Arbitron/ Edison Media Research Internet Study III

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Internet III: Webcasters vs. Broadcasters – Which Business Model Will Win?

Overview

This study represents the third collaboration between Arbitron New Media and Edison Media Research to seek out the very latest on the state of the Internet Webcast usage behavior and consumer interest in various Webcast business models. In our continuing efforts to measure the fast moving nature of the Internet, Arbitron and Edison now debut *"Internet Study III – Broadcasters vs. Webcasters: Which Business Model Will Win?"*

This document and the research findings from our two previous studies can be found at:
http://internet.arbitron.com and http://www.edisonresearch.com.

We will begin with a summary of the highlights of the study. Then 27 key findings of the study will be reviewed followed by seven conclusions and recommendations.

Highlights

- Internet listening is growing but is not yet habitual. In one year, the portion of those online that have listened to radio stations over the Internet has soared from 18% to 30%.

- Online radio listeners are far more interactive than non-listeners. Within the universe of Web users, there is a significant difference in behavior between those that have listened to audio online and those that have not. Consider:

  – Online radio listeners are far more likely to have made a purchase from an Internet Web site (43%) than compared to those that have not listened online (30%).

  – Online radio listeners are far more likely to have bookmarked a Web site (70%) than non-listeners (46%).

  – Online radio listeners (44%) are three times as likely to have bookmarked a *radio station* Web site compared to non-listeners (14%).

  – Online radio listeners are three times as likely to have actually visited a radio station Web site (63%) compared to non-listeners.

  – These so-called "streamies," (consumers of audio and video Web casts), are a tremendously attractive advertiser target. They respond to marketing messages. Forty-one percent of online radio listeners have visited a Web site because of a radio ad compared to 24% of Web users that haven't listened to radio online.

- We tested numerous streaming models with consumers, and the most popular of them all is an icon on a PC that allows people to click and immediately hear the programming of favorite stations. Also highly popular among consumers were Web sites that allow the creation of customized radio stations as well as a Web site with links to hundreds of radio stations from around the world. Many also say they are interested in visiting the Web site of a local radio station that has information about events and news from the local community.

- Nearly 3 out of 10 of Web users (29%) say they have visited a Web site as a direct result of hearing a radio commercial. If this percentage of Arbitron diarykeepers were translated to the U.S. population 12+, the number having visited a Web site after hearing a radio spot would be estimated at approximately 31 million. Also among online adults 25-44, 36% have visited a Web site after hearing a radio ad. This is strong validation as to why radio is a significant medium for Internet brand creation and for driving Web site traffic today.

How the Survey was Conducted

A total of 3,032 interviews were conducted to probe Americans' Internet usage, Internet Webcast tuning activity, and their interest in a variety of Webcasting business models. The study was conducted in two parts.

In June of 1999, 1,527 respondents that were known users of *streaming media* (audio and video Webcasts) were researched through the Internet. The Arbitron NewMedia survey of streaming media users was implemented using a random online intercept of users of broadcast.com and vTuner.com using proprietary software and research methodologies.

Upon choosing to visit either of these Web sites, randomly selected users saw a special "pop up" window that invited them to participate in the survey. If the respondent agreed to participate, he or she was directed into a secure online survey environment, presented with a series of questions about their Webcast usage behavior, and returned to the originating site upon completion of the survey. When we examine the interests and perceptions on those who consume streamed media, we have a robust sample size of 1,527 people.

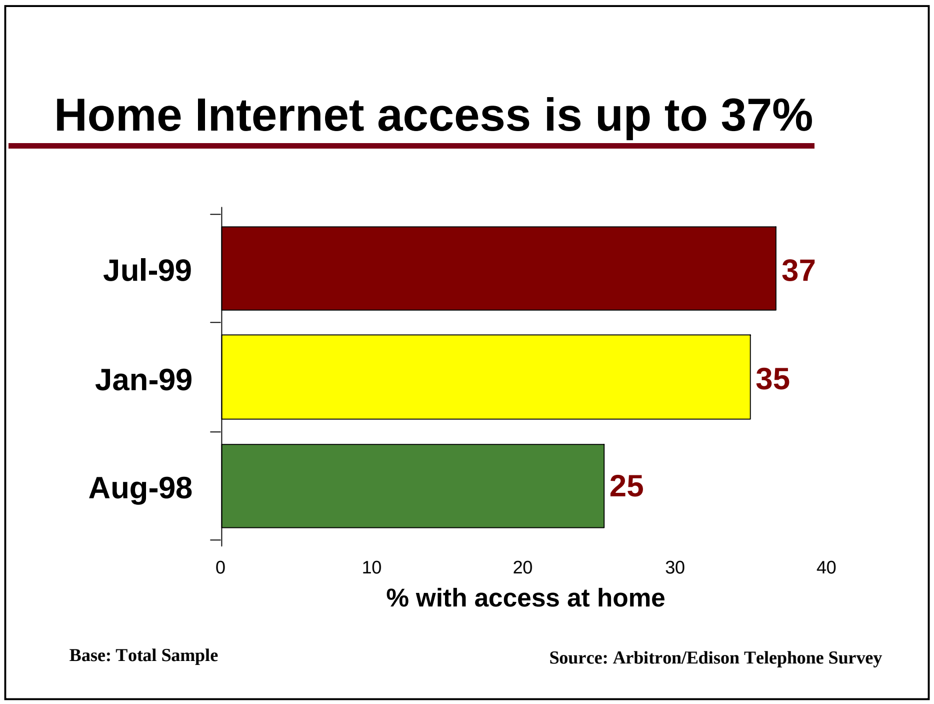
The second aspect of the study, conducted in July of 1999, consists of 1,505 telephone interviews of Arbitron's Spring 1999 radio diarykeepers. The sample was drawn as a national random sample of diarykeepers over the age of 12. Traditional "over-the-air" radio listenership was analyzed from the Arbitron diaries returned by these 1,505 respondents.

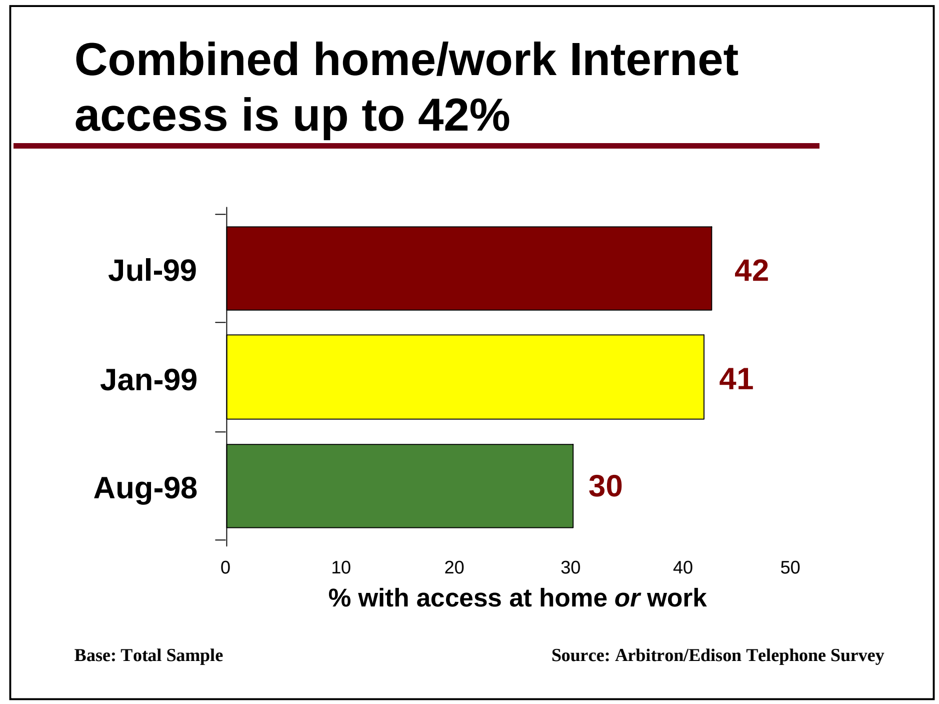
Throughout this research, we will compare these findings with our two prior Internet studies conducted in August of 1998 and January of 1999. Where appropriate, we have also incorporated local market qualitative data from Scarborough Research.

Twenty Seven Key Findings

1. **Internet access growth continues and time spent online is up.** The portion of those accessing the Internet at home is up slightly since the beginning of the year (35% to 37%). The large jump in Internet home access occurred between August 1998 (25%) and this past January (35%). This suggests that the traditional 4th quarter PC purchasing boom resulted in a lot of Americans getting online in 4th quarter 1998. A similar jump in PC purchasing and Web access may be expected in 4th quarter 1999.

   Those accessing the Internet at work is holding steady at 17% (August '98 – 12%; January '99 – 17%; July '99 – 17%). Currently, 42% of all Americans access the Internet either at home or at work. Larger markets see somewhat higher Web usage. In the 64 largest U.S. markets measured by Scarborough Research, home/work Internet access is 46%, compared to 42% home/work Internet access from the National Arbitron sample.



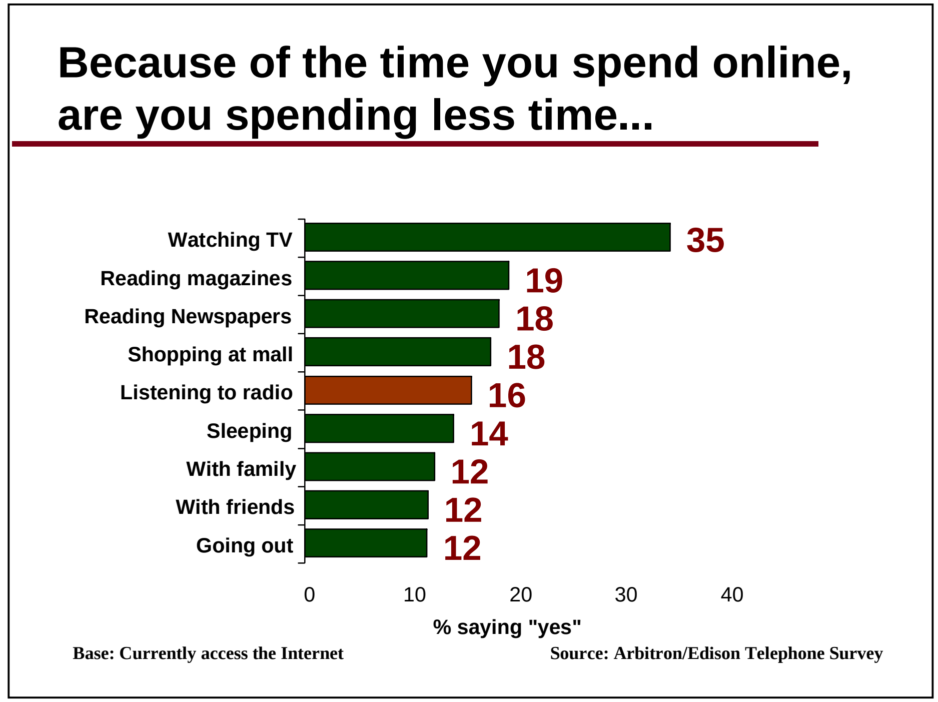


2. **Time spent online is up during the day.** We asked those who are online, how often they use the Internet during each daypart. Compared to a year ago, the percentage of those using the Internet frequently (*at least* several times per week) during each daypart is up in the morning (16% to 22%), in mid-day (17% to 26%) and in the afternoon (22% to 30%). When online users are asked to indicate which time period they use the Internet the most, nights (30%) still edge out afternoons 3PM to 7PM (27%), followed by mid-days (20%) and mornings (17%). Compared to a year ago, more say they use the Internet most in the morning (13% to 17%) and the afternoon (20% to 27%). Those saying they used the Internet the most during mid-day (10AM to 3PM) is stable (20% to 21%), while those using the Internet most at night is down (37% to 30%).

3. **In our survey, Internet usage at home or at work is highest in the West (50%). This is matched by recent Scarborough Research showing six of the ten cities with the highest Internet usage are in the Western U.S.** The data below from Scarborough Research, indicates the top 20 markets with the highest Internet home/work access:

Rank	City	% On Line Home/work Web users	Index
1	Washington DC	63%	136
2	**San Francisco**	**58%**	**127**
3	Austin	58%	125
4	**Seattle**	**58%**	**125**
5	**Denver**	**56%**	**121**
6	**Salt Lake City**	**56%**	**121**
7	Norfolk	52%	114
8	**Portland, OR**	**52%**	**112**
9	Raleigh-Durham	51%	111
10	**Los Angeles**	**51%**	**111**
11	Kansas City	50%	109
12	Houston	50%	108
13	Boston	49%	107
14	Dallas	49%	106
15	Minneapolis	47%	102
16	Jacksonville	47%	102
17	New York	47%	102
18	Chicago	47%	102
19	San Diego	47%	102
20	Baltimore	46%	100

4. **Thirty five percent of online users say they are watching less TV due to their Internet usage.** We asked whether or not those online were doing *less* of variety of activities due to the time they spend online. The other activities that Americans say they are spending less time with due to Internet usage are reading magazines (19%), reading newspapers (18%) and shopping at the mall (18%). *Sixteen percent of Americans say they are listening to less radio* (which is consistent with our previous Internet studies) followed by sleeping (14%), spending time with family (12%), friends (12%) and going out (12%).

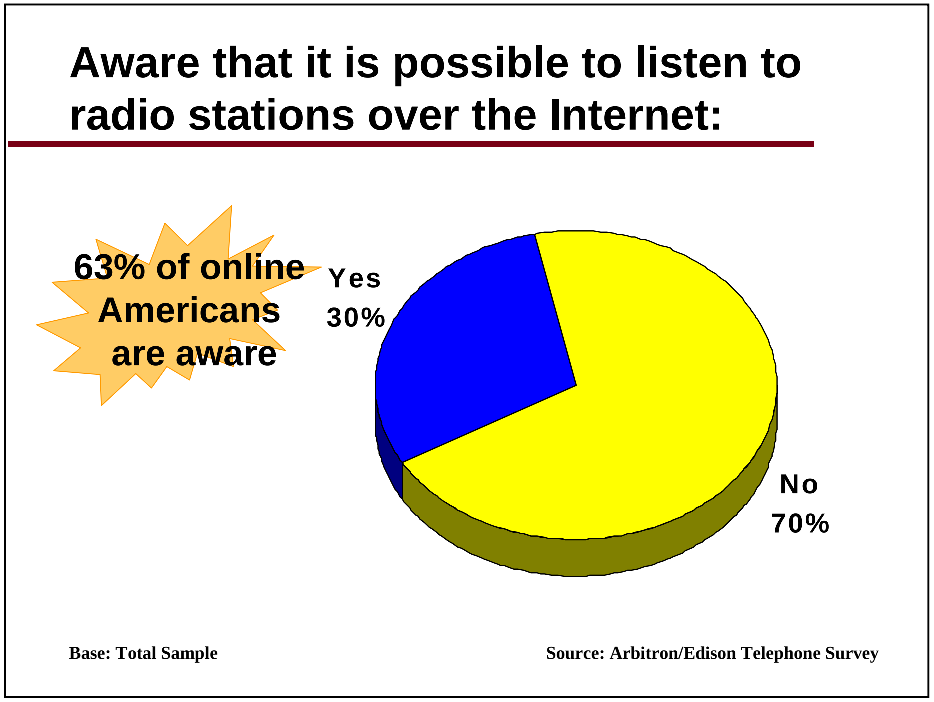


5. **Twenty nine percent of online Americans have visited a Web site that they heard advertised on the radio.** *Again, if we extrapolate this percentage of Arbitron diarykeepers to the 12+ American population, we would have an estimated 31 million people that have visited a Web site as a direct result of a radio ad!* The ability of radio advertising to motivate online users to visit Web sites is consistent among men and women. The portion of those who have visited a Web site based on a radio ad is highest among online Persons 25-44 (36%), followed by 12-24 year olds (27%) and those over the age of 45 (23%). Over the last year, radio has proved itself to be one of the dominant ad media for Web site advertisers desiring to increase awareness and Web site visitation. Radio advertising's ability to drive Web site traffic is somewhat higher among those that access the Internet at work (38%) compared to those that access the Internet at home (31%).

6. **Forty one percent of *online radio listeners* have visited a Web site because of a radio ad compared to 24% of Web users that haven't listened to radio online.** Online radio listeners are far more active consumers of the Internet and are far more likely to be interested in Web sites, the Web experience and making purchases. In fact, they may have heard the ad while listening to the station's online stream, when the barrier to Web site "click-through" is significantly lower than with off-line radio.

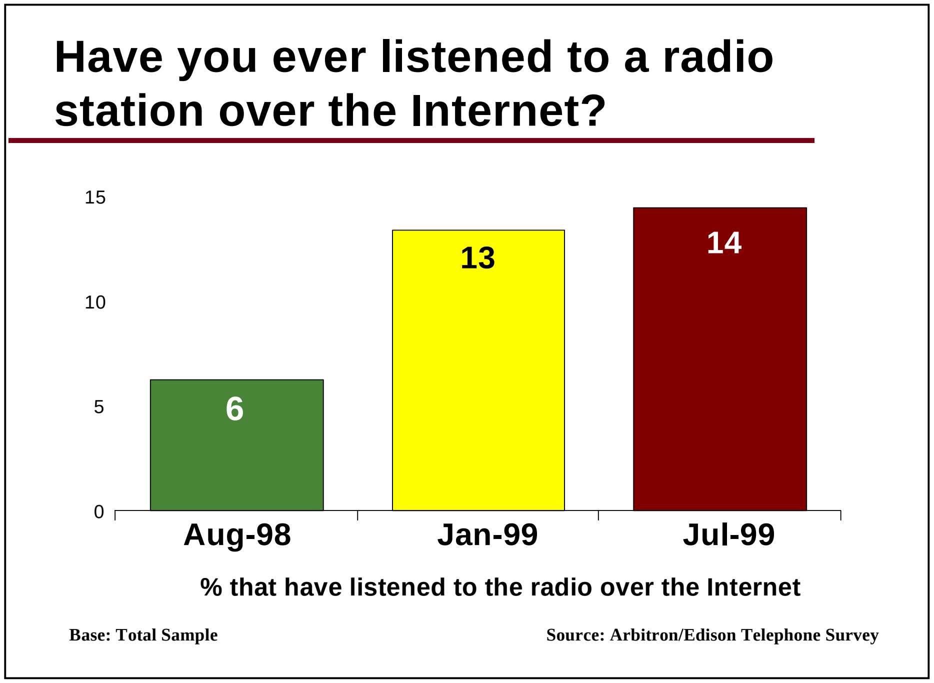
7. **Thirty four percent of online Americans have made a purchase on the Internet.** Among those that have made online purchases, 56% have purchased from one or two sites, 26% have used 3 to 5 sites and 18% have used 6 or more shopping sites. Clearly, online shoppers are developing early brand loyalties to the e-stores that provide the greatest satisfaction for them. Last January, satisfaction with the online shopping experience compared to shopping at a traditional store was polarized with 39% saying they were more satisfied with Internet shopping but almost a third (32%) saying they were less satisfied. Now, those less satisfied with online shopping has dropped from 32% to 22%, and those saying they are equally or more satisfied with the Internet shopping experience is 61%.

8. **Among those online, 63% are aware that one can listen to radio over the Internet.** As a proportion of all Americans, 30% are aware that it is possible to listen to radio stations over the Internet. Just about half of those that are aware of online radio station listenership have actually ever listened. Of all Americans, a greater portion of men are aware that one can listen to radio online (36%) than women (25%). Younger listeners are more aware of online radio. Nearly half of teens are aware one can listen to radio over the Internet (47%), followed by Persons 18-24 (42%). Among Adults 25-54, 35% are aware that one can listen online. Awareness of online radio drops sharply over the age of 55.



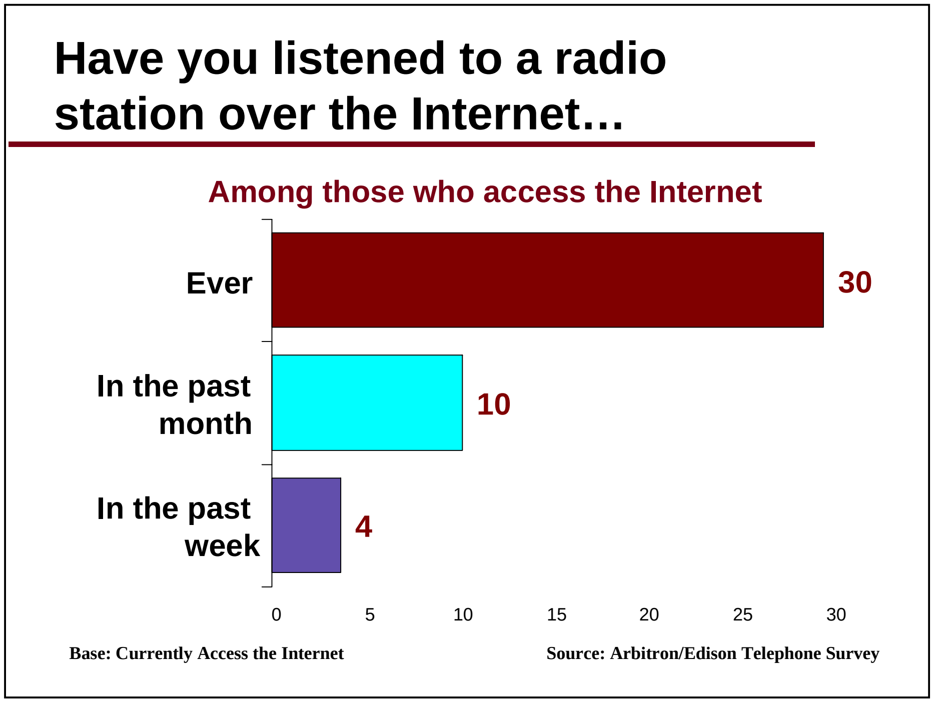
9. **Online radio listenership among Web users has grown from 18% to 30% in one year.** Over the last year, three separate re-interviews of Arbitron radio diarykeepers has provided an excellent trend on how many have tried to listen to radio on the Web. In August of 1998, 18% of those online had said they listened to radio station through the Web. That figure surged to 27% this past January and has grown to 30% today. The large jump between August of 1998 and January of 1999 is probably due to the huge growth in those first going online that occurred in 4th quarter 1998.

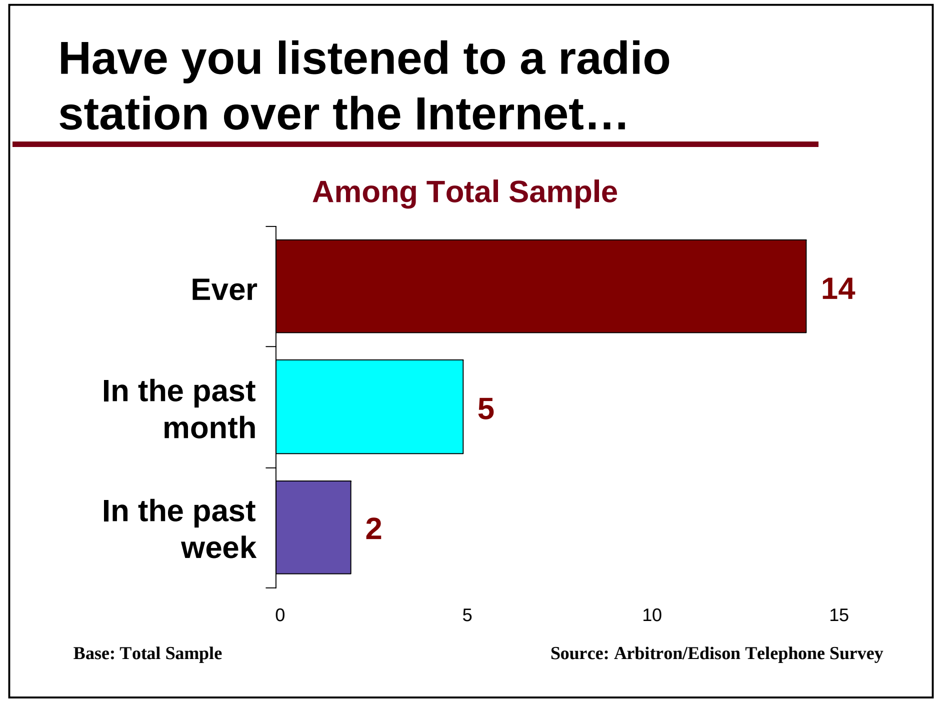
   As a proportion of all Americans, online radio listenership has gone from 6% in August of 1998 to 13% last January to 14% currently. A greater number of men (18%) have listened online compared to women (11%). Most Internet tuning occurs at home. Sixty-three percent of Webcast consumers have listened at home, followed by work (47%) and distantly school/library (6%).



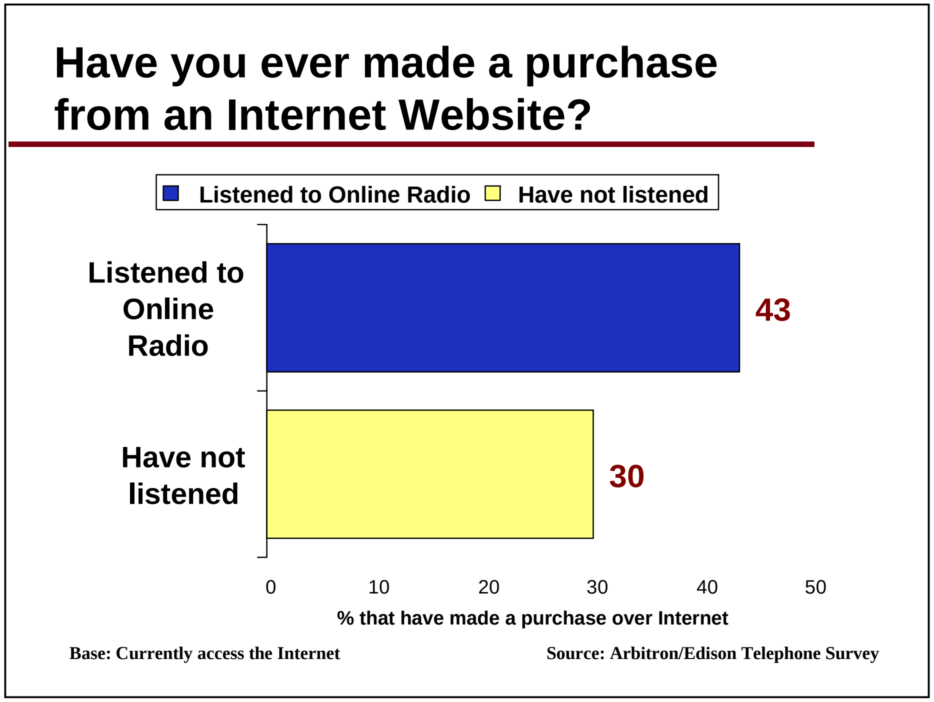
10. **Online radio listeners skew towards men and persons 25-44.** Fifty-eight percent of those that have ever listened to radio through the Internet are men, compared to women (42%). Online radio listeners are not just young people. The age profile of online radio listeners is 25-44 (41%), followed by 55+ (31%) and 12-24 (29%).

11. **At this stage, online radio listenership is not habitual. Whereas 30% of Web users have *ever* listened to radio online, 10% have listened in the past month and only 4% have listened in the past week.** Expressed as a percentage of all Americans, 14% have ever listened to radio online, 5% of all Americans have listened to radio online in the past month and 2% in the past week. Those that have listened to radio online in the past month are 64% male and skewed decidedly towards adults 25-44 (38%), and 55+ (37%) followed by 12-24 year olds (25%).





Extrapolating these percentages among Arbitron diarykeepers to the 12+ population, an estimated 32 million Americans have "ever" listened to radio online, 11 million Americans in the last month, and four million people have listened online in the past week. As a comparison, the estimated 32 million people who have tried online radio at least once represents the combined metro market populations of New York, Los Angeles and Chicago. The "past month" online radio audience of 11 million represents a market one million people larger than the current Los Angeles metro market. The "past week" Web radio audience of 4 million is similar in size to the Philadelphia metro market.



12. **Those that have listened to online radio are far more active Internet shoppers.** Online radio listeners are more likely to have made a Web-based purchase (43%), compared to those that have not listened to radio online (30%). When asked how often they shop over the Internet, 67% of online radio listeners frequently or sometimes make purchases over the Internet, compared to 44% of those that have not listened to radio online.

13. **Online radio listeners are far more likely to bookmark Internet sites.** The practice of bookmarking, or saving Web site addresses in an easy-to-access list of frequently visited Web sites, is far more prevalent among online radio listeners. Seventy percent of those that have listened to radio online have bookmarked a site, compared to only 46% among those that have not listened to online radio.

14. **Online radio listeners are three times as likely to bookmark a radio station Web site.** Forty four percent of online radio listeners have bookmarked a radio station Web site compared to only 14% of Web users that have not listened to radio online.

15. **Online radio listeners participate in *off-line* activities far less than the typical Web user.** Forty three percent of Web radio listeners say they are watching less TV compared to 31% for Web users that have not listened online. When it comes to reading magazines, 28% of online radio listeners say they are reading less compared to 16% for non-radio Web users. Not surprisingly, 18% of online radio listeners are listening less to traditional radio compared to 15% of Web users that haven't listened to radio online. Compared to typical Web users, online radio users are <u>less likely</u> to be shopping at the mall, reading newspapers, sleeping, being with family, friends or going out. Clearly, online radio users are very focused on the Internet.

16. **Thirty five percent of Webcast consumers have listened to their favorite station online.** Thirty percent have never listened to their favorite station online, while 12% tried but were unsuccessful and 17% are unsure whether their favorite station Webcasts.

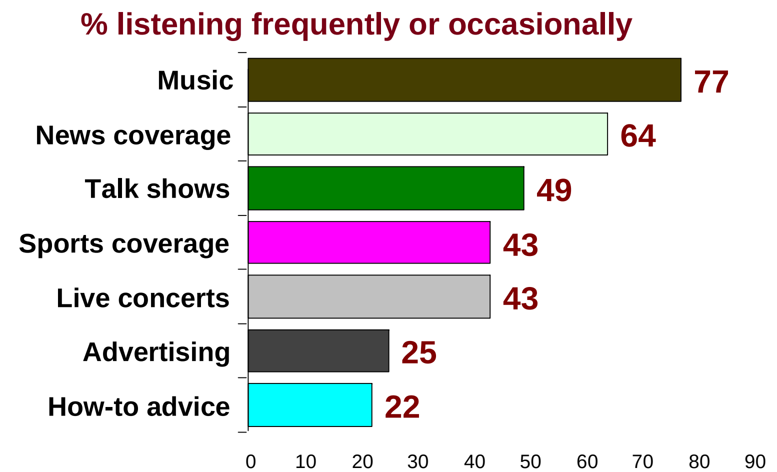
17. **Time spent online listening to "over the air" radio stations is higher than time spent with Internet only audio sources.** When listening online, Webcast users spent an average of 2.9 hours per week of *online* listening to "over the air" radio stations, compared to 1.4 hours for Internet only audio sources.

18. **People find Internet audio a very positive experience.** Thirty seven percent of audio Webcast consumers say they "love" the experience. Thirty-five percent of audio consumers say they "like" the experience, followed by 20% who rate audio Webcasts as "OK". Very few have negative feelings about online audio.

19. **Music, news and talk draw the largest Internet listening audiences.** A full 77% of Webcast consumers have listened frequently or occasionally to music, followed by news coverage (64%), talk shows (49%), sports (43%), live concerts (43%), advertising (25%) and how to advice (22%).

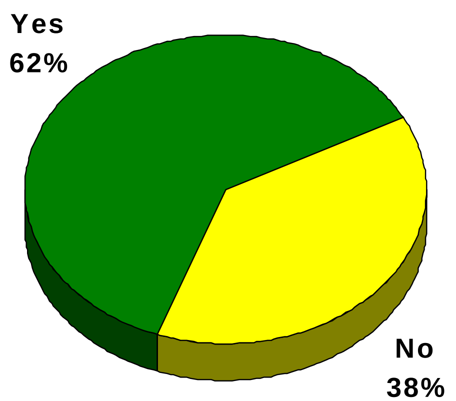
20. **Sixty two percent of Web users have heard radio stations talking about their Web sites on air.** The portion of those that have heard stations discussing their Web sites on air is relatively unchanged over the past year. Thus, there are still 4 out of 10 Web users that cannot recall stations promoting their Web sites.

Music, news and talk draw the largest Internet listening audiences



Base: Online survey

Ever heard a radio station talking about its Website on the air?

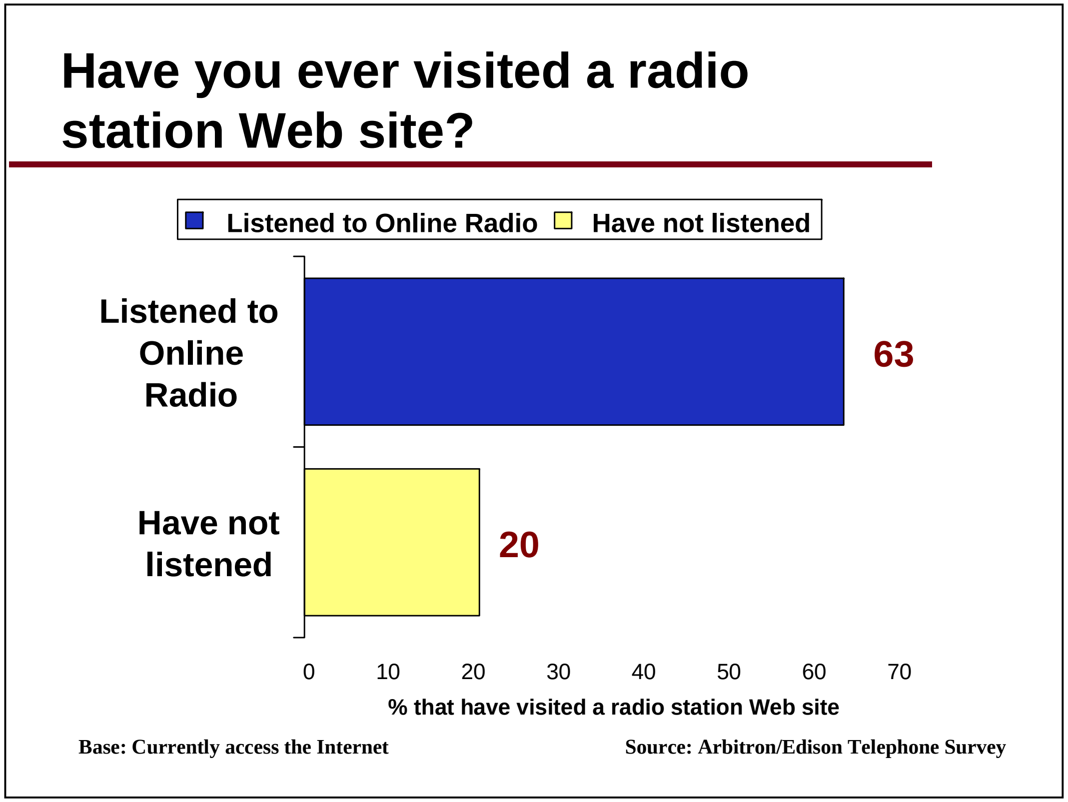


Base: Currently access the Internet

Source: Arbitron/Edison Telephone Survey

Despite this growth in awareness, radio station Web site visitation has increased over the past year. A year ago, 25% of Web users had visited a radio station Web site. Thirty-one percent had visited a station site in January 1999 and 33% now say they have visited a radio station Web site. The portion of Web users that have visited the Web site of the one station they listen to the most has steadily increased (19% in August 1999; 22% in January 1999; 24% in July 1999).

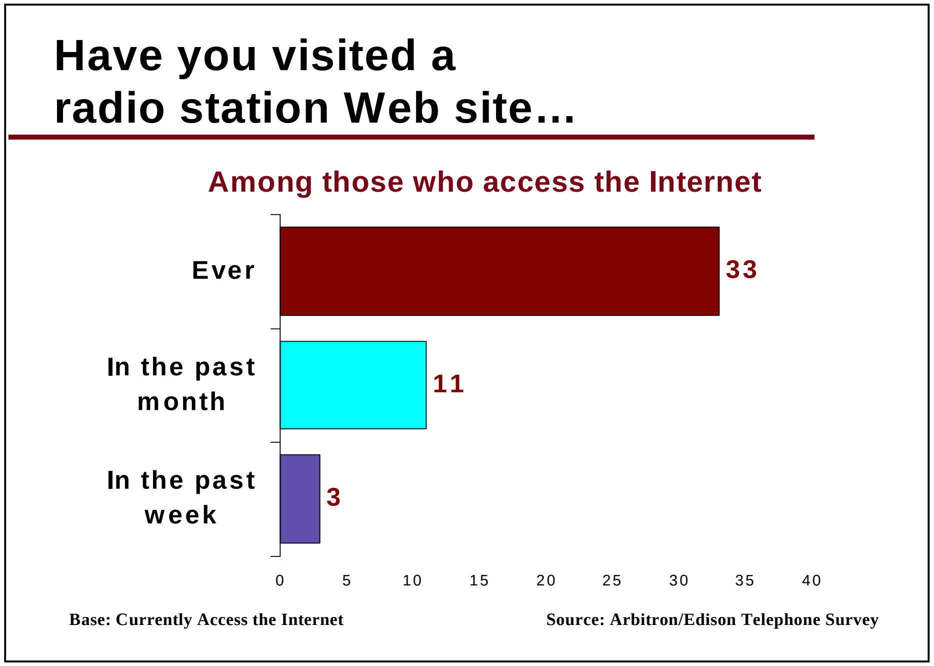
21. **A whopping 63% of online radio listeners have visited a radio station Web site compared to 20% of Web users that haven't listened to online audio.** Once again, we find that online audio listeners are far more compelled by all things radio. Earlier we saw that three times as many Web listeners bookmark radio station Web sites. Here we see that three times as many online audio consumers have visited a radio station Web site compared to Web users that are not online listeners. Among people that have visited a radio station Web site in the last month, the vast majority (68%) are those that have listened to a radio station over the Internet.



22. **In our survey, respondents in the West (20%) and the South (17%) are more likely than other regions to visit radio station Web sites. Recent Scarborough Research shows that Southern markets are among the cities that have greatest visitation to radio station Web sites.** According to Scarborough Research, here are the 20 markets with the highest proportion of people that have visited a radio station home page:

Rank	Market Name	% of people that have visited a radio station Web site	Index
1	**Dallas**	**23%**	**159**
2	**Atlanta**	**22%**	**148**
3	**Knoxville**	**21%**	**142**
4	**Houston**	**19%**	**133**
5	**Raleigh-Durham**	**19%**	**130**
6	Grand Rapids	19%	127
7	**Charlotte**	**18%**	**125**
8	Des Moines	18%	124
9	Seattle	18%	121
10	**Norfolk**	**18%**	**121**
11	St. Louis	17%	119
12	San Diego	17%	118
13	Birmingham	17%	118
14	Providence	17%	117
15	Memphis	17%	114
16	Oklahoma City	16%	113
17	Columbus, OH	16%	112
18	Minneapolis	16%	110
19	Indianapolis	16%	110
20	Los Angeles	16%	108

23. As with online radio listening, visiting radio station Web sites is not a habitual experience. While 33% of Web users have *ever* visited a radio station Web site, 11% have visited a radio station Web site in the last month and 3% in the past week. As a proportion of all Americans, 14% of all Americans have ever visited a radio station Web site, 5% in the last month and 2% in the past week.



24. Local information continues to be the most compelling radio station Web site content. Sixteen different types of radio station Web site functionality were tested among Web users. The most popular items of interest among Web users are detailed below:

Interest Rank	Radio station Web site feature	% Interested in visiting radio station Web site for that feature
1	Information on Community Events	64%
2	Concert information	63%
3	Title/Artist of songs played on radio	58%
4	To listen to the radio station	53%
5	To enter contests	48%
6	For the schedule of programming	48%
7	The opportunity to vote on songs	47%
8	To print advertiser coupons	40%
9	To contact the DJ or personality	39%
10	To see advertiser products	38%
11	Information and pictures of DJs	36%
12	To buy products and/or services	35%
13	To link to advertiser Web sites	33%
14	To participate in music chat rooms	32%
15	To participate in online auctions	31%
16	To purchase radio station clothing	25%

25. Only half of radio station Web sites contain the features that those online desire most. A content analysis of 351 radio station Web sites in the Top 100 markets assigned Web site functionality into 24 categories. Community information, the most compelling station Web site feature, is found in only 60% of the sites. The second most popular feature, concert information, is only found on 50% of the sites. Providing the title and artist of each song played, (the third most desired feature on a station Web site) is found on only 32% of the Web sites. The fourth most compelling Web site feature is the ability to listen to live broadcasts. This functionality is found on 48% of the station Web site sample. The fifth most popular feature is the ability to enter contests and this is found on 58% of the Web sites. The full content analysis of the 351 radio stations in the top 100 markets is indicated below. Photos of disc jockeys is the most consistent item found on radio station Web sites. While 75% of radio station Web sites have photos of the DJs, DJ photos are consistently the least popular elements desired by listeners.

Rank	Radio station Web site feature	% of radio station Web sites in Top 100 markets with feature
1	Information and pictures of DJs	75%
2	Information on Community Events	60%
3	Links to advertiser Web sites	60%
4	“Cool” links to other sites	58%
5	Station information	58%
6	Enter contests	54%
7	Schedule of programming	54%
8	Concert information	50%
9	E-mail contact	50%
10	Listen to the radio station	48%
11	News/Weather/Traffic information	45%
12	Contact the DJ or personality	42%
13	Title/Artist of songs played on radio	32%
14	Employment/Internship opportunities	27%
15	The opportunity to vote on songs	25%
16	See advertiser products	21%
17	Music/listener chat rooms	20%
18	Audio other than broadcast	17%
19	Purchase radio station items/clothing	17%
20	Games/trivia/quizzes	16%
21	Buy products and/or services	7%
22	Print advertiser coupons	7%
23	Internet contact names	6%
24	To participate in online auctions	3%

26. **Consumers say they would consume "a lot more" Internet audio and video with a portable "Web radio/TV" device.** Fifty percent of current Internet audio and video users would consume "a lot more" Internet audio and video with access to portable Web audio/video devices. Twenty four percent say they would listen and watch "a little" more Web audio/video and 15% say their consumption would remain the same.

27. **Thirty percent of Web users are "very interested" and 29% are "somewhat interested" in having an icon on their PC desktop that, when clicked, would immediately allow them to hear their favorites stations online.** In ranked order, the concepts with the highest level of interest among those online are, a Web site…

	% Very Interested	% Somewhat Interested
…allowing for a PC desktop icon that would allow you to immediately hear programming of your favorite radio stations	30	29
…that allows you to create your own customized radio station	27	29
…which has links to hundreds of radio stations from around the world that you can listen to	25	30
…of a local radio station for information about events and news in your community	25	38
…where you can download classic radio programs, concerts and radio shows	19	34
…that originates hundreds of its own diverse channels of audio programming	18	35
…where you can pay to download various media such a songs, albums and music videos	17	30
…of a local station for information on programs and personalities	10	36
…where you can pay to download audio versions of books/magazines	10	29
…where you can pay a small monthly fee for programming, such as Howard Stern, that may not currently be available	3	14

7 Recommendations

The key messages of the study revolve around the significant interactive behavior of online radio listeners. As online listening has increased, even though this behavior is not yet habitual, these "streamies" or Internet audio consumers are voraciously interested in all things radio. Whether it's responding to a radio ad from an Internet advertiser, or visiting and bookmarking radio station Web sites, online audio listeners are very interactive and responsive consumers.

With these findings in mind, we offer the following recommendations:

1. **Internet advertisers should continue to utilize radio as a primary medium for building brands and driving Web site traffic.** With over 14% of Americans saying they have responded to a radio commercial and visited a Web site, radio is clearly the medium to drive traffic and build a Web brand. Radio's ability to create Web traffic is consistent across age and sex demos. In fact, the portion of adults 25-44 that have responded to a *".com"* ad heard on radio is 36%, higher than the national average of 29% of Web users that have responded to a radio ad. Advertisers should seek to target online radio listeners that have even a greater propensity (41%) to respond to a radio ad and visit a Web site.

   With the anticipated fourth quarter 1999 boom in PC sales, advertisers should take this opportunity to reach new online users in fourth quarter 1999 and first quarter 2000. Since nights represent a time of heavy online usage, Internet radio advertisers should insure that their radio campaigns include all days and time periods (especially nights) to reach Web users.

2. **To capitalize on radio's effectiveness in driving online activity, all radio advertisers, whether local direct, agency or national accounts, should give their Web addresses in their commercials.** This will help direct and funnel listeners to client Web sites making radio more tangible. Since repetition is learning, it would be beneficial for advertisers to repeat the Web site address several times in the copy for good "internal frequency." The Web site address is the 1-800-number of the new millennium and, when used effectively in ad copy, can bring a new level of accountability to advertisers' radio buys.

   For years, advertisers have cited tracking response and results as a significant factor in media selection. With the new ability to track Internet response, radio should collect and document Internet advertising success stories and results.

3. **Companies and stations desiring to stream audio programming online must balance the costs of audiocasting with compelling advertising and e-commerce revenue models.** When an "over the air" radio station soars in the ratings, there are virtually no additional technical costs when the radio station doubles and triples its audience. Online increases in audiences result in increased technical and infrastructure costs. As such, building revenue generating models to cover these costs and make a streaming model profitable are essential.

   The significant news out of this study is that those that have listened to audio online are extremely valuable consumers. They are far more likely to respond to a radio ad and visit a Web site. They are three times as likely to bookmark and visit a radio station Web site and far more likely to indulge in e-commerce. These strong interactive behaviors provide radio stations with a strong ad sales story for their Webcast-related inventory.

4. **Stations should demand, from Advertisers, a substantial premium for attracting and delivering these valuable consumers.** "Streamies" (online audio listeners) are a uniquely valuable subset of media consumers who, more than any other subset, go to Web sites and indulge in e-commerce. Targeted, responsive audiences are worth more to advertisers. Due to the significant value of online audio listeners, Webcasters should begin quantifying "streamies."

5. **Stations need to match listener Web site content desires with site functionality.** A content analysis of over 351 stations reveals the most desired Web site elements are only found in about half the station Web sites. As stations are not converting current Web site traffic into habitual on-going visitation, they should include questions about what "content" listeners want and prefer in their Web sites in perceptual studies and existing research. In addition, stations should take advantage of online research tools like the one used in this study where actual Web site visitors can be intercepted while visiting the station site, and participate in quick-and-easy questionnaires about their first-hand desires and perceptions on that *actual* Web site. The more the content on a station Web site aligns with listener desires, the greater the visitation and habituation, and thus a far better environment for advertisers.

   Once station Web site content is more focused on what people want, stations need to become more aggressive in promoting and driving traffic to their Web sites. Awareness among Web users of radio stations promoting their Web sites on air has been flat at around 60%. Thus, four of our ten Web users cannot recall stations discussing their Web sites. Only 1 in 4 Web users have visited the Web site of their favorite station. With more and more people going online, stations need to promote their Web sites just as strongly as they market their own name or slogan.

6. **Traditional radio companies should begin developing niche programming like that already delivered by Internet-only Webcasters.** In any local perceptual format search conducted for a radio station, there are always formats that show a small but loyal audience. Such formats may be unprofitable in a single market, but profitable when presented as a national or worldwide programming option. Further, the cost and regulatory barriers associated with launching a new off-line radio station (from erecting the tower and securing an FCC license to staffing the station) are virtually non-existent in the online world. Group owners and stations have tremendous programming expertise and talent and can supplement their existing offerings with niche Webcasts.

7. **The radio industry should develop and distribute an on-screen interface that creates buttons for listening to radio.** The most popular Webcast business model in this research is an icon on the computer that allows one to click and immediately hear the programming of favorite stations. Just as television broadcasters scrambled in the 70s and 80s to insure that they were carried on cable systems, the radio industry should insure that their programming is what people choose no matter what the source. Just as the radio industry is devoting considerable research and attention to digital audio broadcasting technical solutions, so should the industry consider and assess on screen listening interfaces. The radio industry must consider this question – would you rather invest in building this model for yourselves and secure a lead position in the development of this new medium, or would you rather buy into the model at a significant premium when a company from outside the industry establishes their own on-screen radio dial as the standard?