less commercials | 5 | 11 | 12 | 2 | 4 | 4 |
| - Comedy | 3 | 13 | 14 | 2 | 7 | 8 |
| - Kids | 1 | 3 | 4 | 1 | 4 | 4 |
| - Weather/traffic | 1 | 4 | 6 | 2 | 3 | 5 |
| - Any Music Mentions (Net) | 74 | 88 | 89 | 63 | 78 | 78 |
| - Any Commercial Mentions (Net) | 33 | 51 | 51 | 22 | 39 | 40 |
| - Any Commercial Free Mentions (Net) | 29 | 43 | 44 | 21 | 36 | 37 |

[^25]Figure 4. Top Reasons for Subscribing/Considering Subscribing- General Draw (Q1)*

|  | Current Subscribers ( $\mathrm{n}=307$ ) |  |  | Considering Subscribing ( $\mathrm{n}=121$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Top Mention | \% Top 3 Mention | \% Any Mention | \% Top Mention | \% Top 3 Mention | \% Any Mention |
| - Music programming (no mention of commercial free) | 18 | 34 | 35 | 14 | 35 | 36 |
| - Commercial free (no mention of music) | 15 | 25 | 25 | 18 | 31 | 31 |
| - Talk/Entertainment | 6 | 13 | 14 | 2 | 8 | 9 |
| - Price | 4 | 7 | 7 | 2 | 2 | 3 |
| - News | 2 | 3 | 4 | 2 | 4 | 4 |
| - Coverage | 2 | 7 | 7 | 3 | 6 | 7 |
| - Fewer/less commercials | 2 | 5 | 5 | 2 | 3 | 3 |
| - Commercial Free music | 2 | 4 | 4 | 2 | 4 | 4 |
| - Comedy | 1 | 1 | 2 | 0 | 0 | 0 |
| - Sports | 1 | 5 | 6 | 1 | 2 | 2 |
| - Kids | 0 | 0 | 0 | 1 | 2 | 2 |
| - Weather/traffic | 0 | 0 | 1 | 0 | 1 | 1 |
| - Any Music Mentions (Net) | 19 | 38 | 38 | 17 | 39 | 40 |
| - Any Commercial Mentions (Net) | 19 | 34 | 35 | 22 | 37 | 37 |
| - Any Commercial Free Mentions (Net) | 17 | 29 | 29 | 21 | 35 | 35 |

[^26]Figure 5. Programming Type Most Critical To Decision To Subscribe/Consider Subscribing-Programming Draw (Q2)*

|  | Current Subscribers ( $\mathrm{n}=307$ ) |  |  | Considering Subscribing ( $\mathrm{n}=121$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Top <br> Mention | \% Top 3 Mention | \% Any Mention | \% Top Mention | \% Top 3 Mention | \% Any Mention |
| - Music programming (no mention of commercial free) | 51 | 65 | 66 | 59 | 69 | 69 |
| - Talk/Entertainment | 11 | 22 | 23 | 6 | 19 | 20 |
| - Sports | 9 | 22 | 22 | 11 | 21 | 24 |
| - Comedy | 3 | 10 | 11 | 2 | 7 | 8 |
| - News | 3 | 12 | 12 | 4 | 16 | 18 |
| - Commercial free (no mention of music) | 3 | 5 | 5 | 0 | 0 | 0 |
| - Commercial Free music | 2 | 3 | 3 | 1 | 2 | 2 |
| - Kids | 1 | 2 | 2 | 0 | 2 | 2 |
| - Weather/traffic | 1 | 3 | 4 | 2 | 3 | 5 |
| - Coverage | 1 | 1 | 1 | 0 | 1 | 2 |
| - Price | 1 | 1 | 2 | 2 | 3 | 3 |
| - Fewer/less commercials | 0 | 1 | 1 | 0 | 1 | 1 |
| - Any Music Mentions (Net) | 53 | 68 | 68 | 60 | 71 | 71 |
| - Any Commercial Mentions (Net) | 6 | 9 | 9 | 1 | 2 | 3 |
| - Any Commercial Free Mentions (Net) | 5 | 8 | 8 | 1 | 2 | 2 |

[^27]Figure 6. Importance Of Programming Type (Q4)*

| Type of Programming | Relative importance as reflected in \# of allocated points |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Current Subscribers |  | Considering Subscribing |  |
|  | $\frac{\text { Share }}{(\mathrm{n}=307)}$ <br> \% | Ranked Highest \% | Share $(\mathrm{n}=121)$ <br> \% | Ranked Highest \% |
| Music | $\begin{gathered} 46 \\ (42.50-48.84) \end{gathered}$ | $\begin{gathered} 76 \\ (71.11-80.68) \end{gathered}$ | $\begin{gathered} 38 \\ (33.48-43.18) \end{gathered}$ | $\begin{gathered} 68 \\ (59.44-76.10) \end{gathered}$ |
| Sports | $\begin{gathered} 13 \\ (10.75-14.67) \end{gathered}$ | $\begin{gathered} 16 \\ (11.86-20.06) \end{gathered}$ | $\begin{gathered} 13 \\ (9.83-16.09) \end{gathered}$ | $\begin{gathered} 21 \\ (13.45-27.88) \end{gathered}$ |
| Talk and Entertainment | $\begin{gathered} 12 \\ (10.66-14.53) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (11.37-19.70) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (8.38-13.17) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (8.54-21.22) \\ \hline \end{gathered}$ |
| Comedy | $\begin{gathered} 10 \\ (8.55-11.43) \end{gathered}$ | $\begin{gathered} 13 \\ (9.26-16.79) \end{gathered}$ | $\begin{gathered} 11 \\ (8.96-13.32) \end{gathered}$ | $\begin{gathered} 15 \\ (8.54-21.22) \end{gathered}$ |
| News | $\begin{gathered} 9 \\ (7.42-9.80) \end{gathered}$ | $\begin{gathered} 11 \\ (7.56-14.59) \end{gathered}$ | $\begin{gathered} 12 \\ (10.10-14.54) \end{gathered}$ | $\begin{gathered} 21 \\ (13.45-27.88) \end{gathered}$ |
| Local Weather and Traffic | $\begin{gathered} 6 \\ (5.39-7.75) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (2.73-7.70) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (7.36-10.70) \end{gathered}$ | $\begin{gathered} 11 \\ (5.23-16.26) \end{gathered}$ |
| Kids | $\begin{gathered} 4 \\ (2.66-5.02) \end{gathered}$ | $\begin{gathered} 5 \\ (2.47-7.30) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4 \\ (3.92-6.96) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (2.18-11.04) \\ \hline \end{gathered}$ |
|  | 100 |  | 100 |  |

[^28]Figure 7. Relative Importance Of The Programming and Non-Programming Attributes Of Satellite Radio Based On Conjoint Analysis- Value (Q4-7,10)*

|  | Current Subscribers <br> $(\mathbf{n}=307)$ | Top <br> Considering Subscribing <br> $(\mathbf{n}=121)$ |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Average <br> Importance | Average <br> Mention | Top <br> Importance |  |
|  |  |  |  |  |
| Mention |  |  |  |  |$|$

[^29]Figure 8. Relative Importance Of Music As Reflected In The Choice Of Current Offering With Music Versus Current Offering Without Music (Q10)

|  | Current Subscribers ( $\mathrm{n}=307$ ) | Considering Subscribing ( $\mathrm{n}=121$ ) |
| :---: | :---: | :---: |
|  | Intention To Subscribe | Intention To Subscribe |
| Current Offering (Card 65) | $\square 7.42$ | 6.38 |
| Current Offering With No Music (Card 66) | $\square 2.47$ | $\square 2.48$ |
| Ratio (current offering with no music $\div$ current offering) | $\text { . } 33$ | $.39$ |
|  | \% Giving 0 Points | \% Giving 0 Points |
| Current Offering (Card 65) |  | 9\% |
| Current Offering With No Music (Card 66) | 58\% | 52\% |
| Ratio (current offering with no music $\div$ current offering) | 14.5 | 5.8 |

## APPENDIX K

## RESULTS BY XM AND SIRIUS SUBSCRIBERS AND CONSIDERING SUBSCRIBERS

Figure 1. Effect On Willingness To Cancel If A Specific Programming Type Was Not Available (Q9)*

|  | Sirius |  |  |  | XM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No Music | No News | No Sports | No Talk and Entertainment | No Music | No News | No Sports | No Talk and Entertainment |
|  | ( $\mathrm{n}=220$ ) | ( $\mathrm{n}=220$ ) | ( $\mathrm{n}=220$ ) | ( $\mathrm{n}=220$ ) | ( $\mathrm{n}=208$ ) | ( $\mathrm{n}=208$ ) | ( $\mathrm{n}=208$ ) | ( $\mathrm{n}=208$ ) |
|  | \% | \% | \% | \% | \% | \% | \% | \% |
| Would change amount willing to pay ${ }^{1}$ | 58 | 40 | 40 | 40 | 63 | 39 | 35 | 37 |
| Would Cancel | 41 | 14 | 19 | 17 | 44 | 13 | 10 | 12 |
| Would reduce price | 15 | 22 | 18 | 20 | 18 | 23 | 22 | 22 |
| Would not change amount willing to pay | 36 | 46 | 50 | 49 | 36 | 45 | 50 | 51 |
| Don't Know if would change amount willing to pay | 6 | 14 | 10 | 11 | 7 | 16 | 16 | 12 |

[^30]Figure 2. Effect On Willingness To Pay Without Specific Programming Type (Q9)*

|  | Sirius |  |  |  | XM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No Music | No News | No Sports | No Talk and Entertainment | No Music | No News | No Sports | No Talk and Entertainment |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Average Price Among All Respondents ${ }^{2}$ | 6.57 | 10.16 | 9.57 | 9.63 | 5.71 | 10.14 | 10.47 | 10.37 |
|  | ( $\mathrm{n}=206$ ) | ( $\mathrm{n}=189$ ) | ( $\mathrm{n}=199$ ) | ( $\mathrm{n}=194$ ) | ( $\mathrm{n}=194$ ) | ( $\mathrm{n}=175$ ) | ( $\mathrm{n}=175$ ) | ( $\mathrm{n}=183$ ) |
| Average price among all respondents who would change (including zero) | 2.60 | 6.88 | 5.31 | 5.54 | 2.31 | 6.83 | 6.93 | 6.82 |
|  | ( $\mathrm{n}=127$ ) | ( $\mathrm{n}=87$ ) | ( $\mathrm{n}=88$ ) | ( $\mathrm{n}=87$ ) | ( $\mathrm{n}=132$ ) | ( $\mathrm{n}=81$ ) | ( $\mathrm{n}=72$ ) | ( $\mathrm{n}=77$ ) |
| Average price among those who would pay less (not including 0) | 7.27 | 9.96 | 8.98 | 8.62 | 7.10 | 8.64 | 8.79 | 9.20 |
|  | ( $\mathrm{n}=33$ ) | ( $\mathrm{n}=48$ ) | ( $\mathrm{n}=40$ ) | ( $\mathrm{n}=44$ ) | ( $\mathrm{n}=37$ ) | ( $\mathrm{n}=48$ ) | ( $\mathrm{n}=45$ ) | ( $\mathrm{n}=45$ ) |

[^31]Figure 3. Open-Ended Question Answers
( Net $^{3}$ for Q 1-3, 11)*

|  | Sirius ( $\mathrm{n}=220$ ) |  |  | XM ( $\mathrm{n}=208$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Top <br> Mention | \% Top 3 Mention | \% Any Mention | \% Top <br> Mention | \% Top 3 <br> Mention | \% Any Mention |
| - Music programming (no mention of commercial free) | 65 | 80 | 80 | 71 | 87 | 87 |
| - Talk/Entertainment | 21 | 38 | 40 | 11 | 25 | 27 |
| - Commercial free (no mention of music) | 21 | 33 | 34 | 24 | 38 | 38 |
| - Sports | 17 | 30 | 31 | 11 | 27 | 28 |
| - Coverage | 7 | 14 | 15 | 2 | 10 | 11 |
| - News | 5 | 15 | 18 | 8 | 23 | 24 |
| - Price | 5 | 6 | 7 | 4 | 13 | 13 |
| - Commercial Free music | 5 | 11 | 12 | 10 | 11 | 11 |
| - Comedy | 4 | 10 | 11 | 2 | 13 | 14 |
| - Weather/traffic | 2 | 5 | 5 | 0 | 3 | 5 |
| - Fewer/less commercials | 2 | 7 | 7 | 5 | 12 | 12 |
| - Kids | 1 | 3 | 4 | 1 | 3 | 4 |
| - Any Music Mentions (Net) | 66 | 83 | 83 | 75 | 88 | 88 |
| - Any Commercial Mentions (Net) | 26 | 44 | 45 | 33 | 51 | 51 |
| - Any Commercial Free Mentions (Net) | 25 | 40 | 40 | 29 | 43 | 43 |

[^32]Figure 4. Top Reasons for Subscribing/Considering Subscribing- General Draw (Q1)*

|  | Sirius ( $\mathrm{n}=220$ ) |  |  | XM ( $\mathrm{n}=208$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Top Mention | \% Top 3 Mention | \% Any Mention | \% Top Mention | \% Top 3 Mention | \% Any Mention |
| - Music programming (no mention of commercial free) | 15 | 32 | 32 | 18 | 37 | 39 |
| - Commercial free (no mention of music) | 15 | 24 | 25 | 17 | 29 | 29 |
| - Talk/Entertainment | 8 | 16 | 18 | 1 | 7 | 8 |
| - Coverage | 4 | 8 | 9 | 1 | 5 | 5 |
| - Price | 4 | 4 | 5 | 3 | 7 | 8 |
| - News | 3 | 5 | 5 | 1 | 2 | 2 |
| - Sports | 2 | 5 | 5 | 0 | 3 | 4 |
| - Commercial Free music | 2 | 5 | 5 | 2 | 4 | 4 |
| - Comedy | 1 | 1 | 1 | 0 | 0 | 1 |
| - Fewer/less commercials | 1 | 3 | 4 | 3 | 6 | 6 |
| - Kids | 0 | 1 | 1 | 0 | 0 | 0 |
| - Weather/traffic | 0 | 0 | 1 | 0 | 0 | 0 |
| - Any Music Mentions (Net) | 17 | 36 | 36 | 20 | 40 | 41 |
| - Any Commercial Mentions (Net) | 17 | 32 | 33 | 23 | 38 | 38 |
| - Any Commercial Free Mentions (Net) | 16 | 29 | 29 | 19 | 33 | 33 |

[^33]Figure 5. Programming Type Most Critical To Decision To Subscribe/Consider SubscribingProgramming Draw (Q2)*

|  | Sirius ( $\mathrm{n}=220$ ) |  |  | XM ( $\mathrm{n}=208$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Top Mention | \% Top 3 Mention | \% Any Mention | \% Top Mention | \% Top 3 Mention | \% Any Mention |
| - Music programming (no mention of commercial free) | 49 | 62 | 62 | 57 | 72 | 72 |
| - Sports | 12 | 23 | 23 | 7 | 21 | 23 |
| - Talk/Entertainment | 12 | 27 | 27 | 6 | 16 | 17 |
| - Comedy | 3 | 10 | 10 | 2 | 10 | 10 |
| - Weather/traffic | 2 | 4 | 4 | 0 | 2 | 4 |
| - News | 2 | 9 | 11 | 4 | 17 | 17 |
| - Commercial free (no mention of music) | 2 | 3 | 3 | 3 | 4 | 5 |
| - Coverage | 1 | 1 | 1 | 0 | 1 | 1 |
| - Commercial Free music | 1 | 3 | 4 | 2 | 2 | 2 |
| - Kids | 0 | 2 | 2 | 0 | 3 | 3 |
| - Price | 0 | 0 | 0 | 1 | 3 | 4 |
| - Fewer/less commercials | 0 | 1 | 1 | 0 | 0 | 0 |
| - Any Music Mentions (Net) | 50 | 65 | 65 | 60 | 74 | 74 |
| - Any Commercial Mentions (Net) | 3 | 7 | 8 | 6 | 7 | 8 |
| - Any Commercial Free Mentions (Net) | 3 | 6 | 6 | 5 | 7 | 7 |

[^34]Figure 6. Programming Type Most Critical To Decision To Continue To Subscribe- Retention (Q3)*

|  | Sirius ( $\mathrm{n}=160$ ) |  |  | XM ( $\mathrm{n}=147$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Top Mention | \% Top 3 Mention | \% Any Mention | \% Top Mention | \% Top 3 Mention | \% Any Mention |
| - Music programming (no mention of commercial free) | 43 | 56 | 56 | 48 | 62 | 63 |
| - Talk/Entertainment | 14 | 25 | 26 | 8 | 15 | 15 |
| - Sports | 10 | 19 | 19 | 8 | 19 | 19 |
| - Commercial free (no mention of music) | 6 | 9 | 9 | 7 | 14 | 14 |
| - Comedy | 3 | 4 | 4 | 1 | 7 | 7 |
| - News | 3 | 9 | 10 | 2 | 7 | 7 |
| - Kids | 1 | 1 | 1 | 1 | 3 | 3 |
| - Weather/traffic | 1 | 3 | 3 | 1 | 2 | 2 |
| - Price | 1 | 3 | 3 | 1 | 3 | 3 |
| - Commercial Free music | 1 | 4 | 4 | 2 | 3 | 3 |
| - Coverage | 0 | 1 | 1 | 0 | 4 | 5 |
| - Fewer/less commercials | 0 | 0 | 0 | 1 | 2 | 2 |
| - Any Music Mentions (Net) | 44 | 59 | 59 | 50 | 64 | 65 |
| - Any Commercial Mentions (Net) | 8 | 13 | 13 | 11 | 18 | 18 |
| - Any Commercial Free Mentions (Net) | 8 | 13 | 13 | 10 | 16 | 16 |

[^35]Figure 7. Aspects Of Satellite Radio That Would Be Missed Most If The Service Were Not Available (Q11)*

|  | Sirius ( $\mathrm{n}=160$ ) |  |  | XM ( $\mathrm{n}=147$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Top Mention | \% Top 3 Mention | \% Any Mention | \% Top Mention | \% Top 3 Mention | \% Any Mention |
| - Music programming (no mention of commercial free) | 34 | 46 | 46 | 41 | 54 | 54 |
| - Talk/Entertainment | 13 | 22 | 22 | 3 | 10 | 10 |
| - Commercial free (no mention of music) | 7 | 16 | 18 | 5 | 12 | 12 |
| - Sports | 5 | 12 | 13 | 6 | 16 | 16 |
| - Coverage | 5 | 8 | 8 | 2 | 5 | 6 |
| - Commercial Free music | 3 | 6 | 6 | 9 | 10 | 10 |
| - News | 2 | 5 | 5 | 5 | 9 | 9 |
| - Fewer/less commercials | 2 | 4 | 4 | 3 | 8 | 9 |
| - Comedy | 1 | 4 | 4 | 1 | 4 | 6 |
| - Kids | 1 | 2 | 2 | 0 | 0 | 0 |
| - Weather/traffic | 1 | 2 | 2 | 0 | 1 | 1 |
| - Price | 0 | 0 | 0 | 1 | 2 | 2 |
| - Any Music Mentions (Net) | 36 | 50 | 50 | 50 | 64 | 64 |
| - Any Commercial Mentions (Net) | 11 | 26 | 29 | 18 | 30 | 31 |
| - Any Commercial Free Mentions (Net) | 9 | 23 | 24 | 14 | 22 | 22 |

* Q11a: And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it?
Q11b: Anything else?

Figure 8. Importance Of Programming Type (Q4)*

| Type of Programming | Relative importance as reflected in \# of allocated points |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Sirius |  | XM |  |
|  | $\begin{gathered} \frac{\text { Share }}{(\mathrm{n}=220)} \\ \% \end{gathered}$ | Ranked Highest \% | $\frac{\text { Share }}{(\mathrm{n}=208)}$ | Ranked Highest \% |
| Music | $\begin{gathered} 39 \\ (35.77-42.74) \end{gathered}$ | $\begin{gathered} 69 \\ (62.98-75.20) \end{gathered}$ | $\begin{gathered} 48 \\ (44.20-52.18) \\ \hline \end{gathered}$ | $\begin{gathered} 78 \\ (72.77-83.96) \end{gathered}$ |
| Sports | $\begin{gathered} 14 \\ (11.14-16.06) \end{gathered}$ | $\begin{gathered} 19 \\ (13.49-23.78) \end{gathered}$ | $\begin{gathered} 12 \\ (9.71-14.13) \end{gathered}$ | $\begin{gathered} 16 \\ (10.90-20.83) \end{gathered}$ |
| Talk and Entertainment | $\begin{gathered} 14 \\ (11.90-16.68) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (12.28-22.27) \end{gathered}$ | $\begin{gathered} 10 \\ (7.87-11.63) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (8.82-18.10) \end{gathered}$ |
| Comedy | $\begin{gathered} 11 \\ (8.73-12.21) \end{gathered}$ | $\begin{gathered} 14 \\ (9.49-18.69) \end{gathered}$ | $\begin{gathered} 10 \\ (8.49-11.81) \end{gathered}$ | $\begin{gathered} 13 \\ (8.41-17.55) \end{gathered}$ |
| News | $\begin{gathered} 10 \\ (8.32-11.14) \end{gathered}$ | $\begin{gathered} 14 \\ (9.49-18.69) \\ \hline \end{gathered}$ | $\begin{gathered} 10 \\ (7.96-11.22) \end{gathered}$ | $\begin{gathered} 14 \\ (8.82-18.10) \end{gathered}$ |
| Local Weather and Traffic | $\begin{gathered} 8 \\ (6.89-9.86) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (4.20-11.26) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (4.87-7.32) \end{gathered}$ | $\begin{gathered} 6 \\ (2.60-8.94) \\ \hline \end{gathered}$ |
| Kids | $\begin{gathered} 4 \\ (2.87-5.70) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (2.12-7.88) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (3.04-5.57) \end{gathered}$ | $\begin{gathered} 6 \\ (2.60-8.94) \end{gathered}$ |
|  | 100 |  | 100 |  |

[^36]Figure 9. Usage Of Programming Type (Q8)*
Current Subscribers

| Type of Programming | Time Allocation |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Sirius |  | XM |  |
|  | $\begin{gathered} \text { Share } \\ \left(\begin{array}{c} \mathrm{n}=160) \\ \% \end{array}\right. \end{gathered}$ | Ranked $\frac{\text { Highest }}{\%}$ | $\begin{gathered} \text { Share } \\ (\mathrm{n}=147) \\ \% \end{gathered}$ | Ranked $\underset{\%}{\text { Highest }}$ \% |
| Music | $\begin{gathered} \mathbf{4 3} \\ (38.61-47.28) \end{gathered}$ | $\begin{gathered} 71 \\ (63.57-77.68) \end{gathered}$ | $\begin{gathered} 55 \\ (49.90-59.24) \end{gathered}$ | $\begin{gathered} \hline 84 \\ (78.48-90.23) \end{gathered}$ |
| Talk and Entertainment | $\begin{gathered} 16 \\ (12.70-18.83) \end{gathered}$ | $\begin{gathered} 21 \\ (14.36-26.89) \end{gathered}$ | $\begin{gathered} \hline 8 \\ (5.96-9.64) \end{gathered}$ | $\begin{gathered} 10 \\ (4.78-14.27) \end{gathered}$ |
| Sports | $\begin{gathered} 11 \\ (8.97-13.68) \end{gathered}$ | $\begin{gathered} 17 \\ (11.07-22.68) \end{gathered}$ | $\begin{gathered} 11 \\ (8.81-13.91) \end{gathered}$ | $\begin{gathered} 16 \\ (10.35-22.30) \end{gathered}$ |
| Comedy | $\begin{gathered} 11 \\ (8.37-13.42) \end{gathered}$ | $\begin{gathered} 13 \\ (7.89-18.36) \end{gathered}$ | $\begin{gathered} 9 \\ (7.25-11.14) \end{gathered}$ | $\begin{gathered} 10 \\ (5.31-15.10) \end{gathered}$ |
| News | $\begin{gathered} 8 \\ (6.48-9.38) \end{gathered}$ | $\begin{gathered} 9 \\ (4.86-13.89) \end{gathered}$ | $\begin{gathered} 8 \\ (6.08-10.26) \end{gathered}$ | $\begin{gathered} \hline 8 \\ (3.74-12.59) \end{gathered}$ |
| Local Weather and Traffic | $\stackrel{7}{(5.83-8.88)}$ | $\begin{gathered} 8 \\ (3.42-11.58) \end{gathered}$ | $\begin{gathered} 4 \\ (3.16-5.11) \end{gathered}$ | $\begin{gathered} 2 \\ (-0.24-4.33) \end{gathered}$ |
| Kids | $\begin{gathered} 4 \\ (12.37-5.21) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (1.21-7.54) \end{gathered}$ | $\begin{gathered} 5 \\ (3.00-6.52) \end{gathered}$ | $\begin{gathered} 7 \\ (3.23-11.74) \end{gathered}$ |
|  | 100 |  | 100 |  |

[^37]Figure 10. Relative Importance Of The Programming and Non-Programming
Attributes Of Satellite Radio Based On Conjoint Analysis- Value (Q4-7,10)*

|  | Sirius ( $\mathrm{n}=220$ ) |  | XM ( $\mathrm{n}=208$ ) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Average Importance | Top Mention | Average Importance | Top Mention |
| Type of Programming |  |  |  |  |
| A. Music | $\begin{gathered} 31 \\ (28.14-33.39) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 45 \\ (40.93-47.75) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (27.20-32.92) \\ \hline \end{gathered}$ | $\begin{gathered} 49 \\ (45.47-52.53) \\ \hline \end{gathered}$ |
| B. News | $\begin{gathered} 10 \\ (8.79-11.65) \end{gathered}$ | $\begin{gathered} 4 \\ (2.86-5.63) \end{gathered}$ | $\begin{gathered} 11 \\ (9.07-12.37) \end{gathered}$ | $\begin{gathered} 9 \\ (6.98-11.02) \end{gathered}$ |
| C. Sports | $\begin{gathered} 13 \\ (11.04-14.96) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (8.71-12.99) \end{gathered}$ | $\begin{gathered} 14 \\ (11.81-15.89) \end{gathered}$ | $\begin{gathered} 11 \\ (8.79-13.21) \end{gathered}$ |
| D. Talk and Entertainment | $\begin{gathered} 13 \\ (10.84-14.84) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (9.58-14.01) \end{gathered}$ | $\begin{gathered} 11 \\ (8.93-12.61) \end{gathered}$ | $\begin{gathered} 10 \\ (7.43-11.57) \\ \hline \end{gathered}$ |
| Other Satellite Radio Features and Price |  |  |  |  |
| E. Number of Minutes Per Hour of Commercials on Music Channels | $\begin{gathered} 13 \\ (11.07-14.80) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (8.71-12.99) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (11.39-14.77) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.89-7.11) \\ \hline \end{gathered}$ |
| F. Geographic Coverage | $\begin{gathered} 6 \\ (5.02-7.54) \end{gathered}$ | $\begin{gathered} 4 \\ (2.46-5.08) \end{gathered}$ | $\begin{gathered} 6 \\ (4.92-7.76) \end{gathered}$ | $\begin{gathered} 2 \\ (1.01-2.99) \end{gathered}$ |
| G. The Monthly Price for a Single Subscription | $\begin{gathered} 14 \\ (12.00-15.92) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (11.76-16.54) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (12.98-17.37) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (11.55-16.45) \end{gathered}$ |

[^38]Figure 11. Relative Importance Of Music As Reflected In The Choice Of Current Offering With Music Versus Current Offering Without Music (Q10)

|  | $\begin{aligned} & \text { Sirius } \\ & (n=220) \end{aligned}$ | $\begin{gathered} \text { XM } \\ (n=208) \end{gathered}$ |
| :---: | :---: | :---: |
|  | Intention To Subscribe | Intention To Subscribe |
| Current Offering (Card 65) | 7.32 | 6.93 |
| Current Offering With No Music (Card 66) | 2.40 | $\square 2.55$ |
| Ratio (current offering with no music $\div$ current offering) | . 33 | $.37$ |
|  | \% Giving 0 Points | \% Giving 0 Points |
| Current Offering (Card 65) | \% | $\square 5$ |
| Current Offering With No Music (Card 66) | $\square 56 \%$ | 57\% |
| Ratio (current offering with no music :current offering) | 11.2 | 11.4 |

## APPENDIX L

## REFERENCED SUPPORTING DATA

|  |  | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 428 | 307 | 121 | 220 | 208 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Total | 428 | 307 | 121 | 220 | 208 |
| Respondents | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would change | 259 | 176 | 83 | 127 | 132 |
| amount willing to pay | 61\% | 57\% | 69\% | 58\% | 63\% |
| Would cancel | 182 | 129 | 53 | 90 | 92 |
|  | 43\% | 42\% | 44\% | 41\% | 44\% |
| Would not change amount willing to pay | 141 | 110 | 31 | 79 | 62 |
|  | 33\% | 36\% | 26\% | 36\% | 30\% |
| Don't know if would change amount willing to | 28 | 21 | 7 | 14 | 14 |
|  | 7\% | 7\% | 6\% | 6\% | 7\% |
|  |  |  |  |  |  | pay

App. L. 1 Page 1


App. L. 1 Page 2

Figure 9/17/28 Amount Willing To Pay For Satellite Radio If A Specific Type Of Programming is Not Offered (Q9) No Sports

|  |  | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 428 | 307 | 121 | 220 | 208 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Total | 428 | 307 | 121 | 220 | 208 |
| Respondents | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would change | 160 | 109 | 51 | 88 | 72 |
| amount willing to pay | 37\% | 36\% | 42\% | 40\% | 35\% |
| Would cancel | 62 | 36 | 26 | 41 | 21 |
|  | 14\% | 12\% | 21\% | 19\% | 10\% |
| Would not change amount willing to pay | 214 | 160 | 54 | 111 |  |
|  | 50\% | $52 \%$ | 45\% | 50\% | 50\% |
|  |  |  |  |  |  |
| Don't know if would change amount willing to | 54 | 38 | 16 | 21 | 33 |
|  | 13\% | 12\% | 13\% | 10\% | 16\% |
|  |  |  |  |  |  |

App. L. 1 Page 3

Figure 9/17/28 Amount Willing To Pay For Satellite Radio If A Specific Type Of Programming is Not Offered (Q9) No Talk and Entertainment

|  |  | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 428 | 307 | 121 | 220 | 208 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Total | 428 | 307 | 121 | 220 | 208 |
| Respondents | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would change | 164 | 117 | 47 | 87 | 77 |
| amount willing to pay | 38\% | 38\% | 39\% | 40\% | 37\% |
| Would cancel | 62 | 45 | 17 | 37 | 25 |
|  | 14\% | 15\% | 14\% | 17\% | 12\% |
| Would not change | 213 | 152 | 61 | 107 | 106 |
| amount willing to | 50\% | 50\% | 50\% | 49\% | 51\% |
| pay |  |  |  |  |  |
| Don't know if | 51 | 38 | 13 | 26 | 25 |
| would change | 12\% | 12\% | 11\% | 12\% | 12\% |
| amount willing to |  |  |  |  |  |

App. L. 1 Page 4

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 400 | 286 | 114 | 206 | 194 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Respondents | 400 | 286 | 114 | 206 | 194 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the Same Price |  |  |  |  |  |
|  |  |  |  |  |  |
| 0 | 182 | 129 | 53 | 90 | 92 |
|  | 46\% | 45\% | 46\% | 44\% | 47\% |
| \$1.00 | 4 | 3 | 1 | - | 4 |
|  | 1\% | 1\% | 1\% | - | $2 \%$ |
| \$2.00 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$2.01 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$2.95 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | * | - |
| \$2.99 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | * | - |
| \$3.00 | 3 | 2 | 1 | 3 | - |
|  | 1\% | 1\% | 1\% | 1\% | - |
| \$3.95 | 2 | 1 | 1 | 1 | 1 |
|  | 1\% | * | 1\% | * | 1\% |
| \$4.95 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | * | 1\% |
| \$5.00 | 9 | 5 | 4 | 6 | 3 |
|  | 2\% | 2\% | 4\% | 3\% | $2 \%$ |
| \$5.95 | 4 | 3 | 1 | - | 4 |
|  | 1\% | 1\% | 1\% | - | 2\% |
| \$5.99 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | * | - |
| $\$ 6.00$ | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | * | 1\% |

App. L. 1 Page 5

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 400 | 286 | 114 | 206 | 194 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| \$6.95 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$7.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | * | - |
| \$7.95 | 2 | - | 2 | - | 2 |
|  | 1\% | - | 2\% | - | 1\% |
| \$8.00 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$8.50 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$8.95 | 5 | 4 | 1 | 2 | 3 |
|  | 1\% | 1\% | 1\% | 1\% | $2 \%$ |
| \$8.99 | 3 | 2 | 1 | 1 | 2 |
|  | 1\% | 1\% | 1\% | * | 1\% |
| \$9.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | * | - |
| \$9.90 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$9.95 | 6 | 2 | 4 | 4 | 2 |
|  | 2\% | 1\% | 4\% | 2\% | 1\% |
| \$9.98 | 1 | 1 | - | 1 | - |
|  | * | * | - | * | - |
| \$9.99 | 4 | 4 | - | 2 | 2 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$10.00 | 5 | - | 5 | 4 | 1 |
|  | 1\% | - | 4\% | 2\% | 1\% |
| \$10.50 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | * | - |

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Figure 9/17/28 Amount Willing to Pay If No Music

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 400 | 286 | 114 | 206 | 194 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| \$10.95 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | * | 1\% |
| \$10.99 | 2 | 2 | - | - | 2 |
|  | 1\% | 1\% | - | - | 1\% |
| \$11.00 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$12.92 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$12.95 | 141 | 110 | 31 | 79 | 62 |
|  | 35\% | 38\% | 27\% | 38\% | 32\% |
| \$13.00 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$14.00 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | * | - |
| \$15.00 | 3 | 2 | 1 | 1 | 2 |
|  | 1\% | 1\% | 1\% | * | 1\% |
| \$30.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | * | - |
| \$30.95 | 1 | 1 | - | 1 | - |
|  | * | * | - | * | - |
| Sigma | 400 | 286 | 114 | 206 | 194 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean (with 0) | 6.15 | 6.39 | 5.56 | 6.57 | 5.71 |
| Std. Err. | 0.31 | 0.38 | 0.55 | 0.45 | 0.43 |
| Mean (without 0) | 11.29 | 11.64 | 10.39 | 11.66 | 10.87 |
| Std. Err. | 0.25 | 0.30 | 0.46 | 0.36 | 0.35 |

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> Data Development Worldwide

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 364 | 256 | 108 | 189 | 175 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Respondents | 364 | 256 | 108 | 189 | 175 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| 0 | 57 | 34 | 23 | 31 | 26 |
|  | 16\% | 13\% | 21\% | 16\% | 15\% |
| \$2.00 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$2.50 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$2.99 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$3.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$5.00 | 5 | 4 | 1 | - | 5 |
|  | 1\% | 2\% | 1\% | - | 3\% |
| \$6.00 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$6.95 | 2 | 1 | 1 | 1 | 1 |
|  | 1\% | * | 1\% | 1\% | 1\% |
| \$7.00 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$7.50 | 1 | 1 | - | - |  |
|  | * | * | - | - | 1\% |
| \$7.95 | 3 | 1 | 2 | 1 | 2 |
|  | 1\% | * | 2\% | 1\% | 1\% |
| \$8.00 | 4 | 2 | 2 | 1 |  |
|  | 1\% | 1\% | $2 \%$ | 1\% | 2\% |
| \$8.25 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |

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> Data Development Worldwide

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 364 | 256 | 108 | 189 | 175 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| \$8.95 | 11 | 5 | 6 | 5 | 6 |
|  | 3\% | $2 \%$ | 6\% | 3\% | 3\% |
| \$8.99 | 2 | 1 | 1 | 1 | 1 |
|  | 1\% | * | 1\% | 1\% | 1\% |
| \$9.00 | 3 | 2 | 1 | 2 | 1 |
|  | 1\% | 1\% | 1\% | 1\% | 1\% |
| \$9.50 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |
| \$9.56 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$9.95 | 9 | 4 | 5 | 7 | 2 |
|  | 2\% | $2 \%$ | 5\% | 4\% | 1\% |
| \$9.99 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$10.00 | 15 | 10 | 5 | 10 | 5 |
|  | 4\% | 4\% | 5\% | 5\% | 3\% |
| \$10.01 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$10.50 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$10.95 | 14 | 11 | 3 | 6 | 8 |
|  | 4\% | 4\% | 3\% | 3\% | 5\% |
| \$10.99 | 2 | 2 | - | - | 2 |
|  | 1\% | 1\% | - | - | 1\% |
| \$11.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$12.00 | 8 | 6 | 2 | 6 | 2 |
|  | 2\% | 2\% | 2\% | 3\% | 1\% |

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Figure 9/17/28 Amount Willing to Pay If No News

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 364 | 256 | 108 | 189 | 175 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| \$12.10 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$12.77 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |
| \$12.92 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$12.95 | 196 | 150 | 46 | 102 | 94 |
|  | 54\% | 59\% | 43\% | 54\% | 54\% |
| \$12.99 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$13.50 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$13.58 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$14.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$14.95 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$14.99 | 2 | 1 | 1 | 2 | - |
|  | 1\% | * | 1\% | 1\% | - |
| \$15.00 | 4 | 3 | 1 | 2 | 2 |
|  | 1\% | 1\% | 1\% | 1\% | 1\% |
| \$19.95 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$50.00 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| Sigma | 364 | 256 | 108 | 189 | 175 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean (with 0) | 10.14 | 10.43 | 9.44 | 10.16 | 10.12 |

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|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 364 | 256 | 108 | 189 | 175 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| Std. Err. | 0.27 | 0.29 | 0.62 | 0.35 | 0.43 |
| Mean (without 0) | 12.02 | 12.03 | 11.99 | 12.15 | 11.89 |
| Std. Err. | 0.18 | 0.15 | 0.51 | 0.15 | 0.33 |

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|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 374 | 269 | 105 | 199 | 175 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Respondents | 374 | 269 | 105 | 199 | 175 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| 0 | 62 | 36 | 26 | 41 | 21 |
|  | 17\% | 13\% | 25\% | 21\% | 12\% |
| \$1.00 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$3.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$4.00 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$4.95 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$5.00 | 9 | 6 | 3 | 3 | 6 |
|  | $2 \%$ | 2\% | 3\% | 2\% | $3 \%$ |
| \$5.95 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$6.00 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$7.00 | 3 | 2 | 1 | 2 | 1 |
|  | 1\% | 1\% | 1\% | 1\% | 1\% |
| \$7.95 | 2 | 1 | 1 | - | 2 |
|  | 1\% | * | 1\% | - | 1\% |
| \$8.00 | 5 | 3 | 2 | 2 | 3 |
|  | 1\% | 1\% | $2 \%$ | 1\% | $2 \%$ |
| \$8.25 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$8.95 | 8 | 4 | 4 | 3 | 5 |
|  | 2\% | 1\% | 4\% | $2 \%$ | 3\% |

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|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 374 | 269 | 105 | 199 | 175 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| \$9.00 | 5 | 3 | 2 | 4 | 1 |
|  | 1\% | 1\% | $2 \%$ | $2 \%$ | 1\% |
| \$9.50 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$9.95 | 6 | , | 2 | 6 | - |
|  | $2 \%$ | 1\% | $2 \%$ | 3\% | - |
| \$9.99 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$10.00 | 15 | 12 | 3 | 9 | 6 |
|  | 4\% | 4\% | 3\% | 5\% | 3\% |
| \$10.30 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$10.95 | 10 | 9 | 1 | 3 | 7 |
|  | 3\% | $3 \%$ | 1\% | 2\% | 4\% |
| \$10.99 | 4 | 3 | 1 | 1 | 3 |
|  | 1\% | 1\% | 1\% | 1\% | 2\% |
| \$11.95 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$12.00 | 5 | 4 | 1 | 1 | 4 |
|  | 1\% | 1\% | 1\% | 1\% | 2\% |
| \$12.92 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$12.95 | 214 | 160 | 54 | 111 | 103 |
|  | 57\% | 59\% | 51\% | 56\% | 59\% |
| \$13.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$13.95 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |

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Figure 9/17/28 Amount Willing to Pay If No Sports

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 374 | 269 | 105 | 199 | 175 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| \$14.00 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |
| \$14.95 | 2 | 1 | 1 | - | 2 |
|  | 1\% | * | 1\% | - | 1\% |
| \$14.99 | 2 | 1 | 1 | 2 | - |
|  | 1\% | * | 1\% | 1\% | - |
| \$15.00 | 3 | 3 | - | 1 | 2 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$15.95 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$20.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$29.75 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| Sigma | 374 | 269 | 105 | 199 | 175 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean (with 0) | 9.99 | 10.40 | 8.95 | 9.57 | 10.47 |
| Std. Err. | 0.26 | 0.29 | 0.54 | 0.37 | 0.36 |
| Mean (without 0) | 11.98 | 12.01 | 11.90 | 12.05 | 11.90 |
| Std. Err. | 0.14 | 0.17 | 0.24 | 0.17 | 0.23 |

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|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 377 | 269 | 108 | 194 | 183 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Respondents | 377 | 269 | 108 | 194 | 183 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| 0 | 62 | 45 | 17 | 37 | 25 |
|  | 16\% | 17\% | 16\% | 19\% | 14\% |
| \$0.99 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$1.00 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$2.00 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |
| \$2.95 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$2.99 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$3.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$4.00 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$5.00 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$5.75 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |
| \$5.95 | 2 | 1 | 1 | 1 | 1 |
|  | 1\% | * | 1\% | 1\% | 1\% |
| \$6.00 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$6.50 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |

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Figure 9/17/28 Amount Willing to Pay If No Talk and Entertainment

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 377 | 269 | 108 | 194 | 183 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| \$6.95 | 2 | 1 | 1 | - | 2 |
|  | 1\% | * | 1\% | - | 1\% |
| \$6.99 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$7.00 | 2 | 1 | 1 | 2 | - |
|  | 1\% | * | 1\% | 1\% | - |
| \$7.95 | 3 | 1 | 2 | - | 3 |
|  | 1\% | * | 2\% | - | 2\% |
| \$8.00 | 7 | 6 | 1 | 6 | 1 |
|  | $2 \%$ | $2 \%$ | 1\% | 3\% | 1\% |
| \$8.50 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$8.95 | 8 | 4 | 4 | 4 | 4 |
|  | $2 \%$ | 1\% | 4\% | 2\% | 2\% |
| \$8.99 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$9.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$9.50 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$9.95 | 5 | 3 | 2 | 1 | 4 |
|  | 1\% | 1\% | 2\% | 1\% | 2\% |
| \$9.99 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$10.00 | 15 | 11 | 4 | 9 | 6 |
|  | 4\% | 4\% | 4\% | 5\% | 3\% |
| \$10.25 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |

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Figure 9/17/28 Amount Willing to Pay If No Talk and Entertainment

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 377 | 269 | 108 | 194 | 183 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| \$10.75 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$10.95 | 15 | 12 | 3 | 7 | 8 |
|  | 4\% | 4\% | 3\% | 4\% | 4\% |
| \$10.99 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$11.25 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$12.00 | 6 | 4 | 2 | 2 | 4 |
|  | $2 \%$ | 1\% | $2 \%$ | 1\% | $2 \%$ |
| \$12.29 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$12.50 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| \$12.95 | 213 | 152 | 61 | 107 | 106 |
|  | 56\% | 57\% | 56\% | 55\% | 58\% |
| \$12.99 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$13.95 | 2 | 2 | - | 2 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$13.99 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$14.00 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$14.95 | 1 | 1 | - | - | 1 |
|  | * | * | - | - | 1\% |
| \$14.99 | 2 | 1 | 1 | 2 | - |
|  | 1\% | * | 1\% | 1\% | - |

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Figure 9/17/28 Amount Willing to Pay If No Talk and Entertainment

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Respondents | 377 | 269 | 108 | 194 | 183 |
| Who Would Change | 100\% | 100\% | 100\% | 100\% | 100\% |
| Price/Keep the |  |  |  |  |  |
| Same Price |  |  |  |  |  |
| \$15.00 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$20.00 | 2 | - | 2 | - | 2 |
|  | 1\% | - | $2 \%$ | - | 1\% |
| \$30.00 | 1 | 1 | - | 1 | - |
|  | * | * | - | 1\% | - |
| Sigma | 377 | 269 | 108 | 194 | 183 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean (with 0) | 9.99 | 9.97 | 10.03 | 9.63 | 10.37 |
| Std. Err. | 0.26 | 0.31 | 0.48 | 0.38 | 0.35 |
| Mean (without 0) | 11.95 | 11.97 | 11.90 | 11.90 | 12.01 |
| Std. Err. | 0.15 | 0.17 | 0.28 | 0.23 | 0.19 |

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|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 259 | 176 | 83 | 127 | 132 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Would | 259 | 176 | 83 | 127 | 132 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing to Pay |  |  |  |  |  |
| 0 | 182 | 129 | 53 | 90 | 92 |
|  | 70\% | 73\% | 64\% | 71\% | 70\% |
| \$1.00 | 4 | 3 | 1 | - | 4 |
|  | $2 \%$ | $2 \%$ | 1\% | - | 3\% |
| \$2.00 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$2.01 | 1 | 1 | - | - | 1 |
|  | * | 1\% | - | - | 1\% |
| \$2.95 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |
| \$2.99 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |
| \$3.00 | 3 | 2 | 1 | 3 | - |
|  | 1\% | 1\% | 1\% | 2\% | - |
| \$3.95 | 2 | 1 | 1 | 1 | 1 |
|  | 1\% | 1\% | 1\% | 1\% | 1\% |
| \$4.95 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$5.00 | 9 | 5 | 4 | 6 | 3 |
|  | 3\% | 3\% | 5\% | 5\% | 2\% |
| \$5.95 | 4 | 3 | 1 | - | 4 |
|  | 2\% | 2\% | 1\% | - | 3\% |
| \$5.99 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |
| \$6.00 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | 1\% | 1\% |

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Figure 9/17/28 Amount Willing to Pay If No Music

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 259 | 176 | 83 | 127 | 132 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing to Pay |  |  |  |  |  |
| \$6.95 | 1 | 1 | - | - | 1 |
|  | * | 1\% | - | - | 1\% |
| \$7.00 | 1 | 1 | - | 1 | - |
|  | * | 1\% | - | 1\% | - |
| \$7.95 | 2 | - | 2 | - | 2 |
|  | 1\% | - | 2\% | - | 2\% |
| \$8.00 | 1 | 1 | - | - | 1 |
|  | * | 1\% | - | - | 1\% |
| \$8.50 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$8.95 | 5 | 4 | 1 | 2 | 3 |
|  | $2 \%$ | $2 \%$ | 1\% | $2 \%$ | $2 \%$ |
| \$8.99 | 3 | 2 | 1 | 1 | 2 |
|  | 1\% | 1\% | 1\% | 1\% | 2\% |
| \$9.00 | 1 | 1 | - | 1 | - |
|  | * | 1\% | - | 1\% | - |
| \$9.90 | 1 | 1 | - | - | 1 |
|  | * | 1\% | - | - | 1\% |
| \$9.95 | 6 | 2 | 4 | 4 | 2 |
|  | 2\% | 1\% | 5\% | 3\% | $2 \%$ |
| \$9.98 | 1 | 1 | - | 1 | - |
|  | * | 1\% | - | 1\% | - |
| \$9.99 | 4 | 4 | - | 2 | 2 |
|  | 2\% | 2\% | - | 2\% | 2\% |
| \$10.00 | 5 | - | 5 | 4 | 1 |
|  | 2\% | - | 6\% | 3\% | 1\% |
| \$10.50 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |

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Figure 9/17/28 Amount Willing to Pay If No Music

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 259 | 176 | 83 | 127 | 132 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing to Pay |  |  |  |  |  |
| \$10.95 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 1\% | - | 1\% | 1\% |
| \$10.99 | 2 | 2 | - | - | 2 |
|  | 1\% | 1\% | - | - | $2 \%$ |
| \$11.00 | 1 | 1 | - | - | 1 |
|  | * | 1\% | - | - | 1\% |
| \$12.92 | 1 | - | 1 | - | 1 |
|  | * | - | 1\% | - | 1\% |
| \$13.00 | 1 | 1 | - | - | 1 |
|  | * | 1\% | - | - | 1\% |
| \$14.00 | 1 | - | 1 | 1 | - |
|  | * | - | 1\% | 1\% | - |
| \$15.00 | 3 | 2 | 1 | 1 | 2 |
|  | 1\% | 1\% | 1\% | 1\% | 2\% |
| \$30.00 | 1 | 1 | - | 1 | - |
|  | * | 1\% | - | 1\% | - |
| \$30.95 | 1 | 1 | - | 1 | - |
|  | * | 1\% | - | 1\% | - |
| Sigma | 259 | 176 | 83 | 127 | 132 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean (with 0) | 2.45 | 2.29 | 2.80 | 2.60 | 2.31 |
| Std. Err. | 0.29 | 0.36 | 0.47 | 0.46 | 0.35 |
| Mean (without 0) | 8.25 | 8.57 | 7.75 | 8.92 | 7.64 |
| Std. Err. | 0.57 | 0.84 | 0.65 | 1.00 | 0.59 |

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|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 168 | 106 |  | 87 | 81 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Would | 168 | 106 | 62 | 87 | 81 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| 0 | 57 | 34 | 23 | 31 | 26 |
|  | 34\% | $32 \%$ | 37\% | 36\% | 32\% |
| \$2.00 | 1 | - | 1 | - | 1 |
|  | 1\% | - | $2 \%$ | - | 1\% |
| \$2.50 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$2.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$3.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$5.00 | 5 | 4 | 1 | - | 5 |
|  | $3 \%$ | 4\% | 2\% | - | 6\% |
| \$6.00 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$6.95 | 2 | 1 | 1 | 1 | 1 |
|  | 1\% | 1\% | 2\% | 1\% | 1\% |
| \$7.00 | 2 | 2 | - | 1 | 1 |
|  | 1\% | $2 \%$ | - | 1\% | 1\% |
| \$7.95 | 3 | 1 | 2 | 1 | 2 |
|  | 2\% | 1\% | 3\% | 1\% | 2\% |
| \$8.00 | 4 | 2 | 2 | 1 | 3 |
|  | 2\% | $2 \%$ | 3\% | 1\% | 4\% |
| \$8.25 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$8.95 | 11 | 5 | 6 | 5 | 6 |
|  | 7\% | 5\% | 10\% | 6\% | 7\% |

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|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 168 | 106 | 62 | 87 | 81 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| \$8.99 | 2 | 1 | 1 | 1 | 1 |
|  | 1\% | 1\% | 2\% | 1\% | 1\% |
| \$9.00 | 3 | 2 | 1 | 2 | 1 |
|  | 2\% | $2 \%$ | 2\% | 2\% | 1\% |
| \$9.50 | 1 | - | 1 | 1 | - |
|  | 1\% | - | $2 \%$ | 1\% | - |
| \$9.56 | 1 | - | 1 | - | 1 |
|  | 1\% | - | $2 \%$ | - | 1\% |
| \$9.95 | 9 | 4 | 5 | 7 | 2 |
|  | 5\% | 4\% | 8\% | 8\% | $2 \%$ |
| \$9.99 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 2\% | - | 1\% | 1\% |
| \$10.00 | 15 | 10 | 5 | 10 | 5 |
|  | 9\% | 9\% | 8\% | 11\% | 6\% |
| \$10.01 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 2\% | - | 1\% |
| \$10.50 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$10.95 | 14 | 11 | 3 | 6 | 8 |
|  | 8\% | 10\% | 5\% | 7\% | 10\% |
| \$10.99 | 2 | 2 | - | - | 2 |
|  | 1\% | $2 \%$ | - | - | 2\% |
| \$11.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$12.00 | 8 | 6 | 2 | 6 | 2 |
|  | 5\% | 6\% | 3\% | 7\% | 2\% |
| \$12.10 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |

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Figure 9/17/28 Amount Willing to Pay If No News

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 168 | 106 | 62 | 87 | 81 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| \$12.77 | 1 | - | 1 | 1 | - |
|  | 1\% | - | 2\% | 1\% | - |
| \$12.92 | 1 | - | 1 | - | 1 |
|  | 1\% | - | $2 \%$ | - | 1\% |
| \$12.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$13.50 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$13.58 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$14.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$14.95 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 2\% | - | 1\% |
| \$14.99 | 2 | 1 | 1 | 2 | - |
|  | 1\% | 1\% | 2\% | $2 \%$ | - |
| \$15.00 | 4 | 3 | 1 | 2 | 2 |
|  | $2 \%$ | 3\% | 2\% | 2\% | $2 \%$ |
| \$19.95 | 2 | 2 | - | 1 | 1 |
|  | 1\% | $2 \%$ | - | 1\% | 1\% |
| \$50.00 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 2\% | - | 1\% |
| Don't know/no | 1 | 1 | - | - | 1 |
| answer | 1\% | 1\% | - | - | 1\% |
| Sigma | 168 | 106 | 62 | 87 | 81 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean (with 0) | 6.86 | 6.87 | 6.84 | 6.88 | 6.83 |
| Std. Err. | 0.48 | 0.53 | 0.96 | 0.59 | 0.78 |
| Mean (without 0) | 10.38 | 10.12 | 10.87 | 10.69 | 10.07 |

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|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 168 | 106 | 62 | 87 | 81 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| Std. Err. | 0.45 | 0.37 | 1.10 | 0.33 | 0.86 |

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Figure 9/17/28 Amount Willing to Pay If No Sports

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 160 | 109 | 51 | 88 | 72 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Would | 160 | 109 | 51 | 88 | 72 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| 0 | 62 | 36 | 26 | 41 | 21 |
|  | 39\% | 33\% | 51\% | 47\% | 29\% |
| \$1.00 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$3.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$4.00 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$4.95 | 2 | 2 | - | 1 | 1 |
|  | 1\% | $2 \%$ | - | 1\% | 1\% |
| \$5.00 | 9 | 6 | 3 | 3 | 6 |
|  | 6\% | 6\% | 6\% | 3\% | 8\% |
| \$5.95 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$6.00 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$7.00 | 3 | 2 | 1 | 2 | 1 |
|  | 2\% | 2\% | $2 \%$ | 2\% | 1\% |
| \$7.95 | 2 | 1 | 1 | - | 2 |
|  | 1\% | 1\% | 2\% | - | 3\% |
| \$8.00 | 5 | 3 | 2 | 2 | 3 |
|  | 3\% | 3\% | 4\% | 2\% | 4\% |
| \$8.25 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$8.95 | 8 | 4 | 4 | 3 | 5 |
|  | 5\% | 4\% | 8\% | 3\% | 7\% |

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Figure 9/17/28 Amount Willing to Pay If No Sports

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 160 | 109 | 51 | 88 | 72 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| \$9.00 | 5 | 3 | 2 | 4 | 1 |
|  | 3\% | 3\% | 4\% | 5\% | 1\% |
| \$9.50 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$9.95 | 6 | 4 | 2 | 6 | - |
|  | 4\% | 4\% | 4\% | 7\% | - |
| \$9.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$10.00 | 15 | 12 | 3 | 9 | 6 |
|  | 9\% | 11\% | 6\% | 10\% | 8\% |
| \$10.30 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$10.95 | 10 | 9 | 1 | 3 | 7 |
|  | 6\% | 8\% | 2\% | 3\% | 10\% |
| \$10.99 | 4 | 3 | 1 | 1 | 3 |
|  | 3\% | 3\% | 2\% | 1\% | 4\% |
| \$11.95 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$12.00 | 5 | 4 | 1 | 1 | 4 |
|  | 3\% | 4\% | 2\% | 1\% | 6\% |
| \$12.92 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 2\% | - | 1\% |
| \$13.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$13.95 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$14.00 | 1 | - | 1 | 1 | - |
|  | 1\% | - | 2\% | 1\% | - |

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Figure 9/17/28 Amount Willing to Pay If No Sports

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 160 | 109 | 51 | 88 | 72 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| \$14.95 | 2 | 1 | 1 | - | 2 |
|  | 1\% | 1\% | 2\% | - | 3\% |
| \$14.99 | 2 | 1 | 1 | 2 | - |
|  | 1\% | 1\% | 2\% | 2\% | - |
| \$15.00 | 3 | 3 | - | 1 | 2 |
|  | $2 \%$ | 3\% | - | 1\% | 3\% |
| \$15.95 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$20.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$29.75 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| Sigma | 160 | 109 | 51 | 88 | 72 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean (with 0) | 6.04 | 6.66 | 4.71 | 5.31 | 6.93 |
| Std. Err. | 0.44 | 0.55 | 0.73 | 0.58 | 0.67 |
| Mean (without 0) | 9.86 | 9.94 | 9.62 | 9.94 | 9.78 |
| Std. Err. | 0.37 | 0.47 | 0.55 | 0.45 | 0.59 |

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Figure 9/17/28 Amount Willing to Pay If No Talk and Entertainment

|  |  | Subscriber | Considerer | Sirius | хм |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 164 | 117 | 47 | 87 | 77 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Would | 164 | 117 | 47 | 87 | 77 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| 0 | 62 | 45 | 17 | 37 | 25 |
|  | 38\% | 38\% | 36\% | 43\% | 32\% |
| \$0.99 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$1.00 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$2.00 | 1 | - | 1 | 1 | - |
|  | 1\% | - | $2 \%$ | 1\% | - |
| \$2.95 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$2.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$3.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$4.00 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 2\% | - | 1\% |
| \$5.00 | 2 | 2 | - | 1 | 1 |
|  | 1\% | $2 \%$ | - | 1\% | 1\% |
| \$5.75 | 1 | - | 1 | 1 | - |
|  | 1\% | - | 2\% | 1\% | - |
| \$5.95 | 2 | 1 | 1 | 1 | 1 |
|  | 1\% | 1\% | 2\% | 1\% | 1\% |
| \$6.00 | 1 | - | 1 | - | 1 |
|  | 1\% | - | $2 \%$ | - | 1\% |
| $\$ 6.50$ | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |

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Figure 9/17/28 Amount Willing to Pay If No Talk and Entertainment

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 164 | 117 | 47 | 87 | 77 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| \$6.95 | 2 | 1 | 1 | - | 2 |
|  | 1\% | 1\% | $2 \%$ | - | 3\% |
| \$6.99 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$7.00 | 2 | 1 | 1 | 2 | - |
|  | 1\% | 1\% | 2\% | $2 \%$ | - |
| \$7.95 | 3 | 1 | 2 | - | 3 |
|  | 2\% | 1\% | 4\% | - | 4\% |
| \$8.00 | 7 | 6 | 1 | 6 | 1 |
|  | 4\% | 5\% | 2\% | 7\% | 1\% |
| \$8.50 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$8.95 | 8 | 4 | 4 | 4 | 4 |
|  | 5\% | 3\% | 9\% | 5\% | 5\% |
| \$8.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$9.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$9.50 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$9.95 | 5 | 3 | 2 | 1 | 4 |
|  | 3\% | $3 \%$ | 4\% | 1\% | 5\% |
| \$9.99 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$10.00 | 15 | 11 | 4 | 9 | 6 |
|  | 9\% | 9\% | 9\% | 10\% | 8\% |
| \$10.25 | 1 | - | 1 | 1 | - |
|  | 1\% | - | 2\% | 1\% | - |

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Figure 9/17/28 Amount Willing to Pay If No Talk and Entertainment

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 164 | 117 | 47 | 87 | 77 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| \$10.75 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$10.95 | 15 | 12 | 3 | 7 | 8 |
|  | $9 \%$ | 10\% | 6\% | 8\% | 10\% |
| \$10.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$11.25 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$12.00 | 6 | 4 | 2 | 2 | 4 |
|  | 4\% | 3\% | 4\% | $2 \%$ | 5\% |
| \$12.29 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$12.50 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| \$12.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$13.95 | 2 | 2 | - | 2 | - |
|  | 1\% | 2\% | - | 2\% | - |
| \$13.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$14.00 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 2\% | - | 1\% |
| \$14.95 | 1 | 1 | - | - | 1 |
|  | 1\% | 1\% | - | - | 1\% |
| \$14.99 | 2 | 1 | 1 | 2 | - |
|  | 1\% | 1\% | 2\% | 2\% | - |
| \$15.00 | 2 | 2 | - | 1 | 1 |
|  | 1\% | 2\% | - | 1\% | 1\% |

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Satellite Radio
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Figure 9/17/28 Amount Willing to Pay If No Talk and Entertainment

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Would | 164 | 117 | 47 | 87 | 77 |
| Change Amount | 100\% | 100\% | 100\% | 100\% | 100\% |
| Willing To Pay |  |  |  |  |  |
| \$20.00 | 2 | - | 2 | - | 2 |
|  | 1\% | - | 4\% | - | 3\% |
| \$30.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 1\% | - | 1\% | - |
| Sigma | 164 | 117 | 47 | 87 | 77 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean (with 0) | 6.14 | 6.10 | 6.24 | 5.54 | 6.82 |
| Std. Err. | 0.44 | 0.53 | 0.83 | 0.62 | 0.63 |
| Mean (without 0) | 9.87 | 9.92 | 9.78 | 9.64 | 10.10 |
| Std. Err. | 0.38 | 0.45 | 0.71 | 0.60 | 0.47 |

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Figure 9/17/28 Amount Willing To Pay If No Music (Q9)


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Figure 9/17/28 Amount Willing To Pay If No Music (Q9)

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Total | 70 | 42 | 28 | 33 | 37 |
| Respondents Who | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would Reduce |  |  |  |  |  |
| Price Paid For |  |  |  |  |  |
| Satellite Radio |  |  |  |  |  |
| If No Music |  |  |  |  |  |
| \$6.00 | 2 | 2 | - | 1 | 1 |
|  | 3\% | 5\% | - | $3 \%$ | $3 \%$ |
| \$6.95 | 1 | 1 | - | - | 1 |
|  | 1\% | $2 \%$ | - | - | 3\% |
| \$7.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 3\% | - |
| \$7.95 | 2 | - | 2 | - | 2 |
|  | $3 \%$ | - | 7\% | - | 5\% |
| \$8.00 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | 3\% |
| \$8.50 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 4\% | - | 3\% |
| \$8.95 | 5 | 4 | 1 | 2 | 3 |
|  | 7\% | 10\% | 4\% | 6\% | 8\% |
| \$8.99 | 3 | 2 | 1 | 1 | 2 |
|  | 4\% | 5\% | 4\% | 3\% | 5\% |
| \$9.00 | 1 | 1 | - | 1 | - |
|  | 1\% | $2 \%$ | - | 3\% | - |
| \$9.90 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | $3 \%$ |
| \$9.95 | 6 | 2 | 4 | 4 | 2 |
|  | $9 \%$ | 5\% | 14\% | 12\% | 5\% |
| \$9.98 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 3\% | - |
| \$9.99 | 4 | 4 | - | 2 | 2 |
|  | 6\% | 10\% | - | 6\% | 5\% |

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Figure 9/17/28 Amount Willing To Pay If No Music (Q9)


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Satellite Radio
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Figure 9/17/28 Amount Willing To Pay If No News (Q9)


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Satellite Radio

Figure 9/17/28 Amount Willing To Pay If No News (Q9)

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Total | 96 | 61 | 35 | 48 | 48 |
| Respondents Who | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would Reduce |  |  |  |  |  |
| Price Paid For |  |  |  |  |  |
| Satellite Radio |  |  |  |  |  |
| If $\mathrm{N} \circ$ News |  |  |  |  |  |
| \$8.95 | 11 | 5 | 6 | 5 | 6 |
|  | 11\% | 8\% | 17\% | 10\% | 13\% |
| \$8.99 | 2 | 1 | 1 | 1 | 1 |
|  | $2 \%$ | $2 \%$ | 3\% | 2\% | 2\% |
| \$9.00 | 3 | 2 | 1 | 2 | 1 |
|  | 3\% | 3\% | 3\% | 4\% | 2\% |
| \$9.50 | 1 | - | 1 | 1 | - |
|  | 1\% | - | 3\% | 2\% | - |
| \$9.56 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 3\% | - | $2 \%$ |
| \$9.95 | 9 | 4 | 5 | 7 | 2 |
|  | 9\% | 7\% | 14\% | 15\% | 4\% |
| \$9.99 | 2 | 2 | - | 1 | 1 |
|  | 2\% | 3\% | - | 2\% | 2\% |
| \$10.00 | 15 | 10 | 5 | 10 | 5 |
|  | 16\% | 16\% | 14\% | 21\% | 10\% |
| \$10.01 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 3\% | - | $2 \%$ |
| \$10.50 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 2\% | - |
| \$10.95 | 13 | 10 | 3 | 6 | 7 |
|  | 14\% | 16\% | 9\% | 13\% | 15\% |
| \$10.99 | 2 | 2 | - | - | 2 |
|  | $2 \%$ | 3\% | - | - | 4\% |
| \$11.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 2\% | - |

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Figure 9/17/28 Amount Willing To Pay If No News (Q9)

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Total | 96 | 61 | 35 | 48 | 48 |
| Respondents Who | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would Reduce |  |  |  |  |  |
| Price Paid For |  |  |  |  |  |
| Satellite Radio |  |  |  |  |  |
| If No News |  |  |  |  |  |
| \$12.00 | 8 | 6 | 2 | 6 | 2 |
|  | 8\% | 10\% | 6\% | 13\% | 4\% |
| \$12.10 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 2\% | - |
| \$12.77 | 1 | - | 1 | 1 | - |
|  | 1\% | - | 3\% | 2\% | - |
| \$12.92 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 3\% | - | 2\% |
| Don't know/no | 1 | 1 | - | - | 1 |
| answer | 1\% | $2 \%$ | - | - | 2\% |
| Sigma | 96 | 61 | 35 | 48 | 48 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean | 9.30 | 9.24 | 9.40 | 9.96 | 8.64 |
| Std. Err. | 0.23 | 0.30 | 0.34 | 0.24 | 0.37 |

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Satellite Radio
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Figure 9/17/28 Amount Willing To Pay If No Sports (Q9)


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Satellite Radio
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Figure 9/17/28 Amount Willing To Pay If No Sports (Q9)

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Total | 85 | 63 | 22 | 40 | 45 |
| Respondents Who | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would Reduce |  |  |  |  |  |
| Price Paid For |  |  |  |  |  |
| Satellite Radio |  |  |  |  |  |
| If $N$ o Sports |  |  |  |  |  |
| \$8.95 | 8 | 4 | 4 | 3 | 5 |
|  | $9 \%$ | 6\% | 18\% | 8\% | 11\% |
| \$9.00 | 5 | 3 | 2 | 4 | 1 |
|  | 6\% | 5\% | 9\% | 10\% | 2\% |
| \$9.50 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 3\% | - |
| \$9.95 | 6 | 4 | 2 | 6 | - |
|  | 7\% | 6\% | 9\% | 15\% | - |
| \$9.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | $2 \%$ |
| \$10.00 | 15 | 12 | 3 | 9 | 6 |
|  | 18\% | 19\% | 14\% | 23\% | 13\% |
| \$10.30 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 3\% | - |
| \$10.95 | 10 | 9 | 1 | 3 | 7 |
|  | 12\% | 14\% | 5\% | 8\% | 16\% |
| \$10.99 | 4 | 3 | 1 | 1 | 3 |
|  | 5\% | 5\% | 5\% | 3\% | 7\% |
| \$11.95 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 3\% | - |
| \$12.00 | 5 | 4 | 1 | 1 | 4 |
|  | 6\% | 6\% | 5\% | 3\% | 9\% |
| \$12.92 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 5\% | - | 2\% |
| Sigma | 85 | 63 | 22 | 40 | 45 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean | 8.88 | 8.86 | 8.93 | 8.98 | 8.79 |

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Figure 9/17/28 Amount Willing To Pay If No Sports (Q9)

|  |  | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Total | 85 | 63 | 22 | 40 | 45 |
| Respondents Who | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would Reduce |  |  |  |  |  |
| Price Paid For |  |  |  |  |  |
| Satellite Radio |  |  |  |  |  |
| If No Sports |  |  |  |  |  |
| Std. Err. | 0.26 | 0.32 | 0.45 | 0.33 | 0.40 |

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Satellite Radio
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Figure 9/17/28 Amount Willing To Pay If No Talk and Entertainment (Q9)

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unweighted Base | 89 | 63 | 26 | 44 | 45 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Base: Total | 89 | 63 | 26 | 44 | 45 |
| Respondents Who | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would Reduce |  |  |  |  |  |
| Price Paid For |  |  |  |  |  |
| Satellite Radio |  |  |  |  |  |
| If No Talk and |  |  |  |  |  |
| Entertainment |  |  |  |  |  |
| 0 | - | - | - | - | - |
|  | - | - | - | - | - |
| \$0.99 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | $2 \%$ | - |
| \$1.00 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | 2\% |
| \$2.00 | 1 | - | 1 | 1 | - |
|  | 1\% | - | 4\% | 2\% | - |
| \$2.95 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 2\% | - |
| \$2.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | 2\% |
| \$3.00 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 2\% | - |
| \$4.00 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 4\% | - | $2 \%$ |
| \$5.00 | 2 | 2 | - | 1 | 1 |
|  | 2\% | 3\% | - | 2\% | $2 \%$ |
| \$5.75 | 1 | - | 1 | 1 | - |
|  | 1\% | - | 4\% | 2\% | - |
| \$5.95 | 2 | 1 | 1 | 1 | 1 |
|  | 2\% | $2 \%$ | 4\% | 2\% | $2 \%$ |
| \$6.00 | 1 | - | 1 | - | 1 |
|  | 1\% | - | 4\% | - | $2 \%$ |

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Figure 9/17/28 Amount Willing To Pay If No Talk and Entertainment (Q9)

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Total | 89 | 63 | 26 | 44 | 45 |
| Respondents Who | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would Reduce |  |  |  |  |  |
| Price Paid For |  |  |  |  |  |
| Satellite Radio |  |  |  |  |  |
| If No Talk and |  |  |  |  |  |
| Entertainment |  |  |  |  |  |
| \$6.50 | 1 | 1 | - | 1 | - |
|  | 1\% | $2 \%$ | - | $2 \%$ | - |
| \$6.95 | 2 | 1 | 1 | - | 2 |
|  | $2 \%$ | $2 \%$ | 4\% | - | 4\% |
| \$6.99 | 1 | 1 | - | 1 | - |
|  | 1\% | $2 \%$ | - | $2 \%$ | - |
| \$7.00 | 2 | 1 | 1 | 2 | - |
|  | $2 \%$ | 2\% | 4\% | 5\% | - |
| \$7.95 | 3 | 1 | 2 | - | 3 |
|  | 3\% | 2\% | 8\% | - | 7\% |
| \$8.00 | 7 | 6 | 1 | 6 | 1 |
|  | 8\% | 10\% | 4\% | 14\% | $2 \%$ |
| \$8.50 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | $2 \%$ |
| \$8.95 | 8 | 4 | 4 | 4 | 4 |
|  | $9 \%$ | 6\% | 15\% | 9\% | 9\% |
| \$8.99 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | 2\% |
| \$9.00 | 1 | 1 | - | 1 | - |
|  | 1\% | $2 \%$ | - | $2 \%$ | - |
| \$9.50 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | 2\% |
| \$9.95 | 5 | 3 | 2 | 1 | 4 |
|  | 6\% | 5\% | 8\% | 2\% | $9 \%$ |
| \$9.99 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | $2 \%$ | - |

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Satellite Radio
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Figure 9/17/28 Amount Willing To Pay If No Talk and Entertainment (Q9)

|  | Total | Subscriber | Considerer | Sirius | XM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base: Total | 89 | 63 | 26 | 44 | 45 |
| Respondents Who | 100\% | 100\% | 100\% | 100\% | 100\% |
| Would Reduce |  |  |  |  |  |
| Price Paid For |  |  |  |  |  |
| Satellite Radio |  |  |  |  |  |
| If No Talk and |  |  |  |  |  |
| Entertainment |  |  |  |  |  |
| \$10.00 | 15 | 11 | 4 | 9 | 6 |
|  | 17\% | 17\% | 15\% | 20\% | 13\% |
| \$10.25 | 1 | - | 1 | 1 | - |
|  | 1\% | - | 4\% | $2 \%$ | - |
| \$10.75 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | 2\% |
| \$10.95 | 15 | 12 | 3 | 7 | 8 |
|  | 17\% | 19\% | 12\% | 16\% | 18\% |
| \$10.99 | 1 | 1 | - | - | 1 |
|  | 1\% | $2 \%$ | - | - | 2\% |
| \$11.25 | 1 | 1 | - | - | 1 |
|  | 1\% | $2 \%$ | - | - | 2\% |
| \$12.00 | 6 | 4 | 2 | 2 | 4 |
|  | 7\% | 6\% | 8\% | 5\% | 9\% |
| \$12.29 | 1 | 1 | - | - | 1 |
|  | 1\% | 2\% | - | - | $2 \%$ |
| \$12.50 | 1 | 1 | - | 1 | - |
|  | 1\% | 2\% | - | 2\% | - |
| Sigma | 89 | 63 | 26 | 44 | 45 |
|  | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mean | 8.91 | 9.03 | 8.63 | 8.62 | 9.20 |
| Std. Err. | 0.27 | 0.33 | 0.48 | 0.40 | 0.37 |

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| SC: | Are you or any members of your household employed in any of the industries listed on this card? |
| :--- | :--- |
| Response: | An insurance company: No |
|  | A marketing research firm: No |
|  | An advertising agency: No |
|  | The entertainment industry: No |
|  | A satellite radio provider. No |
|  | A cable TV provider: No |

## DDW 02/629 SUBSCRIBERS CASE ID 10014 (Continued)

| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100. Comedy: 0 |
|  | Kids: 0 |
|  | Local Weather and Traffic: 0 |
|  | Music: 60 |
|  | News: 20 |
|  | Sports: 20 |
|  | Talk and Entertainment: 0 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? <br> Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 74 Music Channels.) |
| Response: | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 1 |
|  | 3. The same number of channels and the same variety of music as currently offered: 7 |
|  | 4. Substantially more channels and more variety of music than currently offered: 8 |
| Q58: | B. News (Current Offering includes 13 News Channels.) |
| Response: | 1. No news programming: 0 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 7 |
|  | 3. The same number of channels and the same variety of news as currently offered: 3 |
|  | 4. Substantially more channels and more variety of news than currently offered: 1 |
| Q5C: | C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.) |
| Response: | 1. No sports programming: 0 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 1 |
|  | 3. The same number of channels and same variety of sports as currently offered: 7 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 5 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.) |
| Response: | 1. No talk and entertainment programming: 7 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 8 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 3 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 0 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 10 |
|  | 2. 2 minutes of commercials per hour: 6 |
|  | 3. 5 minutes of commercials per hour: 3 |
|  | 4. 12 minutes of commercials per hour: 0 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 9 |
|  | 2. Complete nationwide coverage: 10 |


| Q6b: | Now, let's turn to price. l'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 10 <br> 2. $\$ 10.95$ per month: 9 <br> 3. $\$ 12.95$ per month: 8 <br> 4. $\$ 14.95$ per month: 8 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Respo | Other, please specify: specificity of sports stations |
|  | Anything else? |
| Respo | Yes |
| Q6cf2: | What else? <br> vast variety of contrasting options eg: conservative talk radio right next to liberal talk radio |
| Q7: | Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points $(0$ to 100$)$ you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: $\mathbf{3 0}$ <br> Geographic coverage: $\mathbf{2 0}$ <br> The monthly price for a single subscription: 0 <br> Other (specificity of sports stations): 20 <br> Other (vast variety of contrasting options eg: conservative talk radio right next to liberal talk radio): $\mathbf{3 0}$ |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the \% of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 0 <br> Kids: 0 <br> Local Weather and Traffic: 0 <br> Music: 75 <br> News: 10 <br> Sports: 10 <br> Taik and Entertainment: 5 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: No <br> NEWS: No <br> SPORTS: Yes <br> TALK AND ENTERTAINMENT: Yes |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: | SPORTS: 510.00 <br> TALK AND ENTERTAINMENT: Would Cancel Subscription |


| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10. For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 57: 10 |
|  | Card 58:0 |
|  | Card 59: 0 |
|  | Card 60: 0 |
|  | Card 61: 10 |
|  | Card 62: 0 |
|  | Card 63: 6 |
|  | Card 64:0 |
|  | Card 65: 10 |
|  | Card 66: 0 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | The music. |
| Q11b: | Anything else? |
| Response: | I have enjoyed XM radio. I only use it in my vehicles. I hardly listen to regular radio except for sports and rarely play CD's anymore. |


| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider. No <br> A cable TV provider: No <br> An Intemet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response | 18-24 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to cable TV Decision to subscribe to an Internet service Decision to subscribe to satellite radio Decision to subscribe to a wireless phone service |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Cable TV <br> Broadband Internet Wireless phone service |
| SI: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Satellite TV: Yes |
|  | Satellite radio: Yes |
| SJ: | Which of the following best describes the type of satellite radio you or your household are considering? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directiy from XM or Sirius |
| SL: | Which satellite radio service are you currently considering subscribing to? |
| Response: | Both |
| Sm: | Do you wear glasses or contact lenses when you read? |
| Response: | Yes |
| SN: | Do you have your glasses with you or are you wearing your contact lenses today? |
| Response: | Yes |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Why are you considering subscribing to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | No commercials convenient different types of music on them not the same old songs. w/e nothing else |
| Q1b: | 1 (b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | it will save me money by not buying alot of cds. That you have over 250 channels to choose from. w/e nothing else |
| Q2a: | 2(a) What types of satellite radio programming are most critical to your decision whether to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: Q2b: | music and sport and news and about the traffic in different states if i am going on vacation. w/e nothing else 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | the weather and a variaty of different area that you can get news in not only illinois but different states as well. w/e nothing else |
| HO1: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIMHERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HEISHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Interviewer entering answers |

## DDW 02/629 CONSIDERING SUBSCRIBING CASE ID 20040 (Continued)




| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Intemet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 35-49 years |
|  | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to cable TV <br> Decision to subscribe to an Internet service <br> Decision to subscribe to satellite radio <br> Decision to subscribe to a wireless phone service <br> Decision to subscribe to satellite TV |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Cable TV <br> Broadband Internet Satellite radio |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| SI: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Satellite TV: No |
| SK: | Which satellite radio service do you or your household currently subscribe to? |
| Response: | XM |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Female |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | it's anything you want to hear at anytime. |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | $(P)$ it's an easy way to listen to all types of music. |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? <br> (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | the music for sure and the news and the sports for my husband |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | nothing else. |
| Q3a: Response | 3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) music |
| Q3b: | 3 (b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | news |
| HO1: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HEISHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Respondent entering answers |


| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100 . Comedy: 0 |
|  | Kids: 0 |
|  | Local Weather and Traffic: 10 |
|  | Music: 40 |
|  | News: 25 |
|  | Sports: 20 |
|  | Talk and Entertainment: 5 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from "0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? <br> Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 74 Music Channels.) |
| Respo | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 1 |
|  | 3. The same number of channels and the same variety of music as currently offered: 3 |
|  | 4. Substantially more channels and more variety of music than currently offered: 10 |
| Q5B: | B. News (Current Offering includes 13 News Channels.) |
| Response: | 1. No news programming: 0 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: $\mathbf{1}$ |
|  | 3. The same number of channels and the same variety of news as currently offered: 4 |
|  | 4. Substantially more channels and more variety of news than currently offered: 8 |
| Q5C: | C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.) |
| Response: | 1. No sports programming: 0 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 0 |
|  | 3. The same number of channels and same variety of sports as currently offered: 7 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 8 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.) |
| Response: | 1. No talk and entertainment programming: 0 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 1 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 4 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 8 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 10 |
|  | 2. 2 minutes of commercials per hour: 7 |
|  | 3.5 minutes of commercials per hour: 4 |
|  | 4. 12 minutes of commercials per hour: 0 |
|  | B. Geographic Coverage <br> 1. Typical FM coverage: 6 |
|  | 2. Complete nationwide coverage: 10 |

## DDW 02/629 SUBSCRIBERS CASE ID 20054 (Continued)

| Q6b: | Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 10 <br> 2. $\$ 10.95$ per month: 6 <br> 3. $\$ 12.95$ per month: 3 <br> 4. $\$ 14.95$ per month: 0 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> -Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100 ) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: $\mathbf{5 0}$ Geographic coverage: 10 <br> The monthly price for a single subscription: 40 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 0 <br> Kids: 0 <br> Local Weather and Traffic: 10 <br> Music: 40 <br> News: 20 <br> Sports: 20 <br> Talk and Entertainment: 10 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: No <br> NEWS: No <br> SPORTS: No <br> TALK AND ENTERTAINMENT: No |
| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radic offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to " 10 " meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| Response: | Card 17:9 |
|  | Card 18: 3 |
|  | Card 19:9 |
|  | Card 20: 0 |
|  | Card 21: 0 |
|  | Card 22: 2 |
|  | Card 23: 0 |
|  | Card 24: 2 |
|  | Card 65: 10 |
|  | Card 66: 0 |
| Q11a: | And finally, reflecting on your experience with satelite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Respons | The variety |

DDW 02/629 SUBSCRIBERS CASE ID 20054 (Continued)
Q11b: Anything else?
Response: no, nothing else.

| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Internet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 35-49 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to satellite radio |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Cable TV |
|  | Broadband Internet |
|  | Satellite radio |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| Sl: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Satellite TV: Yes |
|  | Wireless phone service: Yes |
| SK: | Which satellite radio service do you or your househoid currently subscribe to? |
| Response: | Sirius |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | Yes |
| SN: | Do you have your glasses with you or are you wearing your contact lenses today? |
| Response: | Yes |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | IT WAS A GIFT |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | BECASUE I AM HARD TO BUY FOR |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | THE COMEDY |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | CLASSIC ROCK |
| Q3a: | 3(a) And now, reffecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | MUSIC AND COMEDY |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | MUSIC |
| H01: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Interviewer entering answers |

## DDW 02/629 SUBSCRIBERS CASE ID 20092 (Continued)

| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satelite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: <br> Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100 . Comedy: 50 |
|  | Kids: 0 |
|  | Local Weather and Traffic: 0 |
|  | Music: 50 |
|  | News: 0 |
|  | Sports: 0 |
|  | Talk and Entertainment: 0 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
| Response: | Please click "Okay" if this |
| Q5A: | A. Music Programming (Current Offering includes 66 Music Channels.) |
| Response: | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 0 |
|  | 3. The same number of channels and the same variety of music as currently offered: 0 |
|  | 4. Substantially more channels and more variety of music than currently offered: 9 |
| Q5B: | B. News (Current Offering includes 15 News Channels.) |
| Response: | 1. No news programming: 1 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 1 |
|  | 3. The same number of channels and the same variety of news as currently offered: 1 |
|  | 4. Substantially more channels and more variety of news than currently offered: 9 |
| Q5C: | C. Sports (Current Offering includes 8 Sports Channels and Live Game Channels for NBA, NFL, etc.) |
| Response: | 1. No sports programming: 0 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 1 |
|  | 3. The same number of channels and same variety of sports as currently offered: 0 |
|  | 4. Substantially more channels and more variety of sporis than currently offered: 1 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc.) |
| Response: | 1. No talk and entertainment programming: 2 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: $\mathbf{8}$ |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 3 |
|  | 4. Substantially more channeis and more variety of talk and entertainment than currently offered: 3 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 0 |
|  | 2. 2 minutes of commercials per hour: 1 |
|  | 3. 5 minutes of commercials per hour: 2 |
|  | 4. 12 minutes of commercials per hour: 3 |
|  | 8. Geographic Coverage |
|  | 1. Typical FM coverage: 2 |
|  | 2. Complete nationwide coverage: $\mathbf{2}$ |

## DDW 02/629 SUBSCRIBERS CASE ID 20092 (Continued)

| Q6b: | Now, let's turn to price. l'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 9 <br> 2. $\$ 10.95$ per month: 8 <br> 3. $\$ 12.95$ per month: 7 <br> 4. $\$ 14.95$ per month: 6 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Respon | Other, please specify: VARIETY OF PROGRAMMING |
|  | Anything else? |
| Response: | No |
| Q7: | Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points $(0$ to 100$)$ you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: 10 Geographic coverage: 0 <br> The monthly price for a single subscription: 60 Other (VARIETY OF PROGRAMMING): 30 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 50 <br> Kids: 0 <br> Local Weather and Traffic: 0 <br> Music: 50 <br> News: 0 <br> Sports: 0 <br> Talk and Entertainment: 0 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: No <br> NEWS: Yes <br> SPORTS: Yes <br> TALK AND ENTERTAINMENT: Yes |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: | NEWS: $\$ 14.99$ <br> SPORTS: $\mathbf{\$ 1 4 . 9 9}$ <br> TALK AND ENTERTAINMENT: $\$ 14.99$ |
| Q9c: | Are you willing to pay more than the current price of $\$ 12.95$ per month if no [PRGTYPE] were available but all other programming features of the service remain the same? |
| Response: | NEWS: Yes SPORTS: Yes TALK AND ENTERTAINMENT: Yes |

## DDW 02/629 SUBSCRIBERS CASE ID 20092 (Continued)

| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from "0" meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 9:8 8 8 |
|  | Card 10: 8 |
|  | Card 11:8 |
|  | Card 12: 8 |
|  | Card 13:9 |
|  | Card 14:8 |
|  | Card 15: 8 |
|  | Card 16: 9 |
|  | Card 65: 9 |
|  | Card 66: 8 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | THE VARIETY |
| Q11b: | Anything else? |
| Response: | NO COMMERCIALS |


| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Internet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 35-49 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to an Internet service |
|  | Decision to subscribe to satellite radio |
|  | Decision to subscribe to a wireless phone service |
|  | Decision to subscribe to satellite TV |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Satellite radio |
|  | Wireless phone service |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| SI: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Cable TV: Yes |
|  | Satellite TV: Yes |
|  | Broadband Internet: Yes |
| SK: | Which satellite radio service do you or your household currently subscribe to? |
| Response: | Sirius |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | WELL I WANTED A LARGER SELECTION OF MUSIC |
| Q1b: | 1 (b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | NOTHING |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satelite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | I DONT KNOW |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | NOTHING |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | THE MUSIC PROGRAMS |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | ILIKE MUSIC |
| H01: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMIHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Respondent entering answers |


| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100 ) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Respon | Okay |
| Q4: <br> Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100. Comedy: 25 |
|  | Kids: 10 |
|  | Local Weather and Traffic: 20 |
|  | Music: 20 |
|  | News: 10 |
|  | Sports: 10 |
|  | Talk and Entertainment: 5 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
|  | Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 66 Music Channels.) |
| Response: | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 4 |
|  | 3. The same number of channels and the same variety of music as currently offered: 8 |
|  | 4. Substantially more channels and more variety of music than currently offered: 9 |
| Q5B: | B. News (Current Offering includes 15 News Channeis.) |
| Response: | 1. No news programming: 6 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 4 |
|  | 3. The same number of channels and the same variety of news as currently offered: 5 |
|  | 4. Substantially more channels and more variety of news than currently offered: 7 |
| Q5C: | C. Sports (Current Offering includes 8 Sports Channels and Live Game Channels for NBA, NFL, etc.) |
| Response: | 1. No sports programming: 5 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 7 |
|  | 3. The same number of channels and same variety of sports as currently offered: 3 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 8 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc.) |
| Response: | 1. No talk and entertainment programming: 4 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 1 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 1 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 8 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels <br> 1. No commercials on music channels: 6 <br> 2. 2 minutes of commercials per hour: 9 <br> 3. 5 minutes of commercials per hour: 2 <br> 4. 12 minutes of commercials per hour: 2 |
|  | B. Geographic Coverage <br> 1. Typical FM coverage: 7 |
|  | 2. Complete nationwide coverage: 10 |


| Q6b: | Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 5 <br> 2. $\$ 10.95$ per month: 6 <br> 3. $\$ 12.95$ per month: 3 <br> 4. $\$ 14.95$ per month: 0 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points $(0$ to 100 ) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: 25 Geographic coverage: $\mathbf{5 0}$ <br> The monthly price for a single subscription: 25 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response | Comedy: 15 <br> Kids: 5 <br> Local Weather and Traffic: 10 <br> Music: 15 <br> News: 20 <br> Sports: $\mathbf{2 5}$ <br> Talk and Entertainment: 10 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: Yes <br> NEWS: No <br> SPORTS: Yes <br> TALK AND ENTERTAINMENT: Yes |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: | MUSIC: $\$ 5.00$ <br> SPORTS: $\$ 5.00$ <br> TALK AND ENTERTAINMENT: $\$ 5.00$ |

Q10: Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering.
If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10. For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that.
Response: Card 1:7
Card 2: 0
Card 3: 5
Card 4: 10
Card 5: 0
Card 6: 3
Card 7: 0
Card 8: 3
Card 65: 9
Card 66: 5
Q11a: And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it?
Response: MUSIC
Q11b: Anything else?
Response: NO

| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Intemet senvice provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 18-24 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to cable TV <br> Decision to subscribe to an Internet service <br> Decision to subscribe to satellite radio <br> Decision to subscribe to a wireless phone service <br> Decision to subscribe to satellite TV |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Satellite TV <br> Satellite radio <br> Wireless phon |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| SI: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Cable TV: Don't know <br> Broadband Internet: Don't know |
| SK: | Which satellite radio service do you or your household currently subscribe to? |
| Response: | Sirius |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: Q1a: | Gave phone number <br> Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | I LIKE TO TRY NEW STUFF |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | NONE |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | HIP HOP, SPORTS, PRAISE |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | NONE |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satelite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | HIP HOP, SPORTS AND PRAISE |
| Q3b: <br> Response: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) NONE |
| H01: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HEISHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMIHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Respondent entering answers |

## DDW 02/629 SUBSCRIBERS CASE ID 20117 (Continued)

| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: <br> Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100. Comedy: 0 |
|  | Kids: 0 |
|  | Local Weather and Traffic: 100 |
|  | Music: 0 |
|  | News: 0 |
|  | Sports: 0 |
|  | Talk and Entertainment: 0 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to $10^{\prime \prime}$ to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? <br> Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 66 Music Channels.) |
| Response: | 1. No music programming: 2 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 4 |
|  | 3. The same number of channels and the same variety of music as currently offered: 2 |
|  | 4. Substantially more channels and more variety of music than currently offered: 5 |
| Q5B: | B. News (Current Offering includes 15 News Channels.) |
| Response: | 1. No news programming: 1 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 4 |
|  | 3. The same number of channels and the same variety of news as currently offered: 6 |
|  | 4. Substantially more channels and more variety of news than currently offered: 9 |
|  | C. Sports (Current Offering includes 8 Sports Channels and Live Game Channels for NBA, NFL, etc.) |
| Resp | 1. No sports programming: 8 <br> 2. Substantially fewer channels and less variety of sports than currently offered: 1 |
|  | 3. The same number of channels and same variety of sports as currently offered: 3 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 5 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc.) |
| Response: | 1. No talk and entertainment programming: 4 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 6 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 4 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: $\mathbf{8}$ |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 4 |
|  | 2. 2 minutes of commercials per hour: 3 |
|  | 3.5 minutes of commercials per hour: 5 |
|  | 4. 12 minutes of commercials per hour: 2 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 1 |
|  | 2. Complete nationwide coverage: 8 |


| Q6b: | Now, let's turn to price. l'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 7 <br> 2. $\$ 10.95$ per month: 8 <br> 3. $\$ 12.95$ per month: 9 <br> 4. \$14.95 per month: 10 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> -Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points $(0$ to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satelite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: 0 Geographic coverage: 0 <br> The monthly price for a single subscription: 100 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 0 <br> Kids: 0 <br> Local Weather and Traffic: 50 <br> Music: 50 <br> News: 0 <br> Sports: 0 <br> Talk and Entertainment: 0 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: Don't know <br> NEWS: Don't know <br> SPORTS: Don't know <br> TALK AND ENTERTAINMENT: Don't know |
| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| Response: | Card 17: 8 <br> Card 18:6 <br> Card 19: 2 <br> Card 20: 10 <br> Card 21: 1 <br> Card 22: 5 <br> Card 23: 0 <br> Card 24:9 <br> Card 65: 4 <br> Card 66: 10 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | DONT KNOW |

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Q11b: Anything else?
Response: NO

| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Intemet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 18-24 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to cable TV <br> Decision to subscribe to an Internet service <br> Decision to subscribe to satellite radio <br> Decision to subscribe to a wireless phone service <br> Decision to subscribe to satellite TV |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Satellite TV <br> Satellite radio |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| SI: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Cable TV: No |
|  | Broadband Internet: No |
|  | Wireless phone service: No |
| SK: | Which satellite radio service do you or your household currently subscribe to? |
| Response: | X ${ }^{\text {M }}$ |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: Q1a: | Gave phone number <br> Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | i got it as a gift |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | nope |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | no commericals |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | no |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satelite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | its paid for already |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: HO1: | no <br> INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIMIHERSELF. $8 E$ SURE TO SIT WITH THE RESPONDENT WHILE HEISHE IS ANSWERING IN CASE HEISHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Respondent entering answers |

## DDW 02/629 SUBSCRIBERS CASE ID 20119 (Continued)

Q4: Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio.
If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.)
Please click "Okay" if this is clear.

## Response: <br> Q4:

Response:

## Okay

Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100.
Comedy: 10
Kids: 10
Local Weather and Traffic: 10
Music: 40
News: 10
Sports: 10
Q5: $\quad$ Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear?
Please click "Okay" if this is clear.
Response: Okay
Q5A:
Response: 1. No music programming: 0
2. Substantially fewer channels and less variety of music than currently offered: 0
3. The same number of channeis and the same variety of music as currently offered: $\mathbf{1 0}$
4. Substantially more channels and more variety of music than currently offered: $\mathbf{1 0}$

Q5B: $\quad$ B. News (Current Offering includes 13 News Channeis.)
Response: 1. No news programming: 10
2. Substantially fewer channels and less variety of news than currently offered: $\mathbf{1 0}$
3. The same number of channels and the same variety of news as currently offered: 0
4. Substantially more channels and more variety of news than currently offered: 0

Q5C: C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.)
Response: 1. No sports programming: 0
2. Substantially fewer channels and less variety of sports than currently offered: 0
3. The same number of channels and same variety of sports as currently offered: 10
4. Substantially more channels and more variety of sports than currently offered: 10

Q5D: D. Talk \& Entertainment (Current Offering includes 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.)
Response: 1. No talk and entertainment programming: 10
2. Substantially fewer channels and less variety of talk and entertainment than currently offered: $\mathbf{1 0}$
3. The same number of channels and same variety of talk and entertainment as currently offered: 0
4. Substantially more channels and more variety of talk and entertainment than currently offered: 0

Q6a: $\quad$ Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option.
Response: A. The Number of Minutes of Commercials Per Hour on Music Channels

1. No commercials on music channels: 10
2. 2 minutes of commercials per hour: 0
3.5 minutes of commercials per hour: 0
3. 12 minutes of commercials per hour: 0
B. Geographic Coverage
4. Typical FM coverage: 10
5. Complete nationwide coverage: 8

| Q6b: | Now, let's turn to price. l'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 0 <br> 2. $\$ 10.95$ per month: 0 <br> 3. $\$ 12.95$ per month: 10 <br> 4. $\$ 14.95$ per month: 0 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points $(0$ to 100$)$ you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: $\mathbf{3 0}$ Geographic coverage: 20 <br> The monthly price for a single subscription: 50 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 10 <br> Kids: 10 <br> Local Weather and Traffic: 10 <br> Music: 40 <br> News: 10 <br> Sports: 10 <br> Talk and Entertainment: 10 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: Don't know <br> NEWS: Don't know <br> SPORTS: Don't know <br> TALK AND ENTERTAINMENT: Yes |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: | TALK AND ENTERTAINMENT: Would Cancel Subscription |


| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from "0" meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 33: 10 边 |
|  | Card 34: 10 |
|  | Card 35: 8 |
|  | Card 36: 0 |
|  | Card 37: 0 |
|  | Card 38: 6 |
|  | Card 39: 8 |
|  | Card 40: 9 |
|  | Card 65: 10 |
|  | Card 66: 7 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | the whole any football game anytime i want |
| Q11b: | Anything else? |
| Response: | no |


| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Intemet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 25-34 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to an Internet service Decision to subscribe to satellite radio Decision to subscribe to a wireless phone ser |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Satellite TV <br> Broadband Internet <br> Satellite radio <br> Wireless phone service |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| Sl: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Cable TV: No |
| SK: | Which satellite radio service do you or your household currently subscribe to? |
| Response: | Sirius |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY;) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: Q1a: | Gave phone number <br> Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | Because on satellite radio there's more music and less talking and I can also listen to any genre of music that I'm in a mood for without hearing anything else at that point and time. |
| Q1b: | 1 (b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | None. |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | Urban music and also some talk radio. |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | None. |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | The urban music, talk radio, and sports. |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: HO1: | None. <br> INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIMIHERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HEISHE IS ANSWERING IN CASE HEISHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Respondent entering answers |


| Q4: | Below is a list of the types of satelite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with sateliite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100. Comedy: 5 |
|  | Kids: 0 |
|  | Local Weather and Traffic: 0 |
|  | Music: 60 |
|  | News: 0 |
|  | Sports: 10 |
|  | Talk and Entertainment: 25 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from "0 to $10^{\prime \prime}$ to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
|  | Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 66 Music Channels.) |
| Response: | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 0 |
|  | 3. The same number of channels and the same variety of music as currently offered: 9 |
|  | 4. Substantially more channels and more variety of music than currently offered: 10 |
| Q5B: | B. News (Current Offering includes 15 News Channels.) |
| Response: | 1. No news programming: 0 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 2 |
|  | 3. The same number of channels and the same variety of news as currently offered: 7 |
|  | 4. Substantially more channels and more variety of news than currently offered: 10 |
| Q5C: | C. Sports (Current Offering includes 8 Sports Channels and Live Game Channels for NBA, NFL, etc.) |
| Response: | 1. No sports programming: 0 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: $\mathbf{2}$ |
|  | 3. The same number of channels and same variety of sports as currently offered: 8 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 10 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc.) |
| Response: | 1. No talk and entertainment programming: 0 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 2 |
|  | 3. The same number of channels and same variety of taik and entertainment as currently offered: 7 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 10 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 10 |
|  | 2.2 minutes of commercials per hour: 9 |
|  | 3.5 minutes of commercials per hour: 2 |
|  | 4. 12 minutes of commercials per hour: 0 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 2 |
|  | 2. Complete nationwide coverage: 10 |

## DDW 02/629 SUBSCRIBERS CASE ID 20126 (Continued)

| Q6b: | Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the sevvice remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 10 <br> 2. $\$ 10.95$ per month: 9 <br> 3. $\$ 12.95$ per month: 7 <br> 4. $\$ 14.95$ per month: 6 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points $(0$ to 100$)$ you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: $\mathbf{1 0}$ Geographic coverage: 40 <br> The monthly price for a single subscription: $\mathbf{5 0}$ |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 5 <br> Kids: 0 <br> Local Weather and Traffic: 0 <br> Music: 60 <br> News: 0 <br> Sporis: 10 <br> Talk and Entertainment: 25 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: Yes <br> NEWS: Yes <br> SPORTS: Yes <br> TALK AND ENTERTAINMENT: Yes |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for sateliite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: | MUSIC: Would Cancel Subscription <br> NEWS: $\$ 10.50$ <br> SPORTS: Would Cancel Subscription <br> TALK AND ENTERTAINMENT: Would Cancel Subscription |


| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to " 10 " meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10. For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 33: 0 |
|  | Card 34: 3 |
|  | Card 35: 8 |
|  | Card 36: 6 |
|  | Card 37:0 |
|  | Card 38: 0 |
|  | Card 39: 3 |
|  | Card 40: 7 |
|  | Card 65: 10 |
|  | Card 66: 0 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | The freedom of being able to dictate what I want to listen to whenever. |
| Q11b: | Anything else? |
| Response: | Nothing. |


| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Intemet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 25-34 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to cable TV |
|  | Decision to subscribe to an Internet service |
|  | Decision to subscribe to satellite radio |
|  | Decision to subscribe to a wireless phone service |
|  | Decision to subscribe to satellite $\mathbf{T V}$ |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Satellite TV |
|  | Broadband Internet |
|  | Wireless phone service |
| SI: | Are you or your househoid currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Cable TV: No |
|  | Satellite radio: Yes |
| SJ: | Which of the following best describes the type of satellite radio you or your household are considering? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| SL: | Which satellite radio service are you currently considering subscribing to? |
| Response: | XM |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Why are you considering subscribing to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | More selection than regular radio and less hassle than cd's |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | no |
| Q2a: | 2(a) What types of satellite radio programming are most critical to your decision whether to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | the variety of channels provided |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | no |
| H01: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HEISHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Respondent entering answers |

## DDW 02/629 CONSIDERING SUBSCRIBING CASE ID 20129 (Continued)

| Q4: | Below is a list of the types of satelite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100 ) you give each type of programming best reflects the relative importance of that type of programming to you and your family's ultimate decision whether to subscribe to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision is likely to be affected by only one of the types of programming and none of the others are likely to be important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming to your decision whether to subscribe to satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: <br> Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100 . Comedy: 10 |
|  | Kids: 5 |
|  | Local Weather and Traffic: 10 |
|  | Music: 40 |
|  | News: 5 |
|  | Sports: 5 |
|  | Talk and Entertainment: 25 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from "0 to $10^{\prime \prime}$ to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
|  | Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 74 Music Channels.) |
| Response: | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 1 |
|  | 3. The same number of channels and the same variety of music as currently offered: 4 |
|  | 4. Substantially more channels and more variety of music than currently offered: 10 |
| Q5B: | B. News (Current Offering includes 13 News Channels.) |
| Response: | 1. No news programming: 2 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 6 |
|  | 3. The same number of channels and the same variety of news as currently offered: 4 |
|  | 4. Substantially more channels and more variety of news than currently offered: 3 |
| Q5C: | C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.) |
| Response: | 1. No sports programming: 0 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 0 |
|  | 3. The same number of channels and same variety of sports as currently offered: 4 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 8 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 17 Taik and Entertainment channels including Opie and Anthony, Air America, etc.) |
| Response: | 1. No talk and entertainment programming: 1 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 0 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 5 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 10 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 10 |
|  | 2. 2 minutes of commercials per hour: 9 |
|  | 3. 5 minutes of commercials per hour: 8 |
|  | 4. 12 minutes of commercials per hour: 4 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 4 |
|  | 2. Complete nationwide coverage: 10 |



|  | SCe you or any members of your household employed in any of the industries listed on this card? |
| :--- | :--- |
| Sesponse: | An insurance company: No |
|  | A marketing research firm: No |
|  | An advertising agency: No |


| H01: Response: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| :---: | :---: |
| Response: Q4: | Respondent entering answers <br> Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the |
|  | seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. |
|  | If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) |
|  | Please click "Okay" if this is clear. |
| Response: <br> Q4: <br> Response: | Okay |
|  | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100 . |
|  | Kids: 0 |
|  | Local Weather and Traffic: 5 |
|  | Music: 50 |
|  | News: 5 |
|  | Sports: 10 |
|  | Talk and Entertainment: 10 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from "0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best refiecis its level of desirability or undesirability, Is this clear? |
| Response: <br> Q5A: <br> Response: | Okay |
|  | A. Music Programming (Current Offering includes 66 Music Channeis.) |
|  | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 0 |
|  | 3. The same number of channels and the same variety of music as currently offered: 9 |
|  | 4. Substantially more channels and more variety of music than currently offered: 10 |
| Q5B: <br> Response: | B. News (Current Offering includes 15 News Channels.) |
|  | 1. No news programming: 0 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 5 |
|  | 3. The same number of channels and the same variety of news as currently offered: 5 |
|  | 4. Substantially more channels and more variety of news than currently offered: 2 |
| Q5C: <br> Response: | C. Sports (Current Offering includes 8 Sports Channels and Live Game Channels for NBA, NFL, etc.) |
|  | 1. No sports programming: 10 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 8 |
|  | 3. The same number of channels and same variety of sports as currently offered: 0 |
|  | 4. Substantially more channeis and more variety of sports than currently offered: 6 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc.) |
| Response: | 1. No talk and entertainment programming: 3 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 4 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 8 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 8 |

## DDW 02/629 SUBSCRIBERS CASE ID 20143 (Continued)

| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels <br> 1. No commercials on music channels: 10 <br> 2. 2 minutes of commercials per hour: 7 <br> 3.5 minutes of commercials per hour: 4 <br> 4. 12 minutes of commercials per hour: 2 <br> B. Geographic Coverage <br> 1. Typical FM coverage: 2 <br> 2. Complete nationwide coverage: $\mathbf{1 0}$ |
| Q6b: | Now, let's tum to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 10 <br> 2. $\$ 10.95$ per month: 9 <br> 3. $\$ 12.95$ per month: 8 <br> 4. $\$ 14.95$ per month: 6 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q6cf1: <br> Response: | Other, please specify: I guess you could say Speak Freely Anything else? <br> No |
| Q7: | Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100 . (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: 80 Geographic coverage: 4 <br> The monthly price for a single subscription: 1 <br> Other (I guess you could say Speak Freely): 15 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 20 <br> Kids: 0 <br> Local Weather and Traffic: 5 <br> Music: 60 <br> News: 5 <br> Sports: 5 <br> Talk and Entertainment: 5 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: Yes <br> NEWS: No <br> SPORTS: No <br> TALK AND ENTERTAINMENT: No |


| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| :---: | :---: |
| Response: | MUSIC: Would Cancel Subscription |
| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| Response: | Card 9: 7 |
|  | Card 10:1 |
|  | Card 11:7 |
|  | Card 12:0 |
|  | Card 13: 0 |
|  | Card 14: 10 |
|  | Card 15:4 |
|  | Card 16: 5 |
|  | Card 65: 10 |
|  | Card 66:0 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | Selecting the kind of music and other programming i like to hear without interruption. |
| Q11b: | Anything else? |
| Response: | The fact that I could not hear people speak their own mind without fear of offending someone. |


| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Intemet service provider: No |
| :---: | :---: |
| SD: <br> Response: | During the past three months have you taken part in any market research survey other than a political poll? No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 18-24 years |
|  | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to cable TV |
|  | Decision to subscribe to an Internet service |
|  | Decision to subscribe to satellite radio |
|  | Decision to subscribe to a wireless phone service |
|  | Decision to subscribe to satellite TV |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Cable TV |
|  | Broadband Internet |
|  | Satellite radio |
|  | Wireless phone service |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
|  | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Satellite TV: No |
|  | Which satellite radio service do you or your household currently subscribe to? |
| Response: | XM |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: Q1b: | there was a free offer connected with buying the car adapter. w/e, i have always liked the XM programing. 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | none. |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | I really like the wide verity of programs, there is somthing for evryone.w/e noting |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | nope |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | i really like the xm radio b ecuase i get all the stations i love, wherever i go. |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | nothing else |
| HO1: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIMIHERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMIHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Res | Respondent entering answers |

## DDW 02/629 SUBSCRIBERS CASE ID 20144 (Continued)

| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100 ) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: <br> Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100. Comedy: $\mathbf{2 0}$ |
|  | Kids: 0 |
|  | Local Weather and Traffic: 0 |
|  | News: 30 |
|  | Sports: 10 |
|  | Talk and Entertainment: 20 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
|  | Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 74 Music Channels.) |
| Response: | 1. No music programming: 2 |
|  | 2. Substantially fewer channeis and less variety of music than currently offered: 2 |
|  | 3. The same number of channels and the same variety of music as currently offered: 8 |
|  | 4. Substantially more channels and more variety of music than currently offered: 10 |
| Q5B: | B. News (Current Offering includes 13 News Channels.) |
| Response: | 1. No news programming: 2 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 4 |
|  | 3. The same number of channels and the same variety of news as currently offered: 4 |
|  | 4. Substantially more channels and more variety of news than currently offered: 4 |
| Q5C: | C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.) |
| Response: | 1. No sports programming: 2 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 5 |
|  | 3. The same number of channels and same variety of sports as currently offered: 7 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 5 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.) |
| Response: | 1. No talk and entertainment programming: 0 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 3 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 7 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 10 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the lypes of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 10 |
|  | 2. 2 minutes of commercials per hour: 0 |
|  | 3.5 minutes of commercials per hour: 6 |
|  | 4. 12 minutes of commercials per hour: 0 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 1 |
|  | 2. Complete nationwide coverage: 7 |

## DDW 02/629 SUBSCRIBERS CASE ID 20144 (Continued)

| Q6b: | Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 1 <br> 2. \$10.95 per month: 1 <br> 3. $\$ 12.95$ per month: 1 <br> 4. $\$ 14.95$ per month: 2 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satelite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: 10 Geographic coverage: 10 <br> The monthly price for a single subscription: $\mathbf{8 0}$ |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming refiecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 20 <br> Kids: 0 <br> Local Weather and Traffic: 0 <br> Music: 20 <br> News: 10 <br> Sports: 10 <br> Talk and Entertainment: 40 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: No <br> NEWS: No <br> SPORTS: No <br> TALK AND ENTERTAINMENT: Yes |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Respo | TALK AND ENTERTAINMENT: Would Cancel Subscription |

Q10: Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from "0" meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering.
If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10. For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that.

## Response: Card 41: 5

Card 42:0
Card 43: 0
Card 44: 10
Card 45: 3
Card 46: 0
Card 47: 7
Card 48: 10
Card 65: 10
Card 66: 0
Q11a: And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it?
Response: the veriety of channels i dont get with my local stations
Q11b: Anything else?
Response: not that i can think of

SC: $\quad$ Are you or any members of your household employed in any of the industries listed on this card?
Response: An insurance company: No
A marketing research firm: No
An advertising agency: No
The entertainment industry: No
A satellite radio provider: No
A cable TV provider: No
SD: $\quad$ During the past three months have you taken part in any market research survey other than a political poll?
Response: No
SE:
I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age?

## Response: 18-24 years

SF: Which, if any, of the following decisions do you make or take part in making for your household?
Response: Decision to subscribe to cable TV
Decision to subscribe to an Internet service
Decision to subscribe to satellite radio
SG: Which of these services, if any, do you or your household currently subscribe to?
Response: Cable TV
Satellite radio
SH: Which of the following best describe the type of satellite radio you or your household currently subscribes to?
Response: Both
S1: Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days?
Response: Satellite TV: Yes
Broadband Internet: Yes
Wireless phone service: Yes
SK: Which satellite radio service do you or your household currently subscribe to?
Response: Both
SM:
Do you wear glasses or contact lenses when you read?
Res
Yes
SN:
Response: Ye
SO:
Response:
SP:
RECORD GENDER OF RESPONDENT
Female
We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study?
Response: Yes, will participate
SQ: May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study.
Response: Gave phone number
Q1a: Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM)
Response: Ilike the radio
Q1b:

## Response: none

Q2a: $\quad$ 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM)
Response: the bid pack
Q2b: 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM)
Response: no
Q3a:

Response:
3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM)
xm chill
Q3b:
Response: no
HO1:
3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM)
no
INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIMIHERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HEISHE IS ANSWERING IN CASE HEISHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD:
Response: Interviewer entering answers

| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with sateliite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: <br> Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100 . Comedy: 10 |
|  | Kids: 10 |
|  | Local Weather and Traffic: 10 |
|  | Music: 10 |
|  | News: 10 |
|  | Sports: 10 |
|  | Talk and Entertainment: 40 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to $10^{\prime \prime}$ to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
|  | Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 74 Music Channels.) |
| Response: | 1. No music programming: 10 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 9 |
|  | 3. The same number of channels and the same variety of music as currently offered: 8 |
|  | 4. Substantially more channels and more variety of music than currently offered: 7 |
| Q5B: | B. News (Current Offering includes 13 News Channels.) |
| Response: | 1. No news programming: 9 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 8 |
|  | 3. The same number of channels and the same variety of news as currently offered: 10 |
|  | 4. Substantially more channels and more variety of news than currently offered: 7 |
| Q5C: | C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.) |
| Response: | 1. No sports programming: 8 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 7 |
|  | 3. The same number of channels and same variety of sports as currently offered: 9 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.) |
| Response: | 1. No talk and entertainment programming: 8 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currentiy offered: 9 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 10 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 7 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commerciais Per Hour on Music Channels |
|  | 1. No commercials on music channels: 6 |
|  | 2.2 minutes of commercials per hour: 7 |
|  | 3.5 minutes of commercials per hour: 8 |
|  | 4. 12 minutes of commercials per hour: 9 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 10 |
|  | 2. Complete nationwide coverage: 5 |


| Q6b: | Now, let's turn to price. l'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 3 <br> 2. $\$ 10.95$ per month: 4 <br> 3. $\$ 12.95$ per month: 5 <br> 4. $\$ 14.95$ per month: 6 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: $\mathbf{5 0}$ Geographic coverage: $\mathbf{5 0}$ <br> The monthly price for a single subscription: 0 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 0 <br> Kids: 0 <br> Local Weather and Traffic: 0 <br> Music: 50 <br> News: 0 <br> Sports: 50 <br> Talk and Entertainment: 0 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: No <br> NEWS: No <br> SPORTS: No <br> TALK AND ENTERTAINMENT: Yes |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satelite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: Q9c: | TALK AND ENTERTAINMENT: $\mathbf{\$ 2 3 . 9 9}$ <br> Are you willing to pay more than the current price of $\$ 12.95$ per month if no [PRGTYPE] were available but all other programming features of the service remain the same? |
| Response: Q9d: | TALK AND ENTERTAINMENT: No <br> How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Would be willing to pay: |
| Response: | TALK AND ENTERTAINMENT: $\mathbf{\$ 2 . 9 9}$ |


| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from "0" meaning "definitely would not subscribe" to " 10 " meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 17:9 |
|  | Card 18:7 |
|  | Card 19: 9 |
|  | Card 20: 8 |
|  | Card 21: 9 |
|  | Card 22:9 |
|  | Card 23: 9 |
|  | Card 24:9 |
|  | Card 65:8 |
|  | Card 66: 9 |
| Q11a: | And finally, reflecting on your experience with satelite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | nothing i just get over it |
| Q11b: | Anything else? |
| Response: | no |

## DDW 02/629 SUBSCRIBERS CASE ID 20152

| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Intemet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 35-49 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to satellite radio |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Satellite radio |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| SI: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response | Cable TV: No |
|  | Satellite TV: No |
|  | Broadband Internet: No |
|  | Wireless phone service: No |
| SK: | Which satellite radio service do you or your household currently subscribe to? |
| Response: | XM |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | Yes |
| SN: | Do you have your glasses with you or are you wearing your contact lenses today? |
| Response: | Yes |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Female |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | it was commercial free |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | there is no othere reason |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | there was nothing that was critical |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | there was nothing else |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | there was nothing else |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | there was nothing else |
| H01: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HEISHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMIHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Interviewer entering answers |


| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100. Comedy: 20 |
| Respon | Kids: 0 |
|  | Local Weather and Traffic: 20 |
|  | Music: 20 |
|  | News: 20 |
|  | Sports: 0 |
|  | Talk and Entertainment: 20 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
|  | Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 74 Music Channels.) |
| Response: | 1. No music programming: 1 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 5 |
|  | 3. The same number of channels and the same variety of music as currently offered: 6 |
|  | 4. Substantially more channels and more variety of music than currently offered: 7 |
| Q5B: | B. News (Current Offering includes 13 News Channels.) |
| Response: | 1. No news programming: 5 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 4 |
|  | 3. The same number of channels and the same variety of news as currently offered: 3 |
|  | 4. Substantially more channels and more variety of news than currently offered: 2 |
| Q5C: | C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.) |
| Response: | 1. No sports programming: 9 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 5 |
|  | 3. The same number of channels and same variety of sports as currently offered: 4 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 5 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.) |
| Response: | 1. No talk and entertainment programming: 5 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 4 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 5 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 6 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) -extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 5 |
|  | 2. 2 minutes of commercials per hour: 4 |
|  | 3.5 minutes of commercials per hour: 3 |
|  | 4. 12 minutes of commercials per hour: 2 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 7 |
|  | 2. Complete nationwide coverage: 6 |


| Q6b: | Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 5 <br> 2. $\$ 10.95$ per month: 4 <br> 3. $\$ 12.95$ per month: 3 <br> 4. $\$ 14.95$ per month: 2 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points (0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satelite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100 . (RECORD $0-100$ FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: 0 Geographic coverage: 100 <br> The monthly price for a single subscription: 0 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reffecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most shouid get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 0 <br> Kids: 0 <br> Local Weather and Traffic: 0 <br> Music: 0 <br> News: 100 <br> Sports: 0 <br> Talk and Entertainment: 0 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: Yes <br> NEWS: Yes SPORTS: Yes TALK AND ENTERTAINMENT: No |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the sevice, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: | MUSIC: $\$ 11.00$ NEWS: $\$ 12.00$ SPORTS: $\$ 12.00$ |


| Q10: | Now, 1 am going to show you 10 different hypothetical satelite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from "0" meaning "definitely would not subscribe" to " 10 " meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10. For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 33: 4 |
|  | Card 34: 3 |
|  | Card 35: 8 |
|  | Card 36: 7 |
|  | Card 37: 3 |
|  | Card 38: 7 |
|  | Card 39: 5 |
|  | Card 40: 8 |
|  | Card 65: 4 |
|  | Card 66: 8 |
| Q11a: | And finally, reflecting on your experience with satelitite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | there was nothing that i would miss |
| Q11b: | Anything else? |
| Response: | there was nothing else |


| SC: Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Internet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 35-49 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to cable TV |
|  | Decision to subscribe to an Internet service |
|  | Decision to subscribe to satellite radio |
|  | Decision to subscribe to a wireless phone service |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Cable TV |
|  | Broadband Internet |
|  | Satellite radio |
|  | Wireless phone service |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| Sl: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Satelite TV: No |
| SK: | Which satelite radio service do you or your household currently subscribe to? |
| Response: | XM |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | Yes |
| SN: | Do you have your glasses with you or are you wearing your contact lenses today? |
| Response: | Yes |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Female |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Thinking back to the time you first subscribed to satelite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | First year came free w/my car. Liked it and keot it. |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | good variety |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | comedy, kids stations, international news |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | nothing else |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satelite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | comedy, kids stations, international news |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | no |
| H01: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIMIHERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HEISHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMIHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Respondent entering answers |

## DDW 02/629 SUBSCRIBERS CASE ID 20154 (Continued)

| Q4: | Below is a list of the types of satelite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100 ) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radic. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: <br> Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100. Comedy: 30 |
|  | Kids: 30 |
|  | Local Weather and Traffic: 5 |
|  | Music: 20 |
|  | News: 5 |
|  | Sports: 5 |
|  | Talk and Entertainment: 5 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to 10 " to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
|  | Please click "Okay" if this is clear. |
| Response: | Okay |
|  | A. Music Programming (Current Offering includes 74 Music Channels.) |
| Response: | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 0 |
|  | 3. The same number of channels and the same variety of music as currently offered: 6 |
|  | 4. Substantially more channels and more variety of music than currently offered: 9 |
| Q5B: | B. News (Current Offering includes 13 News Channels.) |
| Respo | 1. No news programming: 0 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: $\mathbf{2}$ |
|  | 3. The same number of channels and the same variety of news as currently offered: 3 |
|  | 4. Substantially more channels and more variety of news than currently offered: 5 |
| Q5C: | C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.) |
| Response: | 1. No sports programming: 7 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 0 |
|  | 3. The same number of channels and same variety of sports as currently offered: 5 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 8 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.) |
| Response: | 1. No talk and entertainment programming: 0 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 3 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 5 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 6 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 10 |
|  | 2. 2 minutes of commercials per hour: 9 |
|  | 3.5 minutes of commercials per hour: 1 |
|  | 4. 12 minutes of commercials per hour: 0 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 2 |
|  | 2. Complete nationwide coverage: 10 |


| Q6b: | Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 10 <br> 2. $\$ 10.95$ per month: 9 <br> 3. $\$ 12.95$ per month: 8 <br> 4. $\$ 14.95$ per month: 7 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100 ) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: 10 Geographic coverage: 85 <br> The monthly price for a single subscription: 5 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the \% of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 20 <br> Kids: 30 <br> Local Weather and Traffic: 5 <br> Music: 30 <br> News: 5 <br> Sports: 5 <br> Talk and Entertainment: 5 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: Yes <br> NEWS: No <br> SPORTS: Don't know <br> TALK AND ENTERTAINMENT: No |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at ali. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: | MUSIC: Would Cancel Subscription |


| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10. For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 9:1 |
|  | Card 10:0 Card 11:5 |
|  | Card 12:0 |
|  | Card 13:0 |
|  | Card 14: 10 |
|  | Card 15: 7 |
|  | Card 16:1 |
|  | Card 65: 10 |
|  | Card 66: 0 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | geographic reach, variety of stations |
| Q11b: | Anything else? |
| Response: | less commercials than fm radio |


| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Intemet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 25-34 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response | Decision to subscribe to cable TV |
|  | Decision to subscribe to an internet service |
|  | Decision to subscribe to satellite radio |
|  | Decision to subscribe to a wireless phone service |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Cable TV |
|  | Satellite radio |
|  | Wireless phone service |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| SI: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Satellite TV: Yes |
|  | Broadband Internet: Yes |
| SK: | Which satellite radio service do you or your household currently subscribe to? |
| Response: | Sirius |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Female |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | because it would give me a wider range of stations |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | nothing else |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | praise radio disney |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | heart and soul |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | praise |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | radio disney |
| H01: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER ANO ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIMIHERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HEISHE IS ANSWERING IN CASE HEISHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMIHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Respondent entering answers |


| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100 ) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to sateliite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100. Comedy: 10 |
| Response: | Kids: 25 |
|  | Local Weather and Traffic: 10 |
|  | Music: 30 |
|  | News: 10 |
|  | Sports: 10 |
|  | Talk and Entertainment: 5 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from "0 to $10^{n}$ to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
|  | Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 66 Music Channels.) |
| Response: | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 1 |
|  | 3. The same number of channels and the same variety of music as currently offered: 5 |
|  | 4. Substantially more channels and more variety of music than currently offered: 7 |
| Q5B: | B. News (Current Offering includes 15 News Channels.) |
| Response: | 1. No news programming: 0 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 1 |
|  | 3. The same number of channels and the same variety of news as currently offered: 2 |
|  | 4. Substantially more channels and more variety of news than currently offered: 4 |
| Q5C: | C. Sports (Current Offering includes 8 Sports Channels and Live Game Channels for NBA, NFL, etc.) |
| Response: | 1. No sports programming: 0 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 1 |
|  | 3. The same number of channels and same variety of sports as currently offered: 2 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 4 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 22 Talk and Entertainment channels including Howard Stern, Martha Stewart, etc.) |
| Response: | 1. No talk and entertainment programming: 1 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 1 |
|  | 3. The same number of channels and same variety of tak and entertainment as currently offered: 2 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 4 |
| Q6a: | Now, we would like you to consider the non-programming features of satelite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 5 |
|  | 2. 2 minutes of commercials per hour: 8 |
|  | 3.5 minutes of commercials per hour: 2 |
|  | 4. 12 minutes of commercials per hour: 0 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 1 |
|  | 2. Complete nationwide coverage: 3 |


| Q6b: | Now, let's turn to price. ld like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 5 <br> 2. $\$ 10.95$ per month: 2 <br> 3. $\$ 12.95$ per month: 1 <br> 4. $\$ 14.95$ per month: 0 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL. MUSTE\#QUAL 100.) |
| Response | The number of minutes of commercials per hour on music channels: $\mathbf{3 0}$ Geographic coverage: 30 <br> The monthly price for a single subscription: $\mathbf{4 0}$ |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 5 <br> Kids: 20 <br> Local Weather and Traffic: 20 <br> Music: 30 <br> News: $\mathbf{2 0}$ <br> Sports: 5 <br> Talk and Entertainment: 0 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: Yes <br> NEWS: Yes <br> SPORTS: Yes <br> TALK AND ENTERTAINMENT: Yes |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: | MUSIC: $\$ 3.00$ <br> NEWS: $\$ 3.00$ <br> SPORTS: $\mathbf{\$ 3 . 0 0}$ <br> TALK AND ENTERTAINMENT: $\$ \mathbf{3 . 0 0}$ |


| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10. For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 33:0 0 |
|  | Card 34: 0 |
|  | Card 35: 5 |
|  | Card 36: 5 |
|  | Card 37: 1 |
|  | Card 38: 0 |
|  | Card 39: 1 |
|  | Card 40: 6 |
|  | Card 65: 2 |
|  | Card 66: 0 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | i would miss the variety of other stations i would be able to listen to if and when i wanted. |
| Q11b: | Anything else? |
| Response: | no |

## DDW 02/629 SUBSCRIBERS CASE ID 20175

| sc: Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Internet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 18-24 years |
|  | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to cable TV |
|  | Decision to subscribe to an Internet service |
|  | Decision to subscribe to satellite radio |
|  | Decision to subscribe to a wireless phone service |
|  | Decision to subscribe to satellite TV |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Cable TV |
|  | Satellite TV |
|  | Broadband Internet |
|  | Satellite radio |
|  | Wireless phone service |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
|  | Which satellite radio service do you or your household currently subscribe to? |
| Response: | XM |
|  | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENTS PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | because it was new plus more music station because $i$ listen to music all day |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | just to have something new |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | Xm radio |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | No |
| Q3a: | 3(a) And now, reflecting on your experience with satelifie radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | Xm radio on my TV and Car |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | No |
| H01: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIMIHERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HEISHE IS ANSWERING IN CASE HEISHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMIHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | Interviewer entering answers |


| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100 ) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) <br> Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: <br> Respon | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100 . Comedy: 15 |
|  | Kids: 0 |
|  | Local Weather and Traffic: 20 |
|  | Music: 35 |
|  | News: 25 |
|  | Sports: 0 |
|  | Talk and Entertainment: 5 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from " 0 to $10^{\prime \prime}$ to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? |
|  | Please click "Okay" if this is clear. |
| Response: | Okay |
| Q5A: | A. Music Programming (Current Offering includes 74 Music Channeis.) |
| Response: | 1. No music programming: 10 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 6 |
|  | 3. The same number of channels and the same variety of music as currently offered: 5 |
|  | 4. Substantially more channels and more variety of music than currently offered: 6 |
| Q5B: | B. News (Current Offering includes 13 News Channels.) |
| Response: | 1. No news programming: 0 |
|  | 2. Substantialiy fewer channels and less variety of news than currently offered: $\mathbf{1 0}$ |
|  | 3. The same number of channels and the same variety of news as currently offered: 0 |
|  | 4. Substantially more channels and more variety of news than currently offered: 10 |
| Q5C: | C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.) |
| Response: | 1. No sports programming: 5 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 3 |
|  | 3. The same number of channels and same variety of sports as currently offered: 5 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 1 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.) |
| Response: | 1. No talk and entertainment programming: 0 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 10 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 1 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 7 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels |
|  | 1. No commercials on music channels: 8 |
|  | 2. 2 minutes of commercials per hour: 7 |
|  | 3. 5 minutes of commercials per hour: 6 |
|  | 4. 12 minutes of commercials per hour: 5 |
|  | B. Geographic Coverage |
|  | 1. Typical FM coverage: 10 2. Complete nationwide coverage: 9 |
|  | 2. Complete nationwide coverage: 9 |

## DDW 02/629 SUBSCRIBERS CASE ID 20175 (Continued)

| Q6b: | Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 10 <br> 2. $\$ 10.95$ per month: 8 <br> 3. $\$ 12.95$ per month: 9 <br> 4. $\$ 14.95$ per month: 8 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: $\mathbf{3 5}$ Geographic coverage: $\mathbf{2 5}$ <br> The monthly price for a single subscription: $\mathbf{4 0}$ |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 10 <br> Kids: 10 <br> Local Weather and Traffic: 10 <br> Music: 10 <br> News: 20 <br> Sports: 10 <br> Talk and Entertainment: 30 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: Yes <br> NEWS: Don't know <br> SPORTS: Don't know <br> TALK AND ENTERTAINMENT: No |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. |
| Response: | Would be willing to pay: <br> MUSIC: $\$ 9.95$ |


| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from "0" meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10. For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 49:10 |
|  | Card 50: 10 |
|  | Card 52: 10 |
|  | Card 53: 9 |
|  | Card 54: 10 |
|  | Card 55: 10 |
|  | Card 56: 10 |
|  | Card 65: 10 |
|  | Card 66: 10 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | the music |
| Q11b: | Anything else? |
| Response: | no |


| SC: <br> Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An internet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 25-34 years |
| SF: | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to an Internet service Decision to subscribe to satellite radio Decision to subscribe to a wireless phone service Decision to subscribe to satellite TV |
| SG: | Which of these services, if any, do you or your househoid currently subscribe to? |
| Response: | Satellite radio Wireless phone service |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
| SI: | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Cable TV: Yes |
|  | Satellite TV: No |
|  | Broadband Internet: Yes |
| SK: | Which satellite radio service do you or your household currently subscribe to? |
| Response: | Sirius |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | No |
| SO: | RECORD GENDER OF RESPONDENT |
| Response: | Male |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) l'm sorry but i cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: | Gave phone number |
| Q1a: | Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | I WANTED TO HAVE AVARIETY OF MUSIC. |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | BECAUSE IT LOOKS NICE. |
| Q2a: | 2(a) What types of satellite radio programming were most critical to your decision to subscribe to satellite radio? <br> (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | I LIKE SPORTS. |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | NOTHING ELSE. |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | I LIKE THE SPORTS AND THE MUSIC. |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: HO1: | THERE ARE NO OTHER REASONS. <br> INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HE/SHE IS ANSWERING IN CASE HEISHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIM/HER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response: | interviewer entering answers |



| Q6b: | Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| :---: | :---: |
| Response: | C. The Monthly Price for A Single Subscription <br> 1. $\$ 8.95$ per month: 10 <br> 2. $\$ 10.95$ per month: 6 <br> 3. \$12.95 per month: 6 <br> 4. $\$ 14.95$ per month: 5 |
| Q6c: | Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio? <br> -The number of minutes of commercials per hour on music channels <br> - Geographic coverage <br> -The monthly price for a single subscription |
| Response: Q7: | No others considered <br> Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satellite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100. (RECORD 0-100 FOR EACH. TOTAL MUST E\#QUAL 100.) |
| Response: | The number of minutes of commercials per hour on music channels: $\mathbf{4 0}$ Geographic coverage: 10 <br> The monthly price for a single subscription: 50 |
| Q8: | Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the \% of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$. |
| Response: | Comedy: 10 <br> Kids: 0 <br> Local Weather and Traffic: 10 <br> Music: 50 <br> News: 10 <br> Sports: 20 <br> Talk and Entertainment: 0 |
| Q9a: | As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio? |
| Response: | MUSIC: No <br> NEWS: No <br> SPORTS: Yes <br> TALK AND ENTERTAINMENT: Yes |
| Q9b: | How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so. <br> Would be willing to pay: |
| Response: | SPORTS: Would Cancel Subscription TALK AND ENTERTAINMENT: $\$ 13.95$ |
| Q9c: | Are you willing to pay more than the current price of $\$ 12.95$ per month if no [PRGTYPE] were available but all other programming features of the service remain the same? |
| Response: | TALK AND ENTERTAINMENT: Yes |


| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from " 0 " meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. <br> If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10. For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 17:4 |
|  | Card 18: 10 <br> Card 19: 6 |
|  | Card 20: 0 |
|  | Card 21:4 |
|  | Card 22: 6 |
|  | Card 23:0 |
|  | Card 24: 1 |
|  | Card 65: 5 |
|  | Card 66: 0 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | THE MUSIC AND THE VARIETY. |
| Q11b: | Anything else? |
| Response: | NOTHING ELSE |


| Sc: Response: | Are you or any members of your household employed in any of the industries listed on this card? <br> An insurance company: No <br> A marketing research firm: No <br> An advertising agency: No <br> The entertainment industry: No <br> A satellite radio provider: No <br> A cable TV provider: No <br> An Intemet service provider: No |
| :---: | :---: |
| SD: | During the past three months have you taken part in any market research survey other than a political poll? |
| Response: | No |
| SE: | I'm going to ask you a few questions, but please be assured that this is only for classification purposes and that your responses will be kept confidential. Which of these groups includes your age? |
| Response: | 35-49 years |
|  | Which, if any, of the following decisions do you make or take part in making for your household? |
| Response: | Decision to subscribe to satellite radio |
| SG: | Which of these services, if any, do you or your household currently subscribe to? |
| Response: | Cable TV <br> Satellite radio |
| SH: | Which of the following best describe the type of satellite radio you or your household currently subscribes to? |
| Response: | A paid or trial subscription (such as from the purchase of a car) directly from XM or Sirius |
|  | Are you or your household currently considering subscribing to (INSERT ITEM) in the next 30 days? |
| Response: | Satellite TV: Don't know |
|  | Broadband Intemet: Don't know |
|  | Wireless phone service: Don't know |
| SK: | Which satellite radio service do you or your household currently subscribe to? |
| Response: | XM |
| SM: | Do you wear glasses or contact lenses when you read? |
| Response: | Yes |
|  | Do you have your glasses with you or are you wearing your contact lenses today? |
| Response: | Yes |
|  | RECORD GENDER OF RESPONDENT |
| Response: | Female |
| SP: | We would like to invite you to participate in a study that we think you will find interesting. The survey will take about 20 minutes. The survey we would like you to participate in requires you to read questions on a computer and either use a mouse to point and click on your answers or tell me your answers and I will record them. Would you like to participate in this study? |
| Response: | Yes, will participate |
| SQ: | May I please have your full name, address and phone number? You can be assured that your name and phone number will not be used to sell you anything or for any marketing or telemarketing purposes. It will only be used to verify your participation in the survey. (RECORD ON FRONT PAGE OF SCREENER. YOU MUST VERIFY RESPONDENT'S PHONE NUMBER. IF RESPONDENT REFUSES TO GIVE PHONE NUMBER, SAY:) I'm sorry but I cannot ask you to participate in our survey as my client needs your phone number to be able to verify your participation in this study. |
| Response: Q1a: | Gave phone number <br> Q1(a) Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | My husband wanted it |
| Q1b: | 1(b) (PROBE) Any other reason? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | 1 also wanted it |
| Q2a: | 2(a) What types of sateliite radio programming were most critical to your decision to subscribe to satellite radio? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | talk, news, |
| Q2b: | 2(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | music |
| Q3a: | 3(a) And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | everything i just mentioned |
| Q3b: | 3(b) (PROBE) Any others? (RECORD COMPLETE ANSWERS VERBATIM) |
| Response: | no |
| H01: | INTERVIEWER: HAVE THE RESPONDENT SIT IN FRONT OF THE COMPUTER AND ANSWER QUESTIONS TO THE REMAINDER OF THE SURVEY HIM/HERSELF. BE SURE TO SIT WITH THE RESPONDENT WHILE HEISHE IS ANSWERING IN CASE HE/SHE HAS ANY QUESTIONS. IF THE RESPONDENT PREFERS, HAVE HIMIHER READ THE QUESTIONS ON THE SCREEN, BUT YOU WILL ENTER THE ANSWERS. RECORD: |
| Response | Interviewer entering answers |


| Q4: | Below is a list of the types of satellite radio programming. Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio. <br> If a specific type of programming is not important at all, feel free to give it zero points. If, on the other hand, your decision was affected by only one of the types of programming and none of the others were important to you, give that type of programming all of the 100 points. There are no right or wrong answers and we are just looking for your evaluation of the relative importance of the seven types of programming reflecting both the consideration you used in deciding to subscribe and your experience with satellite radio. Please make sure that the total adds to 100 . Is this clear? (RECORD 0-100 FOR EACH. TOTAL MUST EQUAL 100.) Please click "Okay" if this is clear. |
| :---: | :---: |
| Response: | Okay |
| Q4: Response: | Please enter a whole number response from 0 to 100 in each of the spaces provided. Your responses must sum to 100. Comedy: 5 |
|  | Kids: 0 |
|  | Local Weather and Traffic: 10 |
|  | Music: 25 |
|  | News: 25 |
|  | Sports: 10 |
|  | Talk and Entertainment: 25 |
| Q5: | Now I would like to show you four of these programming types. For each type of programming you will see a number of hypothetical options showing different amounts of programming. For each hypothetical option, please indicate how desirable it would be for you relative to the other options. Please assume that in each case all other programming and non-programming features of the service including price remain the same. Please use a number from 0 (zero) = extremely undesirable to $10=$ extremely desirable. You can use any number from "0 to 10" to indicate your answer. Please examine each hypothetical amount of programming and record the number that best reflects its level of desirability or undesirability. Is this clear? <br> Please click "Okay" if this is clear. |
| Response: | Okay |
|  | A. Music Programming (Current Offering includes 74 Music Channels.) |
| Response: | 1. No music programming: 0 |
|  | 2. Substantially fewer channels and less variety of music than currently offered: 0 |
|  | 3. The same number of channels and the same variety of music as currently offered: 10 |
|  | 4. Substantially more channels and more variety of music than currently offered: 10 |
| Q5B: | B. News (Current Offering includes 13 News Channels.) |
| Response: | 1. No news programming: 0 |
|  | 2. Substantially fewer channels and less variety of news than currently offered: 0 |
|  | 3. The same number of channels and the same variety of news as currently offered: 0 |
|  | 4. Substantially more channels and more variety of news than currently offered: $\mathbf{1 0}$ |
| Q5C: | C. Sports (Current Offering includes 13 Sports Channels and Live Game Channels for Major League Baseball, NASCAR, etc.) |
| Response: | 1. No sports programming: 6 |
|  | 2. Substantially fewer channels and less variety of sports than currently offered: 10 |
|  | 3. The same number of channels and same variety of sports as currently offered: 4 |
|  | 4. Substantially more channels and more variety of sports than currently offered: 0 |
| Q5D: | D. Talk \& Entertainment (Current Offering includes 17 Talk and Entertainment channels including Opie and Anthony, Air America, etc.) |
| Response: | 1. No talk and entertainment programming: 0 |
|  | 2. Substantially fewer channels and less variety of talk and entertainment than currently offered: 0 |
|  | 3. The same number of channels and same variety of talk and entertainment as currently offered: 0 |
|  | 4. Substantially more channels and more variety of talk and entertainment than currently offered: 10 |
| Q6a: | Now, we would like you to consider the non-programming features of satellite radio such as the number of minutes of commercials per hour on music channels and geographic coverage. For each type of non-programming feature you will see a hypothetical option showing different amounts for that non-programming feature. Please repeat the desirability task we did before for the types of programming, but this time let's do it with respect to the various options for each of the non-programming features. Please indicate how desirable each of the different options of a given feature would be to you relative to the other options of that feature. Again, please assume that all other programming and non-programming features of the service, including price, remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 -extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option. |
| Response: | A. The Number of Minutes of Commercials Per Hour on Music Channels 1. No commercials on music channels: 10 |
|  | 2. 2 minutes of commercials per hour: 9 |
|  | 3.5 minutes of commercials per hour: 5 |
|  | 4. 12 minutes of commercials per hour: 6 |
|  | B. Geographic Coverage 1. Typical FM coverage: 8 |
|  | 2. Complete nationwide coverage: 9 |

Q6b: $\quad$ Now, let's turn to price. I'd like you to repeat the desirability task for various monthly prices for a single subscription. Please indicate how desirable each of the different price options would be to you relative to the other options. Again, please assume that all other programming and non-programming features of the service remain the same. Again, please use a number from 0 (zero) - extremely undesirable to 10 - extremely desirable. Please examine each option and record the number that best reflects the level of desirability or undesirability of the option.

## Response: C. The Monthly Price for A Single Subscription

1. $\$ 8.95$ per month: 10
2. $\$ 10.95$ per month: 9
3. $\$ 12.95$ per month: 2
4. $\$ 14.95$ per month: 0

Q6c: Please review the list below and tell me if there are any other non-programming features besides the ones listed that you considered in your decision to subscribe and retain your subscription to satellite radio?
-The number of minutes of commercials per hour on music channels

- Geographic coverage
-The monthly price for a single subscription


## Response: No others considered

Q7
Below is a list of the non-programming features of satellite radio. Please review the list and allocate 100 points among the features in a way that the number of points ( 0 to 100) you give each feature best reflects the relative importance of that feature to you and your family's decision to subscribe and retain your subscription to satelite radio. As in the previous 100 point allocation task, please assign each feature a number from 0 to 100 that best reflects its relative importance to you and your family's decision to subscribe and retain your subscription to satellite radio. The more important a feature is, the higher the number of points you would give it, while the less important a feature is, the fewer number of points you would give it. Please make sure that the total adds to 100 . (RECORD $0-100$ FOR EACH. TOTAL MUST E\#QUAL 100.)
Response: The number of minutes of commercials per hour on music channels: $\mathbf{5 0}$
Geographic coverage: 25
The monthly price for a single subscription: 25
Q8: Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types. Again please do so by allocating 100 points among the type of programming reflecting the $\%$ of time allocated to each. If you did not (or will not) spend any time listening to a particular type of program, please give it a zero. The type of programming listened to the most should get the highest number of points, the second most should get fewer points, etc. Make sure the total adds up to $100 \%$.
Response: Comedy: 15
Kids: 0
Local Weather and Traffic: 15
Music: 40

## News: 15

Sports: 0
Talk and Entertainment: 15
Q9a: As you know, the single subscription price per month for satellite radio is $\$ 12.95$. Let's assume that some of the current programming types were not available. Assuming that all other programming and non-programming features of the service, including price, remain the same. If no [PRGTYPE] programming were available, would it affect the amount you would be willing to pay for satellite radio?
Response: MUSIC: No
NEWS: No SPORTS: Yes
TALK AND ENTERTAINMENT: No
Q9b: How much would you be willing to pay for satellite radio if no [PRGTYPE] programming were available? Please assume that all other programming and non-programming features of the service, including price, remain the same. Please tell me the dollar amount you would be willing to pay for satellite radio if these types of programming were not offered at all. Furthermore, if you think that not having this programming type would lead you to cancel your subscription please say so.
Would be willing to pay:
Response: SPORTS: $\$ 10.00$

| Q10: | Now, I am going to show you 10 different hypothetical satellite radio program offerings. Each one represents a specific hypothetical satellite radio offering that includes a set of available programming options, as well as various combinations of the non-programming features we discussed before and a monthly price for a single subscription. Please examine each profile carefully and assign it a number from "0" meaning "definitely would not subscribe" to "10" meaning "definitely would subscribe" that best reflects your likelihood of subscribing to that offering. If you definitely would not subscribe to the offering, you would give it a 0 . If you definitely would subscribe to the offering, you would give it a 10 . For any other case, use a number between 0 and 10 that best reflects your likelihood of subscribing to that offering. If at anytime you want to change your answer to a particular offering, please let me know and we will go back and do that. |
| :---: | :---: |
| Response: | Card 25:0 |
|  | Card 26: 5 |
|  | Card 27:0 |
|  | Card 28: 3 |
|  | Card 29:8 |
|  | Card 30: 6 |
|  | Card 31: 1 |
|  | Card 32: 0 |
|  | Card 65: 0 |
|  | Card 66: 0 |
| Q11a: | And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it? |
| Response: | I would miss the whole thing, I never want to go bac to the regualr radio Anything else? |
|  | Anything else? no |

## Transcript of:

Date: June 14, 2007 Volume: VIII

Case: Adjustment of Rates for Pre-Existing Subscriptions

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|  | Page 5 |  | Page 6 |
| :---: | :---: | :---: | :---: |
| 1 | PROCEEDINGS |  | I'd just like to, if I may, the supplemental |
| 2 | 9:37 a.m. | 2 | declaration is part of our response to the |
| 3 | CHIEF JUDGE SLEDGE: Mr. Handzo? | 3 | motion. |
| 4 | MR. HANDZO: Thank you, Your | 4 | CHIEF JUDGE SLEDGE: Of Kathy |
| 5 | Honor. SoundExchange is ready to begin its | 5 | Ramono? |
| 6 | case with its first witness, Dr. Yoram Wind. | 6 | MR. HANDZO: No. That declaration |
| 7 | CHIEF JUDGE SLEDGE: All right. | 7 | was part of our response, but there was a |
| 8 | And we have a motion pending. | 8 | second declaration that we had wanted to make |
| 9 | MR. HANDZO: We do, Your Honor. | 9 | part of the response that we didn't get in |
| 10 | We filed a response to that motion yesterday, |  | time. That's the declaration of Aileen |
| 11 | late afternoon. Hopefully, the Court has | 11 | English. And that's what we filed this |
| 12 | received that. | 12 | morning that I would ask if I could provide |
| 13 | CHIEF JUDGE SLEDGE: We have. | 3 | courtesy copies to the Court. |
| 14 | MR. HANDZO: We also had a | 14 | CHIEF JUDGE SLEDGE: That's fine. |
| 15 | supplemental declaration which we weren't able | 15 | MR. HANDZO: Copies have already |
| 16 | to get in in time with that filing. That got |  | been given to counsel. |
| 17 | filed this morning. And I assume you probably | 7 | (Pause.) |
| 18 | hadn't received that, so I do have courtesy | 18 | CHIEF JUDGE SLEDGE: Mr. Wind. |
| 19 | copies of that. | 19 | MR. MEYER: Bruce Meyer, Your |
| 20 | CHIEF JUDGE SLEDGE: We'll address | 20 | Honor. |
|  | the motion first. | 21 | CHIEF JUDGE SLEDGE: I'm sorry. |
| 22 | MR. HANDZO: Okay. That's fine. | 22 | MR. MEYER: Mr. Sturm is going to |
|  | Page 7 |  | Page 8 |
|  | argue the motion for the services. | 1 | filled-out form for each verification, right? |
| 2 | CHIEF JUDGE SLEDGE: All right, | 2 | Answer: Correct. |
| 3 | good. Thank you. | 3 | Question: Do you have those |
| 4 | MR. STURM: Thank you, Your Honor. | 4 | forms? |
| 5 | In the response to the motion that was filed, | 5 | Answer: I don't. Data |
| 6 | SoundExchange has said that the services knew | 6 | Development has them and I thought they were |
| 7 | the facts related to this motion for some | 7 | part of the package that you got. If you |
| 8 | time. In fact, what we learned for the first | 8 | don't have it, I can find out. |
| 9 | time last night is that critical documents | 9 | Question: Okay, I don't believe |
| 10 | that contradict the responses that were given | 10 | we received those." |
| 11 | to the Wind Survey have been destroyed. We | 11 | Now in view of that testimony, the |
| 12 | learned that for the first time last night |  | services moved to compel production of the |
| 13 | after months of trial. | 13 | documents. The SoundExchange response was |
| 14 | We originally asked for these | 14 | that these forms are not available at the |
| 15 | verification-related documents back in the | 15 | individual level. |
| 16 | first document request in March. The time we | 16 | According to Ms. Ramono's |
| 17 | took Dr. Wind, we didn't receive them in | 17 | declaration, which was filed with the response |
| 18 | response to the request for production. And |  | in March, before the Wind deposition and |
| 19 | so we asked Dr. Wind about it at his |  | before that response to the Motion to Compel |
|  | deposition which took place on April 27th. |  | was filed, Data Direct advised counsel for |
| 21 | His testimony is quoted in our brief. |  | SoundExchange that the verification for that |
| 22 | "Question: There should be a |  | verification forms had been destroyed. |


| Page 9 | Page 10 |
| :---: | :---: |
| 1 Paragraph 9 of Ms. Ramono's declaration. | 1 respondent exists regarding the verification |
| 2 So in view of the fact that we | 2 process. The materials we provided are the |
| 3 still didn't have the documents, as I said, we | 3 only ones that exist." |
| 4 moved to compel and the Court granted the | 4 Now that appeared irreconcilable |
| 5 Motion to Compel. The Court's order was | 5 with the testimony that I just read from Dr. |
| 6 entered May 17 and on June 1st we received | 6 Wind who said there were forms that were |
| 7 this, along with other Motions to Compel. On | 7 filled out and that Data Direct had them. And |
| 8 June 1st, we received a massive dump of about | 8 that's what prompted us to file the motion on |
| 80,000 pages of documents; and about a week | 9 Tuesday. |
| 10 later, another 12,000 pages of documents, with | 10 Now so there have been multiple |
| 11 no indexes at the time, although they were | 11 opportunities since March when SoundExchange |
| 2 apparently provided some time later. | 12 counsel first found out that these documents |
| 13 So we went through those documents | 13 had been destroyed to advise both us and the |
| 14 and still couldn't find the verification forms | 14 Court that these documents had been destroyed. |
| 15 that Dr. Wind had said existed. And so we | 15 But that was never done, despite a knowledge |
| 16 again contacted SoundExchange and we receive | 16 and despite Dr. Wind's sworn testimony that |
| 17 back orally and then in email, this is | 17 the documents exist |
| 18 Saturday, June 9th, which is attached as | 18 Well, why is this such a big deal? |
| 19 Exhibit G to our motion. It says in part, "at | 19 Ms. Ramono's declaration which was Exhibit 2 |
| 20 his deposition, Dr. Wind did not mean to | 20 to the SoundExchange response puts the key |
| 21 suggest that additional materials such as | 21 documents together and I think that the |
| 22 individual verification forms for each | 22 documents taken together with Dr. Wind's |
| Page 11 | Page 12 |
| 1 testimony show why this is so important | 1 would have been no. But Dr. Wind testified |
| 2 Exhibit A is this validation form | 2 that every respondent who was contacted |
| 3 which was supposed to be filled out and | 3 responded yes to that question. |
| 4 apparently it is these filled-out forms, what | 4 He said and this is the short part |
| 5 we've been seeking all along, and what was | 5 of it, but the whole thing is in there at |
| 6 destroyed. It has a place, a blank, for the | 6 pages six and seven, "they basically reported |
| 7 response to each of the three questions, | 7 that there was no case of any no responses |
| 8 including Question 2 which, if you flip over | 8 from the people they got." |
| 9 to the next page is the verification | 9 So you have all these considerers |
| 10 questionnaire. And it says from Data | 10 saying in the main survey, no, I don't have |
| 11 Development Worldwide, it says "I'm calling to | 11 satellite radio. And in the verification |
| 12 confirm a few points in the survey, one where | 12 saying yes, I do. "I currently have satellite |
| 13 you in a mall and ask questions and then ask | 13 radio in my household." And with that record |
| 14 to go to a facility to do a survey; and then | 14 the survey would be fundamentally unreliable |
| 15 two is the critical one. "Did you tell the | 15 because if there's inconsistent data regarding |
| 16 interviewer that you currently have satellite | 16 whether they even have satellite radio, |
| 17 radio in your household?' | 17 responses to much more subtle questions in the |
| 18 Now as we set out in our motion, | 18 survey wouldn't have any credibility. |
| 19 between a quarter and a third of Dr. Wind's | 19 Now the story that has been told |
| 20 survey respondents were so-called considering | 20 in response to this motion is that well, |
| 21 subscribers or nonsubscribers. So the | 21 actually, we had a special rule for |
| 22 truthful answer to them, to that question | 22 considerers. A successful verification for |

them would be yes, no, yes. Well, look at the form. It says "I'm calling to confirm a few points in the survey."

Now you wouldn't normally say "I'm calling to confirm a few points in the survey, one of which isn't true." That doesn't make any sense. Secondly, the form has the desired response, yes, yes, yes pre-marked. If they were going to do something different in verification for considerers, they could have done a separate form. They could have said with the no marked in response to question two, or they could have asked a different question, did you tell the interviewer that you currently have or are considering getting satellite radio? But there isn't any of that.

And certainly Dr. Wind didn't seem to be aware of it at his deposition because as I said, he testified unequivocally that 54 percent of the respondents answered no to every one of the questions.

MR. MEYER: Said yes.
according to Ms. Ramono, it took a week and involved hundreds of phone calls. And for there to be absolutely no documents concerning it is just unbelievable. No emails?

Apparently there were instructions given that yes, no, yes, was the desired response for considerers. There's no written instructions. There's nothing. And again, it is directly contrary to what Dr. Wind testified which is that every single one that they reached said yes to all three questions.

JUDGE ROBERTS: You may be the wrong person to ask this question of, but looking at Exhibit C --

JUDGE ROBERTS: Do you know what those numbers are? For instance, I look and I see Atlanta, Angel, I presume is the first name of the person contacted and then there's a five followed by a two. Does that mean that the surveyor, maybe it's a surveyor who is

Page 15

5

Page 15

## MR. STURM: Yes.

Angel and she conducted five surveys, two of

5

MR. STURM: Excuse me, said yes to every one of the questions. Thank you.

Then the lost document we have is this Exhibit C. And this is a -- just the summary and it says names, apparently of interviewers, and it says validation is good. So it says they were good, but it doesn't say what the answer was.

And so you've got this massive gap in the record between the blank form, the questionnaire, which appears to be directed to getting all yeses, and then some completed results which say everything is good. You have nothing in the middle. There is not one document anywhere that shows this supposed special rule for considerers. Nothing. And keep in mind, there were three independent parties involved in this process. There was Dr. Wind. There was DDW, Data Development Worldwide. And then there was the subcontractor for this, ABC Research. And to have these three entities in this process,

Page 16
which were validated? Is that what that means?

MR. STURM: That's what I've taken this to mean. And just eyeballing it, it appeared that the number verified in some of them, some of them have no name on them. It appeared that the number of verified was close to the 54 percent where the validation is good. That's what I took it to mean.

Then, it just says --
CHIEF JUDGE SLEDGE: Why then did you just say that the last document says that all the validations are good?

MR. STURM: It says validation is good, but you don't know what's missing is what "good" means. What were the answers to the validation?

CHIEF JUDGE SLEDGE: What you also don't know is whether that's all the validations. You said that they say that all the validations are good. How do you reach that conclusion?

| Page 17 | Page 18 |
| :---: | :---: |
| 1 MR. STURM: There's a validation | 1 MR. STURM: Not from these |
| 2 is good; there's nothing about validations | 2 documents. The representation has been that |
| 3 b | 3 two calls were made to each recipient, each |
| 4 CHIEF JUDGE SLEDGE: But the | 4 survey respondent. But again, there's no |
| 5 number of validations good is less than the | 5 documents to reflect what would be hundreds of |
| 6 number of surveys. | 6 phone calls. |
| 7 MR. STURM: And he said in his | 7 JUDGE ROBERTS: So it could be |
| 8 original written direct testimony that they | 8 that all five were contacted of which only two |
| 9 validated 54 percent. | 9 received a positive validation and the other |
| 10 CHIEF JUDGE SLEDGE: Right. So | 10 three for some reason or other answered no to |
| 11 you're assuming that this is all the | 11 one or more of those questions? |
| 12 validations, but you don't have anything to | 12 MR. STURM: That's right. And we |
| 13 show that? | 13 just don't know. |
| 14 MR. STURM: Your Honor, the five | 14 <br> JUDGE ROBERTS: Or they were never |
| 15 sheets of paper that we have here are all we | 15 contacted at all. |
| 16 have about validation. That's all we've got. | 16 MR. STURM: They were never |
| 17 JUDGE ROBERTS: So we don't know, | 17 contacted. |
| 18 going back to the Atlanta market, we don't | 18 CHIEF JUDGE SLEDGE: And did you |
| 19 know if interviewer Angel of the five surveys | 19 say that the 54 percent is close to the number |
| 20 that she conducted, we don't know of the three | 20 that say the validations are good or is |
| 21 that are missing here, whether there was even | 21 exactly the same as the number of the |
| 22 an attempt to verify those, correct? | 22 validations that are good compared to the |
| Page 19 | Page 20 |
| 1 number of surveys done? | 1 our rules require the retention of the |
| 2 MR. STURM: Your Honor, I | 2 individual validation? |
| 3 eyeballed it and it looked close and I did not | 3 MR. STURM: There is the |
| 4 attempt to see if it was exact. | 4 requirement that input data be retained. |
| 5 (Pause.) | 5 JUDGE ROBERTS: Can you point to |
| 6 MR. STURM: So Your Honors, the | 6 that? I think I'm looking at it, 351.10(e), |
| 7 absence of this data, the destruction of this | 7 but perhaps I'm not reading the rule quite |
| 8 data regarding the verification process, | 8 like you are. |
| 9 particularly when coupled with what Dr. Wind | 9 MR. STURM: May I grab my copy of |
| 10 testified to very clearly, under oath, makes | 10 the rule, Your Honor? |
| 11 this survey unreliable. It justifies drawing | 11 I'm sorry I didn't bring that. |
| 12 an inference that as Dr. Wind explicitly | 12 (Pause.) |
| 13 testified, that respondents who were reached | 13 It's the last sentence, |
| 14 during the verification process answered yes | 14 "summarized descriptions of input data, |
| 15 to all the questions, that would mean that for | 15 aberrations of input data and the input data |
| 16 the considerers that they were testifying that | 16 themselves should be retained." And I believe |
| 17 they both had satellite radio, didn't have | 17 that the responses to the verification |
| 18 satellite radio, that would make the survey | 18 process, they're part of the survey, an |
| 19 fundamentally unreliable and should make it | 19 essential part of the survey and they should |
| 20 inadmissible and therefore we would request | 20 have been retained. |
| 21 that it be excluded from evidence. | 21 JUDGE ROBERTS: How are they input |
| 22 JUDGE ROBERTS: Mr. Sturm, what in | 22 data? |

MR. STURM: Well, they are the same. They are Respondent's answers to questions related to the survey. I believe the same as any other responses to questions related to the survey. It's all part of one process.

JUDGE ROBERTS: I think that certainly if the inputs that the initial responses that they gave and in the mall when they were contacted by these various interviewers, if they had disposed of those, that's clearly the input data because that is, in fact, a number. They generated the numbers that Dr. Wind was using, but I'm less clear as to how the verification forms are, in fact, the input data as they do not generate any numbers that document.

MR. STURM: Well, they generate the 54 percent verification that Dr. Wind refers to in his report.

JUDGE ROBERTS: He refers to it, yes, but he doesn't actually use the 54

Page 23
present on this motion?
MR. STURM: I am representing
Sirius, Your Honor. Do you mean, XM?
CHIEF JUDGE SLEDGE: No.
MR. STURM: I know it gets confusing.

CHIEF JUDGE SLEDGE: Thank you, I was confused. Let me go back and change that.

Just a moment.
(Pause.)
MR. MEYER: The only point I
wanted to add to Mr. Sturm's presentation and
it was in response, I believe, to Judge
Roberts' question is first of all, I think
they have a general obligation to retain any
documents that are relevant to the case, and certainly documents that were responsive to one of our document requests, even apart from
the portion of the rule that speaks of the
inputs to the survey.
But the other point I wanted to
make --
percent number.
MR. STURM: Other than to demonstrate the reliability of the survey which is a critical part, portion of its admissability.
(Pause.)
MR. MEYER: May I be heard to address that point?

CHIEF JUDGE SLEDGE: No, sir.
MR. STURM: Just one more thing to add and obviously I was answering the question, there have now been two affidavits and neither one of them, as I pointed out before, says anything about how these supposed special instructions were implemented or communicated. There is no explanation for the destruction of the verification forms.

They just were destroyed. Thank you.

CHIEF JUDGE SLEDGE: Thank you. (Pause.)
Does Sirius have anything to
Page 24
JUDGE ROBERTS: Let me stop you right there.

MR. STURM: Yes, sir.
JUDGE ROBERTS: How can you be responsible for holding documents that are going to responsive to a document request? You don't know at the time you have the documents whether or not they're going to be asked for at some point in time?

MR. STURM: Your Honor, I think it's like in any litigation, they put in a report that affirmatively represents in the body of the report that 54 percent of the people were validated. The report contains, as an exhibit, Dr. Wind's report contains as Appendix E the instructions to the interviewers which themselves say that it's contemplated that there will be 100 percent telephone validation on all completed interviews. That's in Tab E to Dr. Wind's report, field instructions.

Then also attached to Dr. Wind's

## report --

JUDGE ROBERTS: He's wrong there.
MR. MEYER: I mean clearly that didn't happen for whatever reason and we don't know exactly why not. But so he makes the affirmative representation in the report that it was 54 percent. He attaches to his report the instructions to the interviewers which says that it's contemplated that there will be 100 percent validation. And then he attaches, as Exhibit F to his report, the verification form saying this is the form that is supposed to be used to verify and it's this form that they have inexplicably destroyed with no explanation.

So I would say, Judge Roberts, that to argue that what we didn't realize that we should have kept these, really stretches the bounds of credulity, if not ethics. I mean the fact that something that you attach is an exhibit to your expert's report which you say is part of the protocol of the report Page 27
retains yet another independent company called ABC to do the verification, again independent of DDW, independent of Dr. Wind and they have no idea what all of this is for or it's about.

Now the way the verification process works and Judge Roberts, to some of your questions is, if you look at the validation summary form, you're correct that the -- when you look at Atlanta and then there's a list of names. Those are the names of the DDW interviewers, who did the interviews in the malls in that market.

So what the verification firm does is they attempt to contact every one of the people who was a survey respondent and when you've heard referred to 100 percent verification, they don't mean that they complete 100 percent. They mean they attempt 100 percent. They try and call every survey respondent. They agree to call twice. If they reach them, great. If they don't, they figure that's enough.
and then to come in and say well, we didn't realize that it might be asked for, that we would have to keep it, seems to me to be somewhat of a stretch. But that's the extra point I wanted to make.

CHIEF JUDGE SLEDGE: Thank you. MR. MEYER: Thank you.
CHIEF JUDGE SLEDGE: Mr. Handzo.
MR. HANDZO: Thank you, Your
Honor. Let me start where Sirius did, with
the rhetorical question why is this a big deal? The answer is it's not. It's all a red herring.

Here's what happens. Dr. Wind designs a survey. He hires an independent research firm, Data Development, DDW, to field the survey. It's a double-blind survey, by the way. DDW doesn't even know who the survey is being run for or why it's being run.

DDW fields the survey. They have the interviewers who go out to the malls and they do the interview. DDW then, in turn,

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And so --
CHIEF JUDGE SLEDGE: What is the basis of that statement?

MR. HANDZO: I'm sorry?
CHIEF JUDGE SLEDGE: What is the basis of that statement?

MR. HANDZO: Dr. Wind, that may actually be in Dr. Wind's testimony, but he would certainly testify to that and he's here today.

JUDGE ROBERTS: So just to
clarify, Mr. Handzo, Angel, here in Atlanta, did five surveys?

MR. HANDZO: Right.
JUDGE ROBERTS: And you're saying
that of those five surveys, those people were
called twice?
MR. HANDZO: Correct.
JUDGE ROBERTS: Okay, and it yielded two positive responses?

MR. HANDZO: Two people were actually reached.

JUDGE ROBERTS: Two people were actually reached?

MR. HANDZO: Correct.
CHIEF JUDGE SLEDGE: I don't
understand. What do you mean they were called twice?

MR. HANDZO: Your Honor, what happens is if, let's take Angel from Atlanta who did five surveys.

CHIEF JUDGE SLEDGE: Oh, I see. They weren't called for the survey --

MR. HANDZO: No, these five people had completed the survey and Angel from DDW
had done the survey with these five people.
Then we give those names and addresses or DDW
gives those names and addresses to the verification firm. The verification firm then tries to call each of those people and make two attempts to call each of those five people just to ask these questions. Well, they don't reach all five. In this case, with Angel, they reach two. And so they ask the

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then make sure that they contact every person who was interviewed by Angel, for example. Or whether they go back and try to verify truly reaching 100 percent. But the point is, if you get one that doesn't --

JUDGE ROBERTS: Wait a minute. You said that they're already trying to contact all the people, Angel's survey.

MR. HANDZO: Right, but you're only making two attempts. If you found that one of Angel's didn't verify, that you reached somebody who said oh no, I never got interviewed in the mall, then you would make sure. You'd keep trying until you got all five of Angel's. But if you don't get -- so the numbers that you're seeing here, on the right, those are the evaluations -verifications that were successful. There weren't any where people said oh no, I wasn't interviewed. If there had been, there would have been a further step in the process. But that further step in the process never
verification questions of those two people.
And the result is that we get the verification numbers that you've heard talk about, I think it's 54 percent. Now as it turns out, that 54 percent verification is actually way higher than industry standards and research standards typically would have you do.

JUDGE ROBERTS: Mr. Handzo, do you
know why on this chart there's not a
validation is bad or another category that
says no response?
MR. HANDZO: Because and again I think this is in Dr. Wind's testimony, but he can certainly testify to it. Had they gotten a bad verification, in other words, had somebody answered the questions in a way which said oh no, I wasn't interviewed or I'm not a subscriber or whatever, then they would have gone back and done a complete review. I'm not sure about this. I need to ask Dr. Wind.

I don't know whether they do a --
Page 32
happened, because the verifications were all good.

So that's the process. Now what
Sirius and XM want to argue is oh my goodness,
in the verification process, some of the people should have said yes, yes, yes, on the verification form, the people who are current subscribers and in order to be correctly verified, some of the people should have said yes, no, yes. Those are the people who are not yet subscribers, but are considered.

So what was ABC told to do? We know what they were told to do because we've given you declarations from DVW, Kathy Ramono and from ABC and the declarations say exactly --
MR. MEYER: Your Honor, I am
sorry. It just occurred to us that perhaps
Dr. Wind should not be in the courtroom while
Mr. Handzo is arguing about what he understands to have really happened here, just as a matter of sequestration.

MR. HANDZO: I don't have an objection.

CHIEF JUDGE SLEDGE: Dr. Wind will please remove himself from the courtroom.
(Pause.)
MR. HANDZO: Your Honors, if you look at the Ramono declaration that we attached last night, she tells us what DDW instructed ABC with respect to verifying the survey results. And she says "for respondents who are subscribers, a respondent would be verified if she or he answered yes to all three question son the verification questionnaire. The respondents who were considering subscribing, a respondent would be verified if she or he answered yes to questions one and three, and no to question two. I further instructed ABC to notify me if any respondent answered a question incorrectly."

So we've got testimony from her
about how she instructed the verification to
Page 35
Ramono's declaration. But that's what she told them to do. And we further have the declaration of ABC , where ABC says that they got the instructions from DDW and they confirmed the 54 percent of the respondents of the survey were contacted by ABC and that those individuals gave the proper responses to the questions.

In particular, each of the respondents who had previously identified themselves as subscribers to satellite radio answered all three questions yes. Each of the respondents who had previously identified themselves as considering a subscription to satellite radio answered the questions yes, no, yes.

So we've got both: DDW and ABC submitting sworn declarations to this Court saying ABC was correctly instructed by DDW how to conduct the verification and what the correct answers were for both considering subscribers and current subscribers. You've
be done. We then have a declaration from the verification firm, ABC.

JUDGE ROBERTS: Mr. Handzo, looking at Exhibit B, the verification questionnaire?

MR. HANDZO: Yes.
JUDGE ROBERTS: And this was brought up by Mr. Sturm. Why are the boxes already checked?

MR. HANDZO: That was given to ABC
by DDW as a sample, but then there were, apparently Ms. Ramono called them and said for the considering subscribers, here's how you need to do it.

JUDGE ROBERTS: Was there one sent that had a yes box, a no box, and a yes box checked?

MR. HANDZO: I don't believe so. My understanding is that those communications were communicated orally by Ms. Ramono.

So -- but we do know that those communications happened because we have Ms.

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got ABC saying we got those instructions. That's how we did it and we verified according to that process.

So basically what you have to believe in order to accept this motion is that these two people from ABC and DDW are lying to this Court. Why in the world these two independent companies which have no dog in this fight, they don't even know what this case was about. They weren't told because it's a double-blind survey, who was ultimately conducting the survey or what it being used for, why they would come in and lie about what happened is utterly beyond me. Nobody has attempted to explain that one.

So it's simply not true to say we don't know what happened here. We know exactly what happened here because we have the declarations of two totally uninterested witnesses with no stake in this case, not to mention the fact that in order to accept the arguments of XM and Sirius, you'd have to
believe that ABC faked the responses, faked the verification in the first place, which also doesn't make any sense.

CHIEF JUDGE SLEDGE: No stake in this case, except these are people that want business from Dr. Wind.

MR. HANDZO: Your Honor, I'm not even sure that ABC would have known that Dr. Wind was involved.

I have to say I'm not sure about that. I'd have to ask Dr. Wind. But my understanding of the process is Dr. Wind does retain DDW. Then DDW retains ABC. But I also have to say these are companies that are in the business of doing this. If they were faking results and lying to Courts, they're jeopardizing their own business by doing that. They're not going to do something like that and there's certainly no reason to believe that would have happened in this case.

CHIEF JUDGE SLEDGE: Can the same argument be made for experts that slant their

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was all correct.
So again, you've got ABC doing the verification, but then DDW reviewing their work to make sure it's all correct. And again, that's in Ms. Ramono's declaration about which she'd have to be lying in order for the services' motion to be correct.

However, those forms, those individual forms, we can't get our hands on. Now, Mr. Sturm keeps saying they're destroyed. Frankly, I don't really know. What I know is that we asked DDW for them and they said they can't be located or they weren't retained or whatever. I mean what I've heard is that they were painting their offices and they were moving and they can't find things.

For all I know, it may turn up in two months, but the bottom line is from our perspective, we can't get our hands on them, but I don't want the Court to think that somebody went off to a shredder and purposely destroyed these things. That's not what
on the up and up. So why are we even arguing
about this? Well, when ABC did the
verification, they filled out a form for each one. And then they transmit those forms to DDW and as you see from the Ramono declaration DDW then looks over them to make sure that it

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happened.
But given that we can't --
CHIEF JUDGE SLEDGE: Well, how do you know that?

MR. HANDZO: Well, it's true, I don't know. All I know is we asked them for them and they say they're not available. I don't know what happened to them.

But that sort of leads us to Judge Roberts' question, is there any violation of any rule or regulation or order here? And I read the regulation at 351.10 (e) to say that what we are required to retain is the inputs to the survey.

Now this verification happens after the survey is over. It's done. The responses are in. This is not an input to the survey results or an input to the survey itself. And there's nothing in its verification process that is a number that anybody is relying on to set a rate in this case.

| Page 41 | Page 4 |
| :---: | :---: |
| inputs are the survey | 1 happened. We've got testimony not |
| 2 questionnaires, the responses to thos | 2 Dr. Wind, but we've got the declarations from |
| 3 questionnaires and the tabulations, all of | 3 ABC and DDW which seems to me is pretty |
| provided every piece of appear ther | 4 compelling evidence that it happened just |
| nobody sugge |  |
| ere's just no way to conside | And I would also say we should |
| 7 these verification forms an input into the | 7 keep in mind that verification is just one |
| 8 survey itself. The Court, in addition to | 8 element of proving that a survey is accurate |
| ation, | 9 and provides useful data. I mean let's say w |
| 10 compel which the Court granted. We went to | 10 hadn't verified at all. Those Courts und |
| 11 DDW. We asked them for the forms. They don't | 11 the federal rules would say well, that's an |
| 12 have them for whatever reasons. We can't | 12 issue that we'll consider in looking at the |
| 13 produce what we don't | 13 weight of the survey. Courts don't throw out |
| 14 JUDGE ROBERTS: Dr. Wind | 14 a survey if it wasn't -- if nobody even |
| 15 statement about 54 percent verification, w | 15 attempted to verify |
| 16 don't have any data now apparently to verify | 16 What happened here as Dr. Wind |
| 17 his 54 percent. | 17 will testify is that DDW and ABC actually went |
| 18 MR. HANDZO: Well, we do have data | 18 beyond what is ordinarily required for survey |
| 19 in the sense we've got the summary sheet which | 19 research. They did more verification than one |
| 20 shows you the number of contacts and that they | 20 would ordinarily do, even for a very, very |
| 21 were verified. So we do have that. But in | 21 rigorous survey. I mean, for example, you've |
| 22 addition, we've got the testimony that it | 22 heard a lot of testimony about Sirius and XM |
| ge 43 | ge |
| 1 surveys in this case, there's no verificatio | 1 day comes down to is that in his deposition, |
| 2 of those at all, period | 2 Dr. Wind said well, the verification would |
| 3 So it's not like verificatio | 3 have required people to say yes, yes, yes |
| 4 means the survey is simply not admissible to | 4 Well, what happened in the deposition and |
| 5 begin with. It's an issue that the Court can | 5 again, I think Dr. Wind will explain his |
| 6 consider with respect to weight. But the fact | 6 testimony. In the deposition, he's handed |
| 7 again is it was done and we know it's done and | 7 that sample form, that you've seen and it's |
| 8 we've got sworn testimony that it was done. | 8 got the yes, yes, yes answers. So he |
| 9 CHIEF JUDGE SLEDGE: Sounds like | 9 understands the question to be addressing |
| 10 an improper comparison. Here, we've got an | 10 people who are current subscribers for whom |
| 11 expert witness whose testimony is subject to | 11 the answers would be yes, yes, yes, and that |
| 12 the gatekeeping responsibility of Court, and | 12 was the ba |
| 13 that doesn't apply to any of those surveys | 13 He was intending to say that would |
| 14 that you mention. | 14 be the correct answers for people who say yes, |
| 15 MR. HANDZO: What I would suggest | 15 no, yes. So bottom line, I think that's all |
| 16 to you, Judge. That's a fair point, but the | 16 a misunderstanding which he will explain, but |
| 17 case law which addresses that gatekeeping | 17 at the end of the day, as I say, what we do |
| 18 function doesn't say oh, if there's no | 18 know is that we have sworn testimony from |
| 19 verification you automatically throw the | 19 disinterested witnesses that the verification |
| 20 survey out. They say you can consider it as | 20 was performed correctly, with the correct |
| 21 an issue going to the weight of the survey. | 21 responses for 54 percent of the respondents. |
| 22 What all of this at the end of the | 22 If the Court has any questions, |

I'm happy to address them.
CHIEF JUDGE SLEDGE: A lot of your explanation comes from the declarations and you say that Dr. Wind will explain his deposition testimony which is -- needs explanation, and yet your response to this motion says that the motion is frivolous.

Hyperbole is not a good trial tactic.

MR. HANDZO: I understand, Your Honor.

CHIEF JUDGE SLEDGE: You made another statement that may be confusing. You said that the content of the two declarations is evidence to establish the facts on the verification process. Those declarations are not evidence.

MR. HANDZO: Your Honor, for that matter, I would suggest then that Dr. Wind's deposition on which the services rely is likewise not evidence. That's not in the record either.

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is there isn't a separate form like this for the considerers. There's only this. And so his testimony makes perfect sense.

Now, Mr. Handzo also said well, maybe these things will turn up because they were painting their office or whatever. Again, paragraph 9 of the Ramono declaration says we don't know anything more than this. It says "counsel for SoundExchange requested in March 2007 that DDW provide all materials relating to the validation process. At that time, I discovered that the validation forms had not been retained." So it doesn't sound like the prospects are very good for these things ever showing up.

Mr. Handzo also described the process which is ABC does the validation and then DDW reviews it to make sure it's correct. But that's what we want to do. And that's what we're not going to be able to do because the documents have not been retained. Thank you.

But we are certainly happen to submit the declarations into evidence if the Court desires that.

CHIEF JUDGE SLEDGE: If you can get them into evidence, you can submit them. That still wouldn't make them evidence.

Okay. All right, any follow up, Mr. Sturm?

MR. STURM: Very briefly, Your
Honor. Mr. Handzo says we know what happened
because we have the sworn declarations from the two survey people to tell us.

But as Your Honor pointed out, we also have Dr. Wind's testimony which is directly contrary with respect to the results of the responses that were given in the verification process.

Mr. Handzo tries to explain that testimony away saying well, Dr. Wind was looking at this forum which is marked yes, yes, yes and he says so he thought they were just talking about subscribers, but the point

CHIEF JUDGE SLEDGE: Mr. Meyer, anything in addition?

MR. MEYER: No, Your Honor. CHIEF JUDGE SLEDGE: Mr. Handzo?
MR. HANDZO: Your Honor, the one point I was going to add is that in the volumes of documents we produced, they not only have all of the verbatim responses, they actually have the names and addresses of all of the survey respondents. So to say oh, we're wholly at a loss, there's nothing we can do to verify this. It's not true. They could actually go through a verification process themselves. They have the names and addresses of the survey respondents.

So if they're willing to check on this, they can do it. They could have done it. So it's not like there's no remedy here
for them. They could go through and check on the accuracy of these responses and verify themselves that they have that information to do it.

| Page 49 | Page 50 |
| :---: | :---: |
| CHIEF JUDGE SLEDGE: Don't the rules on unsolicited calls to people who put their name in the no box interfere with that statement? | 1 Judges find that the requirement of Regulation <br> 2 351.10(e) for presenting and preserving <br> 3 underlying data does not apply to the <br> 4 information in question. There is no -- it has |
| MR. HANDZO: Your Honor, you are a | 5 not been determined that verification |
| little bit beyond me in my knowledge of the | 6 required for a survey to be admissible and, |
| call rule" so as far as I can t | 7 therefore, the verification data is not |
| nobody hon | 8 underlying data for the survey. On our gate- |
| , | 9 keeping responsibilities for expert testimony, |
| CHIEF JUDGE SLEDGE: I don't know. | 10 there has not been established from the |
| MR. HANDZO: My point is they have | 11 evidence that the industry standard for |
| the information | 12 surveying requires that surveys be verified |
| MR. STURM: May I address | 13 nor do our rules of procedure require that |
| CHIEF JUDGE SLEDGE: I think | 14 surveys be verified. |
| that's clear. | 15 Verification is an element to fit |
| (Pause. | 16 within the weight of the evidence presented |
| JUDGE SLEDGE: Thank you. We'll | 17 and does not -- is not a required part of |
| recess for consideration | 18 admissibility and with these findings, the |
| (On the record at 10:49 a.m. | 19 motion filed is denied. |
| CHIEF JUDGE SLEDGE: | 20 MR. HANDZO: Your Honor, if I |
| we'll come to order. All right, considering the presentation on the emergency motion, the | 21 I think Dr. Wind is still outside. While <br> 22 we're getting him, we do have binders of the |
| Page 51 | ge 52 |
| testimony that I'd like to distribute to the | 1 THE WITNESS: Good morning. |
| Court. | 2 DIRECT EXAMINATION |
| JUDGE ROBERTS: By the way, so | 3 BY MR. HANDZO |
| that everybody's clear, with respect to this | 4 Q For the record, could you |
| motion on the record and any others that may | 5 introduce yourself to the Court? |
| be made during the course of this proceeding, | 6 A Yeah, I'm Yoram Wind. I am a |
| the time that has gone through during this | 7 Professor of Marketing and a Lauder Professor |
| period is charged to the moving party. | 8 at the Wharton School, University of |
| MR. HANDZO: Your Honor, | 9 Pennsylvania. |
| SoundExchange if we can proceed now, will call | 10 Q How long have you taught at the |
| Dr. Wind. | 11 University of Pennsylvania? |
| CHIEF JUDGE SLEDGE: Please raise | 12 A Forty years. |
| your right hand. | 13 Q What courses do you teach? |
| Whereupon, | 14 A Various marketing courses, |
| YORAM WIND | 15 marketing strategy, consumer behavior and |
| was called as a witness and, having been first | 16 marketing research, marketing research and |
| duly sworn, was examined and testified as | 17 modeling for business decisions and so on. |
| follows: | 18 Q Do you teach graduate or |
| CHIEF JUDGE SLEDGE: Thank you, be | 19 undergraduate courses? |
| seated. | 20 A Mostly MBA and Executive |
| MR. HANDZO: Good morning, Dr. | 21 Development which is basically senior |
| Wind. | 22 executives. |

| Page 53 | ge 54 |
| :---: | :---: |
| Q Is that a particular focus to your | 1 various topics related to marketing. |
| own academic work | 2 Q Dr. Wind, in the course of your |
| A Mostly in the marketing area, the | 3 academic work have you had occasion to perform |
| marketing strategy, relating to the use of new | 4 or supervise surveys? |
| 5 methods for better decision relating to areas | 5 A Yes, many of them. I probably |
| such as corporate growth, market segmentation, | 6 conducted over the last 40 some years probably |
| positioning, new product development and the | 7 thousands of surveys, supervised dissertations |
| 8 lik | 8 of research of students in many of the courses |
| Q Dr. Wind, what is your educational | 9 I teach, conducted and evaluated research for |
| 10 background? | 10 companies for whom I've consulted over the |
| 11 A My Doctorate is from Stanford | 11 years, evaluated research as an editor those, |
| 12 University. | 12 when I was the Editor in Chief of Journal of |
| 13 Q That is a Doctorate in what? | 13 Marketing as well as being on editorial review |
| 14 A In marketing and the behavioral | 14 boards of most of the marketing publications. |
| 15 sciences. | 15 Q Between the surveys that you've |
| 16 Q When did you receive that degree? | 16 conducted yourself, the ones that you've |
| 17 A In January ` 67 when I started | 17 reviewed for your students, and the ones that |
| teaching at Wharton. | 18 you reviewed as an editor, do you have a |
| Q Have you authored any books or | 19 number of the surveys you've been involved in? |
| 20 publications? | 20 A It would have to be in the |
| 21 A Yes, about 21, I think books and | 21 thousands |
| 22 over 250 articles, monographs, chapters on | 22 Q You mentioned doing some survey |
| Page 55 | Page 56 |
| work for companies. Do you occasionally serve | Q Okay, we'll get to contract in |
| as a consultant to companies? | 2 awhile but does that involve going out and |
| A Yes, I regularly serve as a | 3 actually doing a survey and getting |
| consultant to companies both with respect to | 4 respondents and all that sort of thing? |
| 5 marketing strategy in general, business | A Yes, most of the studies involve |
| 6 strategy as well as with respect to specific | 6 development of a research instrument and then |
| issues they have that require research. | 7 going out and interviewing consumers. |
| Q And have you conducted market | 8 Q Now, in addition to the consulting |
| research or survey research for the companies | 9 work that you've done for businesses, have you |
| 0 that you consult with? | 10 testified in Court with respect to survey |
| A Many of them, yes. | 11 evidence? |
| 12 Q Okay. Can you give us an example? | 12 A Yes, I have. |
| 13 A Well, IBM, I was involved in the | 13 Q Do you recall how many times? |
| 14 design of the AS-400. Courtyard by Marriott, | 14 A Not really. In my resume there is |
| 15 actually it was Marriott Corporation, | 15 a listing of cases in which I have been |
| 16 basically it was the design of the Courtyard | 16 involved. I suspect probably in terms of |
| 17 by Marriott Hotel. | 17 actual court appearances, somewhere in 30,40 |
| Q And let me just stop you there. | 18 times over the span of the last probably 30 |
| 19 Did that involve survey research? | 19 years or so. |
| 20 A It involved a conjoint analysis | 20 Q And in those 30 to 40 cases have |
| 21 study which would fall under the category of | 21 you been accepted by the court as a survey |
| 22 survey research. | 22 research expert? |

|  | Page 57 | Page 58 |
| :---: | :---: | :---: |
| 1 | A Yes. | 1 probably over 20 years. He got his Doctorate |
| 2 | MR. HANDZO: Your Honor, I would | 2 as far as I recall, from Harvard, came to us |
| 3 | offer Dr. Wind as an expert in marketing, | 3 and since he came to Wharton, we have been |
|  | marketing strategy and marketing research. | 4 working very closely, he and another colleague |
| 5 | CHIEF JUDGE SLEDGE: Any | 5 of ours who retired recently, Paul Green. So |
| 6 | objection? | 6 many of the publications that you will see in |
| 7 | MR. MEYER: No objection. | 7 my resume will be a Green, Krieger, Wind, some |
| 8 | CHIEF JUDGE SLEDGE: Without | 8 combination of that. |
| 9 | objection, the offer is admitted. | 9 Q Okay, and Dr. Krieger assisted you |
| 10 | BY MR. HANDZO: | 10 with the statistical analysis? |
| 11 | Q Dr. Wind, in the course of your | 11 CHIEF JUDGE SLEDGE: And you said |
| 12 | work in this case, were you assisted by anyone | 12 he's a Professor of German of the Statistical |
| 13 | at the University of Pennsylvania? | 13 Department? |
| 14 | A Yes. For the statistical analysis | 14 THE WITNESS: No, no, Statistics. |
| 15 | and the analysis of the conjoint analysis part | 15 He is a Professor of Statistics and the |
| 16 | of the study I conducted, I worked closely | 16 Chairman, the Chairman of the Statistics |
| 17 | with Professor Abba Krieger, who is a | 17 Department at Wharton. |
| 18 | professor and Chairman of the Statistic | 18 CHIEF JUDGE SLEDGE: Chairman. |
| 19 | Department at Wharton actually. | 19 THE WITNESS: Chairman, sorry. |
| 20 | Q How long have you worked with Dr. | 20 BYMR. HANDZO: |
| 21 | Krieger? | 21 Q Dr. Wind, we've got a very large |
| 22 | A Almost since he came to Wharton, | 22 notebook in front of you. I'm going to ask |
|  | Page 59 | Page 60 |
|  | you to open that up and take a look at the | 1 A Yes. |
|  | document that appears in the first tab that | 2 Q Okay, and did you prepare this |
|  | says "Testimony". | 3 report? |
| 4 | A Yes. | 4 A Yes. |
| 5 | MR. HANDZO: Your Honor, I believe | 5 Q What -- well, let me start at the |
|  | we have marked that as SoundExchange Trial | 6 beginning. Do you recall when you were |
| 7 | Exhibit 51 for identification. | 7 retained by SoundExchange? |
| 8 | (SX Trial Exhibit 51 | 8 JUDGE WISNIEWSKI: Can I clarify |
| 9 | marked for | 9 one thing? Dr. Wind, you said you prepared |
| 10 | identification.) | 10 this report. Did you prepare it or was it |
| 11 | BY MR. HANDZO: | 11 prepared under your supervision? |
| 12 | Q Dr. Wind, can you identify this | 12 THE WITNESS: No, I prepared it. |
| 13 | document for me? | 13 JUDGE WISNIEWSKI: Okay, thank |
| 14 | A Yeah, this is a report I prepared | 14 you. |
| 15 | that summarizes the research I conducted in | 15 THE WITNESS: Would you like me to |
| 16 | this case and involves also behind it tabs | 16 elaborate the process? |
| 17 | from A to L with appendices relating to the | 17 JUDGE WISNIEWSKI: No, I'm sure |
| 18 | study. | 18 that we'll get to that. |
| 19 | Q Okay, let me ask you to turn to | 19 BY MR. HANDZO: |
| 20 | page 52 of the report itself. | 20 Q Well, since we're on it now, you |
| 21 | A Yes. | 21 say you prepared it. Was it also reviewed by |
| 22 | Q Is that your signature? | 22 lawyers? |


| Page 61 | ge |
| :---: | :---: |
| A Yes, but I prepared originally the | 1 A Yeah, generally, it was to explore |
| 2 typical type of research report that I do | 2 the possibility of designing a study that will |
| 3 which is all the exhibits that we have here or | 3 determine the relative importance of music to |
| most of them, but in the form of a PowerPoin | 4 satellite radio subscribers and those who |
| 5 presentation as opposed to a detailed written | 5 consider subscribing |
| 6 report. When -- in this case, they included | $6 \quad$ Q Okay. Are the methods that you |
| 7 I think virtually all the material we have | 7 undertook for that research described in |
| 8 her | 8 Exhibit 5 |
| s was then -- a draft of this | 9 A I used a variety of methods. The |
| 10 was prepared by Matt Helman in your office who | 10 idea underlying it was to try to determine the |
| 11 converted it from my PowerPoint to a report. | 11 value of music. Probably the best way would |
| 12 I reviewed it, worked over this number of | 12 be to try to identify different dimensions of |
| 13 iterations in terms of change | 13 value and to ask |
| 14 basically my report reformatted in the form | 14 approaches to try to determine a consumer's |
| 15 that this Court requires. | 15 perceived value of music versus other |
| 16 Q Okay, now -- I'm not sure if I got | 16 programming options. |
| 17 an answer to this question. Do you recall | 17 Q Dr. Wind, let me just stop you |
| 18 when you retained by SoundExchange? | 18 there because you're a step ahead of me. |
| 19 A I think around June or July of | 19 Right now my question is just whether in |
| 20 last year. | 20 Exhibit 51 you've described the process that |
| 21 Q Okay, and do you recall what you | 21 you went through to create your survey? |
| 22 were asked to do? | 22 A Yes, yes. |
| Page 63 | Page 64 |
| Q Okay, and are the results of that | 1 represents? |
| 2 survey also reported in Exhibit 51? | 2 A This is a summary figure that |
| A Yes. | 3 reflects on the left side the different |
| MR. HANDZO: Your Honor, I would | 4 measures of value that I used in this study |
| 5 move that admission of SoundExchange Exhibit | 5 and the body of the figure, it represents the |
| 651 into eviden | 6 key results. The results here are presented |
| MR. STURM: I'm sorry, for | 7 primarily as the value on the specific measure |
| clarification, is that the whole binder or | 8 for music in the rate powers relative to the |
| just the original report? | 9 highest ranked other programming type which |
| 10 MR. HANDZO: No, it's -- yes, | 10 always is presented here as one. |
| 11 thank you. That's the original report with | 11 And in the blue you can see |
| 12 the appendices to the original report. It is | 12 basically the type -- what is the other |
| 13 not the amended testimony. | 13 programming type that was the next highest to |
| MR. STURM: I have to objection, | 14 music. In the report itself, there will be |
| 5 your Honor. | 15 the details of the measures for each one of |
| 16 MR. MEYER: No objection, your | 16 these specific measures. Here to facilitate |
| 17 Honor. | 17 comparison in the different measures, I used |
| 18 BYMR. HANDZO: | 18 the ratio approach of presenting the ratio of |
| 19 Q Dr. Wind, let me ask you to turn | 19 the number of times that music is more |
| 20 to page 5 of your testimony, your written | 20 preferred than the other leading programming |
| 21 testimony, Exhibit 51 and you'll see a figure | 21 type. |
| 221 there. Can you tell us what that | 22 CHIEF JUDGE SLEDGE: As there was |


| Page 65 | Page 66 |
| :---: | :---: |
| 1 no objection to the offer of admission, the | 1 is my operational interpretation of these, |
| 2 Exhibit 51 is admitted | 2 that this implies these dimensions. |
| 3 (SX Trial Exhibit 5 | 3 Therefore, the research design |
| 4 having been marked for | 4 included various tasks ranging all the way |
| 5 identification was | 5 from open-ended questions to some more |
| 6 received in evidence.) | 6 structured tasks involving conjoint analysis |
| 7 MR. HANDZO: My apologies, your | 7 to allow us to get a reliable and valid |
| 8 Honor. I got ahead of myself. | 8 measures of these dimension |
| 9 BY MR. HANDZO: | 9 Q Okay, is there a benefit from a |
| 10 Q Dr. Wind, looking at Figure 1, | 10 survey research perspective to -- looking at |
| 11 you'll see a number -- you've got a number of | 11 a number of different measures with respect to |
| 12 different bars on this chart representing from | 12 the importance of music and non-music content? |
| 13 the top cancellation, willingness to pay, | 13 A Yes, obviously, in addition to the |
| 14 general draw and so on. Why is it that you | 14 insight it provides by looking at each one of |
| 15 designed this survey to look at these | 15 them as to what is the content it provides, it |
| 16 different aspects? | 16 provides us an opportunity to assess the |
| 17 A This was primarily my | 17 convergence validity of the results. |
| 18 understanding of the different dimensions of | 18 Q Now, you'll have to explain for us |
| 19 value that one can look at. So when given the | 19 what convergence validity is. |
| 20 general assignment to determine -- of | 20 A Convergence validity primarily |
| 21 determining the perceived value of music | 21 relates to a situation where I am measuring a |
| 22 versus other offering of satellite radio, this | 22 phenomena using different methods, different |
| Page 67 | Page 68 |
| 1 approaches and if I am getting the same | 1 of content. Do I have that right? |
| 2 conclusions from all of these different | 2 A Correct. |
| 3 approaches, my confidence in the reliability | 3 Q Can you tell me then why, for |
| 4 and validity of the results are by far | 4 example, in the first bar, cancellation, the |
| 5 greater. | 5 blue bar says both sports and talk? |
| 6 Q And applying that concept of | 6 A Because both of them apparently |
| 7 convergence validity to you study, what did | 7 had the same score as the next highest. |
| 8 you find? | 8 Q Now, let me take you back to the |
| 9 A A very strong convergence of all | 9 beginning. After you were retained by |
| 10 the results, as you can see in this figure 1, | 10 SoundExchange and given your assignment, what |
| 11 in all of them, we have the red bars which are | 11 was the first step in preparing this research? |
| 12 representing music, significantly higher than | 12 A The first step was to develop a |
| 13 the next highest programming type. And it | 13 research design to clearly understand the |
| 14 ranges from as low as 1.6 times the other | 14 objective, clearly understand the universe |
| 15 programming type for willingness to pay to as | 15 involved and then decide what will be the |
| 16 high as 5.3 for general draw. | 16 research design and once a research design is |
| 17 The last bar is the average, does | 17 developed, decide what type of data collection |
| 18 represent the average score across all these | 18 procedure to use and so on. |
| 19 different measures. | 19 Q Okay, and when you say what |
| 20 Q I think you indicated in response | 20 research -- I'm sorry, what universe is |
| 21 to an earlier question that this figure 1 | 21 involved, what do you mean by that? |
| 22 compares music to the next highest rated type | 22 A Who should be the respondents, who |

should be asked. When we talk about consumers, you know, who are the consumers.

Q Okay, and what did you conclude about the universe for your study?

A The -- primarily the decision makers relating to satellite radio as well as those who either had or consider buying satellite radio in the next months. The best way to identify it is really to walk through the screening questionnaire if you want, which will give you exactly the questions that qualify people for inclusion in the study.

Q Okay. I will come back to that. After identifying the universe and the purpose, did you prepare a survey questionnaire?

A Yes.
Q Is that attached to your testimony?

A Yes, this will be under Appendix C.

Q Now, did you decide on a method Page 71
qualify meeting the universe requirement and some security requirement for inclusion in the study.

The screening questionnaire is, incidentally, in Tab B of this report.

Q Now, you mentioned that the screening people go to various places in the mall. Why do they do that?

A This is actually a very important safeguard in this type of research because if they were positioned let's say next to the interviewing facility, the actual site, and this site was next to Neimann Marcus, they're most likely to get people who go to Neimann Marcus. But what about people who shop at Sears and not Neimann Marcus?

So the idea is to send them constantly different part of the malls so they will be able to capture people who buy at the different type of stores in the mall.

Q How are the malls selected?
A They were selected randomly. It's
for obtaining responses by respondents to your survey questionnaire?

A Yes, once I developed the research design and the research instrument, the main question there which is in Tab C , then the question was, what would be the best way to collect the data? And I decided that the best way would be to conduct a central location interviewing.

Q And what do you mean by central location interviewing?

A Central location is a very common, one of the most common research approaches in terms of data collection. The idea is that there are in many shopping centers around the country interviewing facilities. These interviewing facilities have trained staff, that conduct interviews. The process there is typically they get the screening questionnaire and they send screeners to various parts of the mall to identify people who would be willing to participate in the study and that Page 72
basically, a three-step procedure that I use for sampling. First I selected randomly six markets in each of the four census regions. So we had a random selection of markets representing the entire country.

In each market, we then select randomly the malls to participate, because there are many malls with interviewing facilities in each one of the markets and you want, again, to select randomly the specific mall. And the third phase is once the mall is selected, then to go to the selection of the respondents.

Q Okay, now --
CHIEF JUDGE SLEDGE: By limiting your interviews to malls, aren't you excluding lower income people in your survey?

THE WITNESS: The general understanding in the market and research area is that over 90 percent of the population visits malls. Malls today are no longer just a place to shop but they're actually an


| Page 77 | ge 78 |
| :---: | :---: |
| TNESS: It just depends on | 1 the interviewing facility. |
| 2 which malls you're visiting. You may be | Now to the extent that a fie |
| 3 visiting the higher income malls. There ar | 3 house has bad experience with this particular |
| malls which are not designed for the high | 4 mall, that they had some problems with the |
| income people | 5 research facility there, and they cannot rely |
| JUDGE ROBERTS: Dr. Wind, just to | 6 on the supervisor and interviewers there, |
| be clear and following up on Judge Sledge's | 7 they're instructed then to replace this mall |
| questions, are we talking about only indoor | 8 randomly with another mall in this area. |
| 9 malls or are strip malls also included in | 9 But to the extent that I know, |
| 10 thi | 10 they include all malls with interviewing |
| 11 THE WITNESS: To the extent the | 11 facilities |
| 12 there is an interviewing facility in a strip | 12 JUDGE ROBERTS: I'm proud to say |
| 13 mall, it will be included. | 13 that I've never been a mall rat; however, |
| 14 JUDGE ROBERTS: Which I imagine is | 14 experience has taught that indoor malls tend |
| 15 pretty rare. | 15 to have far more upscale stores than strip |
| 16 THE WITNESS: I don't know the | 16 malls. And if most of the interview sites are |
| 17 incidence. I don't know the incidence. | 17 located in the indoor malls, then I think it |
| 18 know that basically the instruction to the | 18 is going to involve a different group of |
| 19 field house who actually implement that sampl | 19 people. But as you say, you don't know to the |
| 20 selection, is once we select the market, to | 20 extent that strip malls were included? |
| 21 list all the available malls with interviewing | 21 THE WITNESS: I can try to find |
| 22 facilities in this market and select randomly | 22 out to what extent strip malls were included |
| Page 79 | ge 80 |
| in the ones we interviews but again, in this | Most of them, not all, most of them. |
| particular case, because of the nature of the | Q Why is that? |
| product, and the expense involved of the 12.95 | CHIEF JUDGE SLEDGE: These issues |
| a month subscription, and that most of the | 4 don't address admissibility. These issues |
| 5 usage of this is in a car that, that requires | 5 address whether the survey had an merit, any |
| 6 a car. I'm less concerned in this particular | 6 weight or not. |
| 7 case about not representing the real bottom | 7 MR. HANDZO: I understand, and |
| part of the income distribution | 8 that's what I am trying to address. |
| JUDGE ROBERTS: I understand. | BY MR. HANDZO: |
| 10 BYMR. HANDZO: | 10 Q Going back to Chief Judge Sledge's |
| 1 Q Dr. Wind, let me ask you to turn | 11 question about trying to make sure you've |
| 12 to page 7 of your written testimony, Exhibit | 12 sampled as much as possible lower income |
| 13 51, and you'll see that you've cited to some | 13 people, are there steps, in terms of the |
| 14 survey research guides there. To your | 14 timing of the interviews within a mall that |
| 15 knowledge, is the mall intercept survey a | 15 are taken to try and insure that that happens? |
| 16 recognized method of conducting surveys? | 16 A Yes. I require that 50 percent of |
| 17 A Yes, it is the most widely used | 17 the interviews will be conducted in evening |
| 18 personal interview approach in the country. | 18 and weekend to assure that you get also |
| 19 Q In the times that you've testified | 19 working people and they've had a chance to be |
| 20 in Court and been accepted as an expert, have | 20 interviewed in the mall. |
| 21 some or all of those involved mall intercept | 21 Q Dr. Wind, when was the survey |
| 22 surveys? | 22 fielded? |

A I mid-October.
Q Of 2006?
A 2006.
Q Okay, and are you familiar with the term "double blind process"?

A Yes.
Q What does that mean?
A Double blind means that the interviewer as well as the interviewees do not know what the purpose of the study is nor do
they know who sponsors the study. So there is no possibility here for the respondent to try to please the interviewer by giving answers that they think the interviewer is looking for and there is no opportunity for the interviewer to suggest through body language or other ways to bias the responses.

Q Okay.
A In addition to this, in this particular study and in most of my studies, all of my studies, I actually keep also the other people working on the study in this case

Page 83
Q You don't actually go to the malls yourself and do interviews?

A No, first of all, I would not qualify because of the double blind. I know what the survey is for and I would probably make a terrible interviewer.

Q Okay. After -- well, actually let me ask you this; do you know how the survey interviews took place? In other words, once DDW finds somebody who is willing to do the interview, what happens?

A Actually, it's not DDW defines the person who's willing to do it. It is the local research firm. So DDW contacts the local research firms in each one of these malls. There are local supervisors so, who train the interviewers. There is an elaborate training process for the interviewers and then once the interviewers are trained, then they send screeners basically interviewers, who go around the mall and primarily tried to identify potential respondents by walking them

Data Development as well as will be the validation group ABC , in this case, to adhere to the double blind standard. So the people who worked on this did not know who is it for. They didn't know why we're conducting the study and this is true also with respect to the coder, the person who did the coding of the open-ended responses.

Q Okay, now you mentioned DDW, who is DDW?

A DDW is Data Development Worldwide. Until about a year ago, it was known as DDC, Data Development Corporation. They changed ownership but primarily it's the same with the same people and it's one of the leading marketing research firms in the country that specializes in custom marketing research study such as these, with whom I have worked for over 20, 25 years.

Q Was it DDW who actually fielded this survey for you?

## A Yes.

once they approached them, introduced themself and they walked through Appendix B, which is the screening questionnaire.

Q Okay, and since you've mentioned that again, let's take a look at Appendix B. What is the function of a screener?

A The main function is to insure that we can identify the right respondents to include in the study. That we are actually selecting the people we intend to include based on our universe definition.

Q Okay, so what would happen with the screener? In other words, somebody from the research firm would go out into that mall and they would do what?

A Well, they will have -- they'll have their questionnaire on a clip and they'll approach people and primarily they'll start conducting the interview. So if you would like to imagine that you are the respondent, we can just walk through it and you'll see what a typical respondent is then exposed to.
asking them the question whether the respondent would like to input the answers themselves or whether they would prefer that the interviewer will do it for them. And in general, we had about 60 percent of the respondents who indicated they would like to do it themselves under the supervision and

Q And when you say they conduct the interview, are you now just talking about the screener?

A Just the screener which is done outside in the mall, somewhere in the mall.

Q Okay. And that interviewer would then be trying to figure out whether I qualify for this --

A Correct, whether you qualify and whether you are willing to be interviewed.

Q All right, and by the way, is there anything offered to the respondents to induce them to be willing to part with some of their time to do this?

A Yes, whenever -- it's a common practice whenever you're dealing with a questionnaire which is longer than two, three minutes, you offer an incentive and we offer here a $\$ 10.00$ incentive.

Q Now, let's say the interviewer has approached me and I've gone through the screener and $I$ do qualify and $I$ am willing to

## Page 87

A Correct, it's under Tab C.
Q Okay.
A So they are asking them basically to go through the first three open-ended questions. They record the results and then questions. They record the results and then
if you look at Attachment C, under Tab C, on the top of page 2 , their instruction to the interviewer to place the respondent in front of the computer because to increase the accuracy of the study, we translated the paper questionnaire into a computer program, so the respondent is now seated in front of a computer and on the screen it starts saying the questions.

But before they start, they're
1
actually spend the time. What happens?
A Then the interviewer who screened you will walk with you to the interviewing facility. Will, in most cases, hand you over to another interviewer who is at the interviewing facility. In some occasions, it might be the same interviewer who will now continue also the interviewing. And then they will basically start walking you through the main questionnaire which is under Tab D , Tab C, I'm sorry.

Q Okay, and in this case, do the respondents actually fill out the survey questionnaire themselves or how is that done?

A Well, the easiest would be to look at Tab C. First, the interviewer is asking three open-ended questions and is recording the responses to the three open-ended questions.

Q And let me just stop you there for a second. Attachment C is the main survey questionnaire?

Page 88
direction of the interviewer and about 40 percent that asked the interviewer to input the data.

Q Okay. Now are there statistics -JUDGE WISNIEWSKI: What was the incentive for doing all this? THE WITNESS: Ten dollars. JUDGE WISNIEWSKI: Wow, that's a deal.

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        BY MR. HANDZO:
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Q Do you keep statistics on how many people were approached by the screener versus how many actually agreed to take the survey?

A Yes, the last page of Tab B are the screening results. And if you look at the screening results they contacted a total of 4301 and, but most of them did not qualify because they did not have a subscription to satellite radio nor did the consider, over 2,000 of them. And the others were screened out for a variety of reasons. We ended up with 428 completed interviews.

Q Okay, now in order to be considered somebody who is considering subscribing, were there some criteria that you have to meet for that?

A Yes, there were. This goes back to the screening questionnaire and again, this is under Tab B. You had to, first of all, meet a variety of security conditions which are on the first page of the screener. So that's just to make sure that we interview -we don't interview people who know the interviewer, for example, or they have a language problem or they work for an industry which typically are being excluded from marketing research studies such as marketing research firm or advertising agency or being interviewed frequently.

So if they're interviewed in
another marketing research firm in the last three months, they are basically being excluded. And then the key --

JUDGE WISNIEWSKI: How long do
Page 91
THE WITNESS: I think you get a bill. You're actually being paid. There are also people who enjoy the opportunity to express their views. So it's not only --

JUDGE WISNIEWSKI: Now, you're going too far. You're really --

CHIEF JUDGE SLEDGE: While we've got you interrupted, looking at Appendix B and Appendix C, both the screener and the interviewer knew that they were involved in a satellite radio survey.

THE WITNESS: Correct.
CHIEF JUDGE SLEDGE: So when you said earlier about double blind, you weren't referring to the fact that they didn't know that they were -- the subject matter was satellite radio.

THE WITNESS: No, obviously, they
have to know the subject matter, but they didn't know who was the study done for. They didn't know who sponsors it nor what we were looking for.
these interviews take?
THE WITNESS: Average was about 25 minutes.

JUDGE WISNIEWSKI: Twenty-five minutes. You get 10 bucks for doing this. As an economist, I'd have to say that opportunity costs just don't match up but --

THE WITNESS: Well, currently for some of these people these are found $\$ 10.00$.

JUDGE WISNIEWSKI: Well, there are
a lot of folks -- that just underlines, there
are a log of folks that don't behave as rationally as economists assume them.

CHIEF JUDGE SLEDGE: I'd like to take a survey for 25 minutes and get $\$ 10.00$.

JUDGE WISNIEWSKI: There you go.
THE WITNESS: You just proved the geneity (phonetic) of markets.

CHIEF JUDGE SLEDGE: I can get a milkshake for $\$ 10.00$.

JUDGE ROBERTS: Do you get a $\$ 10.00$ bill or do you get a certificate?

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So if you go back to the question, then one of the critical questions was Question F in the screener on page 3, which is, "Which, if any, of the following decisions do you make or take part in making for your household", and they had to indicate yes to decision to subscribe to satellite radio. So they had to be the decision makers.

In addition to this --
JUDGE WISNIEWSKI: I'm sorry, where are you at?

THE WITNESS: I'm on Tab B, the screener, page 3, question F , right at the top of the page.

JUDGE WISNIEWSKI: Thank you.
THE WITNESS: In addition to this, we had to decide if they are subscribers or not, so we asked Question G, "Which of these services, if any, do you or your household currently subscribe to", and the number of options, and they had to subscribe to satellite radio to qualify.

And then there was a --
CHIEF JUDGE SLEDGE: Let me question you on that. On Question F, it indicates that they are not terminated if they answer that they take part in any of those decisions, not just satellite radio.

THE WITNESS: No, I'm sorry. If you look below Question F in the first box, it says, "Respondent must be boxed answer in question $\mathrm{F}^{\prime \prime}$, and you'll see that the only boxed answer is decision to subscribe to satellite radio. "If not, terminate in the appropriate box below".

CHIEF JUDGE SLEDGE: I don't see that.

THE WITNESS: Just under F, just below Question F, there is a narrow box that says, "Respondent must be boxed answer in Question F". Your Honor, this is the --

CHIEF JUDGE SLEDGE: "Respondent must be boxed answer", but just above that, where it says "terminate", it says, "None of Page 95
consider, I think the easiest would be to go through the sequence of G, H, I and J and actually pay to look at the sequence of questions. So if you talk about the consider, if you look at Question I, this is on page 4, if in Question G, which was, "Which of these services, if any, do you or your household currently subscribe to", if they did not respond satellite radio, then they were asked Question I and the instruction about Question I says, "Ask Question I for each item not circled in Question G."

And before the Judge asked in terms of whether they knew the purpose. At this stage, whether they knew satellite radio, not the purpose of the study. At this stage of the screening, we're still trying to hide satellite radio. So at this stage we're still asking questions concerning cable TV, satellite TV, broadband internet, wireless phone service as well as satellite radio. So that's a reason that the interviewer is asking
these".
THE WITNESS: That's in addition to this. That's you have here basically the set of decisions and if it's not a boxed answer in the decisions, they are being terminated. In addition to this, if they say none of these or they refuse answer, they are being terminated. So there are two instructions here for termination. A separate one for "none of these", and "refused", and a separate one if they indicate any of the other decisions but not the decision to subscribe to satellite radio and that's a common procedure and form that is used in all of these screening studies.

## BY MR. HANDZO:

Q I'm not sure if I got you to this point, Dr. Wind, but with respect to people who are considering subscribing, was there certain criteria that they had to meet in order to be considering subscribers?

A Yeah, they had to answer for Page 96
for all of the items not circled in Question G.

Q Let me just stop you there for a second. Are the interviewers trained in how to go through these?

A Absolutely. First of all, we employ in this study only experienced interviewers with whom the supervisor has worked before? So they're all professional interviewers. They're all accustomed to these five approaches and this type of screening. This is very standard, and in addition to this, they go through extensive training interview as well as role playing. You know, basically one interviewer role play for the other so they're going through practice interview before they start interviewing and the supervisor is actually observing and then evaluating the practice interview as well. So it doesn't sound as complex as I kind of put it when I read it.

CHIEF JUDGE SLEDGE: Does that
same answer apply to those who are selected to be screeners?

THE WITNESS: Yes, absolutely. The screening -- now with the screeners, it's a very important part.

JUDGE WISNIEWSKI: Before you go on, I'm a little puzzled about Question $H$ here and as to whether this question accurately captures the group of folks who it seemed to be attempting to capture. I take it what you're trying to capture here are folks who either have actually subscribed or those folks how may have purchased, for example, an automobile and there is a complimentary either three-month, six-month or 12-month XM or Sirius service available to them after which point they have to make a decision to subscribe. Is that correct? Is that what you're trying to capture in this question?

THE WITNESS: We cannot look at the question by itself because we have to look at this also in conjunction with Question F.

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as a trial subscription. You know, whether they associate the word "subscription" with what they're experiencing.

THE WITNESS: I don't know. The reason I selected this wording was in consultation with counsel and with the people that they work with and my understanding was this will be the right way of differentiating here. All that I can tell you is we are -the respondents are those who responded positively to this or to both as well as met the criteria for having satellite radio and being the decision makers or if we go into sequence Question I and J, those who are currently considering subscribing in the next 30 months, next 30 days, I'm sorry.

So I don't know how they interpreted it.

JUDGE WISNIEWSKI: Okay, thank you.

BY MR. HANDZO:
Q Dr. Wind, once the screening

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\text { Page } 100
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process is complete and you've given us the numbers on how many people got through that process and then responded to the main questionnaire, I guess I might as well take you to the main questionnaire and ask you what you were trying to get at with the questions that you designed. So if we could turn to Tab C, please --

A Is there a question?
Q Sure, actually, I hadn't asked one yet. Sorry. Looking at the questionnaire, let's just start with Questions 1A and 1B. What -- why did you include those questions, what were you trying to do?

A This is very customarily in considering research to start with. It's a very broad open-end question. "Here thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe", very open-ended question.

Q Let me ask you, the people who are considering subscribing but haven't actually
subscribed, do they get this questionnaire or a similar one appropriate to their status?

A No, after page 9 of the questionnaire, there is a second questionnaire which is for considering subscribing. And the question for them, Question 1A, and I read, this is right after the first questionnaire and it says considering subscribing on the top and Question 1A is, "Why are considering subscribing to satellite radio, any other reason".

Q So the considering subscriber and the actual subscribers get the same kinds of questions but aimed at their particular circumstances.

A Correct, and this is true for all the question.

Q Okay. So --
JUDGE WISNIEWSKI: So I raised the question we had earlier.

MR. HANDZO: I understand. BY MR. HANDZO:

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verbatim?
A In this case, they probably will use the computer because the whole questionnaire is on the computer.

Q Okay, but my question, I guess is, are they trying to capture exactly what the respondent said?

A Absolutely, and they're very
strict instructions both in writing as well as part of the training that instruct the interviewer to write exactly what the respondents say and if they don't understand or they didn't catch it, to say, "Could you repeat it, please", and not to guess. It's very important training to record exactly what the respondent says.

Q Okay, questions 2A and 2B, can you explain why you included those questions?

A Still in the same spirit of the open-end exploration, we asked what type of satellite radio programming was most critical to your decision to your decision to subscribe

Q Going back to the main questionnaire for subscribers, I think what you were telling us was these are intended to be fairly broad questions.

A Correct.
Q And why do you start that way?
A We found in research that the best way of trying to understand consumer perception and behavior in any given situation is to start pretty broad by asking questions such as this. Why did you decide to buy, why did you decide to subscribe? Why are you considering it and anything else. This basically provides us the broadest opportunity to see what are the important considerations that this respondent had.

Q And let's say I'm the respondent and I'm asked this question, how is my response recorded?

A The interviewer will record the answer.

Q And do they write it down
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to satellite radio? And then also a probing follow-up in any others. Very common in most consumer research. Once you ask the general question, "Why did you subscribe", you focus on the specific features or benefits that may have led to the decision.

Q And again, are the responses recorded verbatim?

A Yes.
Q Okay, how about Questions 3A and 3B?

A The same thing. In 3 now we're trying to reflect on your experience with satellite radio, what type of satellite radio programming are most critical to your decision to continue to subscribe. So this is trying to capture now those respondents who are currently using and having satellite, what will be the motivation for them to continue. And obviously this is inappropriate for the considering to subscribe. So if you look at the first page of considering subscribe
questionnaire, it says, there is no Question 3 on this version.

Q Okay, now Question 4 you actually have kind of a different type of a question. Can you explain what that is?

A Yeah, this is -- we're moving now to establishing the relative importance of one programming type over another. The methodology here is called constant sum allocation which is a very common and reliable and valid way of measuring consumer's tradeoff among different options, different features. The individual receives in this cade the seven types of programming on the computer and the instructions and is asked to allocate 100 points among them.

Important to note is that order in which the respondent sees those various type of programming, is rotated by the program. So it's randomized and you may get a version where it would start with talk and entertainment, sport, news, music and the

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do the survey, take the 10 bucks and come back and do it the next day and the next day after that.

A No, because you validate the rule of not being interviewed in the last three months.

Q Okay.
A Let me ask you to take a look at Question 8 and I wonder if you can just tell us what you were trying to do with that question.

JUDGE ROBERTS: Before we go to Question 8, Dr. Wind, I'm looking through the guide here and I don't recall there being a question here asking the respondent if they planned to continue to subscribe to satellite radio; is that correct? I notice that in 3a you say, "What types of programming are most critical to decision to continue to subscribe but I didn't see a question that said, "Are you actually planning to continue to subscribe".

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like. Someone else may get -- the next person may get comedy, music, news, sports and so on, so it's a randomized order and they are to allocate 100 points among them.

Q What happens if I'm the respondent and math isn't my strong suit and I actually only get 98 points down?

A You will not be able to continue with the next question because the computer will kick it back and say, "Please re-examine the numbers".

Q Okay. I'm going to skip a couple of questions and ask you --

JUDGE WISNIEWSKI: At that point, may I take my 10 bucks and go home?

THE WITNESS: Then you would be -you won't get the 10 bucks. You can go home, you're terminated but no 10 buck.

JUDGE WISNIEWSKI: You're really making me work for that.

BY MR. HANDZO:
Q And just so we're clear, you can't
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THE WITNESS: Right, I did not ask this question. I w-- as primarily in the first three questions, I was focusing primarily on the reasons.

JUDGE ROBERTS: You don't think that that might effect the outcome if somebody says, "Well, I had it for awhile but I'm not really planning to subscribe any more. I didn't find it all that interesting for X reasons".

THE WITNESS: The respondent obviously can answer anyway they want. It's totally open-ended. So to the extend that the respondent felt that basically they did not want to continue, then they said, "You know, I probably will not continue to subscribe". I don't recall from reviewing all the verbatim responses that there were such people. It was the benefit of looking at some of the XM and Sirius other research that I did later on, there was a very high level of satisfaction, but the --

they're giving you an amount higher than 12.95.

Q Okay, now looking at Question 11, that appears, once again to be an open-ended question; is that right?

A Yes.
Q And again are the responses to that recorded verbatim?

A Yes, this is the final question which is, "And finally reflecting on your experience with satellite radio, if satellite radio was not available, what, if anything, would you miss most about it", and a probing of anything else. And again, that's a customary program to try to ask people what do they miss.

Obviously, this again, is
appropriate only for the subscribers and in the consider subscriber questionnaire, you'll see on page 7 of that questionnaire, that it says, "Question 11 does not appear on this version".

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CHIEF JUDGE SLEDGE: I'm sorry, can you spell --

THE WITNESS: Tradeoff, tradeoff.
CHIEF JUDGE SLEDGE: What kind of analysis?

THE WITNESS: Conjoint, c-o-n --
MR. HANDZO: I'm sorry, c-o-n-j-o-i-n-t.

CHIEF JUDGE SLEDGE: Thank you. I was having trouble understanding both of you.

THE WITNESS: I apologize.
MR. HANDZO: He has the accent but
I can't spell, so between the two of us you were going to have a problem with that one.

THE WITNESS: Conjoint analysis is a tradeoff methodology primarily. The easiest way would be to explain it, perhaps, through an example. I mentioned before the Courtyard at Marriott. The Courtyard was concerned about building a new chain for markets where they could not support the very large Marriotts. And the question was, "What should
5

Q And again, I assume the responses are recorded verbatim?

A Correct.
MR. HANDZO: Can we just stop for a second. I'm just realizing we didn't take our customary break and that's partly because we broke while the Court was in recess to consider the motion. So, I'm assuming I should just keep going but I just wanted to let the Court address that.

CHIEF JUDGE SLEDGE: Thank you. I hadn't noticed that either.

BY MR. HANDZO:
Q Dr. Wind, in your written testimony you talk about something called conjoint analysis. Do you recall that?

A Yes.
Q And can you tell us without having to teach an entire course about it, what conjoint analysis is?

A Conjoint analysis is a tradeoff methodology and approach.

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be the configuration of the hotel? Should it be just a mini-Marriott, just take the regular Marriott and scale it down or should it be something else"?

They had no idea how to go about
it, so basically we designed a study using conjoint analysis where we gave consumers different type of features and asked for their preference. For example, do they prefer a larger room or a separate bathroom, so it will
be like a separate section around the dressing area around the bathroom. How important, for example, is for them to have a restaurant? How important is it to have only interior kind of corridors to get to the hotel as opposed to outside doors".

A variety of questions relating to type of room, size of room, type of amenities, type of features of the hotel and the way to identify what's really important to the consumer, you cannot just ask them because people have a hard time answering a question,

| Page 117 | Page 118 |
| :---: | :---: |
| 1 an abstract question such as, "Would you like | 1 but there's no restaurant", or I might get a |
| 2 to have a separate dressing area outside the | 2 card that says, "You can have the restaurant |
| 3 bathroom or would you -- or not. How | 3 but there will be no exercise facility and the |
| 4 important is it? How important is it to have | 4 parking lot is two blocks away", and they get |
| 5 music or some other entertainment in the room? | 5 a series of choice |
| 6 So the idea was basically | 6 A Exactly, and there was a very |
| 7 present them with different options, different | 7 large set, there was all together 50 different |
| 8 profiles that we use a very similar approach | 8 factors that we looked at, each one at many |
| 9 we use in this study to try to give consumers | 9 levels. We presented people with different |
| 10 different options and they had to select | 10 combinations of this and asked them a very |
| 11 between here's a picture, for example, of | 11 simple task, to try to evaluate them. Then |
| 12 certain type of room configuration, which of | 12 we, the researcher, because we designed the |
| 13 these three different pictures would you | 13 profiled experimentally, and we know what's |
| 14 prefer. And by then selecting the one they | 14 going into it, we can then analyze this and |
| 15 prefer, we can then decompose the results and | 15 infer the relative importance of each one of |
| 16 identify how important is each one of the | 16 the features. And that's the methodology we |
| 17 features. | 17 used here because the objective here was to |
| 18 BYMR.HANDZO | 18 find out what is the relative importance of |
| 19 Q So if I'm understanding you | 19 music versus other type of programming and |
| 20 correctly, if I'm a respondent in that survey, | 20 features. |
| 21 I might be given a card that says, "You can 22 have a room of this size, with a dressing area | 21 CHIEF JUDGE SLEDGE: Dr. Wind, in <br> 22 the analysis that you just described are the |
| 22 have a room of this size, with a dressing area | 2 the analysis that you just described are the |
| Page 119 | Page 120 |
| 1 attributes independent of one another or | 1 had the real pizza because each one of them |
| 2 there any overlap? | 2 were the interaction. |
| 3 THE WITNESS: Most of them, that's | 3 And we found out in the frozen |
| 4 a great question. Most of them in the | 4 pizza example, that basically interaction -- |
| 5 Marriott were independent. The initial type | 5 was one of the few cases that interaction were |
| 6 of analysis focuses on an attitude and effect | 6 more important than the main effect. In most |
| 7 model. There is a way, especially in hybrid | 7 other studies we start with main effect. We |
| 8 type designs such as this, to analyze after | 8 test how well can we explain the phenomena |
| 9 the fact specific interactions. Now, there | 9 with the main effect and if needed, we then |
| 10 are situations which are more complex where | 10 test for interactions. |
| 11 basically interactions are much more | 11 BY MR. HANDZO: |
| 12 important. | 12 Q Dr. Wind, let me stop you there |
| 13 And example, we did a study on | 13 because SoundExchange only has about 35 hours |
| 14 frozen pizza. When you're doing a study on | 14 left in its time to present this case and we |
| 15 frozen pizza, you cannot just tell people | 15 could probably spend all of it on conjoint but |
| 16 conceptually how important is pepperoni versus | 16 in terms of the factors that respondents were |
| 17 the type of cheese versus the thinnest of the | 17 asked to consider in this case, is there any |
| 18 crust or how well done it is. So we actually | 18 way that the Court can find what those factors |
| 19 had a master design of 81 different | 19 were? |
| 20 combinations, had the company actually back 81 | 20 A I think it's Figure 5. Figure 4, |
| 21 different pizzas and each respondent received | 21 page 15, I apologize. Page 15, Figure 4. |
| 22 four pizzas to taste. And then they actually | 22 These are the seven factors. This is of the |

main report before the Tabs. These were the seven factors that we included in the conjoint analysis task.

Q Okay, now other than sort of doing this research of the tradeoffs of these factors, were there other questions in the survey that were inputs into the conjoint?

A Yes, because of the large number of factors and potential combinations here, there are over 8,000 potential combinations of these various seven factors, we used what's called the hybrid conjoint analysis that required three tasks. And the three tasks are, if we look at the main questionnaire, go back to the main questionnaire, one of them is the same task we did before. This is Tab C.

One of them is the same question we asked before for the constant sum on Question 4. This is Item Number 1 in the hybrid conjoint analysis which is a constant sum allocation among the seven factors.

Item 2 related to this was also

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The specific profiles are under
Tab D which represent there -- you have there 64 cards. They are the test cards. Each respondent received only eight of them plus two control cards. So that's a common hybrid conjoint analysis study been used widely by Paul Green and me and many others in many situations like Easy Pass, Courtyard by Marriott and others and is, in my view, the best approach to assess the relative importance of music.

Q Okay, now in the questions that we've gone through in the questionnaire, it sounds like there are some questions where you're getting numerical responses, like the constant sum, and others where you're just getting the verbatim response of the respondents. In the cases where you get the verbatim response, how do you then translate those into the numbers that appear in the results of your report?

A I used an independent coder who
the constant sum allocation in Question 7 relating to the non-programming type variables. The second task was a desirability task that primarily if you look at on page 3 under A, music programming, there are four levels or options we were giving them and the question is, "What is the spacing among these four levels"? And in the methodology that we used, we allow each respondent to select any spacing they want among them.

So they can decide no music
programming is extremely undesirable but substantially fewer is only two and then the other, the substantially more can be only five. Someone else can select those scale, someone else can select equal spacing. So that's the question of desirability, which is covered in Question 5 and 6, and then finally the hybrid, the combinations, the profiles that I was describing before in the Marriott case, is in Question 10, which gives them the specific combination.

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works independent as an independent contractor with Data Development, who I worked with for probably over 10 years, in different studies. He, too, did not know the purpose of the study or the sponsor of the study and he did the coding. He did the coding scheme and I reviewed it. I did not make any changes to it and then he actually coded the questionnaires, each respondent, following the code scheme that he developed.

Q Okay, if, for example, in response to Question 1, the respondent said, "Well, gee, I think the music is great", that would have been coded in a certain way?

A Yeah, it would have been probably coded as music without any specific other characteristics around it.

Q Okay, and if the respondent had said, "I love commercial free music", would that have been a different coding?

A Yes. This would have been under the coding of commercial free or possibly also

I love it.
Q Okay, now let me -- let's take a look then at the results of all of this and I'm going to ask you to turn first to Figure 7 of your written direct testimony, Exhibit 51. Do you have that?

A Yes.
Q Okay, can you tell us what that represents? It's on page 23 for the benefit of the Court.

A This is a graphic presentation of the results as to percentage of respondents who would cancel their subscription to satellite radio if under the first column, "music was not available", second column, "if news was not available", third column, "if sports was not available", fourth column, "if talk entertainment was not available". This is going back to the basis for this Question 9 we discussed before and the previous chart, Figure 6 present actually the numerical results that we got to Question 9. And if
Page 127
entertainment would be willing to pay $\$ 9.99$. So obviously, the lower the price they were willing to pay, the more important this programming type is to them.

Q Okay.
A The other two rows just represent different ways of looking, slicing the data so as opposed to looking at the total of 400 people in the first category, if you look at the 259 people who indicated that they would change, including those who would pay zero, so we calculate include the zero here, then it goes down to $\$ 2.45$.

Q Okay, so just so I'm clear, going back to Figure 7, what you're looking at there is just if I took away this component to the programming, would you cancel your subscription.

A Correct.
Q Okay, and if you took away the music, 43 percent would cancel?

A Yes.
you'll see in bold the second row is the percent that would cancel.

Q So just so I'm clear, the numbers that we see in Figure 6 are reflected in the graph on Figure 7; is that correct?

A Correct, correct.
Q Okay. Now, you've also, it appears on the same topic, got some numbers reflected in Figure 8 on the next page, page 24.

A Correct. Whereas Figure 7 focused on the percent that would cancel if this programming type was not available, Figure 8 focuses on their willingness to pay without the programming type. And there are different ways of looking at this in terms of what is the base we are looking at. If we're looking at average price among all respondents, then for no music would be $\$ 6.15$ compared to if there was no news they would be willing to pay $\$ 10.14$, if there were no sports, they would be willing to pay $\$ 9.99$, not talk and

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Q And if you took away talk and entertainment, 14 percent of respondents would cancel.

A Correct.
Q All right, and then in Figure 8 you're just looking at how that might effect their willingness to pay a certain price.

A Correct.
Q Now, let me ask you to turn then to Figure 10 which is on page 27.

CHIEF JUDGE SLEDGE: Let me ask one follow-up to that. So 6 and 7 capture those who will cancel and 8 captures those who wouldn't go so far as to cancel but they'd pay less but they'd still subscribe.

THE WITNESS: Correct.
CHIEF JUDGE SLEDGE: It's a selfexcluding two different groups.

THE WITNESS: If we -- Figure 6
includes both actually. If we look at Figure
6 , you have the first categories would change amount willing to pay. Part of them would
cancel the 43 and this is reflected in Figure 7.

CHIEF JUDGE SLEDGE: Okay. THE WITNESS: And some would reduce price. And then for those who said reduce price, the question is, how much. How much are you willing to pay and that's reflected in Figure 8.

CHIEF JUDGE SLEDGE: Thank you.
BY MR. HANDZO:
Q Dr. Wind, turning, if you would, to Figure 10, which I believe is on page 27, tell us what that chart represents.

A As you recall we covered, as we reviewed the questionnaire four open-ended questions. There was Question 1, 2, 3, and 11. So this is a summary across all these four open-ended questions, looking to what extent people actually mentioned music or any of the other programming type and we're looking at percent top mentioned which means this is in the blue, which means they

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music first.
A Correct.
Q I only wind up in the blue if I mentioned music first.

A Correct.
Q And just generally, what does this show you with respect to the comparison of music versus non-music content?

A It primarily shows again that when you're looking at all the open-ended questions, there is a significantly higher percent of people who mention music in response to these four questions.

Q Now, again, if we go back to Figure 9, does that provide the underlying numbers for the chart in Figure 10?

A Yes. Figure 9 basically covers three columns. Top mentioned, this is the mention Number 1, top three and then any mention in the key categories relating to programming types.

Q Okay. Moving ahead, if you would,
mentioned music as the number one response in Question 1, among the balance of them is the number one response in Question 2, if not there, number one response in Question 3, and in Question 11.

Or that they were among the top three mentioned, three items that each respondent could have mentioned in any of these questions. And you get here, this is the net response but across all these four questions.

Q Okay, so that if I were a respondent and I said that I subscribed because I love the Fox news, the music and the fact that I can get this anywhere I want, I wouldn't have been coded as in the blue column.

A Correct.
Q But I would have been coded in the red column.

A In the red, correct.
Q Okay. Because it didn't mention Page 132

Dr. Wind, to page 32, Figure 13, can you tell us what that chart is?

A This figure primarily summarizes the result only to the open-ended Question 2 which is the type of programming most critical to the decision to subscribe or consider subscribing and this shows also we're reporting here the top mentioned and the top three mentioned and similar results it shows that music is by far the most preferred compared to all the other types of programming.

Q Okay, so am I right then, that this is sort of a sub-set of the data we were looking at in Figure 10?

A Correct, and focusing only at the response to Question 2.

Q Okay, so focusing specifically on your decision to subscribe.

A Correct.
Q Okay.
A Or consider subscribing.

| Page 133 | Page 134 |
| :---: | :---: |
| Or consider subscribing. And once | 1 A And again, the same findings. |
| again, if we go back a page, you've got the | 2 Q And again, is this a response to |
| 3 numbers that support that. | 3 an open-ended question? |
| A Yes, this is Figure 12 provides | A Y |
| the underlying data. | Q With the same results with respect |
| Q Right. All right, if you'd turn | 6 to music versus other conten |
| 7 please, to Figure 15 on page 34, do you have | 7 A Ye |
| 8 that? | 8 Q Figure 17, if you would, Dr. Wind, |
| A Y | 9 that's on page 36 |
| $10 \quad \mathrm{Q}$ What is that? | 10 A Ye |
| 11 A This is, again, focusing now only | 11 Q Are we looking at the same sort of |
| 12 on Question 3, and reporting the percent of | 12 thing now with just a different open-ended |
| 13 consumers who mention music or any of the | 13 question? |
| 14 other programming types is the most critical | 14 A Correct, this is basically the |
| 15 to their decision to continue to subscribe. | 15 results to the question, "What would you miss |
| 16 This is the retention measure we are looking | 16 most if the service were not available", and |
| 17 at | 17 open-ended again and we find again, the same |
| 18 Q Okay, so the earlier one was | 18 type of responses, that they would miss the |
| 19 decision to subscribe. This is the decision | 19 music the most. |
| 20 to continue | 20 Q Now, if you would turn, Dr. Wind, |
| 21 A Correct. | 21 to page 38, you've got a couple of charts |
| 22 Q Okay. | 22 there, Figures 19 and 20. Where does that |
| ge 135 | ge 136 |
| 1 data come from? | When you say "it", you mean, music? |
| 2 A This is if you recall, Question 4 | 2 A Music. I'm sorry. Music is 44 |
| 3 which was the constant sum allocation of 100 | 3 percent, the highest. The next highest will |
| 4 points among the seven programming types and | 4 be sports with 13 percent and in terms of |
| 5 primarily the previous page, Figure 18, shows | 5 Figure 20 when we look at the programming type |
| 6 the actual data and shows two things. One is | 6 that has the highest number -- the largest |
| 7 the share, so in this specific case, music got | 7 number of people selecting as most important, |
| 844 percent out of the 100 and the second | 8 we find out that 74 percent selected music. |
| 9 column on Figure 18 shows the item, the | Q Okay, now turn, if you would, Dr. |
| 10 programming type that got the highest number | 10 Wind, to page 40, you've got again two figures |
| 11 of points. Since allocation of 100 points | 11 there, Figure 22 and 23. |
| 12 allows us not only to get the average amount | 12 A This is a question relating again |
| 13 for each category but also which one got the | 13 from the constant sum question with respect to |
| 14 highest number of points. And these are | 14 usage. So Figure 22 reports that average |
| 15 reflected in Figure 19, which is the average | 15 weekly usage of programming type. This was |
| 16 points of programming type and Figure 20, | 16 the Question 8, I believe that we discussed |
| 17 which is the percent of respondents selecting | 17 before in terms of usage and Figure 23 |
| 18 each programming type as the most important. | 18 represents the percent of respondents |
| 19 And we find out that in Figure 19 | 19 indicating that the highest usage of each |
| 20 it is by far the most dominant factor in terms | 20 programming type and again we find like music |
| 21 of importance, 44 percent. | 21 having 77 percent here. |
| 22 Q And let me just stop you there. | 22 CHIEF JUDGE SLEDGE: Is usage |

measured by the time listening?
THE WITNESS: Yes, this was
Question 8 that says, reflecting on the footnote on page 39, it clarifies this. Question 8 is, "Reflecting on you and your family's usage of satellite radio in a typical week, how would you estimate the amount of time spent on each of the following program types", and we used constant sum allocation for this.

## BY MR. HANDZO:

Q And now, Dr. Wind, I think we come to the results of your conjoint analysis, which I believe are presented on page 43 in Figures 25 and 26, is that right?

A Correct.
Q And can you tell us how these -what data put these charts together, what you drew on.

A As you recall, we talked about three types of data. We talked about the constant sum data. We talked about the
with the constant sum allocations, we are also looking at the percent of respondents who selected each attribute as the most important one based on the conjoint analysis and we find out the music is selected by 47 percent of the people and the next highest one is price with 14 percent.

Q And then, Dr. Wind, if you'd just turn to the next page, page 44, and following that, you've got a Figure 27 on page 45 . Can you describe what those results present?

A Yes, I mentioned before that we had two control cards, so each respondent received in the last question, Question 10 of the questionnaire eight profiles, so each respondent had eight out of the set of 64 , so he got eight cards, plus two control cards.

If you turn to Tab $D$, that
includes the various cards, the 64 cards, you will see at the end of Tab $D$, just before Tab E, you will see two cards, Card 65 which is primarily the current situation. So Card 65
desirability data and we talked about the evaluation of the profiles, the eight profiles plus two control profiles. The desirability data and the profiles included basically various combinations from the factors and levels listed in Figure 4 and the results then -- the first analysis from here allows us to determine what is the relative importance of music versus the other programming type.

And we see on Figure 25 that the averaging points of music is 30 percent and the next highest item is the monthly price for a single subscription which is 15 percent. So this is now the situation where we are evaluating the four programming types; the music, news, sports, and talk and entertainment, plus number of minutes per hour of commercial and music channels, plus geographic coverage, plus the price. So that's the primary result from the conjoint analysis study.

Figure 26, again, as we've done Page 140
describes the current offering in the marketplace and Card 66, the second control, describes the same characteristics as Card 64 with one exception; no music programming. So the only difference between the two is no music programming.

We used these cards as a way of validating the result of the conjoint analysis at the individual level because we could predict from the way we analyzed the data for each respondent, the self-explicated data, the desirability in the eight cards, we were able to predict what will be their score, the evaluation of card 65 and 66. But card 65 and 66 , in addition to allow us to validate the conjoint analysis result, offer us a great opportunity to examine very explicit choice situation that respondent have between the two conditions.

So if you look at Figure 27, you
see that out of 10 points when basically this is the intention to subscribe on a 10 -point
scale, you see the current offering Card 65 gets 7.13. The current offering with no music which is Card 66, gets only 2.47 on this $10-$ point scale. So if you look at the relative importance of the current offering with no music, as a percent of the current offering, you'll find it's 35 percent in terms of value.

And similarly, we can also look at another measure which is how many of them gave zero points out of the 10 points they could have assigned here, how many gave zero points to this offering. And we found that on Card 65 , the current offering only five percent gave zero points but to Card 66, the current offering with no music 57 percent gave zero points.

JUDGE WISNIEWSKI: Dr. Wind, you're not able, however to determine because with this amount of specificity to determine if a large part of the effect that you appear to capture here is associated with a particular type of music that the person
answered to us before in the open-ended Question 1, 2, 3 on music.

JUDGE WISNIEWSKI: I understand, but if it weren't captured there --

THE WITNESS: But also the framing for the respondent will be his or her response.

JUDGE WISNIEWSKI: I'm just trying to understand the limits of what --

THE WITNESS: Yeah, no, we did not examine this exclusively, okay?

MR. HANDZO: Your Honor, I'm at a logical breaking point, if it makes sense to break for lunch at this point.

CHIEF JUDGE SLEDGE: But you will continue with this witness for --

MR. HANDZO: Yes, I will.
CHIEF JUDGE SLEDGE: We'll recess for one hour.
(Whereupon at 12:26 p.m. a
luncheon recess was taken until 1:32 p.m.)
CHIEF JUDGE SLEDGE: Mr. Handzo?
likes.
THE WITNESS: The only way I can identify it is by looking at the responses to the open-ended questions, Question 1, 2, 3 and 11 and to the extent that the respondent mentioned a particular type of music, jazz, rock or whatever, I can capture it there, but in the structured questions, no, I did not focus on that.

JUDGE WISNIEWSKI: Let me take a extreme example. Suppose the only type of music that the person liked was heavy metal. And that really wouldn't necessarily be captured here because you could eliminate the heavy metal and still have all this other music that the person wouldn't care much for.

THE WITNESS: Well, what we know
here is that when the person gets to the kind of more structured question where there is music, where we ask about music, like in the constant sum allocation or in the conjoint analysis, this is in the context of what they

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MR. HANDZO: Thank you, Your Honor.

BY MR. HANDZO:
Q Dr. Wind, still on the subject of Exhibit 51, your written testimony with regard to your survey, once a survey has been completed by DDW and the results have been obtained, is there a verification process that is supposed to happen?

A Yes.
Q Can you describe to the Court what is supposed to happen? How does that verification work?

A The easiest will be if we look at the verification form on Section -- on Tab F. This is the second page in this tab. This form is being completed by the interviewers, so each interviewer is completing basically the list of respondent they interviewed. And there's the screener ID, the quota, the respondent name, the address, the phone number, and the -- and the phone number.

This, then, is -- and the interviewer actually is instructed in the field instruction to complete these specific interview forms. This validation form goes to DDW. They check it and primarily validate and make sure that the quota code, which is at the top of the page where it says, "Quota, Satellite Radio Subscriber, Sirius Satellite Radio Subscriber XM, Satellite Radio is considering subscribing, Satellite Radio considering subscribing XM," is inserted basically under the quota on the second column.

They verify that the -- against the actual document the telephone number, that it's correct. And I think also the supervisor is supposed to check this in the field.

And then, this is being sent to an independent research house -- I think it's ABC in this case -- that then conducts the interviews.

Q Let me just stop you there. In

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A Twenty percent actually reached.
Q Okay.
A Just reached. Then, the safeguard that I have, which is also recommended by the Advertising Research Foundation guidelines, is that if there are any problems with the work of any interviewer, then you have to go as many times as it takes to try to interview the rest of the interviewees of that interviewer, because if we have a problem there is no guarantee that there won't be problem with others.

Q Okay. Let me just try and make sure I understand that, and let me give you an example. Let's say that we have an interviewer in an Atlanta mall, and that interviewer interviewed six people. And let's say that the verification firm tries to reach all six of those people, is only able to reach two. Okay?

Now, if those two people that the verification firm reaches, both appropriately
.

terms of this process that you are describing, are these instructions that you give to DDW, or they do this on their own? How does that work?

A Given that I've been working with them for years, these are standard operating procedures in all of the studies. And so DDW gets, then, the form checked, send it to ABC . They basically -- the procedure is --as specified in the validation procedure is try to contact 100 percent of the respondents, and you have to try at least twice to contact each respondent.

Q Okay. Now, what happens if you can't reach 50 percent of them?

A Well, the target is actually to try to reach as many as you can. The industry norm, for example, under the guideline of the Advertising Research Foundation is that typical studies are 20 percent validation.

Q That is, 20 percent actually reached, or 20 percent --

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verify, are there any steps taken as far as that interviewer is concerned?

A No, that will be fine.
Q Okay.
A We continue.
Q Let's say one of the people they reach says, "No, I've got no idea what you're talking about." What happens?

A They all basically provide the wrong answer to these questions, in this case they have to continue trying to reach all six, as many times as it takes to try to reach the 100 percent of that interviewer's work.

Q And are the results of the verification process then communicated back to you?

A Yes, to Data Development. And then, from Data Development to me.

Q Okay. And what was communicated to you about the results of the verification process?

A That they completed 54 percent of
the -- of verification, and there is no problems, and we continue.

Q Okay. Now, when the verification process happens, do you have an understanding about whether the verification firm is supposed to create -- you know, fill out forms as they do the verification?

A My understanding is that the only form that exists is this. This is the form that is completed by the interviewer, is complete, and we have a page like this for each interviewer. And this form is the one that is being sent to the ABC, and that's the form that is then getting back to Data Development.

Q Okay. And then --
JUDGE ROBERTS: What form are you looking at, Dr. Wind? Where is that?

THE WITNESS: This is the second page in Tab F.

JUDGE ROBERTS: Thank you. BY MR. HANDZO:

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Q Okay. But that would be contrary to your standard instructions to them?

A Correct. And their regular practice.

Q Now, you alluded to your deposition. Do you recall, Dr. Wind, that in your deposition you were asked some questions about what would be the correct responses to, you know, a verification call? That is, whether the answer should be yes, yes, yes, or yes, no, yes, or something else. Do you recall that?

A Yes.
Q And do you recall, as you sit here today, the precise question you were asked?

A Not the precise one.
Q Okay. Do you recall what your response was?

A Yes, I think that I misspoke. I
think that the question was somewhat convoluted, in my view at least, or I could not understand it correctly. And I said yes,

Q And is it your understanding -CHIEF JUDGE SLEDGE: Actually, that's the third page, isn't it?

THE WITNESS: Yes, you're correct, depending on how you count.

BY MR. HANDZO:
Q Okay. Is it your understanding that DDW is supposed to retain those?

A Yes. And typically they do. I think in this specific case what happened, they were painting the office, as far as I understand, and mislocated this, and that is basically my understanding what happened.

Q How do you know that?
A When I was asked about this before, we checked with them what happened. Why aren't they delivering? Because I think in my deposition I said that I thought the forms would be with DDW, and they said they cannot find them because they were painting, they were moving stuff in the office, and they just don't know where they are.

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yes, yes, because I was looking I think -there was this form, the one on page 2 , was presented before.

And for the subscribers, the yes, yes, yes, was the answer. That's what I had in mind.

Q Okay.
A But it's obvious, based on the real form that is complete, where there is a clear quota indication here, and a quota for each respondent, that there could not be an error here, and that upon, you know, checking again with Data Development the Field Director clearly indicated that they communicate.

They checked these numbers, they communicated them to the ABC , and ABC clearly knew that the responses they consider should be in B, as it's all logical, and that should be a no, and the response to the subscriber should be a yes to question 2 .

MR. HANDZO: I have no further questions on this subject, but I know the

Court might, so I wanted to give you that opportunity now, because I was going to move on to a different subject.

CHIEF JUDGE SLEDGE: We are not shy to let you know.

MR. HANDZO: Thank you.
BY MR. HANDZO:
Q Dr. Wind, in the notebook that you have, let me ask you to turn to the tab that says Amended Testimony, which we have marked for the record as SoundExchange Trial Exhibit 52. Can you tell me what that is?
(Whereupon, the abovereferred to document was marked as SX Exhibit No. 52 for identification.)
A After I submitted my original testimony, I found out that Sirius and XM actually had a number of studies that they conducted.

Q How did you find that out?
Page 155
Q And do you attach to this amended testimony the survey research that you looked at?

A Correct.
Q Did you receive any survey research that you didn't attach?

A No.
MR. HANDZO: Your Honor, I would move the admission of SoundExchange Trial Exhibit 52 and the attached exhibits. I
should also note for the record, though, that some of the exhibits attached to Dr. Wind's amended testimony have already been admitted into evidence. And so just to clarify the record, I'd like to go through and indicate which those are. And I've consulted with counsel. I think we are in agreement as to what has already been admitted.

The first one with Dr. Wind's testimony, SoundExchange Exhibit 11 -- I'm sorry, 111, has been already admitted as SoundExchange Trial Exhibit 35, and was

A In discussion I think with Matt Hellman.

Q And that's Mr. Hellman here in the front row?

A Yes, it is.
Q Okay.
A I don't recall if he indicated this first or I asked if there are any other data, but eventually we found -- I found that there is a body of research projects, and I suggested that we may want to look in terms of to what extent their results may validate my study, to the extent they are addressing similar type of questions.

Q And did you then obtain the survey research performed by XM and Sirius?

A Yes.
Q Okay. And did you review it?
A Yes.
Q And is that survey research then discussed in this amended testimony?

A Yes.
admitted on a restricted basis. The document attached to Dr. Wind's amended testimony as SoundExchange Exhibit 116 has already been admitted as SoundExchange Trial Exhibit 33 on an unrestricted basis.

The document attached to Dr.
Wind's testimony as SoundExchange 118 was already admitted as SoundExchange Trial Exhibit 29, not restricted. The document attached to Dr. Wind's testimony as Exhibit 119 has already been admitted as SoundExchange Trial Exhibit 6, not restricted.

The document attached to Dr.
Wind's testimony as Exhibit 120 has been
admitted as SoundExchange Trial Exhibit 2.
Portions of that were restricted, but only portions. Exhibit 121 to Dr. Wind's testimony has been admitted as SoundExchange Trial
Exhibit 8 on a restricted basis, and the
document attached to this Exhibit 124 has been
admitted as SoundExchange Exhibit -- Trial Exhibit 13 on a restricted basis.

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| :---: | :---: |
| 1 So with that for clarification, I | 1 114, and 125. And I would ask Mr. Handzo to |
| 2 would move the admission of Dr. Wind's amended | 2 correct me if I misspeak. As to those, we do |
| 3 testimony, Exhibit 52, and the associated | 3 not have an objection, although at the |
| 4 exhibits. | 4 appropriate time I do have a motion about the |
| 5 CHIEF JUDGE SLEDGE: I don't have | 5 confidentiality. |
| 6 an Exhibit 52. | 6 CHIEF JUDGE SLEDGE: I don't |
| 7 MR. HANDZO: Your Honor, it's part | 7 understand your response. You had addressed |
| 8 of the same notebook. It's just the tab that | 8 three exhibits. The offer is Exhibit 52. |
| 9 says Amended Testimony. I think there is a | 9 MR. MEYER: Well, Your Honor, as I |
| 10 separate exhibit sticker on it. | 10 understand it -- and maybe I am |
| 11 CHIEF JUDGE SLEDGE: Any objection | 11 misunderstanding -- is 52 just the testimony |
| 12 to Exhibit 52? | 12 without the attachments? |
| 13 MR. MEYER: Yes, Your Honor. I | 13 CHIEF JUDGE SLEDGE: No, it's with |
| 14 mean, I think Mr. Handzo correctly summarized | 14 the attachments. |
| 15 which of the attachments are already in | 15 MR. MEYER: It's with the |
| 16 evidence. And, of course, some of them are | 16 attachments. |
| 17 restricted, some of them are not. So, let me | 17 CHIEF JUDGE SLEDGE: Yes. |
| 18 get to the objection first. | 18 MR. MEYER: Okay. I have no |
| 19 Three of the exhibits that I | 19 objection to the testimony, and I certainly |
| 20 understand Mr. Handzo is submitting as | 20 have no objection -- and can't object -- to |
| 21 attachments to the amended Wind report have | 21 the attachments that are already in evidence |
| 22 not previously been tendered. That's 113, | 22 as correctly pointed out by Mr. Handzo. As to |
| Page 159 | Page 160 |
| 1 those attachments that are not already i | 1 study that we've looked at before. |
| 2 evidence, I have no objection, subject to | 2 I have no objection to Exhibit |
| 3 concern about confidentiality, which I'll | 3 115. I do have an objection to Exhibit 116, |
| 4 address when Your Honor is ready for that. | 4 which is a study -- which purports to be |
| 5 Excuse me. And for clarification | 5 another study that I do not believe has had -- |
| 6 again, my understanding of the three XM | 6 there has been any knowledge -- excuse me, any |
| 7 exhibits that are attachments that have not | 7 testimony concerning it up to this point. I |
| 8 yet made their way into evidence are attached | 8 don't believe Dr. Wind is a proper sponsor for |
| 9 to Dr. Wind's amended report as SoundExchange | 9 this exhibit, so I would object to 117. And |
| 10 Exhibits 113 and 114 and 125. | 10 that's the only one, Your Honor. |
| 11 CHIEF JUDGE SLEDGE: So you have | 11 CHIEF JUDGE SLEDGE: I am not sure |
| 12 no objection to the exhibit? | 12 I understand your objection. The expert is -- |
| 13 MR. MEYER: I have no objection. | 13 I started to say "is required," but maybe I |
| 14 CHIEF JUDGE SLEDGE: Okay. Mr. | 14 should change that to say "should" produce the |
| 15 Sturm? | 15 material considered in reaching the decisions |
| 16 MR. STURM: Your Honor, I have no | 16 or conclusions. |
| 17 objection to the amended testimony itself, and | 17 And your objection is that the |
| 18 obviously no objection to the documents that | 18 materials considered don't have a sponsoring |
| 19 are already in evidence. I also have no | 19 witness? |
| 20 objection -- I'm going to focus on the Sirius | 20 MR. STURM: All he is doing on |
| 21 documents. I have no objection to Exhibit | 21 this, Your Honor, is he is taking what appears |
| 22112 , which is another version of the listener | 22 on the face of the document and talking about |


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| :---: | :---: |
| 1 it. But there has been no testimony | 1 CHIEF JUDGE SLEDGE: So the answer |
| 2 whatsoever concerning what went into this | 2 to my question is yes? |
| 3 document, what the situation was at the time | 3 MR. STURM: Yes. |
| 4 of the document. | 4 CHIEF JUDGE SLEDGE: You do think |
| 5 So essentially he is just reading | 5 it has to be authenticated before the material |
| 6 what is in the documen | 6 considered by an expert can be admitted? |
| 7 CHIEF JUDGE SLEDGE: Right. | 7 MR. STURM: For him to -- for him |
| 8 MR. STURM: And I don't believe | 8 to testify concerning this document, yes, Your |
| 9 it's proper for him to -- | 9 Honor |
| 10 CHIEF JUDGE SLEDGE: I don't think | 10 CHIEF JUDGE SLEDGE: Okay. |
| 11 I understand your -- does that respond to my | 11 Anything else? |
| 12 question? | 12 MR. STURM: Well, Your Honor, he |
| 13 MR. STURM: It's attempting to, | 13 is -- I understand that he can -- he can |
| 14 Your Honor. | 14 consider things, but here, as I understand it, |
| 15 CHIEF JUDGE SLEDGE: So you think | 15 he is sponsoring it independently into |
| 16 that the material considered by an expert has | 16 evidence as a stand-alone exhibit. And he |
| 17 to be authenticated before it can be admitted? | 17 doesn't have any basis for doing that. |
| 18 MR. STURM: Well, it's not | 18 CHIEF JUDGE SLEDGE: Anything |
| 19 anything that he has created himself. It's | 19 els |
| 20 not anything that he knows about. It's not | 20 MR. STURM: No, Your Honor. |
| 21 anything that he has any basis for opining | 21 CHIEF JUDGE SLEDGE: all right. |
| 22 about. | 22 The objection is overruled. The matters |
| Page 163 | Page 164 |
| 1 considered by an expert do not require | 1 demographic profile of XM users and their |
| 2 authentication. And without further | 2 likes and dislikes, including most popular |
| 3 objection, Exhibit 52 is admitted | 3 channels. 114 is an Arbitron study done for |
| 4 (Whereupon, the above- | 4 XM , which contains similar information, |
| 5 referred to document, | 5 breakdown of demographics, channel, ratings, |
| 6 previously marked as | 6 that sort of thing. |
| 7 SX Exhibit No. 52 for | 7 And then, 125 is a presentation |
| 8 identification, was | 8 given to the programming staff at XM, which |
| 9 admitted into evidence.) | 9 contains, again, demographic data, data about |
| 10 MR. HANDZO: Thank you, Your | 10 which stations are being listened to. This is |
| 11 Honor. | 11 certainly data that XM would not want its |
| 12 MR. MEYER: Your Honor, yes, I'd | 12 competitor Sirius to be aware of. |
| 13 like to move for the three XM exhibits that | 13 To give an example, if Sirius saw |
| 14 are now being admitted for the first time -- | 14 information that said that XM had put on a |
| 15 and in this binder they are SoundExchange 113, | 15 program that a lot of people listened to, the |
| 16114 , and $125-$ to be given restricted status. | 16 Sirius executives may say, "Hey, that's a |
| 17 And I think these documents are | 17 great idea. We should have our own channel |
| 18 actually similar to other documents that the | 18 like that." It's competitively sensitive in |
| 19 Court has already determined to give such | 19 that way, much as I earlier -- in making a |
| 20 status to -- 113 -- I mean, generally, they | 20 similar motion I gave an example of Coke and |
| 21 fall into the category of market research. | 21 Pepsi. That was the reason why I showed it -- |
| $22 \quad 113$ is a study showing a | 22 to see their marketing demographic studies. |


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| :---: | :---: |
| 1 And so, again, I think these fall into the | 1 to the motion on Exhibit 52? |
| 2 same category. | 2 MR. HANDZO: No, Your Honor. |
| 3 (Pause.) | 3 CHIEF JUDGE SLEDGE: Motion is |
| 4 CHIEF JUDGE SLEDGE: Any objection | 4 granted. Mr. Sturm? |
| 5 to the motion for Exhibits 113, 114, and 125? | 5 MR. STURM: Your Honor, I would |
| 6 MR. HANDZO: No, Your Honor. | 6 similarly move to protect Exhibit 112, which |
| 7 CHIEF JUDGE SLEDGE: Without | 7 has been previously protected, the customer |
| 8 objection, the motion is granted | 8 satisfaction monitor. Excuse me, it's another |
| 9 MR. MEYER: Your Honor | 9 version of the listener study, which has been |
| 10 additionally, the amended testimony of Mr. | 10 previously marked. It has the same data that |
| 11 Wind, which quotes extensively from all of | 11 were previously protected in Exhibit |
| 12 these documents -- and, of course, Mr. Sturm | 12 SoundExchange 34. |
| 13 can speak for himself with respect to the | 13 And also, Exhibit 115, which is a |
| 14 Sirius ones, but I believe the copy that has | 14 customer satisfaction monitor. Similar |
| 15 been given to the Court is the same copy I | 15 version -- excuse me, a similar document has |
| 16 have and it grays out portions of the written | 16 been previously protected as SoundExchange |
| 17 testimony that cites directly to the attached | 17 Exhibit 35. |
| 18 exhibits. And so I would move the Court to, | 18 CHIEF JUDGE SLEDGE: Any objection |
| 19 again, designate this restricted version of | 19 to the motion for Exhibits 112 and 115? |
| 20 Dr. Wind's amended written testimony to be | 20 MR. HANDZO: No, Your Honor. |
| 21 restricted. | 21 CHIEF JUDGE SLEDGE: The motion is |
| 22 CHIEF JUDGE SLEDGE: Any objection | 22 granted. |
| Page 167 | Page 168 |
| 1 MR. STURM: Your Honor, we don't | 1 Q Okay. Let's take a look at an |
| 2 need to have me move for protection with | 2 example of that. If you could turn to page 2 |
| 3 respect to the ones that were previously in, | 3 of your amended testimony, Exhibit 52, and |
| 4 correct? Those will maintain their prior | 4 take a look if you would at Figure 2. |
| 5 status? | 5 A Yes. Basically, in one of the |
| 6 CHIEF JUDGE SLEDGE: Yes, sir. | 6 Sirius reports -- am I supposed to read it, |
| 7 MR. STURM: Thank you. | 7 since this is -- |
| 8 BY MR. HANDZO: | 8 Q Let me just ask you, don't use the |
| $9 \quad$ Q Dr. Wind, what conclusions did you | 9 actual number in your testimony. But sort of |
| 10 draw in this amended testimony from the survey | 10 generally, what does it indicate? |
| 11 evidence that you received and that is | 11 A Generally, it indicates the level |
| 12 attached to Exhibit 52? | 12 of cancellation that Sirius found in their |
| 13 A With respect to variables such as | 13 study, which is higher -- somewhat higher than |
| 14 usage and willingness to cancel that are | 14 the one that I found in my study. |
| 15 included both in my study and in the set of | 15 Q Okay. So this is the percentage |
| 16 studies by XM and Sirius, they seem to | 16 of people who would cancel if there was no |
| 17 collaborate and confirm the findings that I | 17 music? |
| 18 had in my study. | 18 A Correct. |
| 19 Q Okay. | 19 Q Okay. And it winds up being |
| 20 A So I looked at them basically as | 20 higher in their survey than yours? |
| 21 an external validation to the results that I | 21 A Correct. |
| 22 got in my study. | 22 Q Turn, if you would, to Figure 12, |

which is on page 17.
A 17 .
Q And can you tell us what this represents?

A One of the questions is the effect of Howard Stern and his impact. And given the fact that talk and entertainment received actually significantly less responses on all the measures that I did in my study compared to music, the question was: how can we explain it, given the popularity of Howard Stern and all of the publicity around it?

And the studies that were provided here gave an explanation for the phenomena. And what you see here is the result of the percentage of new Sirius subscribers who said they were interested in talk programming. And it's a timeline, so the first study is from May 2004, or before, which was 9 percent.

In 2004 to June 2005, it increased to 22 percent. In the July-December 2005, before Howard Stern moved, as far as I

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A Okay. I'm sorry.
Q So in terms of the overall trend that you're seeing here, what are you seeing
from the Sirius data?
A Increase up to January-April, and a decrease from that period down to the last data point we have, which is the June 2006.

Q Okay. And do you know when Howard
Stern's show actually began on Sirius?
A My understanding is January '06.
Q Okay. And do you know whether
that show was promoted or advertised prior to that?

A Heavily.
Q Now, your own study was what date?
A October.
Q Okay. So that would be a more recent time than the data you have here from Sirius?

A Correct.
Q Let me ask you to take a look,
lastly, at Figure 14 of this testimony on
understand, in January of '06, it increased to 31 , and reached a peak of 52 percent in the January-April 2006. This is at the height of the move to Sirius.

But in the April-May period, we see already a decline in the number of subscribers who said they were interested in talk programming to 34 , and the last data that we had in this study for June 2006 suggested 17 percent.

MR. STURM: Your Honor, the questions originally were to not -- as I understood them, were not to elicit specific numbers, and he has gone into it. If we are going to talk about the specific numbers, request to go into closed session.

MR. HANDZO: Your Honor, let me --
BY MR. HANDZO:
Q Dr. Wind, I will ask the questions in terms of just sort of a general
description, and you don't need to give me specific numbers.

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page 20. And can you tell me, again not using specific numbers, but generally, what this represents?

A This is the direct comparison of the percent of the June 2006, the latest date we have from the Sirius studies, subscribers interested in music as compared to talk programming, and compared their results to the results of my study.

Q And how do those match up?
A If you can see the comparison of the two, the two reds are very similar, the two blues are very similar. The reds show -between the reds and the purples or the blues are very similar in those areas, confirming basically the validity of my study.

MR. HANDZO: Thank you, Dr. Wind.
That's all I have, Your Honor.
CHIEF JUDGE SLEDGE: All right.
Who will cross examine for the services?
MR. MEYER: I'm going to go first,
Your Honor, for XM. If I can just have a

done using conjoint analysis price is one of the factors.

Q The question was whether you've done any surveys trying to determine the price of radio TV or music content.

A Well, as I mentioned, the study in Japan for TV as far as I recall had a price component to it.

Q Okay. This will be the first possibly of many times we are going to make reference to your deposition.

Can we hand out copies of the transcript?

Dr. Wind, we've already established I think that you were deposed in this case, and I was present, correct?

A Correct.
Q Okay. And take a look at page 17, please, of the deposition.

JUDGE ROBERTS: 17 in the box?
MR. MEYER: Yes, Your Honor.
BY MR. MEYER:
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A It was a TV study conducted in Japan.

Q Since you had forgotten about that at the time I took your deposition, am I fair in concluding that you are not relying on that in any way in doing your work in this case?

A Correct. I don't think that I have to rely on specific industry studies. I am relying on my general expertise in consumer research.

Q Sir, I'm just asking you -- most of my questions are going to be very simple yes or no questions. Now, you're not an economist, right?

A Correct.
Q And in response to a question from
the Court, I think you testified that you prepared the report, is that your testimony?

A Correct.
Q Okay. In fact, the lawyers did the first draft of the written report, right?

A Based on a report that I submitted

Q And you look at line 6, do you see that, sir?

A Yes.
Q Okay. And the question I asked at the deposition was, "And have you ever done any studies for the purpose of determining the price that a consumer would be willing to pay for radio or television or music content?"
And the answer you gave was? Can you read it for the record?

A "No, not that I recall." And now that you ask me the questions, I recall that I did do a study on TV in Japan, which I think I may have mentioned in the deposition.

Q Okay. You gave the testimony that I just read, and your recollection has now been improved, correct?

A Well, I recall that I did a study on Japan. I'm trying to see --

Q Okay.
A -- if I have it in my resume.
Q What did you study in Japan?
to them.
Q Well, you submitted to them a Powerpoint outline, correct?

A It's not an outline. It was a Powerpoint presentation that included all the details which are in the report on the charts, and they converted this into a written report to follow the format required in this court.

Q Is it true or is it not that the lawyers prepared the first draft of the report?

A Yes, based on the Powerpoint I presented -- I gave them.

Q So, yes, it is true that they prepared the first draft based on the Powerpoint.

CHIEF JUDGE SLEDGE: He has answered that question twice.

BY MR. MEYER:
Q So the written text that the Court has before it was originally drafted by the lawyers, and then you reviewed it, right?

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| :---: | :---: |
| 1 A No. The original report -- the | 1 point. For the record, you have not |
| 2 Powerpoint presentation that included a lot of | 2 identified what you are asking the witness to |
| 3 the verbiage explaining what's there, and the | 3 look at |
| 4 procedure and other, was written by me, | 4 <br> MR. MEYER: Okay. For the record, |
| 5 submitted to them, and they formatted this | 5 I am directing the witness to portions of his |
| 6 into the report. They prepared the first | 6 deposition transcript dated Friday, April 27, |
| 7 reformatted report, which I then reviewed | 7 2007, in this matter. If Your Honor would |
| 8 Q Okay. | 8 like |
| 9 A And exchanged with them a number | 9 CHIEF JUDGE SLEDGE: What exhibit |
| 10 of times. | 10 number are you asking him to look at? |
| 11 Q All right. Well, maybe if we look | 11 MR. MEYER: We haven't marked it |
| 12 at page 19 of your deposition we can see the | 12 as an exhibit, since frankly, Your Honor, I |
| 13 source of my confusion. | 13 have never done that in any court. But if you |
| 14 CHIEF JUDGE SLEDGE: You are | 14 would like to do that, we can. |
| 15 referring to a deposition. We have not | 15 CHIEF JUDGE SLEDGE: Mine is |
| 16 identified an exhibit number. | 16 marked as an exhibit. |
| 17 MR. MEYER: Your Honor, right now, | $17$ <br> MR. MEYER: We can do that. |
| 18 I wouldn't introduce -- I'm using portions of | 18 JUDGE ROBERTS: Mine is marked, |
| 19 the deposition for impeachment. Ordinarily, | 19 too. |
| 20 I wouldn't introduce the entire deposition as | 20 CHIEF JUDGE SLEDGE: Why is yours |
| 21 an exhibit. | 21 not marked the same as mine? |
| 22 CHIEF JUDGE SLEDGE: That's not my | 22 MR. MEYER: It has an exhibit |
| Page 183 | age 184 |
| 1 number? | 1 going to spend much time on this. |
| 2 CHIEF JUDGE SLEDGE: Yes, sir. | 2 BY MR. MEYER: |
| 3 JUDGE ROBERTS: Yes. | 3 Q Let's talk about our favorite |
| 4 MR. MEYER: Okay. So we'll mark | 4 subject, which is validation. Okay? Now, |
| 5 these with an exhibit number. It's exhibit -- | 5 sometimes we see terms "validation" and |
| 6 then, I apologize, Your Honor. I was | 6 "verification," are they the same thing? Or |
| 7 confused. SDARS Exhibit 1. We have decided | 7 are they different? |
| 8 that we are now going to begin marking our | 8 A In the context of marketing |
| 9 exhibits SDARS 1, 2, etcetera, as opposed to | 9 research firms in general, yes. The typical |
| 10 having separate Sirius and XM exhibits. | 10 term used by marketing research firms for the |
| 11 (Whereupon, the above- | 11 process where an independent research house is |
| 12 referred to document was | 12 calling back the respondent is often called |
| 13 marked as SDARS Exhibit | 13 validation. I prefer to call it verification, |
| 14 No. 1 for | 14 because all that it does is verifies that the |
| 15 identification.) | 15 consumers were interviewed. And it's not, in |
| 16 I apologize, Your Honor. The | 16 a sense, validation. So I have been using in |
| 17 confusion was all mine. Are you ready, Your | 17 my reports, both in litigation as well as in |
| 18 Honor? | 18 research, the term "verification." |
| 19 CHIEF JUDGE SLEDGE: You've | 19 Q Okay. Now, the reason we do |
| 20 identified the exhibit. That's what I asked | 20 verification is because there are occasions |
| 21 you to do. | 21 when the people who actually do the interviews |
| 22 MR. MEYER: Okay. Okay. I'm not | 22 and fill out the verbatims don't do it |

accurately, correct?
A Correct.
Q In fact, there are even occasions in surveys where people don't really do them at all, isn't that right?

A yes.
Q Okay. So sometimes -- and this has happened in your experience, right -- you actually have people who are paid to go out and conduct the interview and record verbatims. But rather than actually do that, they pocket the money and they fill out the verbatims themselves. You've seen that happen, right?

A I've seen it happen, but it cannot happen when you have supervisors involved.

Q Okay. The purpose of the verification or validation is to make sure that doesn't happen, right?

A Correct.
Q And that's why it's important, correct?

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CHIEF JUDGE SLEDGE: Dr. Wind, you are directed to answer the questions, which you just did. And I wonder why you mentioned time constraints. What time constraints are you under?

MR. MEYER: The fact that we have limited hours.

CHIEF JUDGE SLEDGE: Which are the hours that the parties asked for.

MR. MEYER: Yes, Your Honor. But I --

CHIEF JUDGE SLEDGE: So what time constraints are you under?

MR. MEYER: Your Honor, ordinarily, on cross examination, if the witness wants to give a lengthy speech in response to question which calls for a yes or no, ordinarily, I don't like that, but I can live with it. In a case where I have a finite amount of time to present my case --

CHIEF JUDGE SLEDGE: Which you imposed on yourself.
8

A It's important, but you have to put it in the broader context of all the safeguards that a study has. And when you have a study where you have basically very close supervisor monitoring of the questionnaire, of the interviewing process, when you have basically computer-assisted programming involved here, you have enough initial safeguards that the verification is done but is much less important and critical, because it is only one of a number of safeguards done in the study.

MR. MEYER: Your Honor, I would ask -- the only question I asked was, "Is verification important?" which is a yes or no question. He began by saying "yes," and then gave a lengthy speech. And given the fact, in particular, that in this case we're under time constraints, I would ask that the witness be directed to answer the questions, and additional information could be elicited on redirect.

Page 188
MR. MEYER: Absolutely, but not with the understanding that the normal rules of cross examination wouldn't apply. But all I can do is ask, Your Honor.

CHIEF JUDGE SLEDGE: And neither can you require a witness to answer yes and no if that's not their answer.

MR. MEYER: Okay. Well --
CHIEF JUDGE SLEDGE: They give you
the answer that they think is appropriate to
your question.

## BY MR. MEYER:

Q In response to the question about
the validation forms, right, and you attached a copy to your report, correct?

A Correct.
Q Okay. You thought it was
important enough to attach to your report, am I right?

A It's part of the report, yes.
Q Okay. And you made an affirmative representation in your report that I think it
was 54 percent of the people had been validated, is that right?

A Correct. And I still make it. That's a correct number.

Q Okay. And you also attached to your report a copy of the instructions that were given to the people in the field, correct?

A Correct.
Q All right. And in those instructions, if you take a look at your report, your initial report, at Exhibit E or Attachment E, the field instructions, do you have that, sir?

A Yes, I do.
Q If you'll turn to page 3 of that document.

A Yes.
Q And under Validations, in the box it says, "DDW conducts a 100 percent telephone validation on all completed interviews. Therefore, we are enclosing validation forms
page 4 of this document, in the middle of the page, again, in a box in bold letter next to the word "validation," do you see that, sir?

A On page 4, I don't.
Q Page 4 of the same -- actually, I see it's the second --

A I don't see it on page 4.
Q It's a separate document, which is still part of Appendix A. So it's now the -well, there are actually three documents here.
It's the third document, the first page of
which is a memo from Kathy Romano to
supervisors. Do you have that document?
A I don't know what you're talking about.

JUDGE ROBERTS: Are we in Tab A now?

MR. MEYER: No, we're still in Tab E.

BY MR. MEYER:
Q My first question was Tab E, page 3, of the first document. And combined under
and ask that you, the interviewer, fill out your own validation forms." Do you see that?

A Yes.
Q So the people who are doing the survey were told that there would be 100 percent telephone validation, correct? Is that right?

A Which is -- no, they were told exactly what is being done, and that's 100 percent telephone validation of all completed interviews. It's 100 percent effort -attempt to reach 100 percent of the respondents with two callbacks. We don't have to give this detail to the field. You want them to know that there is a firm control, and everything is going to be validated.

Q Sir, is it correct -- yes or no -that they were told, "DDW conducts a 100 percent telephone validation on all completed interviews"? Isn't that what they were told?

A Right. And that's correct.
Q Thank you. And if you'll look at

Tab E are two other documents, the third of which is a memo from Kathy Romano to supervisors. Do you see that?

A Yes, this is -- these are the instructions to the supervisors.

Q Supervisors --
A That's a different -- that's a different group. The first question there you -- the first document you relate to was the interview instructions. The second one is the supervisors.

Q I'm sorry. Supervisors of --
A Field supervisor. In each location there is a supervisor. In this specific study, there were a large number -very large number of interviewers, a very large number of supervisors.

Q And did they work for DDW?
A Yes.
Q Okay.
A DDW basically contact the local field house in each area. Each one has a
supervisor.
Q Okay. And if you go now to page 4 of that document, please, in the middle of the page it says "Validation," do you see that?

A Yes.
Q And, again, in a box in bold letters it says, "Please Note: This research is being conducted for a client who does 100 percent telephone validations." Do you see that?

A Yes.
Q Okay. And so that's what the supervisors were instructed as well, correct?

A Correct.
Q And the client that is being referred to there who does 100 percent telephone validations, who is that?

A Me. And I actually insisted on the specific wording for these specific items.

Q Okay. And do you know whether 100 percent validations were done?

A Correctly, as designed, there was Page 195
personal, firsthand knowledge, or is it because somebody told you? Sir, it's not a trick question.

A It's based on a regular, standard operating procedure that I have with Data Development. And, yes, I rely in most of my communications with them on people telling me.
I've got a project director communicating with me directly.

Q Okay. And you also rely on them to keep copies of the validation forms, don't you?

A Yes. But things happen. And when they were basically painting the offices, and people moved stuff, it's possible that they lost one box of material.

Q Okay. So notwithstanding the fact that you rely on them, and you place so much
trust in them, based on your years of
experience, in this case that trust was
misplaced with respect to the forms, right?
A I don't think that the trust was

1
2
3
an effort to reach 100 percent of the respondents with two callbacks. That's the common procedure that I've been using in all my studies, and this was done.

Q How do you know?
A Because I trust the people I work with. I work with them for years. I have no reason under the sun to doubt the fact that the 54 percent is accurate, and I don't know why even raise this question.

Q So you know because somebody tells you, that's the answer, right?

A These are professional people I have been working with for years. What do you mean "because they told me"? You have to rely on the team. They are part of the team.

Q Is my question not correct? You know because somebody told you, right?

A As opposed to what? I'm not sure as opposed to what.

Q Is the answer to my question yes or no? The reason you know -- is it based on Page 196
misplaced. I think that I can understand the fact that it was a human error. There was a change in the office. They moved things, and they could not find one -- one item, which is not that critical, because you have the actual worksheet that tells you exactly what were the results of the validation.

Q Who did the worksheet?
A The computer-printed validation was done by ABC .
Q Okay. ADC, is that it?
A ABC.
Q ABC.
A I think it's ABC.
Q ABC gave the summary to Data
evelopment, is that your understanding?
A Correct.
Q Okay. But I thought you testified
hat Data Development, or maybe it was
omething Mr. Handzo said -- does Data
Development also get the forms, so that they
an check the work of ABW -- ABC?

Page 197
A Let me clarify the process, so there won't be any kind of understanding. The forms are -- the forms that I related to before in the verification, page 3 , is completed by each interviewer, checked by the supervisor, sent to DDW. DDW, the field person, checks it against the questionnaires to make sure that the name and everything is correct, and adds the quota, makes sure that the quota is correctly specified.

This is being sent to the validation house, the ABC , they complete the interview. They record here the correct answer, whether it's a yes, yes, yes, or a yes, no, yes, and send it back to DDW together with a computer printout of the results of the validation, plus typically a letter or something indicating that there are no problems.

This was done. The only thing
that is missing, because of the painting, are
the actual forms, the completed forms that
Page 199
cannot find them.
Q That's what they told you.
A Right. I have no doubt -- no reason to doubt what they told me.

Q Now, you were deposed on April 27, 2007. Do you recall testifying that there should be a filled out form for each verification, and that Data Development has them? Do you recall giving that testimony?

A Yes. This was the best of my understanding concerning these forms on page 3 of Tab F.

Q So when you testified in your deposition and you said Data Development has them, you were wrong, right?

A I assumed they had them, because you did not have them, the lawyer did not have them, so my only conclusion was Data Development must have them. And I was wrong, because apparently they could not find them.

Q Okay. And when did you find out that these documents were destroyed?
came back after validation completed by ABC to DDW.

Q Okay. So to be clear, ABC was supposed to give the forms to DDW, right?

A They did.
Q Excuse me?
A My understanding is they did, because they --

Q It seems they did.
A They did, because the field supervisor at DDW indicated they received the forms. She checked them, they are fine, they just cannot find them. But they also had received from ABC at the same time the computer printout which was the one that was referred to earlier today, for each interviewer the number of completed interviews and how many of them were validated.

Q Okay. And so then it was DDW that didn't retain the forms, correct?

A Correct. Basically, because of the painting, they misplaced them. They Page 200

A Probably they were never destroyed.

Q Oh? Do you know where they are?
A No, they disappeared during the time of -- the time of the painting, and I don't think this -- the word "destroy" is an accurate description of the situation.

Q Did you read the declaration of Kathy Romano that Mr. Handzo submitted to the Court earlier today?

A I think so. I'm not sure. Yes, I did it yesterday.

Q Okay. Do you recall Ms. Romano saying that the validation forms had not been retained?

A I don't recall exactly. But if you read it to me, I will accept your statement.

Q I'll represent to you that's what she said. But your understanding is they weren't disposed of, they could be, as Mr. Sturm said earlier, sitting in a closet

|  | Page 201 | Page 202 |
| :---: | :---: | :---: |
|  | somewhere | 1 of learned treatises, isn't that right? |
| 2 | A To me, there is a big difference | 2 A Ye |
| 3 | between them not being retained or | 3 Q And I assume the fact that you |
|  | disappearing as opposed to destroyed. | 4 cited it means that you think that they are |
| 5 | Q Okay. Now, since at your | 5 reputable, reliable, authoritative sources, is |
| 6 | deposition you told us that the forms existed | 6 that correct |
|  | and that Data Development had them, and that | $7 \quad \mathrm{~A}$ In general. |
| 8 | was April 27, 2007, when did you come to learn | 8 Q And one of the ones that you cited |
| 9 | that the forms were in fact not obtainable? | 9 in your report, I believe on page 7, was |
| 10 | A Sometime between then and today | 10 Sherry Diamond's Reference Guide on Survey |
|  | when I think Matt Hellman told me that DDW | 11 Research, do you recall that? |
|  | cannot find them. | 12 A Yes. |
| 13 | Q And so did you then get on the | 13 Q And do you know what that survey |
|  | phone with DDW? | 14 says about the need for validation, do you |
| 15 | A Yes. And that's when they told me | 15 recall? |
|  | about the painting. | 16 A I don't recall. I go for the |
| 17 | Q Now, I think you testified on | 17 verification. I typically relied on the |
|  | direct that verification -- the standard is 20 | 18 Advertising Research Foundation standards. |
| 19 | percent. Do I have that correct? | 19 MR. MEYER: Okay. Let's take this |
| 20 | A Correct. | 20 and admit this, or offer it for admission. Do |
| 21 | Q Okay. And you cite in your | 21 you have an exhibit number, Jen? This will be |
|  | written direct testimony in this case a couple | 22 SDARS 2. |
|  | Page 203 | Page 204 |
| 1 | (Whereupon, the above- | admitted into evidence.) |
| 2 | referred to document was | 2 BY MR. MEYER: |
| 3 | marked as SDARS Exhibit | 3 Q And if you'll turn, sir, to page |
| 4 | No. 2 for | 4267 of SDARS Exhibit 2, and we'll look on the |
| 5 | identification.) | 5 bottom of the past, in the last paragraph. It |
| 6 | BY MR. MEYER: | 6 says, "When a survey is conducted at the |
| 7 | Q Now, sir, is this the reference | 7 request of a party for litigation, rather than |
| 8 | guide that you refer to in your direct written | 8 in the normal course of business, a heightened |
| 9 | testimony? | 9 standard for validation checks may be |
| 10 | A Yes. | 10 appropriate. Thus, independent validation of |
| 11 | MR. MEYER: I'd like to offer it | 11 at least 50 percent of interviews by a third |
| 12 | in evidence, Your Honor, as SDARS Exhibit 2. | 12 party rather than by the field service that |
| 13 | CHIEF JUDGE SLEDGE: Any objection | 13 conducted the interviews increases the |
| 14 | Exhibit 2? | 14 trustworthiness of the survey results." Do |
| 15 | MR. HANDZO: No, Your Honor. | 15 you see that? |
| 16 | CHIEF JUDGE SLEDGE: Without | 16 A Yes, I do. |
| 17 | objection, it is admitted. | 17 Q Okay. And that is what this |
| 18 | (Whereupon, the above- | 18 article that you cite in your report |
| 19 | referred to document, | 19 recommends, correct? |
| 20 | previously marked as | 20 A Yes. But I also indicated that I |
| 21 | SDARS Exhibit No. 2 for | 21 am relying on -- the ARS had specified 20 |
| 22 | identification, was | 22 percent, and everything -- in this specific |

case, we had 54 percent, which is more than the standard required by Sherry Diamond.

Q Okay. And it's a lot more than 20 percent? We can agree on that, right?

A Well, the fact is that in this case we had 54 percent verification, which is higher than the standard. The higher standards that you suggest here -- if you talk with field houses, research houses such as Data Development, you will find that my requirement typically is higher than they usually had. And typically, a lot of the studies submitted in courts that I have seen and evaluated were around the 20 percent, not the 50 plus.

Q Now, when you found out that your deposition testimony was incorrect, did the attorneys give you any opportunity to correct it?

A No, I did not ask for this. We just basically discussed the fact.

Q Okay. Okay. Now, let's talk
Page 207
Q Right.
A And they can then check it basically to see, depending on the quota, whether it was subscriber or intended subscriber, whether it was a, you know, yes, no, yes, or yes, yes, yes, as well as they are getting the computer printout. That's what they do. They check this. They do the real check at the beginning when they get it from the field.

Q In any event, that's the kind of check that we can't do, because we don't have the forms, right?

A Right. But I -- we do have one of the forms. We have the form -- the computer form, and I have no -- no reason to doubt the integrity of DDW and ABC .

Q Okay. If you find out, sir, where the forms are after they're done with the painting, will you let us know?

A They are done with the painting. They couldn't find it. The minute I will find

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                                    Page 209
how many different questions in your survey?
    A I think if you look at the
questionnaire there are 11 questions.
    Q And in asking the question in all
of those different ways, you believe that each
of them measures a different dimension of
value, right?
A Yes. Some of them may be related, but -- or multiple measures of the same item.
So, for example, importance would be measured
both by the direct constant sum allocation in
question 4 as well as through the conjoint
analysis that combined multiple tasks given
the respondent.
    Q And you think all of your
questions are equally reliable, isn't that
right?
    A I have no reason to doubt the
reliability or validity of my questions.
    Q I think I'm asking --
    CHIEF JUDGE SLEDGE:That didn't
answer the question.
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    Page 211
    Q Now, are you aware that Dr.
Pelcovits and Dr. Ordover relied in a significant way on your work in this case?

A I know it in general. I don't know specifically what they have done.

Q Are you aware of the fact that Dr. Pelcovits and Dr. Ordover looked and used data from only one of your 11 questions?

A I have no idea. The first time I hear it.

Q And that the one they used was one that yielded a higher value of music, do you know that?

A No, I don't.
Q And so notwithstanding the fact that Dr. Pelcovits and Dr. Ordover used the data from your survey as a key input, neither one of them ever spoke to you, did they?

A I have never spoken to them, right.

Q And so you have no idea whether the use they are making of your survey is or

THE WITNESS: I'm sorry. BY MR. MEYER:
Q Do you think they were all equally reliable?

A Unless shown otherwise, I would say that, yes, I think that they are equally reliable.

Q Okay. And do you agree that value is a multi-dimensional construct?

A Yes.
Q Is that right?
A That's the way I defined it here.
Q Well, not coincidental, but that's why I asked about that. There are many ways of looking at it, right?

A Correct.
Q And by assessing the value of music in multiple ways, we can obtain a more robust measure of its value than any one method could provide alone, isn't that right?

A That's the principle of convergence validity.

Page 212
is not appropriate, right?
A Correct.
Q Now, have you since learned that the question that Dr. Pelcovits and Dr. Ordover are using from your survey is question 9? Have you heard that?

A No. That's the first I hear of it.

Q Okay. Let me -- we're going to get to question 9, but let me ask you about some of the other questions that are in your survey. And I want to focus your attention on question 1. And this is Appendix C to your initial direct written testimony. I'm looking at the main questionnaire.

A Yes, sir.
Q Do you have that, sir?
A Yes, I do.
Q All right. And there are two
surveys, right? One for subscribers and one for considering subscribers?

A Correct. And they are one behind
the other.
Q Okay. And you referred to this earlier as the universe that you used, is that right?

A I'm sorry.
Q I recall Mr. Handzo asking you, "What did you conclude was the correct universe?" and you said, "Considerers and subscribers." Is that not accurate?

A Well, the universe was defined a little more than this, defined also as the decisionmakers, those involved in the decision, relating satellite radio among those subscribers and those who intend to subscribe.

Q Okay. And the lawyers were the ones who gave you the definition of the universe to use, isn't that right?

A This is typically the case.
Q So is the --
A In most studies, the client is the one who specifies the objective of the study and the universe. And given these two, the

Page 215
open-ended, right?
A Correct.
Q Okay. And they're the most openended questions in your survey, right?

A Correct.
Q And so they contain no clues of any kind to the respondent as to how to answer the question, correct?

A Correct.
Q Okay. Now, if we take a look in your report at page 29, Figure 11 -- this is in your original report -- and I can't recall whether Mr. Handzo showed you this page or not -- do you have that, sir?

A Yes, I do.
Q Okay. Now, this reflects the answers to that first very open-ended question, right?

A Correct.
Q And the question was just, "Why did you decide to subscribe" or "why are you considering to subscribe," right?
objective of the study and the universe, then I could go into designing a study.

Q So is the answer to my question yes, in this case, the lawyers gave you the universe to use?

A Yes. But I want to put it in the right context, that this is typically done in all studies, whether it's for litigation or not. It's the client who gives those information.

Q All right. Now, so coming back to the questionnaires, and let's look at the first one, which is subscribers. Now, the first question you asked is, "Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe?" And then, similarly, for considerers, when you get to that survey it's, "Why are you considering subscribing to satellite radio," correct?

A Correct.
Q And I think you yourself described these in your direct oral testimony as very Page 216
A Yes, the question is just at the bottom of the page.

Q Okay. And the first column you have you have top mention, and then you have top three mention, and any mention, right?

A Correct.
Q And the reason you have that is because people could have, and in fact often did, give more than one answer, right?

A Correct.
Q So somebody could say music, sports, and news, right?

A Correct.
Q And you said in response to Mr .
Handzo it's basically the job of people to
then take those answers and match them up with codes. It's called coding, right?

A No. That's in the wrong time and place. At the interview, what's happening --

Q No, I'm sorry. I didn't mean to suggest it was being done at the interview. At some point, the answers are coded, correct?

A Yes. Once the study is complete, the data comes to Data Development. Then, an independent coder takes those open-ended responses and creates codes and codes them.

Q Okay. We're going to talk about the coding. But assuming that the coding is all accurate, isn't it true, sir, that in response to your most open-ended question, simply asking people their reasons for subscribing, that 82 percent of the people did not mention music as their top mention?

A It's not surprising at all.
Q Sir, I didn't ask you whether it was surprising. I simply asked you whether it was true.

A Yes. You are reading from the table. The table speaks for itself. These are the correct numbers.

Q Okay. And in response to question 1 , only 39 percent made any mention of music at all, correct?

A Correct.
Page 219
not mention music at all.
CHIEF JUDGE SLEDGE: I thought
your earlier question said 82 percent.
MR. MEYER: Yes. The difference, Your Honor, is 82 percent did not mention music as their top mention.

CHIEF JUDGE SLEDGE: Top mention. BY MR. MEYER:
Q And over 60 percent didn't mention music at any point in answering question 1 and the probe, question 1B, right?

A Correct.
CHIEF JUDGE SLEDGE: Thank you. BY MR. MEYER:
Q And I think you looked at, with
Mr. Handzo, a figure -- Figure 10 on pages 26
and 27. Actually, there's Figure 9, which has
the data, and then Figure 10 which has a chart based on the data. Is that a fair --

A Correct.
Q Pages 26 and 27?
Correct.

1 Q And that's even though question 1 -- if we could go back -- if we go back to the questionnaire, we'll see this -- question 1 is actually asking them twice, right? Because you ask them the question, and then you ask what's called a probe. Basically, you ask them, "Is there anything else?"

A Correct.
Q So given two opportunities to give music, over 60 percent made no mention of music in response to that question, right?

A No. You are just reading from the table.

Q Okay.
A Is there a question?
Q I thought Mr. Handzo did some reading from the tables as well, and I just want to show different parts of some of the tables.

CHIEF JUDGE SLEDGE: You said over 60 percent?

MR. MEYER: Over 60 percent did
Page 220
Q And you said this reflects answers to open-ended questions, right?

A Correct.
Q Now, here when we say "open-ended questions," you're not just looking at the answers to the one we just talked about, which is question 1 , the most open-ended question, right?

A Well, if you look at the second line of the title, it says, "Net for Question 1, Question 2, Question 3, and Question 11." Q Right.
A So I'm looking at all four openended questions.

Q Okay. So, then, I think the answer to my question is yes. You're not just looking at the most open-ended question, you are also looking at question 2 . Now, question 2 in your survey -- again, Appendix C -- says, "What types of satellite radio programming were most critical to your decision to subscribe to satellite radio?" Do you see

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that?
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A Yes.
Q Okay. So unlike question 1, which simply says, "Why did you decide to subscribe?" question 2 actually is just asking them to focus on programming, correct?

A Correct.
Q So it's a little more leading than question 1 in that it's now suggesting your answer should be something about programming, correct?

A I don't think I would use the term "leading."

Q Okay.
A That's a common practice in terms of the funneling approach when you start very broad and then you narrow it to focus on the area of interest. There is nothing leading in this question.

Q Okay.
A Music is never mentioned here, and it asked about programming in general.

Page 223
Q Again, focusing on types of programming, right?

A Correct.
Q Okay. And then, the fourth
question that you include in this Figure 9 and Figure 10, which Mr. Handzo showed you, is question 11, which asks people, "If satellite radio was not available, what, if anything, would you miss most about it," correct?

A Correct.
Q All right. So to be clear, then, again, Figure 9, Figure 10, these results combine any mention of music from any of these four questions, correct?

A Correct.
Q Actually, it's not just four questions, though, is it, Dr. Wind? It's really eight questions, right?

A If you want to add the probe to this, yes.

Q Okay. So --
A But not everyone was asked all of

Q We can agree that, unlike question 1 , which is totally open-ended, question 2 asks them specifically about programming, right?

A It's open-ended with respect to programming.

Q Right. But if somebody wanted to say, "I like the sound quality" or "I like the fact that, you know, I get nationwide coverage," this question wouldn't be soliciting or eliciting that type of information, right, because you're asking them about types of program?

A Correct. They would have responded to this in question 1.

Q Okay. Right. And then, question 3, which is also combined in your Figure 9 is now reflected on your experience what types of satellite radio programming are most critical to your decision to continue to subscribe. Do you see that?

A Correct.
Page 224
them. Keep in mind that those considered were not asked question 3 , nor question 11 .

Q Okay. So for existing subscribers, though, they would have been asked those four different questions. And after each question, they would have been probed to say anything else, right?

A Correct.
Q Okay. And so this table, Figure 10, the chart Figure 10, the table in Figure 9 , reflects anyone who in response to any of those eight questions said anything about music, correct?

A Well, this table combines both consider and subscribers. So let's now clarify this. But, yes, but you should look at all of the comparison, not only at music, look what was the level of response to all the other programming types, which are significantly below the level of music.

Q Do you know whether music was more or less than all of the other things? Well,
let me come back to that, because we are going to talk about the coding. And just one question about the coding. So in looking at this data, isn't it true that if anyone in any of their verbatim answers used the word "music," no matter what context, it would have been coded under music, isn't that right?

A Correct.
Q So if somebody said, "I like the sound quality of the music," that would have been quoted as music, correct?

A Correct.
Q If somebody said, "I like the fact that my music doesn't fade in and out as I drive," that would have been coded as music, correct?

A Depending on the exact wording, but likely, yes.

Q Okay. So the word "music" immediately triggers code music, right?

A Yes.
Q And the coding of open-ended
Page 227
CHIEF JUDGE SLEDGE: You're going to get into that? Okay.

MR. MEYER: There is a code for music, and so any time they mention music it would have been given that code and simply categorized as this person is saying music, the most important thing is music.

CHIEF JUDGE SLEDGE: Okay.
MR. MEYER: But we'll go through I think how it's done, and hopefully it will be clear.

JUDGE ROBERTS: It certainly isn't
every time somebody mentions music. Somebody
could say -- when asked this question could
say, "Well, I didn't sign up for the music,"
and they used that -- the magical word, but I
wouldn't think that it -- would that show up as a response for music?

THE WITNESS: No. No.
JUDGE ROBERTS: But you don't know that for a fact, do you, sir?

THE WITNESS: I reviewed all the
responses is critically important in looking at the results of the survey, wouldn't you agree?

A Well, they are important, but you also have the full verbatim. So you can go back and look at the actual verbatim for each one of them.

Q Well, let's talk about that.
Coding involves somebody looking at --
CHIEF JUDGE SLEDGE: Let me ask a
point of clarification --
MR. MEYER: Yes, sir.
CHIEF JUDGE SLEDGE: -- on that
last question, last several questions. When you say that any mention of music in the answer triggers the code for music, you're saying that the code for music applies, but you're not saying where -- what number in that code applies, but some number in that code applies.

MR. MEYER: Well, no, Your Honor, and we'll look at the coding chart.

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verbatim. I don't recall even one situation where we had the person say they did not subscribe because of the music. We did have -- I did look after the deposition where you raised this whole issue, I did look at some of the verbatim again. And the majority of them, or close to 50 percent, did not mention anything else but music.

There were others, about 25
percent or so, that mentioned variety of music. And then, there are others, very few, less than 10 percent, that mentioned all type of other characteristics of music.

BY MR. MEYER:
Q Some people got coded under music, even though they didn't say anything about music, isn't that right?

A I don't think so.
Q Okay. Well --
A I'm not sure what you're referring to.

Q All right. We'll take a look at
that. But just to set the foundation as to coding, and what it is, and how it works, somebody -- the first thing somebody has to do is come up with a list of codes, correct?

A Categories, yes.
Q Right. And did you do that?
A No.
Q Okay.
A I should not do it. It should be done by someone who follows the double-blind principle and doesn't know the purpose of the study or the identity of the sponsor.

Q Well, you can give somebody a list of codes to use without them knowing the identity of the sponsor, correct?

A Well, but you are asking -- there are two parts, right? There is the code development, which I believe should be done by an independent person. And then, there is the actual assigning of each questionnaire to -each response to the specific codes.

Q Okay.
Page 231
of the responses.
Q Okay.
A I did review all of the verbatim and then looked at the sample of them in terms of the coding, but I did not do a thorough, complete checking of the codes that were conducted.

Q Okay. And you made no changes, once the coding -- and by "coding," I mean the matching of the codes to the answers. Once that was done by somebody -- do you know who that somebody was, by the way?

A Yes. Greg Pierce.
Q Did you give him any instructions or details as to the coding?

A No. He basically was working with Data Development. This is a way to assure basically that we do have this objectivity, the double-blind here.

Q Do you know if he was given any training by Data Development?

A Greg has been doing coding for

A And I believe that you need a double-blind for both of these functions.

Q My question was: you could come up with a list of codes and give it to Data Development or somebody else, and it would still be double-blind, correct?

A No, it would not, because I -- I am not double-blind. I know what the purpose of the study is. So if I develop the categories, I will be biased in the development -- I can be biased in the development of the categories. I want to make sure, for objectivity in the study, and I am letting, then, someone else who doesn't know the purpose of the study develop the codes.

Q Okay. So you didn't develop the codes. You also didn't do the coding. In other words, you didn't review the verbatims and then figure out which bucket or code each answer went into, right?

A Right. I think we discussed this in my deposition. I said I reviewed a sample Page 232
studies that I have been involved in for at least 10 years, if not more.

Q Okay.
A He is a very smart guy, he knows research in and out, and very competent coder.

Q And he did all the coding.
A Correct.
Q You have the utmost confidence in him.

A Yes.
Q Okay.
A Again, I have no reason -- unless
I have good reason, I have no reason to doubt
--
Q Okay.
A -- the integrity of the people I
work with. They're a part of the team.
Q Okay. So, then, the coding that was done was sent to you, and you made no changes whatsoever, correct?

A Correct.
Q You didn't think there was any
answer in the 420 respondents times four openended questions, actually times eight for the actual subscribers, including the problems, out of those thousands of answers, you didn't think any answer had been coded improperly, is that right?

A As I said, I did not validate each one of them. I did not stand there and check each one of them.

Q Okay.
A I have confidence in the people who did it, and I think that the coding, by and large, following the scheme was accurate.

Q Now, you said on direct testimony in response to Mr. Handzo -- I wrote this down -- you said with respect to the coding, "I reviewed it." So, but you actually reviewed a sample, and the sample that you reviewed consisted of probably a few for each one of the coding categories, right?

A Yes, but I reviewed -- but I was responding to -- the question in direct,

Page 235
A Yes.
Q And that would be at Exhibit L, at the end of Exhibit L?

A Correct.
Q Appendix L. And do you know why these particular verbatims out of all the verbatims generated were attached to your report?

A Because these are the ones that I referred to actually in the report, so if I mention a specific quote in the report, I added them. These were the full supporting documents for the specific references.

Q Okay. And just to orient ourselves, I know we covered this just before. You didn't write the codes, you didn't do the coding, and you reviewed a sample of the coding. Right?

A Correct. Which I believe is the correct procedure to do.

Q Okay. Now it's true, isn't it, sir, that you have been criticized by courts,
responding to -- that I reviewed the coding scheme.

Q I see.
A Then, I looked in the term of as -- you are correct, I looked at the sample of the code the way they were coded from the questionnaires.

CHIEF JUDGE SLEDGE: Is this a good time for a break?

MR. MEYER: Yes, certainly.
CHIEF JUDGE SLEDGE: We'll recess 10 minutes.
(Whereupon, the proceedings in the foregoing matter went off the record at 3:00 p.m. and went back on the record at 3:12 p.m.)
CHIEF JUDGE SLEDGE: We'll come to order.

MR. MEYER: Hello again, Dr. Wind. BY MR. MEYER:
Q You attached some of the verbatims from your survey to your report, didn't you? Page 236
have you not, for lack of participation in every stage of the survey process?

A Yes, by very few on this point, but I still feel that the correct approach is the one I use in term of involvement as part of a research team.

MR. MEYER: And I don't know, Your
Honor, what the Court's preference is with respect to the case, whether I go ahead and try and introduce that as an exhibit, or I could simply cite the case to the Court.

CHIEF JUDGE SLEDGE: The purpose is to use it for authority?

MR. MEYER: Well, it makes some statements that are critical of Dr. Wind, that I think are relevant to the survey he did in this case.

CHIEF JUDGE SLEDGE: I don't understand that authorities are exhibits.

MR. MEYER: Okay. Then we can simply cite the case. I could cite it now or at an appropriate point. Is that acceptable?


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    CHIEF JUDGE SLEDGE: Without
objection, it's admitted.
    (Whereupon, SDARS
        Exhibit No. 4 was
        admitted.)
        BY MR. MEYER:
    Q Now using these two documents in a
    given verbatim, it's true, isn't it, Dr. Wind,
    that you can tell how a given verbatim
    response was coded. Correct?
    A Correct.
    Q So let's take a look at a
verbatim. And looking at the one with the
Bates number 8620, Case I.D. }2025
    A I don't have it in front of me.
    Q My associate is gathering it. I
apologize for the delay.
                    (Whereupon, SDARS
                    Exhibit No. }5\mathrm{ was marked
                for identification.)
        BY MR. MEYER:
    Q Okay. Now SDARS Exhibit 5, do you
                        Page 243
    Q And in response to the question,
    "Why are you considering subscribing to
    satellite radio", this person responded, "It
    sounds -- we started out with cable, and then
    went to satellite, and satellite was so much
    better". Do you see that?
    A Yes.
    Q Does that suggest to you that this
person might have been confused and was
thinking about cable T.V. and satellite T.V.,
and, therefore, should have been excluded from
the survey results?
    A Possible. I'm not sure.
    Q Okay. All right. Now let's
illustrate how you determined how that answer
was coded.
    MR. MEYER: And, again with
apologies to the Court, it's somewhat awkward
and took us a while to figure it out.
    BY MR. MEYER:
    Q If you go to SDARS Exhibit 4, and
you see on the left-hand column is says
recognize this document, sir?
    A This is a verbatim, yes.
    Q From your survey?
    A Yes.
        MR. MEYER: I'd like to offer it
into evidence, Your Honor.
        CHIEF JUDGE SLEDGE: Any
objection?
        MR. HANDZO: No, Your Honor.
        BY MR. MEYER:
    Q Okay. So let's interpret some of
this. Dr. Wind, at the top of the page it
says, "Considering subscribing case I.D. 20-0-
25." Do you see that?
    A Yes.
    Q Okay. So does that tell you that
this is a consider, and that the subject I.D.
number is 2025?
    A Correct.
    Q All right. Go down to question
1A. Do you see that?
    A Yes.
        Page 244
"Q1A1". Do you see that? Are you looking at
SDARS 4, sir?
    A Yes.
    Q Okay.So you see Q1A1?
    A Yes.
    Q Okay. Now if you go to the right,
we still haven't figured out what flag means,
but under Main 1 and Main 2, }6411\mathrm{ and 6412, do
you know what that means?
    A Yes. This is column 64, position
11, column 64, position 12. And if you want
to understand what the flag is, if you'll go
to the next page, you have on the left side
final quotes. The left column is flag. This
is the category, and then the full code is the
category, the coding within each one of these
categories.
    Q Okay.
    A So music is category 1.
    Q Oh, the code for music is 11.
Right?
    A Well, but the flag for music is 1,
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so everything that will be related to music will be flagged 1 , and then you have a more specific code within it.

Q Okay. So looking on page 2 of SDARS Exhibit 4, 11 music NS. What does NS mean?

A Not specific.
Q Okay. All right. Now let's see if we can figure out how Mr. or Ms. 2025 was coded on this answer. If you go to SDARS Exhibit 3, and you look in the parentheses, see on the top it says one five, and EQ, N001. That's the first entry on Exhibit 3. Do you see that?

A If you want this responded, you should look at page 12. That's what you are looking at?

Q I understand that. I was just
trying to take it slower for the panel. Yes, let's go to page 12 of Exhibit 3. Okay. And we see here in the parentheses on the left, after the one fives, and after the EQs, we see
Page 247
and you look under full code, and you see 44, it's good, the best, not specific. Right? I think that's what you just said.

A Correct.
MR. MEYER: Okay. Can I ask whether the Court is with me on this?

CHIEF JUDGE SLEDGE: No you may not.
(Laughter.)
MR. MEYER: If I can assist the
Court in any way, please let me know.
CHIEF JUDGE SLEDGE: You can
assist me by giving me a moment to state what
should have been stated long ago. SDARS
Exhibit 5 is admitted without objection.
(Whereupon, SDARS
Exhibit No. 5 was
admitted.)
MR. MEYER: Apologize, Judge. May
I continue?
CHIEF JUDGE SLEDGE: Please.
MR. MEYER: Okay.
numbers, and one of those numbers is 2025. Correct?

A Correct.
Q Okay. And so that tells us that these relate to subject 2025. Right?

A Correct.
Q Okay. And now if we take the first 2025 and we go across and it says C6411, 6412, and going back to Exhibit 4, that tells us that that's a code for the response to Question 1(a)(1). Correct?

A Correct.
Q Okay. And then it says 44. And that's actually the code. Right?

A Right. This says there is no flag for 44 . These are the major categories, miscellaneous, and it says it's good, the best, nothing specific.

Q Okay. Again, I don't want to get ahead of the Court. So the 44 tells you that's how it was coded. And to find out what that means, you go back to Exhibit 4, page 2,

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## BY MR. MEYER:

Q All right. So then wrapping this up, the person who says they started with cable, and then went to satellite, and satellite is so much better, that response was coded it's good, the best. Right?

A Right.
Q Okay. Now let's take some more interesting ones. If I can have 20153.
(Whereupon, SDARS
Exhibit No. 6 was marked for identification.)
BY MR. MEYER:
Q Dr. Wind, can you identify this document?

A Yes. This is the verbatim responses for subscriber responder number 20153.

MR. MEYER: I would offer it into evidence, Your Honor.

CHIEF JUDGE SLEDGE: Any
objection?

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    MR. HANDZO: No, Your Honor.
    CHIEF JUDGE SLEDGE: Without
objection, Exhibit 6 is admitted.
    (Whereupon, SDARS
    Exhibit No. }6\mathrm{ was
        admitted.)
    MR. MEYER: Thank you, Your Honor.
    BY MR. MEYER:
    Q Dr. Wind, I want to ask you here
about response to Question 3(a). It says,
"Now reflecting on your experience with
satellite radio, what types of satellite radio
programming are most critical to your decision
to continue to subscribe"?And the response
was, "I will not like it." Do you see that?
    A Yes.
    Q Okay. Now from SDARS Exhibit 3
and 4, can you tell the Court how that
response was coded?
    A It was coded as 11, which is music
not specific.
    Q That's an error, isn't it?
                            Page 251
    Q Okay. Let's take a look at
subscriber I.D. 20157, please.
            (Whereupon, SDARS
            Exhibit No. }7\mathrm{ was marked
            for identification.)
        BY MR. MEYER:
    Q So that was a mistake, sir,
obviously, that you didn't catch in your
review of the coding. Correct?
    A No. As I mentioned before, I just
did a sample review. I did not check each one
of the numbers.
    Q Because, as you said, you have the
utmost confidence in the person who does all
your coding. Right?
    A And if you found only two or three
mistakes in all of this, this is a very small
level of error.
    Q Okay. Take a look at SDARS
Exhibit 7. This is subject 2157. Right?
    A Yes.
    Q Do you recognize this as another
``` objection, Exhibit 6 is admitted.
(Whereupon, SDARS
Exhibit No. 6 was admitted.)
MR. MEYER: Thank you, Your Honor. BY MR. MEYER:

Q Dr. Wind, I want to ask you here about response to Question 3(a). It says, "Now reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe"? And the response was, "I will not like it." Do you see that?

A Yes.
Q Okay. Now from SDARS Exhibit 3 and 4, can you tell the Court how that response was coded?

A It was coded as 11, which is music not specific.

Q That's an error, isn't it?
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A Looks like it. I think they coded correctly the 1 (a) and 2(a), but apparently something is wrong here.

Q Okay. So this is clearly a mistake coding "I will not like it" as music. Right?

JUDGE ROBERTS: Are you on page 31 of Exhibit 3?

THE WITNESS: I'm on page 31, and if you want to look at this respondent 20153, the first answer was 12 , which was a question to Question 1(a), which was "I like the top 20 and 20 ", which was coded correctly as specific genre of music. And the second one in response to question 2(a), when he says "Top 20 and 20 is good for me and my family", also was coded correctly as 12 . And, apparently, with 3(a) I think it's an error, because he said, "I will not like it". The coding for this is error 11, music not specific, should not have been.

BY MR. MEYER:
verbatim response from your survey?
A Yes.
MR. MEYER: I would offer it into evidence, Your Honor.

CHIEF JUDGE SLEDGE: Any objection to Exhibit 7?

MR. HANDZO: No, Your Honor.
CHIEF JUDGE SLEDGE: Without
objection, it's admitted.
(Whereupon, SDARS
Exhibit No. 7 was
admitted.)
BY MR. MEYER:
Q Now on this one, take a look at
the answer to 3(a)(1), or 3(a), actually. The
question is, "Now reflecting on your experience with satellite radio, what types of satellite radio programming are most critical
to your decision to continue to subscribe?"
Do you see how this person answered the question?

A Not very comprehensible. "I will
not like that. I need it."
Q "I will not like that. I need it." How do you think this was coded? Can you tell us?

A Yes. It was coded also a mistake as 11 , as music not specific. Even though the first code on 1 and 2 are correct.

Q All right. And in this instance, unlike where you pointed out in the prior instance, this person's response to Question 1(a), which was the most open-ended, was, "It is the news". Correct?

A And correctly categorized it as number 22.

Q Okay. But in any event, in Question 3(a), and this would have been combined into your chart that Mr. Handzo showed, combining all the open-ended answers, this was incorrectly coded as music, like the previous ones. Correct?

A Like I said before, so we have two, three errors, so far we have two. This

CHIEF JUDGE SLEDGE: Any objection to Exhibit 8?

MR. HANDZO: No, Your Honor. BY MR. MEYER:
Q Let's take a look at the answer to Question 1(a), Dr. Wind.

CHIEF JUDGE SLEDGE: Exhibit 8 is admitted.
(Whereupon, SDARS
Exhibit No. 8 was admitted.)
MR. MEYER: I apologize, Your Honor.

BY MR. MEYER:
Q If we could, Dr. Wind, look at question 1(a), which is the general open-end, "Why did you decide to subscribe?" The response given by this subject was, "It's wireless, NE Probe, you get a variety of stations." Do you see that?

A Yes.
Q Do you know what "NE Probe" means?
happens.
Q Let's take a look at 20180, if we could, subject 20180.
(Whereupon, SDARS
Exhibit No. 8 was marked
for identification.)
CHIEF JUDGE SLEDGE: Mr. Meyer, I
suffer from the same problem that John does.
When you say those numbers, you're referring to two zero one-eighty?

MR. MEYER: Two zero one-eighty, that's right.

CHIEF JUDGE SLEDGE: And not twenty one eighty.

MR. MEYER: Correct. Two zero one-eighty.

BY MR. MEYER:
Q Dr. Wind, do you recognize this as another verbatim from your study?

A Yes.
MR. MEYER: I would offer it, Your Honor.

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1 A Nothing else.
Q Okay. How do you think this was coded? Do you have any idea?

A This is the second -- this was coded incorrectly as music not specific.

Q Okay. Another mistake. Right?
A Yes.
Q Let's take a look at 20213, please.

JUDGE WISNIEWSKI: You've got to say two zero.

MR. MEYER: Yes. Two zero two one three.

JUDGE ROBERTS: Before we leave Exhibit 8, I notice that the response, Mr. Meyer, since you've been bringing up question 3 , there is a response of music and the variety of stations, and what they offer. Are you simply saying that it's coded incorrectly on that particular line on page 35 of Exhibit 3 ?

MR. MEYER: Well, I'm saying the
answer to Question 1(a), which is the openended question was coded improperly as music.
Each of the other questions and answers have separate codes, and they go into separate buckets, but Question 1(a) is another mistake, inaccurately coding something as music, which clearly is not.

JUDGE ROBERTS: I think in your cross examination here you've been bringing up Question 3, as well.

MR. MEYER: On some of them I've been pointing to Question 3, on some of them I'm pointing to other questions.

JUDGE ROBERTS: Yes. So if in Question 3 on this one the person does mention music, isn't it then a correct code?

MR. MEYER: Question 1(a) the code is incorrect, and Dr. Wind has tabulated all sorts of data, including the answers to just Question 1(a). That's in his report. It's one of the tables in his report.

BY MR. MEYER:
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MR. MEYER: Okay. And that's

\section*{SDARS Exhibit 9.}
(Whereupon, SDARS
Exhibit No. 9 was marked for identification.)
BY MR. MEYER:
Q Do you recognize this as a verbatim from your survey?

A Yes.
MR. MEYER: I'd like to offer this into evidence, Your Honor.

CHIEF JUDGE SLEDGE: Any objection to Exhibit 9?

MR. HANDZO: No, Your Honor.
CHIEF JUDGE SLEDGE: Without
objection, it's admitted.
(Whereupon, SDARS
Exhibit No. 9 was
admitted.)
BY MR. MEYER:
Q Okay. Now here I'd like to direct your attention to the answer to Question

Q All right. So, Dr. Wind, I have to confess, I don't recall. Have we
established how that answer to Question 1(a) was coded? Was that coded as music?

A Which one? I'm sorry.
Q Question 1(a) where the subject said, "It's wireless, NE probe, you get a variety of stations."

A Which exhibit are you talking about?

Q SDARS Exhibit 8.
A Yes, on 20180. Yes.
Q Okay.
A And the 1 will be wrong, and in the cumulative because we're focusing on that, it will have no effect.

MR. MEYER: Okay. And have we distributed 20213?

THE WITNESS: Yes, you have.
MR. MEYER: Okay. You have that one, Dr. Wind?

THE WITNESS: Yes.
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11(a), Dr. Wind. And question 11 was one of the questions that you combined into that chart that Mr. Handzo showed, that combined so-called open-ends. Correct?

A Yes.
Q Okay. And you see the answer -your Question 11(a) says, "If satellite radio is not available, what, if anything, will you miss most about it?" And the response was, "I will not like it." Do you see that?

A Yes.
Q Can you confirm for me, Dr. Wind, that this one, again, was coded, "I will not like it", that answer was coded as music?

A Yes.
Q Another mistake?
A Yes.
(Whereupon, SDARS
Exhibit No. 10 was
marked for
identification.)
Q Let's take a look at 20219,
please. I apologize, two zero two one nine. Is this another verbatim from your survey, Dr. Wind?

A Yes.
MR. MEYER: I would offer it, Your Honor.

CHIEF JUDGE SLEDGE: Any objection to Exhibit 10?

MR. HANDZO: No, Your Honor.
CHIEF JUDGE SLEDGE: Without objection, Exhibit 10 is admitted.
(Whereupon, SDARS
Exhibit No. 10 was admitted.)
BY MR. MEYER:
Q Let's take a look on this one, at the answer to Question 2(a), another one of the so-called open-ends. "What types of satellite radio programming were most critical to your decision to subscribe to satellite radio?" Do you see that?

A Yes.
evidence, Your Honor.
CHIEF JUDGE SLEDGE: Any objection to Exhibit 11?

MR. HANDZO: No, Your Honor.
CHIEF JUDGE SLEDGE: Without
objection, Exhibit 11 is admitted.
(Whereupon, SDARS
Exhibit No. 11 was
admitted.)
BY MR. MEYER:
Q And for this subject, Dr. Wind, if you look again at the most open-ended question, Question 1(a), why did you decide to subscribe, this person said, "I really like the wide variety of channels, and I loved the equipment which I purchased." Can you tell the Court how that was coded, that response?

A Variety of programming.
Q And?
A And music, not specific.
Q That's another mistake. Right?
A Correct.

Q And the response this person gave was, "I did not choose the service for any particular programming. I chose the satellite because of family traditions." Can you tell the Court how that was coded by your coders, Dr. Wind?

A This was coded in error as music, non-specified.

Q Let's take a look --
A The next one was correct.
Q Oh, well.
A The 3(a) was correctly classified.
Q I'm using two more, 20108.
(Whereupon, SDARS
Exhibit No. 11 was
marked for
identification.)
BY MR. MEYER:
Q Dr. Wind, is this another verbatim from your survey?

A Yes.
MR. MEYER: I would offer it into
Page 264
Q Okay.
CHIEF JUDGE SLEDGE: I'm sorry, I don't understand that. Why is variety of program a mistake?

THE WITNESS: No, the variety of program was correct, but there were two answers, and there were two codes for Question
1. And the second one, they corrected this as -- they misclassified this as music.

CHIEF JUDGE SLEDGE: So it's half a mistake.

THE WITNESS: Right.
CHIEF JUDGE SLEDGE: Okay. BY MR. MEYER:
Q And, finally, let's take a look at Subject 20191.
(Whereupon, SDARS
Exhibit No. 12 was marked for identification.)
BY MR. MEYER:
Q Do you recognize this as another
verbatim from your survey, sir?
A Yes.
MR. MEYER: I would offer it, Your Honor.

CHIEF JUDGE SLEDGE: Any objection to Exhibit 12?

MR. HANDZO: No, Your Honor. CHIEF JUDGE SLEDGE: It's admitted.
(Whereupon, SDARS
Exhibit No. 12 was
admitted.)
BY MR. MEYER:
Q And, Dr. Wind, if you take a look at on this one Question 11(a), and the question here was, "If satellite radio was not available, what, if anything, would you miss most about it"? And this person said, "I would miss the whole thing. I never want to go back to the regular radio." Do you see that?

A Yes.
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some interviews, we had eight errors that were discovered. This should not have happened, but in reality does not change the conclusion that I have, because in most of these cases, I think in the bulk of these, there was other correctly classified music responses. And since we're looking at net responses, we were not duplicating a respondent, where a respondent is counted for music only once and not twice or three times, if they mention it, it does not affect the net conclusions of the study. But you are right, this should not have happened.

Q And do you wish that maybe you would have checked more of the coding than you actually did in the survey?

A No. The conclusion for me is basically to have a second independent coder review all the codes. I still don't think that I should do it.

Q Okay. And what you were just saying about how you only count music once,

Q Could you tell us how that was coded?

A This was coded as music.
Q Another mistake. Right?
A Yes, mistake on this, but keep in mind that since - when all the net tables we had, we found music only once, so to the extent that there is an answer here, music correctly classified in some of the other questions, like in Question 2(b), it will not have effect on the specific tables. But this mistake should not have happened.

Q So seeing all of those errors that I just pointed to you, and in each of those cases the erroneous code was attributed to music, when it should not have been. Does that in any way undercut your confidence in your coder that you trust with the utmost confidence that you've used for so many years?

A No, I still trust him, and I think he's very competent. I think that I'm disturbed by the fact that out of the 400 and

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that would only be true on your chart that attempts to amalgamate all of the mentions of music in Question 1-3 and 11. Right?

A The net responses.
Q Okay.
A We're talking about the net responses.

Q Right. If you take a look at page 29 of your report, for example, and Figure 11, which I believe we touched on before, that just goes to Question 1. Right?

A Correct.
Q And so, to the extent that there are errors in the coding of responses to Question 1, it would, obviously, change the data on this chart. Correct?

A By very small amount. You're talking about probably two or three, only two of these, as far as I can recall, or three, are problem with Question 1, so you will -let's deduct three people out of 423 , which is less than 1 percent, so you'll have top
mention, you'll still have 16 percent. And when you're looking at this in comparison to the next highest mention, which will be talk and entertainment, five, my conclusions on the dominant effect of music is not affected.

Q How do you know those are the only mistakes?

A You went through all of them, and that's the only one you found.

Q How do you know I went through all of the mistakes? You don't know that, do you?

A I can assume this, because you're trying to identify the mistakes. I did not see any mistakes. If you have any others, show them to me.

Q What percentage of the coding did you review?

A I reviewed a small sample of the coding. When I reviewed it, I did not find problems. I feel, basically, that this is very unfortunate that this happened. If you have other mistakes, show it to us, and we'll

\section*{Page 271}

Q Okay. Well, is there some other document that you used to check them, that perhaps wasn't produced to us?

A No. What I basically did is, I
had -- I worked with the director at Data
Development and basically asked her to -- I
picked random numbers, and asked her to --
basically random questionnaires, and asked
her to read me the code, so there was no
document. She was probably working from this.
I have never in my life seen this document
before the deposition.
Q And the verbatims that you attached, you attached quite a few verbatims to your direct testimony that you gave to this Court. Right?

A I also provided the complete three documents, three big volumes of all verbatim,
so you actually have access to all the
verbatim in the study.
Q Sir, my question was, you provided a portion of the verbatims to the Court with
adjust the numbers. My objective is to provide the Court with the correct information. And, unfortunately, these errors occurred, which are easily corrected. It does not change the essence of the conclusion, because you're changing less than 1 percent of the respondent, impact on Question 1. It does not change the relation between music and the next highest, which is talk and entertainment.

Q Sir, when I took your deposition, isn't it true that you didn't even know how to tell me how these things were coded?

A Correct.
Q You couldn't figure it out.
Right?
A Correct.
Q I gave you SDARS Exhibit 3, and SDARS Exhibit 4, and I gave you a variety of verbatims. You didn't even know how to check them. Right?

A Correct, because that's not the way I check them.

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your direct written testimony. Correct?
A Correct.
Q Okay. And did you personally choose those verbatims to attach?

A I selected randomly a number of quotes which I thought are interesting, and these were the ones that were attached, basically, the full verbatim for any respondent that was mentioned in my direct testimony.

Q Do you know whether any of the verbatims that I just showed you were attached in your selection that you gave to the Court?

A No, I don't.
Q All right. Let's change the
subject, Dr. Wind. I want to ask you about your conjoint analysis. And the conjoint analysis is reflected, what you referred to as the conjoint analysis is reflected in Question 4-7 and 10 of your survey. Is that right?

A Correct.
Q And you believe, you testified on
\begin{tabular}{|c|c|}
\hline Page 273 & Page 274 \\
\hline 1 direct, I wrote it down, "Conjoint analysis is & 1 procedures, such as constant sum evaluation. \\
\hline 2 the best approach to assess the relevant & 2 Q Okay. And that's Appendix H to \\
\hline 3 importance of music." Do you stand by that & 3 your direct written testimony? \\
\hline 4 testimony? & 4 A Correct. \\
\hline 5 A Yes. Other than kind of field & Q Okay. And, again, you don't know \\
\hline 6 experiments, and these are things we talked in & 6 whether Dr. Pelcovits or Dr. Ordover made any \\
\hline 7 my deposition, conjoint analysis will be the & 7 use of the conjoint analysis. Do you? \\
\hline 8 best approach to determine it. & 8 A I have no idea. \\
\hline \(9 \quad\) Q Okay. And you have confidence in & \(9 \quad\) Q Now tell the Court what your \\
\hline 10 the results of your conjoint analysis. Right? & 10 conjoint analysis revealed about the \\
\hline 11 A Yes, I do. & 11 percentage of the value of satellite radio \\
\hline 12 Q And you're comfortable with the & 12 that comes from music. \\
\hline 13 methodology. Correct? & 13 A If you go to page 42 of the \\
\hline 14 A Yes, I do. & 14 report, or you can actually go to page 43, it \\
\hline 15 Q In fact, of all the methodologies & 15 would be easier to read, you have the bar \\
\hline 16 you used in the survey, the only one that you & 16 graph that's showing the relative importance \\
\hline 17 chose to include an entire separate appendix & 17 of the seven factors studied in the conjoint \\
\hline 18 explaining how well thought of it was, was the & 18 analysis. \\
\hline 19 conjoint analysis. Correct? & 19 Q And it's true, is it not, that \\
\hline 20 A The assumption was that the Cou & 20 your conjoint analysis, what you described a \\
\hline 21 may not be as familiar with conjoint analysis, & 21 the best approach to assess the relevant \\
\hline 22 as with some of the other more common & 22 points of music, has a number for music of 30. \\
\hline Page 275 & Page 276 \\
\hline 1 Is that right? & 1 Q "The analysis revealed 30 percent \\
\hline 2 A Correct. & 2 of the value of satellite radio comes from \\
\hline 3 Q And if you look back at the text & 3 music", not 56 percent, or 55 percent, or 68 \\
\hline 4 in your report on page 41, in the middle of & 4 percent, 30 percent. Correct? \\
\hline 5 the second paragraph, you write: "The analysis & 5 A In this context, in the context in \\
\hline 6 revealed that a full 30 percent of the value & 6 which it was evaluated, yes. \\
\hline 7 of satellite radio comes from music." Do you & \(7 \quad\) Q Now on page 41 of your -- well, \\
\hline 8 see that? & 8 actually, if you continue -- I'm sorry, let me \\
\hline 9 A Yes. & 9 withdraw that. \\
\hline 10 Q And that was your conclusion based & 10 In fact, in your report, if you \\
\hline 11 on the conjoint analysis. & 11 look at the Table of Contents, which is on the \\
\hline 12 A In the context of the variables & 12 second page of your written report, when \\
\hline 13 that we studied, you have to realize that in & 13 you're describing the responses from your \\
\hline 14 conjoint analysis the value is a function of & 14 various questions in your survey, the conjoint \\
\hline 15 the complete set, so when you look at this in & 15 questions, 4-7 and 10, are described under the \\
\hline 16 term of the four programming type, as well as & 16 heading "Value." Correct? \\
\hline 17 price, as well as geographical coverage, as & 17 A Yes. These are the terms that I \\
\hline 18 well as the commercial-free, in this context, & 18 use to describe the conjoint analysis here. \\
\hline 19 this is the number. & 19 Q Okay. And by putting the conjoint \\
\hline 20 Q Sir, I'm just reading the sentence & 20 under the heading "Value", is it reasonable to \\
\hline 21 you wrote here. & 21 assume that you thought that it had something \\
\hline 22 A I'm trying to explain it. & 22 to do with the value of music. Right? \\
\hline
\end{tabular}
Q Yage 279
yourself?
A Yes.
Q Now Question \(9(a)\) asks the subject
to assume that the price is \(\$ 12.95\). Correct?
A Correct.
Q And you know that's not true for
every subscriber. Right?
A I was not aware of this.
Q Do you know that some people get a
lower rate based on family plans?
A My understanding was that the
statement, the single subscription price per
month for satellite radio is \$12.95. My
belief is that this was accurate.
Q Okay.
A I had no other data to suggest
that this is not accurate.
Q Okay. And then for considerers,
where you also tell them assume the price is
\$12.95, those are people who, by definition,
haven't paid anything yet. Right?
- I think I mentioned in direct at the beginning, and it's clear that throughout the testimony here, that I view all of the measures in Figure 1, for example, is different dimensions of value. I don't single this, this is just one measure which I think is very reliable and valid measure. It's one of the measures that we have. And we cannot ignore it in the context of all the measures in Figure 1.

Q And it's the one that you happened to put under the heading "Value." Right?

A I think that we're referring here also to all of these as the value, to the entire set of dimensions we have here.

Q All right. Now let's take a look at Question 9 of your survey. Do you have that, sir?

A Yes, I do.
Q Okay. Now in Question 9 -JUDGE ROBERTS: Where is that?

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Q You checked those web sites yourself?

A Yes.
Q Now Question 9(a) asks the subject to assume that the price is \(\$ 12.95\). Correct?

A Correct.
Q And you know that's not true for every subscriber. Right?

A I was not aware of this.
Q Do you know that some people get a lower rate based on family plans?

A My understanding was that the statement, the single subscription price per month for satellite radio is \(\$ 12.95\). My belief is that this was accurate.

Q Okay.
A I had no other data to suggest that this is not accurate.

Q Okay. And then for considerers, where you also tell them assume the price is \(\$ 12.95\), those are people who, by definition, haven't paid anything yet. Right?

MR. MEYER: It's Appendix C, which is his questionnaire, and then it's Question 9 of that questionnaire.

BY MR. MEYER:
Q Now in Question 9, you asked about four categories of programming. Right?

A Correct.
Q Music, news, sports, and talk and entertainment. Is that correct?

A Correct.
Q And those areas came from your lawyers. Right?

A They came in discussion with the lawyers as to what are the major programing types. And they're also the ones that the two companies advertise the most.

Q They suggested them to you, and you didn't make any changes, did you?

A I had no basis to suggest changes, and their suggestion was reinforced by the web sites of the two companies that emphasize these programming types.

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A Correct. But the reason we selected people who consider buying it in the next months to make sure, the next 30 days, to make sure that we're dealing with people who are interested and aware of what we're dealing with.

Q My question is those people aren't paying anything. Right?

A So far.
Q Now at the end of Question 9(b), you then ask the people, "If you think that not having this programming type would lead you to cancel your subscription, please say so." It's possibly a little bit leading, wouldn't you agree?

A Possible. Depending how you interpret this, but possible.

Q And when you're asking about these various programming types, no music, no news, no sports, the question, or the value proposition you're putting in front of people is all or nothing. Right?
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A Right.
Q This question tells you nothing about the margin of value of a little more or a little less music. Correct?
A Correct.
Q It doesn't tell you anything about music as it is on satellite radio, versus music as it is on terrestrial radio. Right?
A Correct.
Q Doesn't tell you anything about commercial-free music, versus music with commercials. Right?
A Correct. All of these -- most of these variables that you mentioned were covered in the conjoint analysis test.
Q Okay. I'm just focusing on Question 9. Now when you asked people what they would do if there were no music programming whatsoever, do you know how many people said they would cancel the satellite radio service?
A Yes.

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Page 283
Q So without any music at all on a satellite service, a third of the people wouldn't pay a penny less. Correct?

A Right. But, again, you have to look at all these data relative. You're looking at this as absolute. You have to look at this as relative.

Q Sir, I'm asking questions that I want to ask on cross examination. So a majority of people wouldn't cancel even with no music. And, I'm sorry, I think I may have misspoke. Thirty-nine percent of the people would not change the amount they were willing to pay. Do I have that right? Because you have 61 percent would change the amount willing to pay. Does that mean 39 percent wouldn't even pay less for the service with no music?

A No. If you look further down the column, you have also -- you have 33 percent that would not change amount willing to pay, and 6 percent indicated they don't know it

Q And is that found on page 22, Figure 6?

A Yes. And it's also actually confirmed by some of the other studies that were done by I think Sirius.

Q I'm asking you now about your survey, about this question, about this piece of data.

A Yes.
Q When you asked people what would you do if there were no music programming whatsoever, not one iota of music on satellite radio, isn't it true that 57 percent of people, the majority of people wouldn't cancel the service, even if you dropped all music from it. Isn't that right? Isn't that what your data shows?

A Yes, they would not cancel. Right.

Q Okay.
A Thirty-three would not change the amount willing to pay.

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would change amount willing to pay.
Q All right. Now I understand. So 39 percent didn't say they would pay less for a service with no music. Correct?

A Correct.
Q Okay. Now does this Question 9, does this tell you -- I mean, you have here that more people said they would cancel if there were no music than news, sports, and entertainment. Does this tell you whether -how the number of people who would cancel if there were no music relates to the number of people who would cancel if there were no news, no sports, and no talk and entertainment put together?

A No. This is, basically -- the purpose of this question is to look for four distinct scenarios. One is assuming there is no music, everything else the same. Two is assuming no news, everything else the same. Three assuming no sports, everything the same. And four, no talk and entertainment,
everything else the same.
Q So it doesn't compare the value of music versus all non-music content. Correct? All non-music content together.

A Not if you combine them, but it gives you a direct -- it's an apple-to-apple comparison. What will happen if there is no music, what will happen if there is no news.

Q I understand, but is the answer to my question yes, it doesn't tell you -- it doesn't compare the value of music to the value of all non-music content. Right?

A The difficulty I'm having answering your question is that it does not combine them. It does not provide the situation of combining the others.

Q That's all I'm asking.
A But when you're asking the scenario of the no music, they will continue having all the other programming. That's what they will have, so you are comparing it against everything else. So it's basically

\section*{Page 287}
sports, and entertainment. Right? But you don't ask what would you pay for a service with music, but no news, and no sports, and no talk and entertainment.

A Correct.
Q That's all I'm getting at.
A Correct.
Q Okay. Now with respect to, again, Question 9, where you're asking about music, and some of your other questions that just ask about music, well, this Question 9, it's not discriminating enough to distinguish between the value of the music itself, as opposed to the superior variety of music, or the superior fidelity of the music. Right?

A Whatever the respondent understands when they talk about no music.

Q Let me ask you to take a look at your deposition, sir, which has been marked as SDARS Exhibit 9. And if you look, please, at page 84 at the bottom, line 22. Do you have that, sir?
music against continuing -- the task is, I basically have no music, but I continue to have news, sports, talk, entertainment, everything else the way I have it.

Q All right. But you don't ask them what if you had music, and no news, no sports, and no talk and entertainment. Right? You don't ask that.

A No. Let me repeat it. The task here is saying - let's go to the questionnaire.

CHIEF JUDGE SLEDGE: Mr. Meyer, you varied your question from the several times you've asked it before.

MR. MEYER: I thought I was asking the same question, but, obviously, it didn't come out that way, so let me clarify.

BY MR. MEYER:
Q You've tested four different types of programming. And as to each of them, I understand what you did. You said what would you pay for a service with no music, but news,

Page 288
A Yes.
Q Line 22 I asked you the exact same question. "So the question like this is not discriminating enough to distinguish between the value of the music itself, as opposed to superior variety of music, or the fidelity of the music, for example." And you answered, "No." Correct?

A Yes. You were just reading it.
Q All right. Now in Question 9 --
A I continue to explain to you what the question addresses. Do you want to read the rest of it?

Q I don't think it's relevant to my question, so I don't. But if you want to on redirect, that's fine.

Now on Question 9, when you just asked about no music, that assumes that the entire value of music as it's presented on the satellite services is attributable to the sound recordings. It doesn't take into any account any of the things that the SDARS might
add to the value of the music. Is that right?
A Well, it addresses whatever the respondent understands music to mean. It's the totality of the music as the respondent understands it.

Q Is it fair to say your survey doesn't attempt to show the value of sound recording, as opposed to the value of music programming, in general?

A You brought the point in deposition, and I looked at the verbatim responses following the deposition, and as I started mentioning before in response to another question, there were very few people, less than 10 percent of the total people that mentioned anything that can relate to other programming characteristics of music, like one person mentions a DJ. I think two people mentioned bringing live concert. I think two people mentioned the value of mentioning the name of the song, and the name of the artist. So if you look at the totality of what people

Page 291
Q All right. You don't know whether somebody who said variety of music is referring to the selection, the programming ability of the programmers at XM or Sirius. You don't know that, do you?

\section*{A Correct.}

Q And when somebody says, when asked why did you decide to subscribe, and they say music, that doesn't tell you what aspect of the music allowed them to subscribe. Right?

A Well, there are plenty of opportunity to elaborate on this. And the fact is that close to 50 percent of respondents did not elaborate besides music. And then a small -- then we have two other big chunks, which is the variety, and the commercial-free. And very few, less than 10 percent, who mentioned the other things that I mentioned.

Q You didn't ask people what they meant by "music", when they said music. Right?
answered in the open-ended questions, you find out that there are very few who really mention these extra characteristics. The most of the responses, I think over 45 percent, is just music by itself, unspecified, about over 25 percent mentioned variety, how you interpret variety here. And I think then there is also a number of people that talked about 24 -hour programming, so based on the open-ended responses, it seems the majority of the people think about music, and not the things around music.

Q Well, if somebody says variety of music, they could be referring to the programming skill of the people who select and choose the music that gets played on satellite radio. Right?

A Or they can refer to plainly the variety, the fact they have variety. Some people mentioned explicitly, like, I like it because it gives me my genre. I don't have to listen to other things.

Page 292
1 A No, we did not.
Q You didn't ask people what aspect of music they were referring to when they said "music". Right?

A No.
Q Okay. Now you know music is available to people in the car, for instance, on AM-FM radio. Correct?

A Correct.
Q And you know that people don't pay anything for that. Right?

A Correct.
Q And so, for people to pay \(\$ 12.98\) for satellite radio, do you know what it is that gets people -- if people say music is the reason, do you know why those people are willing to pay \(\$ 12.98\) for something that they get for free? Does your survey tell us that?

A No, but it tells us that people clearly, regardless of the measure you use, perceive that music is the greatest value in satellite radio.

Q It could be the variety of music. It could be commercial-free. Right?

A I'm giving you the number, the results that I got in the open-ended analysis, where you have close to 50 percent that mention only music. You have about slightly over 20 percent that mention, I think, variety and commercial-free, somewhere around there, the 20s. Then you have very few, less than 10 percent, that mentioned clearly thing that will be the value-added of the programming, like a DJ.

Q I don't want to go over what we've already covered, but when somebody pays \(\$ 12.95\), and they say the reason they're doing it is music, and you know that music is available for free on FM radio, it doesn't really tell you much about what about the music on satellite radio causes them to pay \(\$ 12.95\). Right?

A I did not ask them about the meaning of - what they mean by "music".
                                    Page 295
is 37.84 percent, as it is 47.21 percent? Do you know?

A What it means is that in 95 out of 100 times, if you repeat the study, the results will be within the range of the 37.84 and the 47.21.

Q That wasn't the question I asked you. The question was, do you know whether it's equally likely that the true number is 37.84, as it is 47.21? Do you know?

A I don't know. What I answered you is the correct interpretation of the 95 percent confidence interval.

Q You think it was important to include these error ranges in your report. Right?

A Yes.
Q That's something you customarily do. Correct?

A Yes.
Q Now let me ask you a few questions about the universe you selected. Now the

Q Okay.
A I thought music is relatively straightforward, the same way that when they say talk and entertainment is straightforward, or news.

Q Now your survey includes error ranges. Correct?

A Correct.
Q And, for example, when looking at Question 9 on page 22 of your report, the responses.

A Yes.
Q So when it says 43 percent would cancel if there were no music, that's got an error range surrounding it, 37.84 to 47.21 ?

A Correct.
Q And you didn't calculate those statistics. Right?

A No. Abba Krieger calculated all of the statistical significance in the study.

Q Do you know whether that means that it's just as likely that the true number Page 296
universe basically refers to the people that you choose to question in your survey. Right?

A Correct.
Q And it's important, isn't it, to try and match as closely as possible the actual characteristics of users, and in your case, potential users of the product?

A I'm not sure what you mean by "match". Can you repeat the question? I'm not sure I got it.

Q Well, let me ask you this way. Would you agree that identification of the survey population must be followed by selection of a sample that accurately represents that population?

A Correct.
Q And so ideally, when you do a survey, if, let's say, the male/female split of a service like, say, Sirius, happened to be something like, say, 81 percent male, and 19 percent female, ideally you would want to have a survey that duplicated that demographic.

Isn't that right?
A Well, you ought to have a representative sample. The question is when you talk about the \(81 / 19\), are these basically the distribution that they have for people who meet my criteria here, or they're actually people who signed the contract. So the question is, what is the statistic that you are giving me, the \(81 / 19\), what it represents? The procedure I used here is very safe and a regular procedure used in most quality research, which would be to identify an initial demographic pool of people based on gender and age, as an initial, so you're representing the entire population. And then to stream them down to meet the universe requirement, which I've done in all my research, and it's the more accurate way of doing it, as opposed to setting up a quota, an a priori quota for completion of, let's say, the \(81 / 19\).

Q But, Dr. Wind, at the end of the
                    Page 299
procedure I'm using does not require you to have final gender quota here. I am using the gender and age as an initial opening screening, not a final one.

Q You have no idea how close your ultimate survey population is in terms of gender to the gender demographic of the satellite services. Correct?

A I can give you -- we can easily get a tabulation of the gender distribution, gender/age distribution.

Q Do you know?
A I don't know it sitting here, but we can easily -- the data are there. You have the data, too.

Q It's not in the big binder that you handed up to the Court.

A It's in the data that you have.
CHIEF JUDGE SLEDGE: Mr. Meyer, your questions only address that part of the universe that are considering subscription. It couldn't address those that are
day what you want is to get as close as possible to a sample population that matches, to the extent possible, the demographics of the population that you're trying -- that you're interested in; in this case, purchasers and considerers of purchasing satellite radio. Right?

A Right.
Q So if, for example, going back to my hypothetical, and there may be evidence on this later, if, for example, Sirius Radio had an 80 percent male subscribership, you would want, ideally, to end up with a sample population that was 80 percent males. Isn't that right?

A If you're comparing apples to apples, yes, you would like to come close to it.

Q Okay. You have no idea, do you, what the gender mix was of your final survey, of the final population?

A No. And, basically, because the Page 300
subscribers, because by definition, they are the same demographic that you're asking.

MR. MEYER: With all respect, I don't agree with that, because it is possible that you could ask ten -- you could find ten women who do subscribe to Sirius, and you'll end up with a population of ten females and no males. That doesn't mean it's reflective of the actual population. You have to take steps to ask questions of a population so that you can eventually get down to the appropriate population.

BY MR. MEYER:
Q And you didn't even check - at the end, you did not check your final survey population to see whether it met the demographic description in any respect of the satellite services. Isn't that right?

A First of all, I don't have the demographic comparison for -- against which I can evaluate it. Second, the data are available. And, third, I think that the

selected randomly in each one of the four census regions.

Q Do you know, for example, the demographic, geographic distribution of the typical XM customer?

A No.
Q If I said to you that it was 42
percent people from the Northeast, and 16
percent people from the East, then
geographically your survey would not be representative. Isn't that right?

A My survey is representative of the U.S. If you want to weight different regions separately, you can easily do it.

Q Well, it may be representative --
A The data are there.
Q Excuse me. It may be representative of the U.S., but it's not necessarily representative of the subscribership of XM and Sirius. Isn't that right?

A The -- I don't know how to tell Page 307
area. Do you see that?
A Correct.
Q Isn't it true that Baltimore,
Maryland is, in fact, not in the Eastern region of the census breakdown, but is, in fact, in the South?

A I don't know. I basically rely on the distribution, on the market distribution that DDW has, and they basically have markets from which you select randomly, and then they work from there, so I don't know.

Q Well, let me give you a question with hypotheticals. If I'm correct that the average XM user, or that 42 percent of the XM users are in the Northeast, and if I'm correct that Baltimore, by the same standard, the census standard, is not in the East, but in the South, then isn't it true that not only didn't you reflect the geographic distribution of XM subscribers, but you actually have less sites that you tested from the Northeast, than any other region. Isn't that right?
you. The research -- the sampling procedure used here is the best possible sampling procedure. If you want to insist on quotas based on the current data you have, you can easily do it by weighting it. So if you know that the higher percentage are in one of the census regions, you can weight it differentially. You have the data, and this could easily be done.

Q Sir, my question was, if it's correct, if I'm correct that the data shows that 42 percent of the XM subscribers are in the Northeast, then your geographic distribution does not reflect that of the XM subscribers. Isn't that right?

A It does not represent this specific distribution. I think it represents, basically, the population of subscribers, and those who consider nationally.

Q How about - I'm going to quibble with you on this one. Your survey locations you have them broke down, six in each census

Page 308
A If you're correct, it's a correct statement.

Q Okay.
A I still stand by the fact that
this is - the survey's design is a national survey, not as a survey to analyze each one of the regions separately. But you can weight them any way you want to, so if you're concerned about the Northeast, and you want to have a higher weight there, we can take the data. You can find out if there is an agreement on the weight, and you can weight this, the sample then that we have, with a higher weight for the Northeast.

Q Which you didn't do.
JUDGE WISNIEWSKI: But, Dr. Wind, you didn't do that.

THE WITNESS: I didn't do it. JUDGE WISNIEWSKI: Okay. CHIEF JUDGE SLEDGE: But the Northeast is not one of the four census areas. MR. MEYER: I, actually --
\begin{tabular}{|c|c|}
\hline Page 309 & Page 310 \\
\hline CHIEF JUDGE SLEDGE: So I'm & 1 I can go back to it. \\
\hline 2 puzzled by your question. & 2 BY MR. MEYER \\
\hline MR. MEYER: Well, I actually & 3 Q There are four regions, four \\
\hline printed out a map that says -- it's got West, & 4 census regions. Right? \\
\hline Midwest, Northeast and South. And then it' & 5 A There are actually more than four. \\
\hline 6 broken down into sub-regions. But it's & 6 They're either a categorization of nine census \\
\hline 7 either East or North & 7 regions, where some tables are within the \\
\hline IEF JUDGE SLEDGE: The survey & 8 Northeast is separated, and some of them are \\
\hline only refers to E & 9 four. My understanding, that these were \\
\hline 10 MR. MEYER: I believe the survey & 10 markets selected from the census regions of \\
\hline 11 is wrong. I believe it's actually referred to & 11 four \\
\hline 12 by the census as Northeast. I don't intend to & 12 Q Okay. In any event, we agree that \\
\hline 13 & 13 you made no attempt to match the cities where \\
\hline 14 CHIEF JUDGE SLEDGE: Your question & 14 you did the survey to the actual geographic \\
\hline 15 refers to the Northeast, but the survey refers & 15 distribution of either of the SDARS. Right? \\
\hline 16 to East. & 16 A Correct. Because at the time we \\
\hline 17 Mr. MEYER: Okay. & 17 did the survey, I did not have the other data, \\
\hline 18 CHIEF JUDGE SLEDGE: So your & 18 and I still feel that the procedure that I \\
\hline 19 question doesn't refer to the same criteria as & 19 used is the correct procedure for sampling. \\
\hline used in the survey. & 20 Q Do you know if there's any \\
\hline 21 MR. MEYER: Okay & 21 difference in the interests of, say, males and \\
\hline 22 to save time, I'm going to leave the area, but & 22 females on Sirius in terms of the type of \\
\hline age 31 & ge \\
\hline content they favor? & \(1 \quad\) A Unless they were -- defined \\
\hline A I did not analyze it separately in & 2 themselves as those who would consider it \\
\hline 3 the study. & 3 again. \\
\hline Q Do you know whether males on & Q Okay. Unless they bought a new \\
\hline Sirius are more, tend to be more interested & 5 car, and were on a new trial subscription. \\
\hline in, say, Howard Stern, or sports than music & 6 And you also asked whether somebody in a \\
\hline programming? Do you know that? & 7 person's household subscribed, and on that \\
\hline 8 A I saw some reference to this in & 8 basis, you included them in your universe. \\
\hline 9 some of the studies that I reviewed for my & 9 Correct? \\
\hline 10 amended testimony. & 10 A I'm not sure which question you're \\
\hline Q And that -- for your amended & 11 referring to. \\
\hline 12 testimony, but not your original testimony. & 12 Q Well, it's in the screener. Do \\
\hline 13 A Correct. I didn't have those & 13 you know whether that's the case? Do you know \\
\hline 14 studies when I did the original study. & 14 whether, if somebody said they were in a \\
\hline 15 Q Okay. All right. Just a few more & 15 household that subscribed, they would have \\
\hline 16 questions about the universe. Your survey & 16 been included in the survey? \\
\hline 17 didn't sample any former users. Right? & 17 A Well, they had to qualify o \\
\hline 18 A Correct. & 18 multiple criteria, like Question F, where \\
\hline 19 Q So people who had used the & 19 basically is, if they are involved in making \\
\hline 20 service, and then quit for one reason or & 20 or taking part in making the decision to \\
\hline 21 another, they're not included in your & 21 subscribe to satellite radio for their \\
\hline 22 universe. & 22 household, so they had to do this. Then when \\
\hline
\end{tabular}
you talk about the subscribe, the question was (G), "Which of these services, if any, do you or your household currently subscribe to?" So it's a household question, and the same thing was for the considering, Question J, which was, "Which of the following best describes the type of satellite radio you or your household are considering", for example.

Q Okay. So if I got satellite radio for my daughter to listen to the Disney channel, and then never listen to it again, I would have qualified for your survey. Correct?

A If you qualify on -- if you responded yes to Question F, which is that you are the one to make the decision, or take part in making the decision.

Q Right. And so it's not necessary for someone to actually be familiar with the content of the service to have qualified for your survey. Isn't that right?

A Well, the assumption is that these
Page 315
\begin{tabular}{|c|c|c|}
\hline & Page 313 & ge 314 \\
\hline & you talk about the subscribe, the question was & 1 criteria will qualify them. And in the open- \\
\hline 2 & ), "Which of these services, if any, do you & 2 end responses, we saw in one of the errors \\
\hline 3 & or your household currently subscribe to?' So & 3 that you indicated, a person said I don't \\
\hline 4 & 's a household question, and the same thing & 4 know \\
\hline 5 & was for the considering, Question J, which & 5 Q In answer to my question, isn't it \\
\hline 6 & was, "Which of the following best describes & 6 true that it's not necessary for someone to \\
\hline 7 & the type of satellite radio you or your & 7 actually be familiar with the content of the \\
\hline 8 & household are considering", for example. & 8 services to be included in your survey? \\
\hline 9 & Q Okay. So if I got satellite radio & A I don't know whether there were \\
\hline 10 & for my daughter to listen to the Disney & 10 any who were not familiar. They had ample \\
\hline 11 & annel, and then never listen to it again, I & 11 opportunity in each one of the questions, is \\
\hline 12 & would have qualified for your survey. & 12 it open-ended, or you don't know to the other \\
\hline 13 & Correct? & 13 questions, to indicate so. \\
\hline 14 & A If you qualify on -- if you & 14 Q And your screener and your survey \\
\hline 15 & esponded yes to Question F, which is that you & 15 doesn't distinguish people with limited \\
\hline 16 & are the one to make the decision, or take part & 16 familiarity with the content on the SDARS, and \\
\hline 17 & making the decision. & 17 people who listen to it all the time. \\
\hline 18 & Q Right. And so it's not necessary & 18 Correct? \\
\hline 19 & r someone to actually be familiar with the & 19 A Correct. \\
\hline & content of the service to have qualified for & 20 Q Now you did your survey, \\
\hline 21 & your survey. Isn't that right? & 21 testified, in October of 2006. Is that right? \\
\hline 22 & A Well, the assumption is that these & 22 A Right. \\
\hline & Page 315 & Page 316 \\
\hline 1 & Q You actually did some of it in & 1 many people were those? \\
\hline 2 & September. Right? & \(2 \quad \mathrm{~A}\) The ones that were combined? \\
\hline 3 & A Right, the pre-test was done the & 3 Q The pre-test. \\
\hline 4 & end of September. & 4 A The pre-test was, I think, 55 or \\
\hline 5 & Q You did a pre-test of a few & 5 something like that. \\
\hline 6 & people, and then you included those results in & 6 Q Okay. So your survey was actually \\
\hline 7 & your final results. Correct? & 7 done on several dates between, I believe it \\
\hline 8 & A With the exception of a few & 8 was September 29th, `06, and October 17th, `06. \\
\hline 9 & respondents who had some difficulty with & 9 Is that right? \\
\hline 10 & Question 9, so we, basically, excluded these & 10 A Correct. \\
\hline 11 & few respondents, modified actually the & 11 Q Okay. Now are you aware of how, \\
\hline 12 & questionnaire, Question 9 to reflect a clearer & 12 if at all, the content on either Sirius or XM \\
\hline 3 & understanding. This was in case people & 13 has changed since that date? \\
\hline 4 & responded that they will pay more than the & 14 A No. \\
\hline 15 & \$12.95. And other than excluding these few & 15 Q That could affect the results of \\
\hline 16 & people, there is no - since we didn't change & 16 your survey. Right? \\
\hline 17 & anything else, there is no reason why not to & 17 A Well, this depends on the nature \\
\hline 18 & include the rest of the pre-test people in the & 18 of the changes. If there are dramatic \\
\hline 19 & main study, which is a common procedure. & 19 changes, change the environment, it may. If \\
\hline 20 & Q I think you're getting a little & 20 the changes are not perceived by consumer as \\
\hline & oo defensive. I didn't ask you why you did & 21 major, it will not change. \\
\hline & it. I just said you did it. Right? And how & 22 Q You can't tell from your screener \\
\hline
\end{tabular}
how long respondents have been subscribers. Right?

A Correct.
Q So any individual subject in your survey could have been a subscriber for two years, or could have been a subscriber for a week. Right?

A Well, I would assume that you will have a distribution of all of these different lengths of membership.

Q So the answer to my question is yes.

A Correct. I don't know, but, basically, the likely response will be that you will have a full distribution here.

Q So you can't distinguish between so-called early adopters and more recent subscribers. Right?

A Correct.
Q Now if -- do you know when Oprah and Friends, when that station was added to XM?

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we're dealing with.
Q And it's possible that if the content changed significantly, the results of the survey would no longer be probative. Isn't that right?

A It's possible. We don't know how likely, but it's possible.

Q And the question of whether such change is an empirical question, that you would have to do a survey to test. Isn't that right?

A Correct.
Q Okay. This will be a very short subject area. When you did your survey, were you aware that not all of what you termed music was subject to the sound recording performance right?

A At the time, no.
Q Okay. So you weren't aware that pre-1972 music was not subject to that right.

A Right. You brought it the first time in the deposition.

A Not exact date.
Q Well, you would agree, would you not, that to the extent content changes, the interests and nature of the subscribers could change. Right?

A Obviously, there is some interdependency.

Q Okay. And as subscribers themselves are added to the service for any reason, that cohort of subscribers, they could yield different answers to your survey, if you surveyed them. Right?

A Well, this assumes that there are fundamental changes. This is the issue of aging of data, in terms of how long can you rely on the result of any survey.

Q And you would agree then, wouldn't you, that your survey can only tell us about the preferences of people as of the dates that you did the survey. Right?

A Correct. And apply, as long as there are no major changes in the environment

Page 320
Q Well, the Judges weren't at the deposition, so that's why some of this stuff we have to do again.

A Yes.
Q And so there's no way to tell from your survey what value, what percentage of the value of music that you determined is pre-1972 music. Right?

A Only from the open-ended responses.

Q Okay. Before I leave your direct report, your original direct written report, I have a few questions on the amended report. I want to ask you about something that you said on page 27 of your report. Do you have that, sir?

A Yes.
Q On the bottom of page 27, you say, "As our last example indicates, in providing these responses, some respondents cited the fact that satellite radio would allow them to avoid buying music from other sources." Do
you see that?
A Where?
Q The bottom of page 27?
A Yes, I see.
Q And we refer to this sometimes in shorthand as a substitution effect. That wasn't the purpose of your study, was it?

A Correct.
Q And you don't know what percentage of respondents said that, did you?

A Correct.
Q And you're not saying that your survey is enough to demonstrate to any degree of certainty that there was a substitutional effect from satellite radio, are you?

A Correct.
Q You just felt the need to throw in that gratuitous statement in your report?

A I'm not sure it's gratuitous, but basically it was one of the quotes, and I thought it's interesting.

Q The lawyers asked you to put that
Page 323
about your answers.
Obviously, we're having a mighty struggle from this side saying music isn't really all that important to our business, to this side of the room saying it's critical to the satellite radio business. And as Judge Sledge observed earlier, one always tends to relate these things to one's personal experience.

I am a Sirius satellite radio subscriber. I received it because my wife got it for me for Christmas. I think really because she wanted Pittsburgh Steeler's games, but clearly, there was a lot more programming on there. And I've continued to subscribe.
And there's -- if Sirius had been just a music service, quite honestly, I don't believe I would have subscribed to it, if it was only music, whether it was 69 channels, or however many channels of music, and it was just music, I don't think I would have subscribed. Yet, certainly, if Sirius dropped all of the music,
in, didn't they, Dr. Wind?
A I don't recall.
Q You don't recall one way or the other?

A I don't recall if they asked or not.

Q All right.
A I selected some examples, and I thought that's an appropriate kind of description of this last example.

Q Because in your mind, the issue of substitution versus promotion was something that you were concerned about in doing the survey?

A No. I was not really focusing on this at all.

JUDGE ROBERTS: It's getting kind of late in the day, Dr. Wind, and I wanted even though I know you're going to be back here on Monday, or so it would appear, I wanted to ask you a couple of questions, because it'll give me the weekend to think Page 324
so that I was just left with football, sports, Howard Stern, I don't think I would subscribe, as well. So my question to you is, can you tell me anything about what that says about the value of music?

THE WITNESS: Well, I think there are two ways of looking at this. One is that markets are heterogenous. If there's anything in marketing that we know, is that all markets are heterogeneous. And there are different people who subscribe for different reasons, or will drop it for different reasons.

So given this heterogeneity of all markets, the question here is, if you look at the population of the subscribers, and those who intend to subscribe, what you're trying to find out is the relative importance, and focus on the relative of music versus other offering. And I think there is no simple answer to your question, but looking at the various dimensions of music, and the various comparison, like in the first figure, Figure

1 , should help understand the magnitude of the importance of music in each of the dimension compared to the other leading programming type. That's what the study is trying to do, is trying really to identify number of dimensions, and show the relative evaluation of music versus the others.

JUDGE ROBERTS: I understand that part of your study, and I agree with you, that's exactly what it's attempting to do, is measure the relative importance in the view of subscribers, and in your instance, those supposedly intending to subscribe. But do you believe that that really tells me anything about the value, the ultimate value of the music, or is it just telling me that well, in these generic categories of music, and news, and Howard Stern, and sports, subscribers tend to overall think more highly of this one compared to that one, but is it really answering the question of the value of music?

CHIEF JUDGE SLEDGE: Are you
Page 327
conclusion is quite clear here, that music is really the power, the driving power of satellite radio.

JUDGE ROBERTS: Is your survey capable of telling me the difference between the reason I might subscribe, in this case, let's say that I was actually the one that wanted the Pittsburgh Steeler games, and I got the Pittsburgh Steeler games by signing up to Sirius. But I'm of the view now that well, if they drop that service, I think I would probably still continue to subscribe.

THE WITNESS: Well, this will be -- there are two different measures now. We're talking about in Question 2(a), will respond what type of satellite radio programming were most critical to a decision to subscribe, for the decision to subscribe. You're describing then the second situation, which would be Question 3, reflecting on your experience with satellite radio, what type of satellite radio programming are most critical to the decision
asking absolute value, or relative value?
JUDGE ROBERTS: I'm asking absolute value.

THE WITNESS: You see, absolute value you have to identify then the specific measures that you want to focus on, because a lot of the insight you get is really also on the relative basis. So we know, for example, with respect to in the extreme situation that you described, if music was not available, you will fall in the segment that says yes, I will cancel.

JUDGE ROBERTS: Yes.
THE WITNESS: So you belong - not everyone did. There were some people who did not, that still stayed, even though you drop music. So because of this heterogeneity of the market, I think, and the different measures here, I think we do have to look at this, to some extent, relative to provide us a better base. So when you compare music to any of other programming type, I think my

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to continue to subscribe. So I think there are different dimensions here, there are different determinants. There are also different determinants in terms of subscribing to satellite radio, versus subscribing to Sirius versus XM, which is kind of a different lower-level decision.

JUDGE ROBERTS: But if you note in the question that I just posed to you, I didn't just say to you well, I -- if all sports were dropped, I would continue to subscribe. I was actually just mentioning one, in particular, the NFL, which is the one that, certainly, attracted my family to subscribe in the first place. And I guess, more or less, what I'm focusing on here is that, isn't it not really generic categories, like music, or sports, or talk that maybe provides the incentives to come, or the incentives to go, but it's maybe a whole collection of individual things. Within sports, maybe it's just the NFL, within talk
and entertainment, maybe it's just Howard
Stern, within music, maybe it's just Channel 23, Hair Nation.

THE WITNESS: I think that you will probably find different respondents out there, different segments that will respond differently. In one of the documents that I looked at, the NFL document for the amendment of testimony, there was actually a comment in term of even though they looked at the NFL, that still music is a pretty dominant kind of draw for the population at-large. So I think you're raising a very serious question that requires real examination at a more detailed level, because it's very difficult to generalize to the whole population when you look at the entire market, then I can clearly tell you that without any doubt, and despite those eight errors we found here, that music is, by far, more important to consumers on any of the measures, than any of the other programming types.

Okay.

\section*{BY MR. MEYER:}

Q Dr. Wind, let's take a look -- and by the way, I said I was turning to your amended report, but in your answer to Judge Roberts' question, where you said that by any measure, music is by far the most important again, if you look at the answers to the most open-ended question, which was on page 29, Figure 11, when you asked people what was the top reason for considering subscribing, only 18 percent of them gave the top mention as music. So by that measure, at least, that would suggest that music is really not that important. Wouldn't you agree?

A No, because I mentioned - I talked about this relative, so this would be compare 18 to 5 percent who mentioned talk and entertainment, compare this to 2 percent who mentioned news, compare this to 1 percent who mentioned sports, so that's the -- I'm talking relative, I'm talking about comparing the

Once you move to the level you're discussing, the details, is it the NFL, is it NASCAR, is it specific type, specific genre there are some people who say they love it because of the specific genre that \(I\) have here, that I don't have to hear a kind of mixture of music. There was two people that mentioned this, so I think we have to go at a much more detailed level.

JUDGE ROBERTS: Well, I appreciate your thoughts on this, and I'm going to think more about this over the weekend. And since it looks like you're going to be here on Monday, I may have more questions for you.

MR. MEYER: Your Honor, I am reaching an actual breaking point. Well, I was going to turn to his amended report, so it would be a great time to break, or I'm happy to keep going, at your pleasure.

CHIEF JUDGE SLEDGE: I think it's at your pleasure.

MR. MEYER: I can keep going.
\[
\text { Page } 332
\]
relative in each question, the relative evaluation. That's the reason Figure 1 is showing this as the ratio between the number of times that people prefer music over the next highest ranked or mentioned programming type.

Q Well, if you -- okay, you're saying relative, but if you add up in this table, Figure 11, if you add up talk, entertainment, price, coverage, news, certainly if you added commercial-free with no mention of music, sports, et cetera, you get a number that's at least equal, and depending on where you put commercial-free, greater than the number of mentions for music. Right?

A Right. But the comparison that I'm talking about here is - and that's my understanding of the objective of the study is to look at the evaluation of music versus other programming type. In the context of programming, what is the relative value of music versus the others, so you look at this
independently, music versus talk, music versus sports, versus news and the like.

Q Okay. So the purpose of your survey was only to look at music versus specific other programming types.

A No. You defined actually accurately way, way back the objective of the study, to determine the value of music based on all these various measures that I defined. And to look particularly at a comparison of music versus talk and entertainment. But a lot of the -- I think the insight from the study, and from the evidence we have here from the study, is to look at this in the comparison of music versus each one of these programming types.

Q Okay. Let me ask you about your amended testimony. Now I took your deposition on April 27th. Correct?

A I don't recall the date, but I'm sure you're correct.

Q And at that deposition, you told
Page 335
that we had the deposition.
Q Did you make a decision to wait until after your deposition to start looking at those documents?

A I had no idea that these documents exist when we had the deposition.

Q At the time of your report, you didn't ask the attorneys, or I take it at the time of the report you didn't have the documents, at the time of your deposition, did you ask your attorneys whether there were any documents in the Sirius or XM document production that --

A I don't recall the time line. I do recall that I did ask after completing the report if there are any other studies, but I don't recall the time line when it was.

Q Okay. So after the deposition, you wrote the report. Did you write it yourself?

A Yes, I wrote it, and then I basically sent it to Matt, who had, again,
me you were doing no other work. Correct?
A That's correct.
Q And you told me that you had not looked at any Sirius or XM internal documents. Right?

A That's correct.
Q Okay. And yet, about two weeks later, on May 14th, you completed this amended testimony where you summarize all of these Sirius and XM documents that were attached to your amended report. Correct?

A Yes. I'm not sure that I summarized all these reports, but I reviewed these reports to evaluate to what extent their conclusions support or don't support the conclusions that my study reached.

Q And you did --
A It's in the summary.
Q And you did that all between April 27th and May 14th. Right?

A Right. As soon as I got the studies. I did not have them for the time Page 336
formatted it in the form that you have it here. So the draft, and this was then formatted along this line.

Q You drafted the prose in here, you didn't the first draft?

A I drafted some of the prose, drafted some of this, and then Matt completed, basically, the first draft. He sent it back to me, and we changed it a few times.

Q Who decided what documents you should look at in connection with the amended testimony?

A I received the set of documents, and I used some of them, not all of them, in the report. Not all of them are actually included in the report.

Q So is the answer to my question the lawyers decided which documents you should look at?

A I asked them to give me all the recent studies we had, and I got this batch of reports from them.

Q And you read through all those documents cover-to-cover?

A I reviewed them. It's not that you read cover-to-cover, tables that you know are not related to what you're looking at.

Q The lawyers directed your attention to certain pages, didn't they?

A No, I skimmed the documents, looked at the specific things, specific areas, seeing that the major conclusion can support related to usage and cancellation. It had some other data on usage that related actually to Judge Roberts' question before, that relate to the top 10 channel, did an analysis by channels, which I did not have in my report which seemed to be related. And these were the area that I focused on.

Q Okay. And of the documents that you attached, most of the -- portions of the documents that you cite in your amended testimony, most of that is data related to time spent listening. Isn't that right?

A No.
Q And going to something like Judge
Roberts' hypothetical, and go from my personal experience, I moved into a house and was deciding between cable TV and satellite, DirectTV. The sole reason I selected DirectTV was because they had the NFL Sunday Package, which gives you every NFL football game.
Notwithstanding that, and if you're uncomfortable taking my personal anecdote, you can treat me as a hypothetical.
Notwithstanding that that was the sole reason for my decision to get DirectTV over cable, you'd be surprised to here that I don't spend most of my time listening or watching NFL football, because it's not on that much. I spend most of my time watching, unfortunately, re-runs of "Friends", and "The Honeymooners", and "Seinfeld", and other things I shouldn't be wasting my time. So given my situation, or using me as a hypothetical, the fact that I chose DirectTV for NFL football, but I spend

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A Most of the reports relate to the usage, right, to time spent listening, and some of them, I think two reports relate to cancellation.

Q Okay. And time spent listening doesn't necessarily equate to the value placed on that particular type of program. Isn't that right?

A I would hypothesize that time spent listening is highly correlated with importance.

Q Okay. Well, you said hypothesize, and highly correlated. When you say you'd hypothesize, that means you don't know. Correct?

A Well, it means that professionally I would go on the hypothesis. If you want to test it, we can look at our own data, look at the usage data versus the scores on importance, and my guess is we'll come with significant relation between the two.

Q Okay. But you haven't done that.
Page 340
most of my time watching something else, that makes perfect sense to you, doesn't it?

A Yes. This goes back to market heterogeneity. There are different segments, and you're the one that we don't have a high correlation between the two. But, overall, in markets, you look at the entire market, I would hypothesize, and I think it won't be that difficult to try to test, to see to what extent usage is highly correlated with importance.

Q Okay. And so, let me give another example, someone who signs up to Sirius solely for the reason that they like Howard Stern, but listens to Howard Stern in the morning for an hour, and spends the rest of the time listening to other programming, such as music, but clearly joined up to get Howard Stern. In that instance, clearly then listenership data would not correlate to the value placed on a particular type of program for that subject.

A For this particular case, you're
right.
Q So then I'm correct, aren't I, that listenership data does not necessarily correlate to the value that people put on particular types of programming.

A I would feel more comfortable indicating that, in general, the literature in marketing consumer behavior will support that there is a correlation between usage and preference, and usage and importance. There are, of course, heterogeneities of all markets, and there will be people for whom this will not fit, so there will be segments out there that will have a very low correlation between the two.

Q Any of the literature that you're thinking of have anything to do with satellite radio?

A I don't think so. I have not seen any specific study on this for satellite radio. We can actually test it in this case, because we have, in my study we have data both

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lawyers spend time on Sundays watching television.
(Laughter.)
CHIEF JUDGE SLEDGE: That will
hurt the recruitment activities of the government for lawyers, and they're trying to be able to recruit lawyers.

We'll recess until 9:30 Monday morning.

MR. MEYER: Your Honor, I felt that if Judge Roberts felt comfortable admitting that he listens to the Hair metal station, that it was okay to confess to watching football on Sundays.

JUDGE ROBERTS: Which is Channel
41, the Boneyard on XM. I know that, I'm aware of that, and listen, on occasion. For tallies on the hours, SoundExchange has consumed 19 hours, and Services have consumed 28 hours.

CHIEF JUDGE SLEDGE: And please try to have the room clear by 5:30.
on usage, and we have data on importance. And we can correlate the two.

Q Well, that assumes that we assume the validity of the rest of your survey.

A Which I feel comfortable about.
Q I'm not surprised. Now the documents that you chose to attach to the amended testimony, you say in your amended testimony that reviewing these documents - I forget the exact words you use - but they support or corroborate the conclusions in your original testimony. Right?

A Correct.
Q Now did you take a look at --
CHIEF JUDGE SLEDGE: Mr. Meyer, before you start on that analysis, would this be a reasonable time to break?

MR. MEYER: I think it would, Your Honor. And I think it would go more smoothly if I got my documents together.

CHIEF JUDGE SLEDGE: Before we recess, let me ask you not to publicize that Page 344

JUDGE ROBERTS: Mr. Handzo, I can only carry so much, and I'm clearly going to want to have this again on Monday, but if you could take it back until that point in time.
I'm afraid that if I put it back here, it might be gone on Monday.

MR. HANDZO: That's fine, Your Honor.
(Whereupon, the proceedings went off the record at 5:04 p.m.)

\section*{Transcript of: \\ Date: June 18, 2007 \\ Volume: IX}

Case: Adjustment of Rates for Pre-Existing Subscriptions

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testimony?
A Something along those lines.
Q And did you say that "I said yes, yes, yes because I was looking I think, there was this form, the one on page two was presented before, and for subscribers, the yes, yes, yes, was the answer. That's what I had in mind." Do you remember giving that testimony?

A I don't remember, but it sounds reasonable.

Q Do you have Exhibit 1 which is your deposition testimony in front of you?

A Yes, I do.
Q Will you look at page 143, please?
A Yes.
Q I'm going to start at page 143, line 4.

It says, "Now is Exhibit 9 the verification form that was used?

Answer: Yes.
Question: As I understand it, 54
Page 15
direct that the questions were convoluted. Would you agree that you understood the question?

A I think there were a number of other questions here related to this. And I think what I was referring to is the entire sequence of this questioning.

Q Now you say that you were also confused because you had the form in front of you, right?

A At some point I saw the form, yes.
Q But the form is the same one that is used for both subscribers and considerers, right?

A But not the form with the markings. That's what I tried to explain to you before. The research house gets a blank form with the questions, without the markings. And they ask the questions and they complete it on page two. And then they basically decide if it's a validated response or not, depending on the quota assignment for this
percent of the respondents had their responses verified. Is that right?

Answer: Correct.
Question: Would a verification require a yes response to all three of these questions?

Answer: Yes."
Is that your testimony at the deposition?

A Yes, I suppose.
Q And are you telling the Judges that those questions are convoluted or that you weren't able to understand them?

A Well, I basically -- when I saw the form I was thinking about the subscribers and respondent in this respect and I did not think about kind of the full set of responses that included that they consider at that time. So that's basically what was apparently the frame of my mind at the time that I answered it.

Q Are you saying -- you said on Page 16
particular respondent. And they have the quota from the top of the page where they have basically the four different sales.

Q Now going on in your deposition, looking at page 144 , line 9 . This is your answer to the question about the procedures, right?

A I don't know. Again, I think it's quite clear that throughout this set of responses I was thinking about the subscribers and responding in this context. That's consistent throughout my responses here.

Q You testified there was no case of any no responses from these people, correct?

A Well, I misspoke. I basically was thinking again in terms of the subscribers and for them there was no case of no responses.

Q Looking down at the bottom of page 145 , you say "in the materials you got, you should have received probably these sheets with 54 percent of the respondents a yes.
Yes, yes, yes."

Question from me: "So I think I did misspeak in my question. For 54 percent of the respondents, there should be a sheet with Q1, Q2, Q3, all yes, yes, yes?

Answer: Correct."
Was that your testimony?
A Yes, and as I indicated before I misspoke because I basically had in mind the response to the subscribers and obviously this is consistent throughout my set of responses here.

Q Now what percentage of actual subscribers were verified?

A I don't know offhand.
Q It's impossible to know, isn't it, because you don't have any data to show that?

A I don't have the exact number. But given the large number of respondents who were validated, the 54 percentage, my assumption would be they'll probably be distributed based upon their proportion in the sample.

Page 19
Q Now, did DDW report any problems to you with other aspects of their offices besides painting?

A I think they may have mentioned something construction and painting.

Q They didn't say anything about their computers having a problem?

A No.
Q So to your knowledge, their computer system should be intact?

A I assume so, but I have no idea.
Q And you're not aware of any
painting or other problems that ABC which is
the company that actually did the
verifications?
A I am not aware of any.
Q Do you have your binder of exhibits in front of you?

A Yes, I do.
Q Could you look at your report, Tab E, please?
(Pause.)

Q That's your assumption, but you don't have any data to confirm or contradict that assumption, right?

A Correct.
Q Fifty-four percent has to refer to all of the respondents, including the considerers, correct?

A Correct.
Q And so when you said 54 percent, there should be a sheet, Q1, Q2, Q3, yes, yes, yes.

A I misspoke.
Q And you don't have any idea what percentage there were for considerers or subscribers?

A No, but it would be reasonable to assume it will be the same proportion as they are in the sample.

Q Again, the data has been destroyed, so we don't know.

A It's not been destroyed. I think we talked about this before.

A Yes.
Q And Tab E in the binder is a
series of documents, right? First, there's the interviewer instructions that go on for six pages, plus -- six pages or so?

A Yes.
Q Are there similar instructions for the verification process?

A No. The verification process is basically done on the routine basis based on discussions between the field director and the verification house.

Q Then the next document, there's a couple, a several page form and then there's a memorandum to supervisors from Kathy Romano for five pages, do you see that?

A Yes, I do.
Q And that's her instructions to all the supervisors who are going to work on the study?

A Correct.
Q And is there again, is there any
kind of memorandum from Ms. Romano to the people who are going to work on verification process or does that not exist?

A No, as I said before, the common procedure in verification is that there are no such detailed instructions. There are also no training by DDW of the people who are doing the verification. The verification is a house that specializes in straight-forward telephone interviewing. They're doing it on all, my guess is most of the studies of DDW, they're doing this on all of my studies. There are -they know basically the process. They work on this very closely with the field director and I have never had in any study written instructions similar to the ones to the field for the verification process.

Q Could you turn to page four of Ms. Romano's memorandum to the supervisors?

A Yes.
Q Down at the bottom, the very bottom of page four, it says "The validation

Page 23
point that out. The validation forms are called out as being emailed to DDW, correct?

A Right.
Q Now has DDW's computer been searched for those validation forms?

A My understanding is they searched for it. They looked everywhere for the form.

Q Do you know if the computers have been searched?

A No. Not explicitly. I know that they search everywhere for the forms.

Q But the records on the computer wouldn't be affected by the painting, correct?

A The record on the computer will not be the complete record because they are before they were sent to the verification house and before the completion of the forms. So it's most, if the records are available there, they will be the names of the interviewers completed on the page three of Appendix A of the verification, but without the results of the interview.
form will be e-mailed to you. You must fill in information for each respondent. There must be a separate sheet/tab for each interviewer. Email to DDW." Do you see that?

A Yes, I do.
Q So the completed verification forms with the respondents' names were emailed from the field to DDW, right?

A Based on this instruction.
Q And you don't have any reason to believe that these instructions were violated, correct?

A The only question is to what extent they sent it together with the questionnaire in the Federal Express package. And so I -- that's the instruction, but I'm not sure whether -- if you look at the next page, on page five, when returning work, they say "you must return the form to DDW completed screeners, validation forms emailed to DDW, and screeners only."

Q That's right. I was going to
Page 24
Q A very specific question. Do you know if the computers at DDW have been searched?

A No, I don't.
Q Now if they received the email, the forms by email per instruction, then they could have emailed them also to ABC , correct?

A I don't know the process. My understanding is that these forms once received by DDW goes through primarily checking by the field people before they forward them to ABC and I don't know how they forward them.

Q Typically, when you receive an email within an attachment, then you can just forward it along as an attachment, right?

A Not if you basically -- you may print it to work on this. I don't know the process they went through.

Q And then they could have been emailed back from ABC to DDW, correct?

A They could, but I don't know the
process they use.
Q Do you know if ABC's computers have been searched?

A No, I don't. If it's important, I can probably call and find out and get you the answer.

Q Well, it is important. It should have been done already, but you don't know?

A I don't know. But when we have a break, I'll be glad to call and find out what is the process they went through, whether they emailed them or they mailed them or they sent it with a messenger, I have no idea.

Q And you do know that the Judges ordered these documents to be produced, correct?

A Right.
Q Do you have your main study there in front of you?

A Yes, I do.
Q Page 43 shows the results of your conjoint analysis that you discussed?

Page 27
important attribute, right?
A Yes, because many of the people use it in a car.

Q Most people use it in a car, right?

A Yes.
Q But that isn't an attribute that you tested in your conjoint, correct?

A Well, unless consumer assumes that this is part of the coverage.

Q Geographic coverage.
A Geographic coverage.
Q Okay, but geographic coverage is different from being able to receive it on a mobile basis, right?

A Right, maybe. I don't know how consumers will receive it. Some consumers may assume that this is included here, especially given their usage pattern. Others may not.
I don't know.
Q So either it wasn't included or you don't know if mobility was included,

A Yes.
Q And the conjoint allocates relative weights or relative importance among these attributes that you tested, right?

A Yes.
Q And these attributes that are
listed here are the ones that you came up with
and worked with in consultation with
SoundExchange's lawyers, right?
A Correct.
Q Attributes that you don't test on the conjoint effectively are given a weight of zero, right? They aren't tested?

A Correct.
Q Now there's been testimony in this case that a lot of money has been spent on satellites and special antennas and things like that so that these services can be received in a moving car.

Based on what you know about
satellite radio, it makes sense that the way to receive the service in a car is an Page 28
correct?
A No, the question is I don't know to what extent consumers when they evaluated the cards they assumed, based on their own experience, that all of these options are basically, can be used in a car or to what extent they included this more in their mind as part of the geographic coverage. But when we tested explicitly are those seven factors that are listed here.

Q And any other attribute that you didn't test explicitly isn't included in this, right?

A Correct. Unless assumed by the consumer as given for all the options.

Q And the closest you came you say was geographic coverage, right?

A If assumed as part of one of the factors, unless because of the wide usage of this, everyone assumes that when we talk about satellite radio, it is obviously all of these cards, all of them are usable in a car.

hours. Do you see those?
A Yes.
Q Your survey doesn't explain that change in listening, does it?

A No. My survey is basically a point in time and presents the result as of October of '06.

Q Again, your survey doesn't explain the change in listening over time, correct?

A Well, it's not designed as a longitudinal study, so it's primarily, it's a point in time study in October and it presents the picture, the importance of music versus the other programming types as of October of last year.

Q Figure 10, which is on page 13 of your former testimony --

A Yes.
Q That is based on Exhibit 116, which is a Fox News study?

A Correct.
Q And that Fox News study is from data.

Q Looking at Figure 12 which is on page 17, now as I understood your testimony, you said that this showed changing interest in talk programming over time based on different surveys? Is that what you said on direct?

A I don't recall exactly what I
said. It basically shows that the interest in
kind of the trend or the pattern of interest in top programming.

Q But these aren't different studies are they?

A They're all based on -- this will be the next document --

Q The next document is 17 , correct?
A Correct.
Q And so when you say June 2006,
last data provided by Sirius, all of this data, all of these data were gathered at the same time, correct?

A No. My understanding of this document, this is --

August of 2005, correct?
A Correct.
Q And you're aware that the
programming on Sirius changed significantly between August 2005 and the present, correct?

A Correct.
Q Among other things, in August 2005, if someone wanted to listen to Howard Stern, they couldn't do it on Sirius, correct?

A Correct.
Q And so whatever the validity of this was back in August 2005, you wouldn't say that it now represents the views of Sirius subscribers, correct?

A It just represents basically the latest data we have and this was the latest study I had and that's all it does.

Q Well, you had much more recent data on cancellation, correct?

A There is the next analysis, I
think, represents this. The analysis basically per channel represents a more recent Page 36
Q Are you looking at Exhibit 111, page 17?

A Yes. And you have there basically -- the analysis there was done by basically subscription tenure. And the last number I focused on was primarily the June ' 06 number that we had.

Q That's my point. These are -- all this data, all these data were gathered at the same time. These are different subscription tenures, not different studies, right? Or do you not know?

A Well, the question is if you look at page 3 , of the same document it talks about survey field periods and talk about tracking began in 2002. Then there is also if you go back, the last point there, they were talking about research anticipated engaging in another wave on or about November 2006, a decision to conduct that wave was presented by Sirius and then they give under it a table with CSat waves going back to the third quarter, second
quarter '03.
So I'm not sure to what extent the data that are on page 17 that are used was collected only if the second quarter of '06 or represents also some data from previous tracking reports.

Q You couldn't figure out that based on these documents?

A At the time I did not really focus on this question and now I'm not sure, but I'm just saying that given my understanding of this was these are the result of tracking reports and therefore I'm not sure whether this is all based on the data in one point in time survey.

Q Don't the -- does it look like to you that the -- do you see under the headings for the different time periods there are Ns which represent the number of respondents, correct?

A Yes
Q And does it look like to you that Page 39
Q But you weren't really clear what the different segments meant?

A I think it's clear what they meant. I wasn't clear whether they were all collected at the same time or there were some other days, but basically I think that the headings are very clear what they mean.

CHIEF JUDGE SLEDGE: Mr. Sturm, your initial question leading to this examination of 11 confuses me.

You asked about Figure 10 and that was based on Exhibit 116 and August ' 05 study. And then you asked about Figure 12 which is based on Exhibit 111, a June '06 study.

MR. STURM: Yes.
CHIEF JUDGE SLEDGE: And then I understood to ask him if these were all based on the same study? And I don't understand why you're asking that.

MR. STURM: When I asked that question i was just asking about Figure 12.

CHIEF JUDGE SLEDGE: Figure 12 is
the numbers that are broken out by month there add up to the total presented in the second quarter of '06 column?

A The interviewers for comparison, the fourth quarter of '05--

Q Right.
A Which is a similar large number.
Q So you're saying, just so I'm clear on this, you're not clear if these are all different studies or different cohorts, subscription tenure cohorts within the same study?

A Now that I look at the numbers, it seems that the data for the ' 06 , the six columns are subheadings of the second quarter ' 06 and the report here, probably for comparison, the fourth quarter ' 05 is the first column.

Q But you didn't really focus on that when you were doing your report?

A I looked earlier at those segments and the results were these segments.

Page 40
based on Exhibit 111?
MR. STURM: Yes, Your Honor.
CHIEF JUDGE SLEDGE: I see. Thank you.

MR. STURM: Figure 10 is based on something different.

CHIEF JUDGE SLEDGE: All right. BY MR. STURM:
Q Now if you will turn a couple pages to page 20, Figure 14, and this purports to compare percentage of June 2006 Sirius subscribers interested in music as compared to talk versus Sirius respondents in the October 2006 Wind study, right?

A Correct.
Q Now what you have done is just take the people who subscribed to Sirius in June 2006 and compared them to your overall survey results for the entire subscriber base, right?

A Correct.
Q So you basically just cherry
\begin{tabular}{|c|c|}
\hline Page 41 & Page 42 \\
\hline picked this one month of subscriber data and & 1 which I think I was very clear indicating -- \\
\hline compared it to an overall, rather than taking & 2 if you look at Figure 12 in the heading of \\
\hline the overall data that are also nit eh Sirius & 3 this which is the June 2006, focusing only on \\
\hline survey, correct? & 4 them and not previous to this and trying to \\
\hline A I don't look at this as cherry & 5 add now the relation between music and talk \\
\hline picking. I think this is the last point in & 6 and entertainment. And that's this is \\
\hline time. This is the last month available. So & 7 designed. I think I made it very explicit in \\
\hline this is also the same 17 percent that we have & 8 the report what we're looking at. \\
\hline in the previous figure and Figure 12. & Q Now your survey covers, purports \\
\hline 10 Q Sir, you're ignoring all of the & 10 to cover the entire group, right, and doesn't \\
\hline 11 people who subscribed to Sirius May 2006 and & 11 break it out among subscription tenures, \\
\hline 12 before in this chart, correct? & 12 correct? \\
\hline 13 A Correct. And I thought I made it & 13 A Correct. \\
\hline 14 very clear in the write up what I'm doing & 14 Q In fact, you didn't even gather \\
\hline 15 here. & 15 any data about subscription tenure, correct? \\
\hline Q So you're just relying on these 96 & 16 A Correct. \\
\hline 17 people who subscribed in June 2006 as opposed & 17 Q So there's no way -- \\
\hline 18 to covering the more than 2,150 who subscribed & 18 CHIEF JUDGE SLEDGE: What is that \\
\hline 19 at other times, right? & 19 word? \\
\hline 20 A Because I'm trying -- this is an & 20 MR. STURM: Subscription tenure. \\
\hline 21 elaboration on Figure 12 and trying to explain & 21 CHIEF JUDGE SLEDGE: Tenure? \\
\hline 22 the trend and showing for the last for those, & 22 Mr. STURM: How long they've been \\
\hline Page 43 & Page 44 \\
\hline subscribers. & 1 the music channels have shown increased \\
\hline CHIEF JUDGE SLEDGE: All right. & 2 listenership." Do you remember saying that? \\
\hline BY MR. STURM: & 3 A Vaguely. \\
\hline Q You also have -- and by the way, & Q But overall, we know that total \\
\hline that June 2006 cohort is the smallest one of & 5 music listening has gone down recently, \\
\hline all of them, correct? & 6 correct, the time spent listening that we \\
\hline A It's still close to 100 people and & looked at earlier? \\
\hline you can definitely analyze them and conclude & A Based on this one report. I think \\
\hline from them what is -- what are the reasons that & 9 there are other indications there, including \\
\hline 10 they provide for subscribing. & 10 if you look in terms of the talk channels \\
\hline 11 Q It was a very simple question. & 11 people listen to and some of the XM studies, \\
\hline 12 That one June month that you picked is the & 12 and I'm not sure that this will be the general \\
\hline 13 smallest, has the smallest number of & 13 pattern. \\
\hline 14 respondents of any of the ones that are broken & 14 Q Well, XM studies wouldn't go to \\
\hline 15 out, correct? & 15 Howard Stern, right, because he's not on XM. \\
\hline 16 A Yes. & 16 Now you also say that Howard Stern \\
\hline Q Now you also talk later in your & 17 is not really attracting listeners, right? \\
\hline 18 report about the impact of Howard Stern and & 18 A I'm not sure I said that. \\
\hline 19 how it's less than music and things like that, & 19 Q Did you say that he has stopped \\
\hline 20 right? & 20 attracting listeners? \\
\hline 21 A Correct. & 21 A Well, as we can see from the data, \\
\hline 22 Q And you say "among other things, & 22 the number of new subscribers who attribute \\
\hline
\end{tabular}

Page 45
their subscription to Howard Stern is getting smaller.

CHIEF JUDGE SLEDGE: Dr. Wind, that sounds to me like his listeners are so passionate that all of them rushed out at the first opportunity they had to subscribe and therefore there weren't any left to subscribe after that.

THE WITNESS: This is consistent with my interpretation.

CHIEF JUDGE SLEDGE: Okay.
THE WITNESS: So if we're talking about new subscribers I think the percent of people who subscribe now subscribe -- or the latest data we have is June, that subscribed is smaller than before. That's what Figure 12 is actually showing us.

BY MR. STURM:
Q There was a question in the listener study, "what was your primary reason you subscribed to Sirius? Please type in your one primary reason." Do you remember that

Page 47
this was reason for subscribing to Sirius, not subscribing to satellite radio in general.

And there is clearly Howard Stern is a major attraction for selecting the brand and the data I showed before on I think that we dealt with on page 17 was the subscription to satellite radio in general.

Q The question is what was the primary -- your primary reason you subscribed to Sirius?

A Right, which is for a brand, which is a brand choice decision, whereas the data I relied on on page 17 was category benefits. So initial purchase intent which was a please tell me all the reasons you were interested in satellite radio, not necessarily the brand. So yes, Howard Stern is definitely a major impact in selecting Sirius over XM.

The importance of Howard Stern for selecting satellite radio seemed to be decreasing based on the data that's here.

Q And the other thing shown here on
question?
A No, you have to direct me to the specific study and page.

Q Look at Exhibit 112, page 23. (Pause.) It's headed "unaided primary reason for subscribing." Do you see that?

A Yes.
Q And unaided means what?
A That you are not providing people options, but it's an open-ended question.

Q And you like open-ended questions, right?

A Correct.
Q All right, and it's all past week listeners based on a total 25,702? See that at the top?

A Yes.
Q And without putting the specific numbers on the record, the overwhelming top reason is Howard Stern, correct?

A But if my recollection is correct, Page 48
page 23 of Exhibit 112 is that music is down in fourth place below miscellaneous, correct?

A Again, for this selection of the brand as opposed to selection of the category.

Q And you didn't mention this slide in your report, did you?

A No, because I focused in the report not so much on the determinants of selection of Sirius versus XM which this addresses itself to. I focused more on the attraction to the category, to satellite radio.

MR. STURM: Your Honor, I don't have any further questions right now.

CHIEF JUDGE SLEDGE: Mr. Handzo, any redirect?

MR. HANDZO: Yes, Your Honor. REDIRECT EXAMINATION
BY MR. HANDZO:
Q Good morning, Dr. Wind.
A Good morning.
Q Dr. Wind, do you have there,

Page 49
excuse me, SDARS Exhibits 6 through 12 or do
you need copies of those?
A No.
(Pause.)
Q Dr. Wind, do you recognize these
as the verbatims that you were asked about?
A Yes.
Q On Thursday?
A Yes.
Q Now the first question was how
many survey respondents did you have in your
survey?
A Four hundred twenty-four.
Q If you need to refresh your
recollection, you might want to take a look at
page eight of your written testimony.
A Four hundred twenty-eight.
Q And that would be how many open-
ended questions for each of those respondents?
A There will be four questions, 1, ( 3 , and 11, plus a probe, plus possibility
Page 51
Q And you just said you know why the error was made?

A Yes.
Q What is that?
A It was basically a computer glitch that I had a letter that I can explain from the coder who checked actually the process and explained how it happened.

Q Well, leaving aside why it happened, does the fact that there are 7
coding errors out of 3,000 plus coding decisions changed your results?

A No.
Q Now let me ask you to start with Exhibit 6.

Looking at the --
JUDGE WISNIEWSKI: Can I follow up on that last question?

MR. HANDZO: Oh sure.
JUDGE WISNIEWSKI: Are you saying
that the errors don't affect the results
absolutely or are you saying in no material

Q Well, leaving out the probes for the moment, if there are four open-ended and 428 respondents, does that mean there are something like 1700 coding decisions to be made?

A Yes.
Q Now you mentioned that each one of those open ends does have a probe. If there's a response to the probe, would those be additional coding decisions to be made?

A Actually, we know that -- I looked at this after the Court on Thursday. There were over 3,000 coding decisions.

Q Okay, and out of those 3,000 coding decisions we've identified 7 that appear to be in error?

A Yes, and I think I know why the error.

Q Let me ask you first, I assume that out of -- you're not happy about the fact that there are 7 hours out of 3,000 or so?

A No, I was very disturbed by that.
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way?

THE WITNESS: Well, obviously, the results that I reported will be affected by those few cases, but the substantive conclusion from the study in terms of the magnitude of the importance of music compared to the other variables is not changed. And I actually kind of ran even an analysis to try to show the comparison between the two.

JUDGE WISNIEWSKI: Thank you. BY MR. HANDZO:
Q Dr. Wind, looking at the first of these verbatim, Exhibit 6, it starts Exhibit \(6 ?\)

A Yes.
Q Looking at the first three
verbatim responses, do any of those responses mention music?

A I'm not sure. Top 20 on 20 is
good for me and my family. This may be a music program.

Q Okay. And looking at the next
one, Exhibit 7, do you see the response to question 2?

A Yes. Top 10 on 20.
Q Does that also appear to be a mention of music?

A Yes.
Q So the date with entry response to questions two and three? Do you see the mention --

A Sports and Hispanic music.
Q And question three?
A And three will be the music and the variety of stations and what do they offer.

Q Okay. Looking at Exhibit no. 9. Do you see the response to question one?

A Yes.
Q Does that mention music?
A Yes. I want to get it for the music and the news. It was the Freedom Pack.

Q Now looking at Exhibit 10. Do you see the response to Exhibit 3? I'm sorry, to

Page 55
a person says music in question one, says music in question two, this person will be counted only once.

Q Okay, now let me ask you that given that each of the verbatim responses that we just looked at in Exhibits 6 through 12 mentioned music, would the coding errors have any impact on this chart?

A No. It will have no effect whatsoever on Figure 10.

Q Let me ask you to turn to Figure 13 on page 32. Can you tell us what this represents?

A This is the programming type most critical to the decision to continue to subscribe. This is the retention measure based on question number three.

Q So I'm sorry, this is showing the results from question three?

A Yes, the results of the open-ended question three.

Q Let me just make sure we're both
question three?
A Yes. Jazz.
Q Looking at Exhibit 11 and looking at the response to question three, what do you see?

A The channels that offer new music that is uninterrupted.

Q Okay, Exhibit 12, response to question two. What do you see?

A Music.
Q Does it appear to you that each of the verbatims that you were shown that the respondents mention music?

A Correct.
Q Now, let me ask you, Dr. Wind, to turn to your testimony Exhibit 51. Figure 10 at page 27 .

A Yes.
Q What does this chart represent?
A The chart represents the results of the net mention of music in either question \(1,2,3,11\), avoiding any duplication. So if Page 56
on the same page literally. We're talking about Figure 13 on page --

A I'm sorry, I was looking at figure 14. Figure 13 on page 32.

Q Okay, and that is showing what?
A This shows the programming type most critical to decision to subscribe -consider to subscribe. This is the programming draw which is the open-ended response to question two.

Q So this would have been asked of all 428 respondents?

A Yes.
Q Okay. Now am I right that in the verbatims that you were shown, Exhibits 6
through 12 , only one respondent had a wrongly coded answer to question two?

\section*{(Pause.)}

A That's the way it seems.
Q So if there was one wrongly coded answer to question two out of 428 respondents, what impact would that have on this chart?
found out that for example XM and Sirius listeners represented a different demographic. Do you recall that?

A Correct.
Q Can you explain how you would do that?

A I actually did it over the
weekend. Do you want to -- I can present the results.

Q Let's hear it.
MR. MEYER: Your Honor, I would object. I mean, we obviously haven't seen this. It's unfair because if it's something that he testified he could have done before in connection with his written direct testimony. He obviously didn't do it. So I would say that it is unrelated to his written direct testimony and is unfair at this point, Your Honor.

CHIEF JUDGE SLEDGE: Mr. Handzo?
MR. HANDZO: Well, Your Honor, as to the fairness or unfairness, I have to say

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that I have not seen it either. We're all playing on a level playing field as far as that is concerned. But the question was raised on cross. I don't think that it can fairly be said that it is outside the scope of the cross and apparently he's taken a look at it, so I think it is fair for the Court to hear that.

CHIEF JUDGE SLEDGE: Is this an exhibit you have exchanged 24 hours in advance? offering it as an exhibit, Your Honor. I'm just going to ask him what his conclusions were.

CHIEF JUDGE SLEDGE: Objection sustained.

BY MR. HANDZO:
Q Dr. Wind, without telling us what you did, how would you go about weighting the data?

A It's very simple. What you do is
Page 59
think, a number of questions about the
demographics of the respondents to your study. I think you indicated something about being able to go back and re-weight the data if you

.



BYMR. HANDZO:

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Page 60
take the data you have. You have the 428 respondents. One of the areas that was suggested is a geographical difference that the east will have different characteristics than the rest of the country.

There was also a comment made that Baltimore does not below in the east, but rather in the south. So you take Baltimore out and you have about close to a hundred people, I think 96 people. You give them a weight of 50 percent and basically run all of the data when you weight now the data 50 percent to the east and 50 percent to the rest of the country.

You get the results and when you get the results, you can compare them to the results you got before. You can do the same thing with respect to the second point that was raised that we have data on, which is the male percent, men, as opposed to women. So you can easily take then all the data we have, all the men, and give them as opposed to their

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    MR. HANDZO: Your Honor, I object
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CHIEF JUDGE SLEDGE:Sustained.
You don't have to answer questions yes or no
if that is not the appropriate answer to the
question.
MR. MEYER: May I withdraw the
question?
CHIEF JUDGE SLEDGE: Yes, sir.
BY MR. MEYER:
Q Let's look at page five of your
amended report just to save time. On page
five of your amended report, Dr. Wind, it may
come as no surprise to you that in my question
which you were not able to answer yes or no,
I was simply reading directly into the record
a sentence from your amended report --
A And you ignored the next sentence.
Q Did you see the sentence I read?
A Yes, but you --
Q Did I read the sentence correctly
that says that I note that in comparing the

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asking. We have not talked at all about anything relating to this case since I left the Court.

And I've done a number of analyses following the Court session on Thursday to try to help the Court and clarify some of the questions that were left unanswered.

Q And Mr. Handzo again, when he asked you whether you had done any reweighting, actually had no idea to your knowledge that you had?

A He had no idea that I did any of the additional analyses that I'd done.

Q Now with respect to the verbatims Mr. Handzo showed you. I think you said there were seven, but I had shown you. It's not your testimony that those were the only seven errors in your coding, is it?

A No. These are the ones that you showed. I actually did a follow-up checking what happened and I mentioned before that it was a computer glitch in the coding situation.
results of the Sirius and XM service to my own, differences in survey methodology question rating, sample size, etcetera make it impossible to directly compare the results of the service to my own.

My only question to you is did I read that sentence correctly?

A Yes, you did, but you ignored the next sentence.

Q Now with respect to the coding errors that Mr. Handzo asked you about, and also with respect to the re-weighting which you did which I'm not going to ask you about the substance, obviously.

Did you talk to the lawyers for SoundExchange over the weekend?

A No.
Q So when Mr. Handzo asked you whether you did any re-weighting, he simply was making a lucky guess, that in fact, you had done some re-weighting. Is that right?

A I don't know the reason for his
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And they were all together if I recall correctly something like 21 or so errors.

I have actually a letter that I received from the coder, Greg Pierce, that explains exactly what happened.

Q My question was you didn't mean to suggest to the Panel in response to Mr .
Handzo's question questions that the seven errors that I identified to you were the only errors, right? You didn't mean to suggest that, right?

A These are all that you showed and I know I'm confident now, given what I know, that basically there are a few errors that were in the coding. They were all corrected and they make absolutely no difference.

Q I'm going to try and ask my
question again. It's not your testimony that
those were the only errors, the seven errors
I showed you? Is that your testimony or not?
A No.
Q Okay. And in fact, there are
additional errors that were responses that had nothing to do with music under the code of music, isn't that right?

A That's what I explained. That's what I explained, that it was a computer glitch in the coding in some of the transfer in the coding. There were about 21 or so errors and they were all kind of identified and the data corrected.

Q Okay, the fact that -- and your coder who you apparently who you still apparently have utmost confidence in, right?

A I do, because they basically found the reason for this and was no basically in this code. Because this was originally correct and then basically when they transformed the data, there are two symbols in the coding. They were interpreted as a wild card by Excel, the Microsoft system, and that's what led to these 21 errors.

Q And it just so happened that all of the errors I showed you and possibly

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cases that were all -- 21 or 31 -- I'm not sure exactly. Many of them were coded as 1,1 , inappropriately. These are the codes that you can -- so this was an error that was identified. It had nothing to do with the original coding which was correct. So my confidence in my coder is in place.

And then given that we filed this, this was corrected. We re-ran the data, it was the corrected --

Q This is way beyond the scope of my question, sir.

A It was coincidental.
Q Yes, if you want to --
CHIEF JUDGE SLEDGE: Mr. Meyer, is
he is answering your question. Don't
interrupt him.
THE WITNESS: We recoded the data base on this and there was no difference.

BY MR. MEYER:
Q So it now could be as many as 31 errors is that right?
additional ones happened to change answers that had nothing to do with music to answers that had to do with music?

A I'm trying to explain to you what happened, that --

Q Answer my question, sir. Is it your testimony that it's simply coincidental that these errors, these computer errors had the result of changing answers that had nothing to do with music to codes of music? Is it your testimony that it's coincidental?

A It's -- I don't know how you define coincidental. These are basically perfectly explained by the facts that happened.

They coded this basically as "star", one of the codes and another one was "question mark". These apparently in some transformation that they did was translated by the program, the Excel program as some wild card in the programming language.

And these were about 21 or so
Page 72
A I think it was either 21 or 31 cases that there was a glitch in the program, but all of them were corrected. We re-ran the data, based on the correct numbers and there is no difference, no significant difference between the results with before and these results. It's a minor impact, given the size of the sample.

Q Now in response, first of all, I would ask that any such documents be produced immediately since the witness has been permitted to testify about it.

We can take that up later with Mr.
Handzo, but now in response to Mr. Handzo's questions, when he showed you some of the verbatims and said well, it says music somewhere else in the questionnaire, do you recall those questions?

A Yes.
Q Your survey wasn't designed to
show that people mention music in response to any of 11 questions, right? You looked at



\begin{tabular}{|c|c|c|}
\hline & Page 85 & Page \\
\hline & KI: This is your & 1 in \\
\hline & on. I'm talking about what you did with & 2 just mentioned here on page 109 of Exhibit \\
\hline & eet to this other data & 3 112, likelihood to cancel if channel gone, to \\
\hline & E WITNESS: & 4 me the results of asking that kind of questi \\
\hline & obviously to the extent that we hav & 5 are extremely specu \\
\hline & apped. We have probably kind of double & Again, as a satellite subscriber \\
\hline 7 & ng here & 7 I know that if I was asked the question, if \\
\hline & JUDGE WISNIEWSKI: Okay, and the & 8 the NFL network was being taken off, would you \\
\hline & estion & 9 cancel? I might be inclined to say yes, I \\
\hline & tly point out, that serves as the basis & 10 would cancel. But I might n \\
\hline & elieve, what you did there for & 11 And there's just not a concre \\
\hline & entage that you report in Figure 10 & 12 way of knowing, of course, unless a channel \\
\hline & \(r\) amended t & 13 like that \\
\hline & THE WITNESS: Correct. And this & 14 And then I've been looking at the \\
\hline & as the best that I could do there, because & 15 survey data here with respect to listenership \\
\hline & not have separate, independent data here & 16 and trying to make a determination as to \\
\hline & JUDGE WISNIEWSKI: Very well, & 17 whether listenership determines value. And \\
\hline & nk you. & 18 then the other thing I've been looking at \\
\hline & JUDGE ROBERTS: Well, Dr. Wind, in & 19 the ability to attract subscribers. Is the \\
\hline & ition to struggling with this cold & 20 programming sufficient to attract subscribe \\
\hline & ast weekend, I have continued to struggle & 21 and isn't that the greatest value? In other \\
\hline & with measuring the value of music and for & 22 words, the music -- what the value of the \\
\hline & ge 87 & 88 \\
\hline & ic is or the value of sports programming or & 1 looking at any single measure, but what \\
\hline & value of talk programming to Sirius and & 2 they're looking at the fact as we have in \\
\hline & M , is its ability to attract and then hold & 3 figure one, we develop these multiple \\
\hline & scribers. & 4 measures, incidentally all of them are from \\
\hline & And my question to you is in your & 5 the consumer point of vie \\
\hline & v, what is the best metric to measure & So the point of view th \\
\hline & ue? Is it the value to the companies & 7 in determining value is the perception of the \\
\hline & roviding the services, XM and Sirius? Is it & 8 consumer, what's important for the consumer. \\
\hline & tenership? Is it something else? & 9 And I say there is no single measure. There \\
\hline & THE WITNESS: I think it is & 10 are multiple measures and this is the \\
\hline & cellent question, but you have actually & 11 reporting on these multiple measures and the \\
\hline & ree compounded questions underlying it. & 12 are different ways in which I'm getting them. \\
\hline & And the first one in terms of the & 13 So the question is attraction. I think the \\
\hline & cancellation data, I think you're absolutely & 14 best way to address this was with the open- \\
\hline & ight. We don't have a follow up. We don't & 15 ended question on Question 2 \\
\hline & have a real validation of these questions. & 16 If we want to look at importance, \\
\hline & ther in their data nor in my study that w & 17 we can look at a number of measures like the \\
\hline & following as people, what you have actually & 18 constant sum, the conjoint analysis. And \\
\hline & ne, assuming a channel has been canceled. & 19 incidentally, you raise again the point that \\
\hline & That's the reason that the essence & 20 you raised on Thursday, which was the relation \\
\hline & of my report is multiple measures and looking & 21 between usage or listening and the other \\
\hline & at convergence validity of them. So it's not & 22 important variables. \\
\hline & & 22 (Pages 85 to 88) \\
\hline \multicolumn{2}{|l|}{(202) 234-4433} & \& Co., Inc. www.nealrgross \\
\hline
\end{tabular}
And my response at the time was
that the markets are heterogeneous, that there 89
are different segments that will have
different relationships and that I believe
there will be a positive association between
the two.
I did one over the weekend, the
regressions, actually, usage against
importance and found --
MR. MEYER: Your Honor, I hate to
interrupt again. This is new analysis and
he's not testified that he's done. We
haven't seen it. It wasn't part of his direct
report, and it may be something he can do in
rebuttal, but at this point I would say it's
premature.
CHIEF JUDGE SLEDGE: You have made
your point.
JUDGE ROBERTS: I don't hear him
offering any numbers. Please continue.
THE WITNESS: The point, what I
suggested is there is a strong association

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THE WITNESS: All from the consumer point of view.

That's basically the essence of
marketing. Marketing really tries to
understand what are the perceptions and
preferences of consumers, this is important to making business decisions.

JUDGE ROBERTS: Thank you, Dr.
Wind.
(Pause.)
CHIEF JUDGE SLEDGE: All right, any follow-up questions?

MR. HANDZO: No, Your Honor.
MR. MEYER: No, Your Honor.
MR. STURM: No, Your Honor.
CHIEF JUDGE SLEDGE: Thank you, sir.

THE WITNESS: Thank you.
CHIEF JUDGE SLEDGE: Mr. Handzo, anything before we take a recess?

MR. HANDZO: No thank you, Your
Honor.
between the usage and importance is very fine.
So and to the extent that you want to, I'd be delighted to share with the question the results of these studies.

So I think that going back it's from a marketing point of view the study that I preferred has done has identified a number of dimensions that was summarized in figure 1 and present the results on a common base in terms of comparing the structure of music, compared to the best second programming feature.

And to me, there is the strength of the study, the convergence validity we have here, that all of these measures are consistent, all of them showing the three eminence of music compared to the others in dealing with attraction, in cancellation, in importance, in any one of the measures that we have here.

JUDGE ROBERTS: And all from the consumer point of view?

CHIEF JUDGE SLEDGE: We'll recess ten minutes.
(Off the record.)
CHIEF JUDGE SLEDGE: We will come back to order. You are going to be our next presenter?

MR. DeSANCTIS: I am, Your Honor.
CHIEF JUDGE SLEDGE: All right, Mr. DeSanctis.

MR. DeSANCTIS: I would like to call Mark Eisenberg.

CHIEF JUDGE SLEDGE: Mr.
Eisenberg, please raise your right hand.
Whereupon,
MARK EISENBERG
was called as a witness by counsel for
SoundExchange and, having been first duly
sworn, was examined and testified as follows:
CHIEF JUDGE SLEDGE: Please be seated.

MR. DeSANCTIS: Good morning. DIRECT EXAMINATION

\title{
Before the UNITED STATES COPYRIGHT ROYALTY JUDGES \\ Washington, D.C.
}

In the Matter of:

Digital Performance Right in Sound
Docket No. 2009-1
Recordings and Ephemeral Recordings

TESTIMONY OF

\section*{GEORGE S. FORD}

President, Applied Economic Studies

Witness for SoundExchange, Inc.

SX Trial Ex. 4

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.

In the Matter of:
Digital Performance Right in Sound
Docket No. 2009-1
Recordings and Ephemeral Recordings

\section*{TESTIMONY OF}

\section*{GEORGE S. FORD}

\author{
President, Applied Economic Studies
}

\section*{I. My Experience and Qualifications}

My name is George S. Ford. I am the President of Applied Economic Studies, a private consulting firm specializing in economic and econometric analysis, located in Birmingham, Alabama. I am also the Chief Economist of the Phoenix Center for Advanced Legal \& Economic Policy Studies, a Washington, D.C. based 501(c)(3) research organization that specializes in the legal and economic analysis of public policy issues involving the communications and technology industries. In addition, I am an Adjunct Professor at Samford University, a private university located in Birmingham, Alabama, where I teach economics in the graduate program of the business school. I serve as a member of the Alabama Broadband Taskforce upon appointment by Alabama Governor Bob Riley.

I received a Ph.D. in Economics from Auburn University in 1994. Since then, I have worked as a professional economist in both government and industry. In 1994, I became an economist in the Competition Division of the Federal Communications Commission, an organization located in the General Counsel's Office that provided competition analysis support to the many bureaus of that organization. My primary interests were multichannel video services and broadcasting policies, though my work ranged from international policy to radio interference standards to statistical analysis. After my government tenure, I became an economist at MCI Communications, where my work focused on telecommunications policy. In April 2000, I became the Chief Economist of Z-Tel Communications in Tampa, Florida, a small competitive telephone company where I performed both regulatory and business analysis. I have been in my present employment since the Summer of 2004.

My areas of specialty in economics include Industrial Economics, Regulation, and Public Policy, with an emphasis on the communications industries, including broadcast radio and television. I have written many papers on telecommunications and media policy, and much of this work has been published in economic and law journals including the Journal of Law \& Economics, Empirical Economics, the Journal of Business, the Journal of Regulatory Economics, the Antitrust Bulletin, Energy Economics, the Yale Journal on Regulation, the Federal Communications Law Journal, and many others. I have testified before numerous public service commissions, state legislative bodies, and committees of the U.S. Congress on communications policy and rate setting. In June of this year, I filed testimony before the Copyright Royalty Judges in the Matter of Distribution of the 2004 and 2005 Cable Royalty Funds, Docket No. 2007-3 CRB CD 2004-2005. A copy of my curriculum vitae is attached as Appendix A.

\section*{II. Summary of My Testimony}

The purpose of this proceeding is to establish the rates and terms for certain digital public performances of sound recordings under Section 114 of the Copyright Act and for the making of ephemeral copies in furtherance of such performances under Section 112(e) of the Copyright Act. I was engaged by SoundExchange, Inc. to provide an economic framework useful for establishing a rate for ephemeral copies under the statutory license provided in Section 112(e) of the Copyright Act and to canvas available sources for information relevant to that task.

In the course of my work, I have been given free reign by SoundExchange to examine any sources that I believed might be relevant in setting a rate for ephemeral copies. I have reviewed the relevant statutory provisions and the various decisions of the CRB and its predecessor, the CARP, as well as the Register of Copyrights, interpreting
those provisions. I have familiarized myself with the terms of marketplace agreements for non-statutory forms of music streaming licensing. I have familiarized myself with the technological issues arising from ephemeral copies. I have conferred with SoundExchange's other expert, Dr. Michael D. Pelcovits, Ph.D. I have also carried out a free-ranging search of online materials in an effort to determine whether there is any information that would help establish the proper royalty rate for ephemeral copies in the webcasting context.

As I will explain below in further detail, I have concluded that sound principles of economic theory as well as observed marketplace benchmarks firmly establish that ephemeral copies have economic value. I have also concluded on the basis of marketplace benchmarks that the economic value of ephemeral copies is properly measured as a fixed percentage of the overall value of the rights acquired by webcasters under Sections 112 and 114. However, there exists very little in the way of traditional marketplace benchmarks to facilitate the proper computation of that percentage. This is because the hypothetical "marketplace" envisioned by Sections 112 and 114 is made up of actors with very different economic interests from the marketplace that exists outside of the statutory framework. In the unregulated marketplace, where copyright owners and services that publicly perform sound recordings freely negotiate to determine rates, the "willing buyers" and "willing sellers" are less concerned about the allocation of those royalty rates between payments for ephemeral copies and payments for public performances. However, when copyright owners and the service providers must abide by rates determined under Sections 112 and 114, the explicit allocation of payments between those two components becomes much more relevant, because the ephemeral copy payments under Section \(112(\mathrm{e})\) are made
directly to copyright owners (or record companies in this case), while the performance payments under Section 114 are shared equally between copyright owners and artists. This particular division of payments is solely an artifact of the statute and does not bind or constrain market transactions.

While this division of royalties among upstream providers makes little difference to the "willing buyer" in this hypothetical marketplace - that is, the webcasters - it makes a significant difference to the "willing seller" or "sellers", i.e., the record companies that own the rights to the sound recordings and the artists who get a share of the royalties. Record companies and artists care about what portion of royalty payments are allocated to ephemerals because the higher the portion allocated to ephemerals, the lower the portion paid directly to artists per the terms of the Section 114 license. Record companies and artists therefore have every incentive to negotiate over the proper percentage of royalty payments that are allocated to ephemeral copies. This negotiation is precisely what one would expect to happen in a hypothetical free market in which both artists and record companies are forced by statute to share 50-50 in performance royalty payments.

Such a negotiation is the basis of the rate proposal advanced by SoundExchange. SoundExchange, a collective made up of both record companies and artists, has proposed a rate that represents the result of negotiations between the artists and the record companies that make up its board. As long as the ephemeral rate is defined as a percentage subset of the total royalty payment, the willing buyer - the webcaster - is indifferent to the ephemeral copy rate. As such, marketplace negotiations between the "willing buyer"the webcaster - and the "willing seller" - the copyright owner - while potentially informative, may or may not establish a specific ephemeral copy rate. From a ratemaking
standpoint, it does not matter. The SoundExchange proposal is what the willing seller in such a marketplace would propose. Because the willing buyer is indifferent, the rate proposed by SoundExchange is legitimately viewed as the proper marketplace rate for ephemeral copies. The proposal resolves the problem of a non-market allocation of royalties, and is the best evidence available of the market rate of, and rate mechanism for, ephemeral copies under Section 112.
\(\square\)



\section*{IV. My Conclusions}

Section 112(e), which governs the compulsory license for ephemeral copies, provides in relevant part that:

The Copyright Royalty Judges shall establish rates that most clearly represent the fees that would have been negotiated in the marketplace between a willing buyer and a willing seller. ... \({ }^{16}\)

Despite minor differences in the language between Section 112(e)(4) (governing ephemeral licenses) and Section 114(f)(2) (governing statutory licenses for nonsubscription services and new subscription services), the economic criteria for setting rates and terms under those licenses are, in the words of the CARP, "essentially identical. \({ }^{17}\) In measuring the value of the Section 112(e) statutory license, just as in measuring the value of the Section \(114(\mathrm{f})(2)\) license, a key consideration in setting a proper rate is the identification of proper marketplace benchmarks. As the CARP has observed: "[T]he quest to derive rates which would have been observed in the hypothetical willing buyer/willing seller marketplace is best based on a review of actual marketplace agreements, if they involve comparable rights and comparable circumstances." \({ }^{18}\)

As I will explain below, in reviewing the most closely analogous marketplace agreements, I come to three conclusions about the proper royalty rate for ephemeral copies under Section 112(e). First, marketplace benchmarks as well as basic economic theory demonstrate that ephemeral copies have economic value to services that publicly perform sound recordings because these services cannot as a practical matter properly function without those copies. Second, marketplace benchmarks show that the royalty rate for
\({ }^{16} 17\) U.S.C. § \(112(\mathrm{e})(4)\)
\({ }^{17}\) Webcaster I CARP Opinion at 25; see also Webcaster II at 24100-01.
\({ }^{18}\) Webcaster I CARP Opinion at 43; see also Webcaster II at 24092 ("we adopt a benchmark approach to determining . . rates").
ephemeral copies, if directly established, is almost always expressed as a percentage of the overall royalty rate for combined activities under Sections 112 and 114. Third, because the only actors in the hypothetical three-party market established by the statute - webcasters, record companies, and artists - that have any economic interest in the measure of that allocation are the artists and the copyright owners, the agreement reached between them as to that allocation is the best measure of how a willing buyer and a willing seller would allocate royalty payments between performance royalties and ephemeral copies, and would value the ephemeral license in the course of a marketplace negotiation for public performances.

\section*{A. The Ephemeral License Has Economic Value.}

As an initial proposition, it is beyond serious question that ephemeral copies of sound recordings have economic value. This is because, as Congress recognized in enacting Section 112(e), webcasters simply could not exist without the ability to make ephemeral copies. In fact, because webcasters must have both the ephemeral copy right as well as the performance right in order to operate their services, as a matter of economic theory one could say that the Section 114 right has zero economic value without the Section 112 right, and the Section 112 right has zero economic value without the Section 114 right. One cannot remove the Section 112(e) right from the full complement of rights required by webcasters any more than one can remove oxygen molecules from water and still have water.

This theoretical proposition is confirmed by a number of marketplace benchmarks. First, in the marketplace deals between record companies and webcasters for non-statutory forms of licenses, it is typical for ephemeral copy rights to be expressly included among the grant of rights provided to the webcaster. Most of these agreements do not set a
distinct rate for those ephemeral copies, incorporating them instead into the overall rate that the webcaster pays for the combined ephemeral copy rights and performance rights. Nonetheless, economic theory teaches that rational companies do not give away something for nothing. Because these ephemeral copy rights are essential for webcasters to operate their services, it follows that the value of ephemeral copy rights has been included in the overall rate that webcasters pay under these agreements.

Second, I am aware of several agreements over the years between record companies and services that publicly perform sound recordings that do establish specific rate mechanisms for ephemeral copies. For example, I have reviewed a current agreement between a major record label and a webcaster that covers ad-supported internet radio service, subscription radio service, and on-demand streaming and recites the parties' agreement that \(10 \%\) of the royalty payments made under the agreement shall be designated as payment for ephemeral copies. Other agreements have contained similar language. For example, in Webcaster II and SDARS the CRJs were presented with evidence of agreements negotiated by Sony BMG and by Warner Music Group which provided that \(10 \%\) of the overall fees for streaming are attributable to the making of ephemeral copies. \({ }^{19}\)

\footnotetext{
\({ }^{19}\) See Webcaster II at 24101. The actual rates established in such marketplace agreements, while potentially informative, are not necessarily the best proxy for the ephemeral rate in the instant proceeding. These agreements are made without statutory constraints on how ephemeral and performance royalties are allocated between copyright owners and artists. Had these agreements been bound by such statutory conditions, then the outcomes may very well have been different. But these agreements are relevant in two important ways: First, they demonstrate that willing buyers and willing sellers do trade in ephemeral rights, which would be economically irrational if they had no value. Second, as discussed more fully in the next section below, they demonstrate that the payments for ephemeral rights, even absent regulatory constraint, employ a percent-of-total mechanism where ephemeral royalties are expressed as a percentage of payments metered on performances.
}

Third, I am also aware that, more recently, SoundExchange negotiated a number of voluntary agreements (with broadcasters, certain commercial webcasters and certain noncommercial educational webcasters) for the very same Section 112 and 114 rights at issue in this proceeding. In these agreements, the willing participants in the market agreed to structure the ephemeral reproduction rate as an allocation of the correlative performance royalty. \({ }^{20}\)

\section*{B. It Is Appropriate to Express the Value of Ephemeral Copies as a Fixed Percentage of the Performance Royalty.}

Setting the ephemeral rate as a share of the total performance royalty fee does no injustice to economic theory. In fact, marketplace benchmarks consistently confirm that a percent rate is the appropriate measure. The marketplace has spoken with near unanimity in structuring the Section 112(e) ephemeral reproduction license as a percentage of the Section 114 performance royalty where such performance royalty is established. As discussed above, I have seen numerous voluntary agreements between willing buyers and willing sellers in which the rate for the ephemeral reproduction license was expressed as a percent of the performance royalty. Similarly, as mentioned above, SoundExchange negotiated a number of voluntary agreements (with broadcasters, certain commercial webcasters and certain noncommercial educational webcasters) for the very same Section 112 and 114 rights at issue in this proceeding. There, again, the willing participants in the

\footnotetext{
\({ }^{20}\) Notification of Agreements Under the Webcaster Settlement Act of 2008, Agreed Rates and Terms for Broadcasters, 74 Fed Reg. 9293, 9299 (2009); Notification of Agreements Under the Webcaster Settlement Act of 2009, Agreed Rates and Terms for Webcasts by Commercial Webcasters, 74 Fed Reg. 40614 (2009); Notification of Agreements Under the Webcaster Settlement Act of 2009, Agreed Rates and Terms for Noncommercial Educational Webcasters, 74 Fed Reg. 40614, 40616 (2009).
}
market agreed to structure the ephemeral reproduction rate as an allocation of the correlative performance royalty. \({ }^{21}\)

Thus, it appears that, where a rate for ephemeral copies is set in the marketplace, it is set as a percentage of overall royalties. As a structural matter, the available evidence suggests that setting the ephemeral rate as a percent of an overall payment is consistent with marketplace negotiation.

\section*{C. The Best Market Benchmark is the Agreement Between Artists and Record Companies.}

Having established that the Section 112(e) ephemeral reproduction right clearly has value and is best expressed as a percentage of the Section 114 performance royalty where such royalty is set, the final step in the analysis is to determine how to set an actual percentage as required by the Register. As noted above, most agreements that set a rate for ephemeral copies specify that rate as a percentage of total royalty payments. Given the nature of the rights at issue, that is not a surprising outcome. Where performance royalties for streaming activities are negotiated in a free market setting, that is, outside of the Section 114 context, the copyright owner (in this case the record companies) and the service provider should have less at stake with respect to the allocation of payments between ephemeral copies and performances.

By contrast, in the Section 114 context, Congress radically altered this market dynamic when it comes to statutory licenses. There is a very significant difference between payments under the Section 112(e) compulsory license and the Section 114 compulsory license: payments under Section 114 are by law split between copyright

\footnotetext{
\({ }^{21}\) Although these agreements do not set the specific allocation, but leave that open to future determination, the point here is that the willing buyers and willing sellers agreed to structure the ephemeral rate as an allocation of the performance rate.
}
owners and artists, while payments under Section 112(e) go directly to copyright owners. The implication of this phenomenon is immediate. The sharing of income between record companies and artists for performances is set by law. Thus, if it is to have any relevance for the Judges, the willing buyer/ willing seller market analysis suggested by Section 112(e) for ephemeral rates must reflect this statutory alteration to the market dynamics whereby the artists and the record companies jointly have a real interest in negotiating the Section 112(e) rate while the webcasters (as the willing buyers) do not.

By the very nature of the statute, the agreements reached under the constraints relevant in this proceeding will not be the same as in the unregulated market. Evidence suggests that the terms between the "willing buyer" in this hypothetical market - the webcaster - and the "willing seller" - the record companies - will either embody the ephemeral copy rate in the performance rate or express the ephemeral rate as a percent of the total overall performance royalty. If so, the buyer is indifferent to the allocation of payments between ephemeral copies and performance royalties. But the "willing seller" - the record companies - will not be so indifferent under the statutory division of royalties that cannot be assumed away. Under plausible conditions, only the record companies and artists are parties to the establishment of the ephemeral rate, and these parties have arrived at a royalty rate for ephemeral copies that reflects a more market based allocation of payments between ephemerals and performance royalties.

Because the willing buyer is disinterested with respect to that allocation, the agreement between the record companies and the artists thereby becomes the best indication of the proper allocation of royalties.

My understanding is that the recording artists and the record companies have reached an agreement that five percent (5\%) of the payments for activities under Section 112(e) and 114 should be allocated to Section 112(e) activities. In light of the principles I have articulated above, that appears to be a reasonable proposal, and credibly represents the result that would in fact obtain in a hypothetical marketplace negotiation between a willing buyer and the interested willing sellers under the relevant constraints.

I declare under penalty of perjury that the foregoing testimony is true and correct.


George S. Ford

\section*{Appendix A}

George S. Ford, Ph.D.
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\section*{EDUCATION:}

Ph.D., Economics, Auburn University, 1994.
B.S., Economics (magna cum laude), Auburn University, 1990.

EXPERIENCE:
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\hline 2000 - Present & \begin{tabular}{l}
PHOENIX CENTER FOR ADVANCED LEGAL AND ECONOMIC PUBLIC POLICY STUDIES \\
Washington, DC \\
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\hline 2006 - Present & SAMFORD UNIVERSITY, Birmingham, Alabama Adjunct Professor \\
\hline 2004 - Present & APPLIED ECONOMIC STUDIES, Birmingham, Alabama President \\
\hline 2000-2004 & \begin{tabular}{l}
Z-TEL COMMUNICATIONS \\
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\hline 1996-2000 & \begin{tabular}{l}
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Senior Economist, Office of Policy and Strategic Planning
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\hline 1994-1996 & \begin{tabular}{l}
FEDERAL COMMUNICATIONS COMMISSION \\
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Economist, Office of the General Counsel \& Cable Bureau, Competition Division
\end{tabular} \\
\hline
\end{tabular}

\section*{PUBLISHED RESEARCH:}
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"HAC Standard Errors and the Event Study Methodology: A Cautionary Note," with J. Jackson. (Forthcoming in Applied Economics Letters).
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"An Investigation into the Influence of Retail Gas Prices on Oil Company Profits."
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\section*{Capital Reporting Company}

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\begin{tabular}{|c|c|c|c|c|}
\hline & & & & 245 \\
\hline 1 & APPEARANCES & & APPEARANCES (continued): & \\
\hline 2 & & 2 & & \\
\hline 3 & Copyright Royalty Tribunal: & 3 & On behalf of Live365, Inc. (continued): & \\
\hline 4 & CHIEF JUDGE JAMES SLEDGE & 4 & DAVID ROSENBERG, ESQUIRE & \\
\hline 5 & JUDGE WILLIAM ROBERTS & 5 & Live365, Inc. & \\
\hline 6 & JUDGE STANLEY C. WISNIEWSKI & 6 & 950 Tower Lane & \\
\hline 7 & & 7 & Suite 1550 & \\
\hline 8 & On behalf of SoundExchange, Inc.: & 8 & Foster City, California 94404 & \\
\hline 9 & DAVID A. HANDZO, ESQUIRE & 9 & (650) 345-7400 & \\
\hline 10 & MICHAEL B. DeSANCTIS, ESQUIRE & 10 & & \\
\hline 11 & GARRETT A. LEVIN, ESQUIRE & 11 & On behalf of RealNetworks: & \\
\hline 12 & TAJ N. WILSON, ESQUIRE & 12 & CHARLES D. BRECKINRIDGE, ESQUIRE & \\
\hline 13 & JARED O. FREEDMAN, ESQUIRE & 13 & Wiltshire \& Grannis, LLP & \\
\hline 14 & Jenner \& Block, LLP & 14 & 1200 18th Street, Northwest & \\
\hline 15 & 1099 New York Avenue, Northwest & 15 & Suite 1200 & \\
\hline 16 & Suite 900 & 16 & Washington, D.C. 20036 & \\
\hline 17 & Washington, D.C. 20001 & 17 & (202) 730-1349 & \\
\hline 18 & (202) 639-6000 & 18 & & \\
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\hline & (Appearances continued on the next page.) & & (Appearances continued on the next page.) & \\
\hline & & & & 246 \\
\hline 1 & APPEARANCES (continued): & & APPEARANCES (continued): & \\
\hline 2 & & 2 & & \\
\hline 3 & On behalf of Live365, Inc.: & 3 & On behalf of Intercollegiate Broadcasting System: & \\
\hline 4 & DAVID D. OXENFORD, ESQUIRE & 4 & WILLIAM MALONE, ESQUIRE & \\
\hline 5 & Davis Wright Tremaine, LLP & 5 & Miller \& VanEaton, PLLC & \\
\hline 6 & 1919 Pennsylvania Avenue, Northwest & 6 & 1120 Connecticut Avenue, Northwest & \\
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\hline 8 & Washington, D.C. 20006 & 8 & Washington, D.C. 20036 & \\
\hline 9 & (202) 973-5256 & 9 & (202) 785-0600 & \\
\hline 10 & & 10 & & \\
\hline 11 & ANGUS MacDONALD, ESQUIRE & 11 & & \\
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\hline 15 & Suite 514 & 15 & & \\
\hline 16 & Pasadena, California 91101 & 16 & & \\
\hline 17 & (626) 737-7288 & 17 & & \\
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those actions? \\
A Well, I'm not sure I understand the question, but if it is part of the role and the mission of the organization that is consistent with enforcing the \\
payments and the royalties that performers and copyright owners are entitled to, and it is a necessary cost of doing business for the organization, it is something that the organization has to do. It would seem to me that any organization always tries to improve its efficiency if you're talking about the question of efficiency. \\
Q Let me see if I can get at it another way. \\
Does SoundExchange prioritize its administration \\
efforts with a view towards maximizing revenue or \\
maximizing the disbursements to the artists and labels? \\
A I think SoundExchange is -- certainly its mission is to try and collect and ensure that the collections and the distributions to performers are as strong as possible. \\
Q How about -- strength, in terms of your answer, would mean a comparison of the amounts spent
\end{tabular} & \begin{tabular}{l}
A I don't know, but I don't really understand the question well enough to answer it. \\
MR. MALONE: I have nothing further. \\
CHIEF JUDGE SLEDGE: Any questions from the \\
bench? \\
Thank you, ma'am. \\
THE WITNESS: Thank you. \\
(Witness excused.) \\
CHIEF JUDGE SLEDGE: Mr. Freedman? \\
MR. FREEDMAN: Your Honor, our next witness \\
is George Ford. I don't know if Your Honors were \\
wanting to take a break right now or to proceed. We \\
could do whichever you prefer, of course. \\
CHIEF JUDGE SLEDGE: We'll recess ten minutes. \\
(Whereupon, a short recess was taken.) \\
CHIEF JUDGE SLEDGE: Come to order. \\
Mr. Handzo. \\
MR. HANDZO: Thank you, Your Honor. \\
SoundExchange will call as its next witness Dr. George \\
Ford. \\
WHEREUPON,
\end{tabular} \\
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in the efforts against the amounts yielded? \\
A I'm not sure I could answer that question. \\
Q What sort of direction does the board give to \\
the administrators in SoundExchange as to how they \\
should focus their efforts, how they should budget for \\
various efforts? \\
A As I understand, and it's not dissimilar from my experience in AFTRA which, as a nonprofit, is that the board of directors looks at the anticipated work that needs to be done, reviews that and makes \\
appropriate approvals and judgments in consultation \\
with the SoundExchange staff. \\
Q And what are these judgments based on? What factors? \\
A It will be based upon all of the information that's before a board member at the time. \\
Q To what extent is this an efficiency test in terms of the return for the expenditure on a particular function? \\
A I'm not -- I'm not sure I can answer that question. \\
Q Who would be able to answer that question?
\end{tabular} & \begin{tabular}{l}
GEORGE FORD, \\
called as a witness, and after having been first sworn \\
by the chief judge, was examined and testified as \\
follows: \\
DIRECT EXAMINATION \\
BY MR. HANDZO: \\
Q Good afternoon, Dr. Ford. Can you please \\
just introduce yourself for the record and spell your \\
last name for the court reporter. \\
A My name is George Sterling Ford, F-O-R-D. \\
Q Dr. Ford, what's your educational background? \\
A I have a Ph.D. in economics from Auburn \\
University in 1994. \\
Q Where are you currently employed? \\
A I'm the president of Applied Economics \\
Studies, an economic and econometric consulting firm, \\
as well as the chief economist of the Phoenix Center \\
for Advanced Legal and Economic Public Policy Studies, a 501(c)(3) here in Washington, D.C. \\
Q The consulting firm that you identified \\
first, which I'm going to call AES for short, what does that firm do?
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A We do economic and consulting, quantitative \\
statistical analysis for various clients related to a \\
wide range of issues. \\
Q And what do you do for them? \\
A I'm the president of the organization and its primary consultant. \\
Q You mentioned the Phoenix Center. What's your position with the Phoenix Center? \\
A I'm the chief economist of the Phoenix Center. \\
Q And what is it that the Phoenix Center does? \\
A The Phoenix Center is a non-profit research \\
organization. We do research projects primarily in \\
the communications industries, radio, television, \\
telephone, Internet, as well as some intellectual \\
property, energy issues as well. \\
Q Can you just briefly tell the court your employment history before AES and the Phoenix Center. \\
A When I left Auburn University with my Ph.D., \\
I went to the Federal Communications Commission, \\
worked in its competition division, in the cable \\
services bureau, and then in the office of general
\end{tabular} & \begin{tabular}{l}
Q Have you previously testified before this court? \\
A I have in the '04-'05 cable royalty \\
distribution proceeding. \\
Q And were you accepted by this court as an expert? \\
A I was. \\
Q In what subject? \\
A Industrial economics and maybe regulation, public policy -- but I know industrial economics for sure. \\
Q What do you mean by industrial economics? \\
A It's the application of microeconomics to \\
industry and firms. It's also referred to as industrial organization. \\
Q And within the area of industrial economics, do you have a particular area of concentration? \\
A Well, it's mainly in communications. \\
Q Have you testified in other forums besides this court? \\
A Yes. I've testified before many state public \\
service commissions in matters of telecommunications
\end{tabular} \\
\hline ```
counsel. I left the FCC and went to the federal
policy shop of MCI Communications here in Washington,
D.C., I spent five or six years there, and then went
to Z-Tel Communications in Tampa, Florida, which was a
small telecommunications start-up that -- after the
1996 Telecommunications Act. I worked there for four
years, and then took on my current positions.
    Q Do you hold any teaching positions?
    A I teach as an adjunct professor at Samford
University where I teach economics to MBA students.
    Q Have you written any peer-reviewed or
published any peer-reviewed papers?
    A I've published over 50 papers. I've
published over 30 papers in peer-reviewed journals.
    Q What kinds of subjects do those papers
address?
    A Most of them, again, are in the
communications industries, radio, Internet, telephone.
I've also done some energy papers. I've done some
papers on statistical methodology, the funeral
business, various other topics, but mostly
communications.
``` & ```
regulation, and also before Congress on matters of
broadband policy, Internet policy.
    Q And have you testified in rate-setting
matters before?
    A Yes. Many of my appearances before public
service commissions were rate-setting proceedings
implementing total element long-run incremental cost
rates for the elements of the telecommunications
network that were required to be sold by the 1996 Act.
    MR. HANDZO: Your Honor, I would offer
Dr. Ford as an expert in industrial economics.
    CHIEF JUDGE SLEDGE:Any objection to the
proffer?
    MR. MacDONALD: No objection, Your Honor.
    MR. MALONE: No objection, Your Honor.
    CHIEF JUDGE SLEDGE: Without objection, the
proffer is accepted.
    MR. HANDZO:Thank you.
    BY MR. HANDZO:
    Q Dr. Ford, I'm going to show you what we've
marked as SoundExchange Exhibit Number 4.
    MR. HANDZO: May I approach, Your Honor?
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BY MR. HANDZO: \\
Q Can you tell us what that is, Dr. Ford? \\
A This looks like the testimony I filed in this case. \\
Q And did you prepare this testimony? \\
A I did. \\
Q Is there anything in that testimony, as you \\
sit here today, that is inaccurate and that you would \\
want to correct? \\
A No. \\
MR. HANDZO: Your Honor, I would offer \\
SoundExchange Exhibit 4 into evidence. \\
CHIEF JUDGE SLEDGE: I don't believe you've \\
authenticated it. \\
BY MR. HANDZO: \\
Q Dr. Ford, is this the testimony that you \\
filed in this case? \\
A Yes, this the testimony of George S. Ford, president of Applied Economics -- \\
Q And let me ask you to turn to page 16. Is that your signature? \\
A It is indeed.
\end{tabular} & \begin{tabular}{l}
MR. HANDZO: Your Honor, I can ask the question of Dr. Ford, but I think the answer is -- \\
CHIEF JUDGE SLEDGE: No, sir, it's not a \\
question to him. It's a question to you. \\
MR. HANDZO: That's fine. I think the answer \\
is that, in his economic opinion, the legal and regulatory environment in which this particular rate is being set is really very much affected by the legal structure and the legal rights, and he really can't opine on what the rate would be in this market given the particular impact of section 114 and the fact that it splits the royalties between artists and the record companies. \\
He can't not consider that in his analysis. \\
In fact, I suspect what he would say is his analysis would be just totally wrong if he ignored that regulatory environment in which he is setting the rate here. And so he has to recite his understanding of it. \\
CHIEF JUDGE SLEDGE: But isn't that what he's \\
put in the first page of "my conclusions" in section IV?
\end{tabular} \\
\hline \begin{tabular}{l}
Q And does this report represent your own work? \\
A Yes. \\
Q And your opinions? \\
A Yes. \\
MR. HANDZO: With that foundation, Your \\
Honor, I would offer -- \\
CHIEF JUDGE SLEDGE: Any objection to \\
Exhibit 4? \\
MR. MacDONALD: No objection, Your Honor. \\
MR. MALONE: No objection. \\
CHIEF JUDGE SLEDGE: All right. We'll recess \\
just a minute or two. \\
(Whereupon, a short recess was taken.) \\
CHIEF JUDGE SLEDGE: We'll come to order. \\
Mr. Handzo, this is a good example of why \\
it's dangerous for judges to anticipate or expect what \\
parties in a proceeding will do. There's been no \\
objection to section III of the testimony. It would \\
appear from section III that all of it is testimony \\
that would only be appropriate from a legal expert. \\
How is section III appropriate for an expert in \\
industrial economics and communications?
\end{tabular} & \begin{tabular}{l}
MR. HANDZO: I think that his conclusions are \\
the economic analysis, but what he is telling you in this section III is how he understood the regulatory \\
environment and how that factored into his economic analysis. Now, obviously, if the court believes that \\
his legal analysis is wrong, you know, that would \\
impact your consideration of his economic analysis. \\
But I think in order for him to give his \\
economic analysis, he has to tell you what he's basing \\
it on and, in part, he's basing it on his \\
understanding of what the regulatory environment is, which he what he has done in other matters in the communication sphere, for example. \\
CHIEF JUDGE SLEDGE: I think your last \\
comment hit the nail on the head. He's not able -- \\
he's not permitted to give an understanding of what \\
the standard -- legal standards are. The exhibit is \\
admitted, striking section III. \\
(SoundExchange Trial Exhibit Number 4, as \\
amended, was received into evidence.) \\
BY MR. HANDZO: \\
Q Dr. Ford, do you recall when you were
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retained by SoundExchange in the case? \\
A I believe it was in August of '09. \\
Q What were you asked to do? \\
A I was asked to provide an economic analysis \\
of rate setting for the ephemeral right for digital \\
transmissions. \\
Q And did you take steps to familiarize yourself with that market? \\
A I did, indeed. I read the statute, of course, prior decisions, prior testimony that I could find. I read -- I looked through legal research, economic research on these issues and related issues. \\
I was given access to some agreements by counsel related to this issue. I spoke with Dr. Pelcovits who was the SoundExchange expert in this case. \\
Q And based on your research, did you come to any conclusions about whether the section 112 ephemeral rights have value in the hypothetical market that we're setting a rate for here? \\
A Certainly they would. They're an essential component of the service that's being provided. \\
Without the ephemeral -- without the rights of copy,
\end{tabular} & \begin{tabular}{l}
A No. \\
Q Have you seen contracts for other markets, for other kinds of streaming or interactive services, where the 114 and the 112 right are sold together? \\
A Yes. I've seen a number of agreements covering custom radio, on-demand, interactive-type services, webcasting-type services, that had rights being sold together. \\
Q And in any of those agreements, was there an actual allocation of how much went to the ephemeral and how much went to the 114 right? \\
A Yes. In one agreement there was an actual percentage allocation. \\
Q Do you recall what that was? \\
A It was the Sony broadcast properties agreement. \\
Q And do you recall what kinds of services that agreement covered? \\
A It carried -- it covered many services, custom radio up to subscription-based, you know, completely on-demand type services. \\
Q Do you recall what the actual number was, the
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the service couldn't be provided at all. So if the service itself has value, the ephemeral must have value. \\
Q In the what I'm going to call the target marketplace, the hypothetical marketplace that we're setting a rate for here, have you seen any agreements in which the section 112 right and the section 114 right have been sold together as a bundle? \\
A Yes, I have. \\
Q And do you recall what those agreements are? \\
A In the target market, the agreements were \\
with the National Association of Broadcasters, or for \\
the broadcasters' agreement. There was a commercial agreement, which I think was XM/SIRIUS. And then there was an educational webcasting agreement. \\
Q And in those agreements where those rights were sold together was there any allocation of the amounts between the ephemeral and the 114 right? \\
A The specific amount was not specified, no. \\
Q Have you seen any agreements in this market, the market we're setting a rate for, that actually sold those rights separately?
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allocation? \\
A It was 10 percent. \\
Q To the ephemeral right? \\
A Yes. \\
Q Have you seen any agreements, again, in \\
markets -- similar markets outside of this webcasting \\
market where we're trying to set a rate -- where the \\
ephemeral was actually sold separately from the 114 \\
right? \\
A I have seen -- \\
CHIEF JUDGE SLEDGE: I thought you just asked \\
that question. \\
MR. HANDZO: I'm sorry. I intended to ask \\
him whether he's seen agreements where they were sold together. \\
CHIEF JUDGE SLEDGE: Before that I think you \\
asked him if he had seen any agreements where the rights were sold separate. \\
MR. HANDZO: What I intended to ask in the prior question was whether he had seen agreements for this market; that is, within the statutory webcasting market. And now I'm asking him about agreements
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outside of this market. \\
CHIEF JUDGE SLEDGE: I see. \\
THE WITNESS: Repeat the question. \\
BY MR. HANDZO: \\
Q Sure. Sorry. Have you seen any agreements \\
outside of the statutory webcasting market where the \\
ephemeral right has actually been sold separate from \\
the 114 right? \\
A One agreement. \\
Q And do you recall what that was? \\
A The business services agreement, music played \\
in stores and things, where the performance right was not part of the package. \\
Q Now, based on what you've seen from these agreements, Dr. Ford, do you have an opinion as to whether a willing buyer and a willing seller in our market -- that is, statutory webcasting -- would sell the ephemeral rights separately or bundled with the 114 ? \\
A Bundled together. \\
Q Now, you mentioned earlier that you had \\
actually seen one agreement, not in this market, that
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concerned with the total rate that he has to pay. How \\
it gets divided amongst the seller or sellers is not material to his decisions. That leaves the seller as the interested party. \\
The statutory split of the royalty -- \\
JUDGE ROBERTS: Before you go any further, \\
Dr. Ford, do you know why the buyer is not interested? \\
THE WITNESS: The buyer isn't interested \\
because the -- if you set it as a percent of the \\
total, then, if you alter the percent, it doesn't \\
affect the check the buyer has to write. \\
JUDGE ROBERTS: That's if you do it that way. \\
THE WITNESS: Yes. \\
JUDGE ROBERTS: But is the buyer ever \\
interested in the value of the 112 license? \\
THE WITNESS: Yes. If the -- if the right, \\
the ephemeral right or let's just -- if copies occur \\
in variable proportions to performances, then they \\
would care. If it doesn't, then they wouldn't. If we \\
thought that every performance required two ephemeral \\
copies -- you get one for free, so that means you have \\
one that you have to pay for. If you said it was
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actually specified what the allocation was, \\
10 percent. Would you recommend using that number as the allocation here? \\
A No, I would not. \\
Q Why is that? \\
A Because the 10 percent was set in a market environment that was not subject to the same set of constraints that the statute provides for the webcaster agreements. So it's -- they're different transactions. \\
Q And what constraint are you referring to? \\
A The -- in the -- under the statute, the \\
performance royalty is split \(50 / 50\) between the record \\
companies and the artists. That's not -- that split \\
does not exist in market transactions. \\
Q So do you have an opinion about how one would \\
think about figuring out what the appropriate \\
allocation in this market would be? How would you approach that? \\
A Well, the -- as a percentage of the total \\
rate, the buyer in the target or hypothetical market, the webcaster, is unconcerned. The only -- he's only
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10 percent, then -- let's say -- to make the math easy, let's say it's 10 cents a copy, 10 cents a \\
performance. Then that's one penny per ephemeral copy \\
because you get one per performance. If it's \\
variable, then it would begin to matter. \\
But I think that it may be so complicated -- \\
given this is market transactions, it may be so \\
complicated to monitor all that, or the technology may \\
be so close to fixed or may be fixed proportions, that \\
you wouldn't end up contracting for the rate. It \\
wouldn't be worth the effort to do so. \\
JUDGE ROBERTS: Are you aware of how many \\
webcasters actually need the 112 license? \\
THE WITNESS: I suspect almost all do, from \\
what I seen of the technology. \\
JUDGE ROBERTS: Why do you think that? \\
THE WITNESS: Because they're copying the \\
music. If they use multiple servers, they're going to \\
need multiple copies. There's also a debate as to \\
what constitutes an ephemeral copy, and I couldn't \\
find a good solution to that problem. \\
In the process of webcasting, the thing --
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you know, it's broken apart and hits various parts of the network and it, in essence, is being stored electronically to some extent along the way. When it hits the end user's computer, it's stored, it's sorted and then played. Is that an ephemeral copy? \\
So there's a debate, I think, about what constitutes an ephemeral copy, which, if we don't know exactly what it is, then it's very difficult to meter on that. I mean, it's impossible to meter on that. \\
It's somewhat like the SDARS decision where \\
we used -- where you decided to use a percentage of -- \\
of revenues instead of a performance rate, as in this \\
case, was because, well, we can't measure quantity \\
right. And if you can't measure quantity right, then \\
you have to come up with some other means to do so. \\
JUDGE ROBERTS: Well, if we can't determine \\
what it is, then how can we ever attach a value to it? \\
THE WITNESS: Well, I think that was the \\
point of the testimony. If the two occur together -- \\
like four tires on a car. Okay? I mean, if the dealer said 90 percent of your car purchase is the tires, you'd say, I don't care, I'm just going to
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don't want to bother counting them, we don't really mind, so, okay, it's fine. \\
In this case, though, we've got this \\
constraint of the \(50 / 50\) split which creates the motivation for the seller to try to resolve the problem. \\
So while in a market agreement you might not \\
see a percentage, or you might see a percentage, I \\
don't think that -- you know, it's not really saying \\
much about this. I mean, it does say that the thing \\
is occurring in a roughly fixed proportion -- we \\
believe it to be, today, to be roughly fixed \\
proportions, and if that's true, why bother setting a \\
separate rate for it because, in the end, it's just \\
going to be a percentage anyway? \\
So I think that's the difference. But here \\
we've got this \(50 / 50\) problem that has to be resolved \\
because that doesn't exist in the market. \\
JUDGE ROBERTS: You brought up the car \\
industry, and that made me think of an analogy here. \\
When I buy a car in this area, cars don't rust, and if \\
I go to the dealer and I buy a car, and he says, you
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write a check for the car; whatever you want to do is fine with me, then certainly the tire has value in the same sense that the ephemeral right has value. If you can't make a copy, or can't make multiple copies in the webcasting context, you may not be able to provide your service. \\
So it's there. It does have value because \\
it's necessary to provide the service. So it has it. \\
So the question is, how do you deal with assigning a value to something when it is so tightly integrated or occurring alongside the other service that you're providing? \\
In economics, the buyer just wouldn't care. \\
If it comes together like that -- and it's always this number for that number, fixed proportions -- if it comes together, the buyer just really doesn't care. \\
Okay? And it's very difficult to separate out the values for the two. \\
But in this case -- which is why I think in the contracts you don't see them doing a lot of that. \\
He says, okay, you get them both, because it's not worth splitting it up because they come together, you
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know what, I'm going to throw in rust-proofing on this -- and I say, I don't care, because it doesn't do me any good, the car is not going to rust in this area. But he insists, no, you're going to get the rust-proofing. Is there any value to that rust-proofing? I don't want it. I'm not particularly interested in it. But he's throwing it into the deal. \\
THE WITNESS: I think it's relevant in two \\
ways. First, you could drive off without it and the \\
car would work perfectly well, unlike webcasting where \\
that probably is not true. You know, if he says, I'm \\
going to take out the motor, you go, well, wait a \\
minute, you know, that's not -- \\
JUDGE ROBERTS: That would be different. \\
THE WITNESS: That's different because it's \\
required to provide the service. And ephemeral copies \\
are required to provide the service. \\
The second case is that there is -- the \\
seller is offering you something, okay, that is \\
important to him, and you say you don't care. So \\
there are contracts -- and you've probably seen many \\
of them, many more than I have -- where there are
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parts of the contract that one side may care about and the other side doesn't. Okay? In this case, we sort of have that, where the seller does care -- \\
JUDGE ROBERTS: I'm still troubled by the \\
fact that the buyer doesn't care. Because if the \\
buyer can't run a webcasting operation without the 112 \\
license, then you have every reason to care, just as, \\
in the car example, if the dealer is not going to give \\
me the engine, I have every reason to care about \\
getting that engine. But yet, your testimony says, \\
well -- and you recognize that the buyer doesn't care. \\
Why doesn't the buyer care? \\
THE WITNESS: Okay. I understand your \\
question. The buyer doesn't care because of the \\
pricing mechanism. He certainly cares about getting \\
ephemeral copies, because he can't exist without them. \\
But by assigning it as a percentage -- if it's a penny \\
a song -- to keep the math simple, if I say it's a \\
penny a song, 10 percent ephemeral. The guy says, it's a penny a song, that's all I care about, here's a penny. \\
JUDGE ROBERTS: Right.
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case that the two -- that the ephemerals and the \\
performances are consumed in fixed proportions, which, \\
I mean, you know, you get two ephemerals per play or \\
whatever it might be, then there's no reason to \\
separate your prices out. It's just an extra price \\
that has no meaning, has no purpose. \\
JUDGE WISNIEWSKI: There's no reason to have \\
two either, is there? \\
THE WITNESS: Well, the cost of contracting \\
and monitoring and all those sorts of things. You \\
could set an ephemeral rate based on performances. \\
JUDGE WISNIEWSKI: You could have 10 cents a \\
copy for performance, one cent for the ephemeral even \\
if they were in that proportion all the way \\
throughout, couldn't you? \\
THE WITNESS: If you could count ephemerals, \\
if you knew exactly how to do so, you could do that. \\
But it may -- \\
JUDGE WISNIEWSKI: Well, aren't you implying \\
you can count them when you do the allocation? \\
THE WITNESS: No. \\
JUDGE WISNIEWSKI: Well, you obviously must
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THE WITNESS: If I say it's 20 percent, it's \\
a penny a song, here's your penny. \\
JUDGE ROBERTS: Right. \\
THE WITNESS: Because of the pricing scheme \\
is why he doesn't care. It's not that he doesn't care \\
about ephemerals. Of course he cares about \\
ephemerals; they're required to provide the service. \\
It's because of the way we use the percentage which \\
makes it where he doesn't care. So it's a pricing \\
statement more than it is a technical statement, I \\
guess is what I'm trying to say. \\
JUDGE ROBERTS: So this is the -- this \\
problem that we're facing, then, is created by the \\
owners, by the fact that, in the agreements that you \\
looked at, they chose to price it out that way and \\
sell two licenses together -- two rights, I should \\
say -- since the agreements you were looking at were \\
non-statutory. \\
THE WITNESS: Right. The contracts sold -- \\
well, they sold multiple rights together, not just \\
ephemerals and performances. I'm sure there are other \\
rights involved in that as well. The -- if it's the
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be, because you're assuming fixed proportions. If you \\
can't count them, how do you know it's a fixed \\
proportion? \\
THE WITNESS: Well, I know that it can be -- \\
it can be a fixed proportion technology without \\
knowing what the fixed proportion is. Okay? It is -and it's -- \\
CHIEF JUDGE SLEDGE: And those proportions \\
can change depending on the technology, right? \\
THE WITNESS: Well, it may. But my view is \\
when you look at the way it's going, when you look at \\
the contracts and you say this is the way these \\
willing buyers and willing sellers are making this \\
deal in a marketplace exchange without constraint, \\
that they're thinking, for the most part, it's not \\
worth bothering with setting -- with separating these \\
two rights, okay, so we're going to put them together. \\
It eliminates a whole separate price. It eliminates a \\
whole separate monitoring scheme, accounting scheme, \\
for something that, because of the newness of the \\
technologies, we may not even be exactly sure how we would go about doing it.
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But -- so, you know, we think that as this \\
guy scales, he's going to put on servers in roughly a \\
constant rate per play, that sort of thing, so the copies work out that way. \\
If you go in a different route and say, well, \\
we're going to do rate setting, like we do in telecom, you might actually decide, we're going to assume, to simplify the problem, that there are X number of copies per play. And then, even if you used a percentage allocation, you could compute from that what the actual copy rate was. Okay? If we can't measure the copy rate very well, or we could if we knew exactly how to define it, which would require, I guess, a proceeding and lots of testimony, the \\
alternative would be to say, okay, it's, you know, 1 cents per play, and meter it on play rather than meter it on copy. That would be another pricing scheme that you might observe -- and we observe all kinds of weird pricing schemes in market outcomes. It depends on what the buyers and sellers are interested in and how they can get to a deal that's most efficient. \\
22 It doesn't always look like we think it would
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evidence -- to proceed is to assign the two rights \\
together and allocate some percentage to that rate because, you know -- I mean, the register's decision said, hey, I want a rate, I mean, so we want a rate. \\
We go to people who care -- under the percentage pricing scheme, okay, we go to the people who care what that percentage is, because the buyer doesn't care what the percentage is -- he cares about ephemerals, but doesn't care what the percentage is. \\
And you say, okay, seller, what would -- what \\
offer would you make -- under the constraints of the \\
statute, what offer would you make? And then that \\
becomes the market rate because the buyer is happy, \\
the seller is happy and the components of the seller \\
are happy under this artificial constraint that's been \\
levied by the statute. So everybody is happy. When everybody is happy, that's the market exchange. \\
JUDGE ROBERTS: Let me ask you a question. A \\
record company that negotiates an agreement with a \\
large webcaster -- the number one webcaster right now being Pandora, apparently. Pandora is going to make a \\
lot of performances. Presumably, there's going to be
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look like. I got a \(\$ 500\) cell phone for free. That's pretty weird. A lot of people go, ooh, that's not a market outcome. Well, sure it's a market outcome. I promised to send them a hundred dollar check every month for two years. It's a market outcome. It just doesn't look exactly like the textbook might say it would look, but that's the way markets work. You almost always get an answer that looks peculiar. \\
JUDGE WISNIEWSKI: As an economist, you know \\
you didn't get that phone for free. \\
THE WITNESS: Well, exactly, but I didn't -- \\
CHIEF JUDGE SLEDGE: I'm not an economist and I know that. \\
THE WITNESS: Nothing is free. There's no free lunch. \\
CHIEF JUDGE SLEDGE: Something you just \\
mentioned. We have had that proceeding, and the technology people can't agree on how to define it. \\
They all have a different opinion. \\
THE WITNESS: And if that's the case, I think \\
the -- the cleanest way, and certainly within a zone \\
of reasonableness -- and this matches up with market
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a lot of ephemeral copies made because of the volume of customers that Pandora serves. Yet, in the agreement, the record company makes no distinction between the fact that Pandora is making lots and lots and lots of ephemeral copies, and yet, the agreement that they negotiate with the startup webcaster, who is making far less, it's -- they treat it as the same. Aren't they just leaving money on the table? \\
THE WITNESS: Well, if they do, they're doing \\
it voluntarily, which is -- you know, we always -- as \\
I was always taught, always leave some money on the \\
table so everybody is happy when you leave. But I \\
think it's probably -- you could make an efficiency \\
argument that, in the end, it's whatever we might \\
could get -- the nickel we could get from it is not \\
worth the effort of trying to negotiate that specific \\
term, whatever it may be. \\
But I think the real issue is, as you scale \\
it, sure you're making more copies, but you're making more copies because you're making more performances, and so that the ratio of copies to performances, it may vary a little, but it doesn't vary enough to
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bother with in a market transaction. \\
CHIEF JUDGE SLEDGE: Well, that answer in \\
your earlier statement that everybody is happy, \\
doesn't that assume that the distributions of the two \\
rights is equal? As long as the distributions of 112 \\
is different than the distributions of 114 , how can it \\
be that it doesn't matter, because one side is getting slighted, how you make that allocation? \\
THE WITNESS: Are you talking about the \\
between the musicians' and the record companies' \\
distribution? \\
CHIEF JUDGE SLEDGE: Yes. \\
THE WITNESS: In the market, that doesn't \\
occur. There is no -- the contract -- the 112 -- an \\
ephemeral rate and a performance royalty is not split \\
any differently in the market. So there is no issue \\
about how to allocate one to the other. It doesn't \\
matter. All the money comes in and goes out, however \\
the contract has been written. \\
CHIEF JUDGE SLEDGE: Isn't that because the \\
musicians aren't at the table? \\
THE WITNESS: No. It's because the musicians
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different, then you can't just port it, no better than you could port the number from this case over to the market, because the constraint was different and the distribution of the royalties was different. \\
So the only people that are concerned about that distribution are the musicians and the record companies, as long as we're in this percentage world, okay. So they're the only ones that care. \\
So if we're going to ask ourselves what a \\
willing seller is going to offer, then we go ask the \\
seller, what's your offer? And the buyer is going to say, okay, whatever, you know, I don't care, \\
willing -- I'm willing. It doesn't matter to me. I \\
just want to pay you a penny a song and be done with it. \\
BY MR. HANDZO: \\
Q Dr. Ford, the court has actually conducted most of my examination for me, albeit they led you a lot more than I could. So let me sort of cut to the chase here. Do you have an opinion about what the ephemeral rate should be in this case? \\
A Well, given the explanation I've provided, my
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have already signed a deal. This is just some piece of their business. They've already signed some agreement. The guy says, I'll give you a million dollars to make a record, and then I'm going to keep the first ten that comes in the door and then I'll start paying you 10 percent of every record sale after that, or whatever it might be, but I might not give you anything. Or maybe -- you know, if it's Sting or somebody like that, I'll give you \(\$ 20\) million for a record, and then I'll pay you 10 percent of every record that gets sold. \\
So it -- all these agreements are going to be different in the market, but there is no statutory \\
obligation to split the money in any particular way. \\
We come over to the statutory world and, bam, we slap this obligation -- this doesn't exist over here in the market. \\
So it makes it -- I know that the goal here \\
is to look to the market, grab something and put it \\
over here. I mean, that's the plan, and that's a good \\
plan. But if the transaction here is not the \\
transaction here, or has some constraint on it that's
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recommendation would be to ask the people that care, the musicians and the record companies, what they would recommend the ephemeral rate to be. They have done that. They have negotiated and made a proposal of 5 percent. \\
Q When you say they've negotiated and made a proposal, how do we know that? \\
A They did that -- I was advised by counsel \\
that agreement through the SoundExchange, which has a \\
board that is equal part musician, equal part record \\
company, they had a meeting, they discussed the issue, they voted and unanimously approved the 5 percent recommendation. \\
Q And have you actually seen the board minutes for that? \\
A I've seen the board minutes, yes. \\
MR. HANDZO: That's all I have for this witness, Your Honor. Thank you. \\
CHIEF JUDGE SLEDGE: Any further \\
cross-examination? \\
MR. MacDONALD: Yes, Your Honor, I have \\
several questions.
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CHIEF JUDGE SLEDGE: All right. Once again, \\
you surprise me by asking questions. \\
MR. MacDONALD: Well, we'll see how good \\
these questions are, though. I want to keep your \\
expectations up. \\
CROSS-EXAMINATION \\
BY MR. MacDONALD: \\
Q Good afternoon Dr. Ford. \\
A Good afternoon. \\
Q My name is Angus MacDonald. I represent \\
Live365. Dr. Ford, your opinion is that a 5 percent \\
rate for the ephemeral license is an appropriate one \\
for this proceeding; is that correct? \\
A Yes. \\
Q And that 5 percent rate recommendation is based on your understanding that the recording artists and record companies had already reached an agreement for a 5 percent allocation for the ephemeral license; is that correct? \\
A Yes. \\
Q Now, what's the basis for that understanding? \\
A I was advised by counsel, and I have seen
\end{tabular} & \begin{tabular}{l}
A This looks like what I have seen, yes. \\
Q Just for the record, this is Bates numbered \\
SXW3_00008266 to 8268. \\
A Yes. \\
Q Who gave you these board of director meeting minutes? \\
A Counsel. \\
Q Were you -- you were essentially informed \\
about the board's decision -- let me withdraw that question. \\
Were you informed about the board's decision \\
on the ephemeral rate before proposing your 5 percent \\
recommendation? \\
A Would you repeat that question? \\
Q Did you already have the 5 percent \\
recommendation in mind for the ephemeral license \\
before you reviewed the board meeting minutes? \\
A I had no number until I was told the product of this meeting. \\
MR. MacDONALD: Your Honor, I move for admission of Live365 Exhibit 19 into evidence. \\
CHIEF JUDGE SLEDGE: Any objection to the
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subsequent to that, the minutes from the meeting. \\
Q And essentially there is an agreement within \\
SoundExchange by SoundExchange representatives of the \\
record labels on one hand and SoundExchange \\
representatives of the recording artists on the other \\
hand for this 5 percent, correct? \\
A Uh-huh. \\
CHIEF JUDGE SLEDGE: Please answer out loud. \\
THE WITNESS: Yes. \\
MR. MacDONALD: I'd like to actually mark the \\
board meeting minutes for the time being as Live365 \\
Exhibit 19. And I'd ask that Mr. Yacobian please pass \\
them out. \\
CHIEF JUDGE SLEDGE: Mr. MacDonald, does \\
Live365 have a dispute with that proposal of \\
SoundExchange? \\
MR. MacDONALD: Live365's rate proposal for \\
the ephemeral rate is a little different than the \\
proposal set forth by SoundExchange. \\
BY MR. MacDONALD: \\
Q Dr. Ford, are these the board of director \\
meeting minutes that you were referring to earlier?
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offer?
    MR. HANDZO: No, Your Honor.
    CHIEF JUDGE SLEDGE: Without objection, it's
admitted.
    (Live365 Trial Exhibit Number 19 was received
into evidence.)
    MR. MacDONALD: I have no further questions.
    JUDGE ROBERTS: Before you step down,
Counsel, I'm looking at your proposal for ephemeral
copies, and it seems to be the same one that was put
forward last time, 8.8 percent. Are you willing to
stipulate with counsel for the other side that
5 percent would be the rate?
    MR. MacDONALD: Your Honor, we have -- we are
considering that, that stipulation, and I would
suggest that, before the end of this hearing, the
direct hearing, that if we were to stipulate, we would
do so by then.
    JUDGE ROBERTS: Thank you.
    CHIEF JUDGE SLEDGE:Well, it's obvious
you're causing curiosity on the bench by
cross-examining this witness.
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CERTIFICATE OF COURT REPORTER \\
I, Denise M. Brunet, the court reporter \\
before whom the foregoing proceedings were taken, do hereby certify that the proceedings were taken by me stenographically and thereafter reduced to print by means of computer-assisted transcription by me; that said proceedings are a true record; that I am neither counsel for, related to, nor employed by any of the parties to this litigation and have no interest, financial or otherwise, in the outcome of this matter.
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[^0]:    ${ }^{1}$ All of these findings are substantially the same when broken down for current and considering subscribers, as well as for XM and Sirius subscribers. See Appendices J and K.

[^1]:    ${ }^{2}$ Note, in most of the figures reporting the results of the study we identify a number of measures for each of the metrics. For example, in figures $9,11,12,14$, and 16 , we report on three measures - "top mention" percent, "top 3" mention percent, and "any mention" percent.

[^2]:    ${ }^{4}$ The sound recordings subject to the compulsory license and played on music, kids and comedy channels will be collectively referred to as "Recorded Content."

[^3]:    ${ }^{5}$ The subscription must have been a paid or trial subscription obtained directly from XM or Sirius for the respondent to be eligible for the survey.

[^4]:    ${ }^{6}$ Appendix B presents the screening results, i.e., the reason that most of the contacted individuals did not qualify for inclusion in the study.

[^5]:    ${ }^{7}$ A seven-factor conjoint analysis is comfortably manageable for respondents, and is typical of commercial conjoint applications.
    ${ }^{8}$ The four programming types included (music, news, sports and talk \& entertainment) in the conjoint cards were chosen because they are the programming types that are specifically and heavily promoted by XM and Sirius. To the extent that two of the three categories omitted comedy and kids programming - contained recorded programming subject to the statutory license at issue here, this leads to a conservative estimate of music's value. See infra.

[^6]:    ${ }^{9}$ DDW is one of the country's largest marketing research companies devoted exclusively to custom quantitative research. DDW has carried out more than 20,000 surveys since 1960 on behalf of hundreds of major companies and institutions. DDW was a co-founder of the Council of American Survey Research Organizations (CASRO) and fully subscribes to the standards outlined in its code. Under my supervision, DDW was responsible for all aspects of the administration of this project, including sample selection, the preparation of field materials, data collection, coding and typing of the verbatim responses, and tabulation of the responses.

[^7]:    ${ }^{10}$ The malls selected for the pretest are located in Springfield, MA, White Plains, NY, Eau Claire, WI, Indianapolis, IN, Houston, TX, Raleigh, NC, Seattle, WA, and Los Angeles, CA.

[^8]:    *See Appendix C for the text of this question.
    ${ }^{11}$ A few respondents indicated a willingness to pay a higher price than $\$ 12.95$. These included $2 \%$ for music, $4 \%$ for news, $3 \%$ for sports, $3 \%$ for talk and entertainment. Adding these respondents to the "would cancel" and "would reduce price," would result in the number of respondents in "would change amount willing to pay." The complete distribution of respondents' answers is included in Appendix L.
    ${ }^{12}$ These figures represent the $95 \%$ confidence interval.

[^9]:    ${ }^{*}$ See Appendix C for the text of this question.
    ${ }^{13}$ This category does not include individuals who said "don't know" in response to this question, but does include the few individuals who said they would pay more than $\$ 12.95$ a month in the absence of the programming category. See supra n. 11
    ${ }^{14}$ These figures represent the $95 \%$ confidence intervals.

[^10]:    * Q1(a): Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe?/Why are you considering subscribing to satellite radio?
    Q1(b): Any other reason?
    ${ }^{18}$ Based on 428 individuals, the 95 percent confidence interval is no bigger than $\pm .047$ [1.96 x $.5 /$ square root of n$]$.
    ${ }^{19}$ See supra note 17 for information about the categories included in this figure.

[^11]:    * Q2(a): What types of satellite radio programming were most critical to your decision to subscribe to satellite radio?/What types of satellite radio programming are most critical to your decision whether to subscribe?
    Q2(b): Any other reason?
    ${ }^{20}$ Based on 428 individuals, the 95 percent confidence interval is no bigger than $\pm .047$ [1.96 x $.5 /$ square root of n$]$.
    ${ }^{21}$ See supra note 17 for information about what categories are included on this table.

[^12]:    * Q3(a): And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe?
    Q3(b): Any other reason?
    ${ }^{22}$ Based on 307 individuals, the 95 percent confidence interval is no bigger than $\pm .056[1.96 \mathrm{x}$ .5/square root of n$]$.
    ${ }^{23}$ See supra note 17 for information about what categories are included on this table.

[^13]:    * Q11a: And finally, reflecting on your experience with satellite radio, if satellite radio was not available what, if anything, would you miss most about it?
    Q11b: Anything else?
    ${ }^{24}$ Based on 307 individuals, the 95 percent confidence interval is no bigger than $\pm .056[1.96 \mathrm{x}$ .5/square root of n$]$.
    ${ }^{25}$ See supra note 17 for information about what categories are included on this table.

[^14]:    ${ }^{26}$ In asking the constant sum question in the context of "subscribing" or "retaining their subscription," this particular constant sum question closely follows the phrasing of the constant sum question employed in the cable royalty distribution proceedings. See Report of Copyright Arbitration Royalty Panel in Docket No. 2001-8 CARP CD 98-99, at 19.

[^15]:    * Q8: Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types.
    ${ }^{29}$ Total sums to more than 100 because some respondents had two or more programming types tied for their highest ranking.
    ${ }^{30}$ These numbers represent the $95 \%$ confidence interval.

[^16]:    *See Appendix C for the text of these questions.
    ${ }^{31}$ Total does not sum to 100 because of rounding.
    ${ }^{32}$ Total sums to more than 100 because some respondents had two or more content types tied for their highest ranking.
    ${ }^{33}$ These numbers represent the $95 \%$ confidence interval.

[^17]:    ${ }^{34}$ To the extent that the comedy and kids channels contain live programming, or other nonrecorded content, these figures would represent an upper bound on the value placed on content subject to this proceeding.

[^18]:    ${ }^{35}$ In this measure, a lower price indicates a higher importance (i.e., it shows that a respondent would be wiling to pay less if a particular programming type were absent.). The multiple here therefore represents the degree to which the next lowest priced programming type exceeded the price respondents were willing to pay for the service without music
    ${ }^{36}$ The choice measure (Figure 27) is not included on this chart because it did not measure music's value versus that of talk and entertainment in isolation.

[^19]:    ${ }^{37}$ Namely: Cancellation (Figure 7), Willingness to Pay (Figure 8), Open-Ended Net (Figure 10), Draw (Aspect) (Figure 11), Draw (Programming Type) (Figure 13), Retention (Figure 15), Most Missed Aspect (Figure 17), Average Importance (Figure 19), Greatest Importance (Figure 20), Average Usage (Figure 22), Greatest Usage (Figure 23), Value (Figure 25), Highest Value (26) and Choice (Figure 27).

[^20]:    ${ }^{1}$ Note: One could have used the $t$-distribution instead of the normal distribution, but since n is sufficiently large in all cases this is not substantively different.

[^21]:    ${ }^{3}$ Note: We needed to use this approach to obtain the self-explicated weights. It was desirable to collect relative weights for the first four attributes and relative weights for the last three attributes. Instead of measuring explicitly the relative importances of the first four attributes to the last three attributes, we used the sum of the maximum differences of partworths as a way to combine these two subsets of attributes.

[^22]:    ${ }^{4}$ Given the thousands of articles on conjoint analysis this is a short illustrative list. A Google search for conjoint analysis studies identified over 500,000 entries.

[^23]:    * See Appendix C for the text of this question.
    ${ }^{1}$ A few respondents indicated a willingness to pay a higher price than $\$ 12.95$. These included for current subscribers $1 \%$ for music, $4 \%$ for news, $\underline{3 \%}$ for sports, $\underline{2 \%}$ for talk and entertainment. For considerers, $\underline{2 \%}$ for music, $\underline{3 \%}$ for news, $\underline{3 \%}$ for sports and $4 \%$ for talk and entertainment.

[^24]:    * See Appendix C for the text of this question.
    ${ }^{2}$ Respondents who replied "did not know" are not included here.

[^25]:    ${ }^{3}$ Net results are presented to avoid double-counting, i.e., a respondent who mentioned music as his top response to all four questions is counted only once. Because the figure shows cumulative results from multiple questions, columns may sum to more than $100 \%$.

    * See Appendix C for the text of these questions.

[^26]:    * Q1(a): Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe?/Why are you considering subscribing to satellite radio?
    Q1(b): Any other reason?

[^27]:    * Q2(a): What types of satellite radio programming were most critical to your decision to subscribe to satellite radio?/What types of satellite radio programming are most critical to your decision whether to subscribe?
    Q2(b): Any other reason?

[^28]:    * Q4: Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100 ) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio

[^29]:    * See Appendix C for the text of these questions.

[^30]:    See Appendix C for the text of this question.
    ${ }^{1}$ A few respondents indicated a willingness to pay a higher price than $\$ 12.95$. These included for Sirius $2 \%$ for music, $4 \%$ for news, $3 \%$ for sports, 3\% for talk and entertainment. For XM, $1 \%$ for music, $\mathbf{3 \%}$ for news, $3 \%$ for sports and $3 \%$ for talk and entertainment.

[^31]:    *See Appendix C for the text of this question.
    ${ }^{2}$ Respondents who replied "did not know" are not included here.

[^32]:    ${ }^{3}$ Net results are presented to avoid double-counting, i.e., a respondent who mentioned music as his top response to two questions is counted only once. Because the figure shows the cumulative results from multiple questions, columns may sum to more than $100 \%$.
    *See Appendix C for the text of these questions.

[^33]:    * Q1(a): Thinking back to the time you first subscribed to satellite radio, why did you decide to subscribe?/Why are you considering subscribing to satellite radio?
    Q1(b): Any other reason?

[^34]:    * Q2(a): What types of satellite radio programming were most critical to your decision to subscribe to satellite radio?/What types of satellite radio programming are most critical to your decision whether to subscribe?
    Q2(b): Any other reason?

[^35]:    * Q3(a): And now, reflecting on your experience with satellite radio, what types of satellite radio programming are most critical to your decision to continue to subscribe?
    Q3(b): Any other reason?

[^36]:    * Q4: Please review the list and allocate 100 points among the seven types of programming in such a way that the number of points ( 0 to 100 ) you give each type of programming best reflects the relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio

[^37]:    * Q8: Reflecting on your and your family's usage of satellite radio in a typical week how would you estimate the amount of time spent on each of the following program types.

[^38]:    * See Appendix C for the text of these questions.

[^39]:    $02-629$ TOTAL verbatims subscribers

