## Arbitron/Edison Media Research

## Internet and Multimedia 2006: On-Demand Media Explodes



Presented by:

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## Overview

Arbitron and Edison Media Research are pleased to present the latest in our series of Internet and multimedia studies: Internet and Multimedia 2006: On-Demand Media Explodes. Arbitron and Edison Media Research have conducted 14 national studies since 1998, and they have become one of the most widely used sources of information about online broadcasting, Internet usage and consumer media trends. In this year's installment, we examine how cross-platform media choices are changing the way consumers think about the myriad types of audio and video programming available to them. In addition, we continue to explore consumer use of the Internet, online broadcasting and digital media. This study contains brand-new data from interviews conducted in the first quarter of 2006.

As technology continues to advance, consumers are increasingly using different forms of audio and video on their own terms - a phenomenon we began tracking in 2005 called "on-demand media consumers." The last 12 months have seen numerous partnerships arising from consumer adoption of these technologies and behaviors that have led to unprecedented control over the types of programming they consume and when they consume it. The advent of on-demand devices and services such as TiVo ${ }^{\circledR} / \mathrm{DVR}, \mathrm{iPod}^{\circledR}$ with video, Video On Demand programming from cable/satellite TV providers and others is beginning to change the way content providers deliver media and the manner in which they are consumed.

We are following these trends closely because they will have a fundamental impact on how advertisers successfully market their products and services. Many of the on-demand media behaviors and devices we examine allow consumers to change or even limit the commercial messaging they normally receive through television, radio and the Internet.

In this report, we update the trends for the more established new media such as Internet radio, Internet video and satellite radio. In addition, we explore awareness and usage of even newer forms of burgeoning media such as HD Radio ${ }^{\text {TM }}$, podcasting and new platforms for delivery of television programming.

This report outlines key findings detailed in a point-by-point manner and also includes significant highlights, implications and appendices.

## How the Study Was Conducted

A total of 1,925 people were interviewed to investigate Americans' use of various forms of traditional, online and satellite media. From January 13 to February 12, 2006, telephone interviews were conducted with respondents age 12 and older chosen at random from a national sample of Arbitron's Fall 2005 survey diarykeepers. In certain geographic areas (representing 5\% of the national population), a sample of Arbitron diarykeepers was not available for the survey, and a supplemental sample was interviewed through random digit dialing.

## Definition of Terms

Internet/online radio: Over-the-air radio station programming rebroadcast on the Internet or audio programming available exclusively on the Internet.

Internet/online video: Video content (either streamed or downloaded) over the Internet.
Video On Demand (VOD): TV shows, movies and other video programming accessed upon request through a cable TV provider. This programming is not recorded or saved, but can be controlled (pause/forward/rewind) by the consumer using their cable TV remote.

Digital video recorder (DVR): A digital recording device for a TV that can gather a user's viewing preferences and automatically record and store many hours of programming for playback at any time. It can be a stand-alone unit such as TiVo or offered by a cable or satellite TV provider. A monthly fee is usually associated with the service.

Audio podcast: The concept of downloading various types of longer-form online audio programs, in the form of digital files you can listen to at any time you choose. Audio podcasting does not refer to the downloading of individual MP3s or songs. Audio podcasting does refer to the download of program-oriented online audio (such as a talk show or a hosted music program), usually as an automatic download that can be listened to at the user's convenience.

## The On-Demand Media Consumer Scale

In our Internet and Multimedia 2005 study, we constructed a scale to represent the level of control that consumers exercise on their own media usage. This scale assigned values to each respondent based upon their ownership of the on-demand devices and their media behaviors. In this year's study, we have replicated and updated the scale to take into account the technological changes that have arisen in the last 12 months.

The goals of this scale are to determine the demographic groups that are most invested in the new ondemand options and to provide insight into developing marketing plans that accommodate their shifting media habits.

Our on-demand scale categorizes consumers into five groups: Heavy, Medium, Light, Very Light and None. The Heavy category represents consumers who own multiple on-demand devices (TiVo/DVR, iPod, portable DVD player, etc.). The Medium category represents consumers who demonstrate some on-demand media behavior but do not necessarily own one or more of the ondemand devices. The Light and Very Light categories represent consumers who show only a few ondemand media behaviors. The last category (None) represents those who exhibit no on-demand media behavior.

The table below contains the 16 items that were used to assign respondents to categories of ondemand media usage. See Appendix C for more details.

| On-Demand Devices, Behaviors and Attitudes |  |
| :--- | :--- |
| - Have watched Video On Demand in the past month. | - Subscribe to an online DVD rental service. |
| - Own/use a digital video recorder such as TiVo. | - Prefer to record TV to watch at a later time. |
| - Own a portable DVD player. | - Listened to online radio in the past month. |
| - Own a portable MP3 player such as an iPod. | - Watched online video in the past month. |
| - Own a portable media player (plays digital | - Try new products or services before most. |
| video/audio). | - Own a hand-held wireless Internet device <br> - Ever watched TV clips on cell phone. |
| -- Spend seven hours or more on the Internet <br> per week. |  |
| - Own to try new products or services. | - Have made a purchase online. |

In past studies, we have measured consumer awareness and ownership of new digital devices such as TiVo, Video On Demand and the iPod. An underlying feature of these devices and programming choices is the ability of the user to have more control over the media they consume and in some cases to alter or limit their commercial exposure. In this study we look at these devices and behaviors in greater detail.

## Significant Highlights

- There was a sharp increase in the number of Heavy on-demand media consumers compared with last year. In 2005, we classified $11 \%$ of consumers age 12 and older as Heavy on-demand media consumers. With advances in technology and increased changes in on-demand behavior, this figure increased to $21 \%$ in 2006.
- Consumers find cell phones and broadband Internet access the most "life-changing" new technologies. We asked respondents about a long list of devices to determine which had had the biggest impact on their lives. Overall, the item consumers reported having the most impact is the cell phone, with $38 \%$ of all respondents saying it had made a "big impact" on their lives. When we look among the user base for each technology, the most powerful item is broadband Internet access.
- The user base of MP3 player owners is growing rapidly. The portion of our sample that reported owning an iPod-branded digital audio player nearly doubled in the last year, from $6 \%$ to $11 \%$; among 12 - to 17 -year-olds, iPod ownership more than doubled, from $10 \%$ to $22 \%$. Owners of the iPod brand love these devices more than the owners or users of any other item we investigated. Among all respondents, ownership of any type of MP3 player (iPod/non-iPod) increased from $14 \%$ in 2005 to $22 \%$ in 2006; among 12- to 17-year-olds, ownership increased from $27 \%$ to $42 \%$.
- Households with broadband Internet access now significantly outnumber those with dial-up access. Last year, approximately half of those with home Internet access had broadband and half had dial-up connections. This year, $58 \%$ of those who have Internet access at home use either a cable or DSL modem for a high-speed Internet connection, compared to $38 \%$ who use a dial-up service. Of those who do not have a broadband Internet connection, $25 \%$ say they plan to get high-speed Internet service in the next 12 months.
- Thirteen percent of respondents have three or more working computers in their homes. When we first asked about home computers in 1998, fewer than half of respondents lived in households with even one computer. Today, $77 \%$ have home computers, and $32 \%$ of homes have more than one.
- The number of respondents having ever made an online purchase has grown fourfold since 1999. Only $13 \%$ said they had ever made a purchase from an Internet Web site in 1999. As of this study, $52 \%$ of respondents have made online purchases. More than $31 \%$ of respondents said they had made an online purchase in the last month, up from $16 \%$ in 1999.
- The weekly Internet radio and video audiences have each increased $50 \%$ over the last year. Twelve percent of Americans age 12 and older have listened to Internet radio in the last week, a $50 \%$ increase over the 2005 estimate of $8 \%$. Internet video saw precisely the same numbers, also increasing from $8 \%$ in 2005 to $12 \%$ in 2006.
- One in five ( $\mathbf{1 9 \%}$ ) of those online have ever tuned to the Internet broadcast of the AM/FM station they listen to most over the air. While this number is a record high (up from $15 \%$ in 2005), it shows that streaming of over the air radio is not yet a regular habit.
- TV series on DVD and Video On Demand top the list of nontraditional ways to watch TV programs. TV programs are now offered through a wide variety of options, including DVD, Video On Demand, episode/series downloads (such as from the Apple iTunes store), streamed over the Internet or streamed to a cell phone. Twenty-seven percent of consumers have watched TV series on DVD, and $23 \%$ have watched via Video On Demand.
- Video On Demand is rapidly expanding. Thirty-one percent of all respondents have viewed Video On Demand through cable or satellite TV, a significant gain versus 2005. Respondents are divided over whether they would prefer to pay for video without commercials versus receiving free video with commercials that cannot be skipped.
- The public's understanding of "podcasting" is still forming. When asked to define podcasting, a majority of Americans mention "file transfer," "downloading," "iPods," "radio and/or television programming" most often. There seems to be some confusion about the differences among podcasting, Internet broadcasting and downloadable music.
- Given a choice between never using the Internet or never watching TV, four in 10 would choose to keep the Internet and eliminate television. In 2001, we asked respondents to choose between never watching television again or never accessing the Internet. At that time, 26\% chose keeping the Internet and eliminating television. Five years later, $40 \%$ of respondents chose the Internet. Among 12- to 34 -year-olds, a majority would eliminate television from their lives.
- Digital video recorders (DVR) are gaining wider acceptance. Eighteen percent of Americans have the ability to pause live TV and record programming digitally through devices they own such as TiVo or other DVRs supplied by cable or satellite companies. Another $9 \%$ tell us they plan to acquire a DVR in the next 12 months.
- Nearly one in four (23\%) Sirius subscribers said they acquired the service specifically to listen to Howard Stern.
- One in six Americans feel that broadcast network television programming is "frequently" too dirty and explicit for their tastes. In 2006, $32 \%$ feel that broadcast network television is "almost never" too dirty and explicit while another $15 \%$ believe network TV "rarely" pushes the line of acceptability.

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## Key Findings

## A. The On-Demand Media Consumer 2006

1. The number of Heavy on-demand media consumers has nearly doubled in the past year. Heavy on-demand media consumers own one or more on-demand media devices and also exhibit behaviors that show a heavy desire to control their media experience. In January 2005, 11\% of Americans were Heavy on-demand consumers and as of January 2006, that number increased to 21\%.

2. Many of the direct and indirect on-demand media devices top $\mathbf{1 0 \%}$ or higher ownership among American consumers.

Percent of U.S. Population Who Own/Use On-Demand Devices/Media Base: Total Population 12+

|  | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ |
| :--- | :---: | :---: |
| Satellite TV | $25 \%$ | $25 \%$ |
| Portable DVD player | $19 \%$ | $24 \%$ |
| High-definition TV (HDTV) | $10 \%$ | $19 \%$ |
| TiVo/DVR (2005 = ownership of TiVo/DVR; 2006 = any usage of | $6 \%$ | $18 \%$ |
| TiVo/DVR, including cable/satellite) | $10 \%$ | $14 \%$ |
| Video On Demand (watched last month) | $10 \%$ | $14 \%$ |
| Portable MP3 player other than iPod | $6 \%$ | $11 \%$ |
| iPod | $3 \%$ | $4 \%$ |
| Hand-held wireless e-mail device such as a BlackBerry |  |  |

3. Newer on-demand media devices and media have high enthusiasm among their users. The iPod has the highest enthusiasm among owners/users, with nearly half (45\%) saying they "love it" and an additional $29 \%$ saying they "like it." More than four in 10 broadband Internet users say they "love it," and about one-third of HDTV, satellite radio and TiVo/DVR owners/users say they "love" using those devices/media.

| Percent of Owners/Users Who Say They "Love" Using Device |  |
| :--- | :---: |
| iPod | $45 \%$ |
| Broadband Internet access | $41 \%$ |
| High-definition TV (HDTV) | $34 \%$ |
| Satellite radio | $33 \%$ |
| TiVo/DVR | $32 \%$ |
| Satellite TV | $28 \%$ |
| Portable MP3 player other than iPod | $25 \%$ |
| Hand-held wireless e-mail device such as a BlackBerry | $21 \%$ |
| Local AM/FM radio | $21 \%$ |
| Cable TV | $20 \%$ |
| Pay TV channels such as HBO or Showtime | $16 \%$ |
| Video On Demand | $13 \%$ |
| Internet radio | $13 \%$ |
| Internet video | $8 \%$ |

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4. Consumers find cell phones and broadband Internet access the most "life-changing" new technologies. We asked respondents about a long list of devices to determine which had had the biggest impact on their lives. Overall, the item consumers reported having the most impact is the cell phone, with $38 \%$ of all respondents saying it had made a "big impact" on their lives. Other items with double-digit percentages were local AM/FM radio at 24\% saying it has made a "big impact," broadband Internet access at $20 \%$ and DVDs at $18 \%$. When we look among the user base for each technology, the most powerful item is broadband Internet access.
5. Four in ten affluent Americans are heavy on-demand media consumers. It stands to reason that those in higher income households are more able to afford on-demand media devices such as TiVo/DVRs and portable audio/video players.

## Affluent Americans Far More Likely to Be Heavy On-Demand Media Users


6. Older Americans are the group least interested in controlling the media they consume. Sixty-two percent of the consumers who exhibited none of the traits used for our on-demand media scale are age 55 and over.

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## B. Internet Usage Trends

7. Thirteen percent of respondents have three or more working computers in their homes. When we first asked about home computers in 1998, fewer than half of respondents lived in households with even one computer. Today, $77 \%$ have home computers, and $32 \%$ of homes have more than one.
8. More than eight in ten Americans are now online. In 2000, 56\% of the U.S. population age 12 and older had Internet access at any location (including home, work, school or a public library), and as of $2006,81 \%$ of Americans are online. Seventy-one percent of Americans have the Internet at home, and $34 \%$ have the Internet at work.

9. Households with broadband Internet access now significantly outnumber those with dial-up access. Last year, approximately half of those with home Internet access had broadband and half had dial-up connections. This year, $58 \%$ of those who have Internet access at home use either a cable or DSL modem for a high-speed Internet connection, compared to $38 \%$ who use a dial-up service. Of those who do not have a broadband Internet connection, $25 \%$ say they plan to get high-speed Internet service in the next 12 months.

10. More than seven in ten Americans have been online in the past month. Seventy-two percent of Americans have used the Internet in the past month, and $67 \%$ have used the Internet in the past week. Those online reported spending an average of 10 hours 31 minutes on the Internet in the past week.

## The Internet and Traditional Media

11. Approximately $\mathbf{3 0 \%}$ of Americans say they are spending less time with traditional media because of the amount of time they are spending online. Thirty percent of online consumers say they are spending less time reading printed newspapers and $30 \%$ say they are spending less time with magazines because of the time they spend on the Internet. Thirty-three percent feel they are spending less time watching television due to their online activities, and $19 \%$ believe they are listening to less AM/FM radio because of the Internet.

12. Twenty-five percent of those with home Internet access "frequently" use the Internet while watching TV in the same room. Another $19 \%$ say they "sometimes" use the Internet and watch TV in the same room at the same time.
13. When given a choice of whether to keep the Internet and drop TV or vice versa; four in 10 would choose to keep the Internet and eliminate television. In 2001, we asked respondents how they would choose between never watching television again or never accessing the Internet again. At that time, $26 \%$ chose keeping the Internet and eliminating television. Five years later, $40 \%$ of respondents chose the Internet. Among 12- to 34 -year olds, a majority would eliminate television from their lives.


## Internet Advertising and Commerce

14. Most people with Internet access at home use software to block e-mail spam and online advertising. Seventy-three percent of those with Internet access at home use a program to block e-mail spam (up from $34 \%$ in 2003), while $71 \%$ use software to block pop-up advertising on their home computer (nearly triple the $25 \%$ in 2003); $70 \%$ of those with Internet access at work use pop-up blocking software on their work PC as well.

15. The number of respondents having ever made an online purchase has grown fourfold since 1999. Only $13 \%$ said they had ever made a purchase from an Internet Web site in 1999. As of this study, $52 \%$ of respondents have made online purchases. More than $31 \%$ of respondents said they had made an online purchase in the last month, up from $16 \%$ in 1999.

16. During the 2005 holiday season, nearly one in four online consumers researched an item online before buying it in a local store. Thirty-nine percent of those with Internet access looked up information about a product or service online before purchasing it in a store during this past holiday shopping season. Twenty percent had seen an item in a local store and then purchased that item on the Internet instead.

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## C. Television and Video

17. Half of Americans feel that network television programming should be unrestricted. Fifty percent of Americans agreed with the statement "Television networks like ABC, NBC, CBS and FOX should be able to air whatever programming they please; if people don't want to watch, they can change the channel." Sixty-three percent agreed that cable channels like MTV, E! and Comedy Central should be able to air unrestricted programming, while $75 \%$ feel that pay TV networks such as HBO and Showtime should have the same freedom.

## Americans Split on Restricting Network Television Programming

"Television networks like ABC, NBC, CBS and FOX should be able to air whatever programming they please; if people don't want to watch, they can change the channel."

18. One in six Americans feel that broadcast network television programming is "frequently" too dirty and explicit for their tastes. In 2006, $32 \%$ feel that broadcast network television is "almost never" too dirty and explicit while another $15 \%$ believe network TV "rarely" pushes the line of acceptability.

## One in Six Frequently Find Network TV Programs Too Dirty/Explicit

"How often do you find NETWORK television programs to be too dirty and explicit for your taste?"

$\Delta$ arbitron
Base: Total Population 12+
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$\qquad$
19. Fifty-four percent of cable subscribers would prefer to choose and pay for only the channels they are interested in viewing. Forty-two percent of cable subscribers would choose to continue buying channel packages as they currently do; $4 \%$ are undecided.

## Cable Subscribers Prefer À La Carte Pricing Versus Packaged Tiers

"Which of the two cable subscription options is more appealing to you?"


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## Internet Video

20. Nearly one in five Americans have watched video over the Internet in the last month.

Nineteen percent of Americans have viewed Internet video in the last month; $12 \%$ have done so in the last week.

21. The number of Americans who have viewed Internet video in the last week has increased by $\mathbf{5 0 \%}$ in the last year. In January 2005, the proportion of Americans who had watched Internet video in the last week was $8 \%$. In January 2006, that number has increased to $12 \%$.


## Video On Demand (VOD)

22. Nearly one-third of Americans have watched ever watched Video On Demand. Thirty-one percent of U.S. residents have watched Video On Demand, the television service that allows customers to choose movies or other video programming from an on-screen list and view that programming at their convenience. Fourteen percent have watched VOD in the past month, and $8 \%$ have watched in the past week. Of those who have not tried VOD, more than one-quarter (29\%) are "very" or "somewhat" interested in using this service in the future.

## Close to One-Third of Americans Have Ever Watched Video On Demand

\% Who Have Watched Video On Demand Programming...


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23. Consumers are split on whether they prefer to access Video On Demand programming with commercials or pay a fee. Forty-seven percent of those who have either watched or are interested in VOD services would prefer to get the programming for free in exchange for watching commercials that they cannot fast-forward through. Forty-two percent would rather pay a small fee, such as a dollar or two per show, in order to watch uninterrupted (commercial-free) programming; $11 \%$ are undecided.


## Digital Video Recorder (DVR)

24. Nearly one in five Americans own or use a DVR. Between TiVo recorders and other DVRs supplied by cable or satellite companies, $18 \%$ of Americans now have the ability to pause live TV and record programming digitally through such devices. Another $9 \%$ tell us they plan to acquire a DVR in the next 12 months.

25. The ability to skip through commercials is increasingly important to those choosing to record TV programming. Forty-four percent of those who record TV shows feel that the ability to watch programs when it fits their schedule is the most important reason to prerecord television shows; however, this is lower than in 2005. Skipping through commercials is most important among $37 \%$ of those who record, up from $29 \%$ in 2005.

26. More than half of DVR owners/users say the device has had a big impact on their lives. When DVR users were asked to rate the impact of the device on their lives, on a 5-point scale from 1 (No Impact) to 5 (Big Impact), $34 \%$ rated it a " 5 " and another $21 \%$ gave it a " 4 ."

## DVD

27. DVD ownership has reached eight in 10 consumers. Eighty percent of Americans own at least one DVD; $29 \%$ own 25 or more DVDs.
28. Video on the go is growing in popularity. In 2005, 19\% of consumers reported owning a portable DVD player, and in 2006 that figure rose to $\mathbf{2 3 \%}$. Nine percent reported owning a portable video player that plays video content downloaded from the Internet or recorded directly to the device from a TV or DVR.
29. One in ten consumers subscribe to an online DVD rental service such as Netflix or Blockbuster Online. Ten percent of Americans report subscribing to a service that allows them to rent DVDs through the mail.

## New Distribution Methods for TV Shows

30. TV series on DVD and Video On Demand top the list of nontraditional ways to watch TV programs. TV programs are now offered through a wide variety of options, including DVD, Video On Demand, episode/series downloads (such as from the Apple iTunes store), streamed over the Internet or streamed to a cell phone. Twenty-seven percent of consumers have watched TV series on DVD, and $23 \%$ have watched via Video On Demand.
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TV Series on DVD and VOD Lead Nontraditional Ways of Watching TV Programs
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## D. Digital Radio

## Internet Radio

31. More than one in five have listened to Internet radio in the past month. Twenty-one percent of the U.S. population age 12 and older have listened to Internet radio in the past month. The estimated monthly audience for Internet radio is more than 52 million.


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32. The weekly Internet radio audience has increased $\mathbf{5 0 \%}$ over the last year. Twelve percent of Americans age 12+ have listened to Internet radio in the past week, a $50 \%$ increase over the 2005 estimate of $8 \%$.

33. Nearly one in five 18- to 34-year-olds listened to Internet radio in the last week. Nineteen percent of Americans age 18-34 listen to Internet radio during an average week. Internet radio delivers $16 \%$ of persons in the prime 18-49 radio buying demo

34. Only $19 \%$ of those online have ever listened online to their most listened to $\mathrm{AM} / \mathrm{FM}$ radio station. While this number is a record high, up from $15 \%$ the previous year, it shows the continued lack of usage of Internet streaming as a way to increase a station's reach.

## Satellite Radio

35. Awareness of both satellite radio companies is over 60\%. XM Satellite Radio had greater public recognition than Sirius Satellite Radio in the early years of the medium. In 2006, both XM and Sirius have reached an awareness level of $61 \%$ among those age 12 and older.

36. Eighteen percent of those who do not currently subscribe to satellite radio (XM or Sirius) said they were likely to subscribe in the next 12 months. Only $4 \%$ of nonsubscribers to satellite radio said they were "very" likely to subscribe in the next 12 months, while $82 \%$ said they were "not at all" likely to subscribe to satellite radio in the next 12 months.

37. Twenty-three percent of Sirius subscribers said they acquired the service specifically to listen to Howard Stern.

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38. Satellite radio subscribers are twice as likely to live in $\mathbf{\$ 1 0 0 , 0 0 0 +}$ households. To date, satellite radio has attracted an upscale audience. More than one in four (27\%) have an annual household income of $\$ 100,000$ or more, almost twice the national average of $14 \%$.

39. The public's understanding of podcasting is still forming. When asked to define what a podcast is in their own words, a majority of Americans mention "file transfer," "downloading," "iPods," "radio and/or television programming" most often. There still seems to be some confusion among podcasting, Internet broadcasting and downloadable music.
40. Eleven percent of Americans have listened to an audio podcast. When given a detailed description of podcasting, more than one in 10 people age 12 and over said they have ever listened to an audio podcast. That translates to approximately 27 million Americans who have already tried this new form of radio.

41. Podcasting attracts a youthful audience. One out of five Americans who have ever listened to an audio podcast are 12 to 17 years old, and more than half ( $53 \%$ ) are under the age of 35 .


## HD Radio

42. More than one-third of respondents are interested in HD Radio. When read a description of HD Radio, $8 \%$ said they were "very" interested, and another $27 \%$ said they were "somewhat" interested.

43. Thirty-five percent of Americans are willing to pay $\mathbf{\$ 5 0}$ for an HD Radio. More than onethird of Americans said they would be likely to purchase a new HD Radio if the cost was $\$ 50$. Nine percent of all consumers would be likely to pay $\$ 200$ or more for an HD Radio receiver; 5\% said they would be likely to purchase at a price of $\$ 300$.

44. More than four in ten satellite radio subscribers are either "very" interested or "somewhat" interested in HD Radio. Ten percent of satellite radio subscribers said they were "very" interested in HD Radio, and 33\% said they were "somewhat" interested in HD Radio.

## AM/FM Radio

45. Three-quarters of the "digital radio" audience predict they will continue listening the same amount to AM/FM radio. Seventy-seven percent of respondents said they expect to listen to AM/FM radio as much as they do now despite increasing advancements in technology. The same holds true for Internet radio listeners and those who have tried audio podcasting. Satellite radio subscribers showed slightly less dedication to traditional broadcasting, with $64 \%$ saying they expect to continue listening to the same amount of AM/FM radio.

46. Fewer than one in ten say that over-the-air AM/FM radio is "frequently" too dirty and explicit for their tastes. Twenty percent say AM/FM radio is "sometimes" too dirty and explicit, $17 \%$ say it is "rarely" so, while another $46 \%$ believe terrestrial radio is "almost never" too dirty or explicit for their tastes.
47. AM/FM radio does not appear to be losing Time Spent Listening to the new digital radio platforms. This research does not support the belief that AM/FM radio is losing a significant portion of its audience to new digital radio choices. In 2005, according to the diaries of our respondents, an average of 2 hours 48 minutes was spent with radio daily. This figure was nearly exactly the same this year ( 2 hours 45 minutes). Radio saw no meaningful loss of TSL from year to year despite the growth reported in alternatives such as the iPod, Internet radio, and satellite radio.

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## Digital Music

48. The user base of MP3 player owners is growing rapidly. The portion of our sample that reported owning an iPod-branded digital audio player nearly doubled in the last year, from $6 \%$ to $11 \%$; among 12- to 17 -year-olds, iPod ownership more than doubled, from $10 \%$ to $22 \%$. Owners of the iPod brand love these devices more than the owners or users of any other item we investigated. Among all respondents, ownership of any type of MP3 player (iPod/non-iPod) increased from $14 \%$ in 2005 to $22 \%$ in 2006; among 12- to 17-year-olds, ownership increased from $27 \%$ to $42 \%$.


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49. One in four teens have purchased downloadable music. Twenty-one percent of 18- to 24-yearolds and $20 \%$ of 25 - to 34 -year-olds also have bought downloadable music online.

50. One-third of weekly online radio listeners have purchased music from an online music download store. Those who listen to online radio platforms such as Internet radio or podcasting are much more likely to have purchased downloadable music than the average American.

51. More than four in ten people who purchase MP3s from an online store do not listen to that audio most often on a portable digital music player. Forty-three percent of consumers who have downloaded audio files they bought from an online store listen to the audio more often on their computer than on a portable digital music player.

## Nearly Half Who Have Purchased MP3s Listen Most Often on Their PC

"Where do you most often listen to MP3s or other digital audio you have downloaded?"


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## Implications

1. Producers of content and the advertisers that support them will need to track the "Heavy" on-demand media consumer more closely. The breakneck growth of "on-demand media consumers" has shown that new broadcasting platforms and time-shifting programming is not a fad, nor is it relegated to niche behavior for techies. This study measures the intense shifts in how Americans think about broadcasting, entertainment and advertising, and implies that the "Heavy" group will continue to rapidly expand. Advertisers must continue to support experiments in tandem with the content providers to learn how to reach consumers who are adopting this new media consumption style.
2. Media become ever more portable and flexible, requiring new approaches. Kids already are downloading television shows onto their iPods and then bringing them to their friends' houses to watch on their big-screens. Devices now exist that allow the capture of favorite radio shows for later listening. Podcasting is further disconnecting the locations of use from the normal ones. Content and advertising need to reflect the unique nature of each distribution platform to ensure maximum impact. Creative executions that have worked for years on traditional media vehicles may not be effective on newer platforms where consumers can easily skip ads. Shorter spots, more engaging creative, and new incentives to view and listen to ads will need to be tested.
3. Audience measurement will have to include time-shifting. We see in our study that the time that content first debuts and the time of its consumption increasingly are disconnected. As a result, audience measurement systems will have to account for exposure over time.
4. Advertising will continue to be integrated into the content of programming. With so much of on-demand being driven by the ability to avoid commercials (DVRs) or by subscription models to eliminate commercials (much of Internet radio, the music channels on satellite radio), advertisers will have to continue their experiments with advertising and promotion within programming. Look for any number of partnerships and creative solutions to reduce dependence on traditional "spots" and instead to interweave programming with advertising.
5. Increased demand for accountability and standardized audience measurement. Online radio and XM Satellite Radio are now measured and accountable. Each of the new media platforms needs to develop reliable and standardized measurement tools in order to justify a significant investment from advertisers and agencies.

## Appendix A

## The Current State of Internet Broadcasting (Streaming) 2006

Those who have ever listened or watched online

- 122 million Americans
- $49 \%$ of U.S. population $12+$
- $60 \%$ of those online
- 69\% have broadband Internet access at home

Those who have listened or watched online in the last month

- 73 million Americans
- $29 \%$ of U.S. population $12+$
- $36 \%$ of those online
- $75 \%$ have broadband Internet access at home

Those who have listened or watched online in the last week

- 47 million Americans
- $19 \%$ of U.S. population $12+$
- $23 \%$ of those online
- 76\% have broadband Internet access at home

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## Appendix B

## Profile of the U.S. Population, Internet and Online Broadcasting Audience

|  | U.S. <br> Population <br> (250 Million Age 12+) | Internet Users <br> (81\% of U.S. <br> Population) | Last-Month Online Radio ( $21 \%$ of U.S. Population) | Last-Month Online Video (19\% of U.S. Population) | Last-Month Radio/Video ( $29 \%$ of U.S. Population) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Demographics |  |  |  |  |  |
| Men | 46\%* | 47\% | 58\%* | 62\% | 58\% |
| Women | 54\% | 53\% | 42\% | 38\% | 42\% |
| 12-17 | 11\% | 13\% | 14\% | 15\% | 15\% |
| 18-24 | 10\% | 11\% | 15\% | 17\% | 15\% |
| 25-34 | 16\% | 17\% | 23\% | 24\% | 22\% |
| 35-44 | 19\% | 21\% | 22\% | 21\% | 22\% |
| 45-54 | 18\% | 19\% | 19\% | 15\% | 18\% |
| 55-64 | 12\% | 11\% | 5\% | 6\% | 6\% |
| 65+ | 14\% | 8\% | 2\% | 2\% | 2\% |
| Employed part/full time | 57\% | 62\% | 67\% | 69\% | 67\% |
| Retired | 16\% | 11\% | 4\% | 3\% | 4\% |
| Student | 14\% | 16\% | 18\% | 20\% | 18\% |
| Homemaker | 7\% | 6\% | 5\% | 3\% | 4\% |
| Unemployed | 4\% | 4\% | 4\% | 4\% | 4\% |
| \$75K+ HH income | 27\% | 32\% | 36\% | 45\% | 39\% |
| White | 73\% | 74\% | 69\% | 72\% | 72\% |
| African-American | 11\% | 10\% | 14\% | 11\% | 11\% |
| Hispanic/Latino | 11\% | 10\% | 9\% | 10\% | 9\% |
| At-home Internet connection |  |  |  |  |  |
| Broadband | - | 58\% | 74\% | 81\% | 75\% |
| Dial-up | - | 39\% | 26\% | 19\% | 24\% |
| Plan to switch to broadband in next 12 months | - | 34\% | 44\% | 47\% | 44\% |

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## Appendix C

## U.S. Population Composition for On-Demand Behaviors and Attitudes

|  | Prefer to Record TV Programs to Watch at Another Time (19\% of U.S. Population) | Own/Use a Digital Video Recorder (such as TiVo) ( $18 \%$ of U.S. Population) | Watched Video <br> On Demand Through Cable/Satellite in the Past Month ( $31 \%$ of U.S. Population) | Own 20 or More DVDs (42\% of U.S. Population) | Own a Portable DVD Player (24\% of U.S. Population) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Demographics |  |  |  |  |  |
| Men | 41\% | 52\% | 50\% | 49\% | 49\% |
| Women | 59\% | 48\% | 50\% | 51\% | 51\% |
| 12-17 | 12\% | 14\% | 14\% | 6\% | 12\% |
| 18-24 | 11\% | 8\% | 10\% | 12\% | 10\% |
| 25-34 | 22\% | 22\% | 26\% | 24\% | 21\% |
| 35-44 | 22\% | 19\% | 18\% | 26\% | 26\% |
| 45-54 | 19\% | 20\% | 19\% | 20\% | 15\% |
| 55-64 | 10\% | 10\% | 9\% | 9\% | 11\% |
| 65+ | 5\% | 8\% | 4\% | 5\% | 5\% |
| \$75K+ <br> HH Income | 30\% | 35\% | 41\% | 31\% | 32\% |
| White | 71\% | 70\% | 67\% | 67\% | 66\% |
| AfricanAmerican | 12\% | 13\% | 14\% | 16\% | 16\% |
| Hispanic or Latino | 11\% | 11\% | 11\% | 11\% | 12\% |

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## Appendix C (continued)

## U.S. Population Composition for On-Demand Behaviors and Attitudes

|  | Own an iPod or Other <br> Brand of MP3 Player ( $22 \%$ of U.S. Population) | Own a Portable Digital Media Player (Audio \& Video) (11\% of U.S. Population) | Own a <br> Handheld Wireless E-mail \& Internet Device (4\% of U.S. Population) | First Among Family/Friends to Try New Products/ Services ( $10 \%$ of U.S. Population) | Try New Products/ Services Before Most Family/Friends ( $11 \%$ of U.S. Population) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Demographics |  |  |  |  |  |
| Men | 54\% | 52\% | 62\% | 56\% | 44\% |
| Women | 46\% | 48\% | 38\% | 44\% | 56\% |
| 12-17 | 21\% | 20\% | 7\% | 16\% | 12\% |
| 18-24 | 14\% | 13\% | 6\% | 15\% | 11\% |
| 25-34 | 21\% | 15\% | 31\% | 20\% | 21\% |
| 35-44 | 26\% | 26\% | 32\% | 16\% | 20\% |
| 45-54 | 13\% | 16\% | 15\% | 15\% | 21\% |
| 55-64 | 4\% | 9\% | 6\% | 8\% | 9\% |
| 65+ | 2\% | 1\% | 2\% | 9\% | 6\% |
| \$75K+ <br> HH Income | 43\% | 34\% | 58\% | 32\% | 33\% |
| White | 71\% | 70\% | 79\% | 67\% | 74\% |
| African- <br> American | 10\% | 13\% | 12\% | 21\% | 9\% |
| Hispanic or Latino | 11\% | 11\% | 8\% | 9\% | 11\% |

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## Appendix C (continued)

## U.S. Population Composition for On-Demand Behaviors and Attitudes

|  | Spend 7+ Hours on Internet per Week (37\% of U.S. Population) | Listened to Online Radio in the Past Month ( $21 \%$ of U.S. Population) | Watched Online Video in the Past Month (14\% of U.S. Population) | Have ever Made a Purchase Over the Internet (52\% of U.S. Population) | Subscribe to an Online DVD Rental Service (e.g., Netflix) <br> ( $10 \%$ of U.S. Population) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Demographics |  |  |  |  |  |
| Men | 47\% | 58\% | 62\% | 48\% | 52\% |
| Women | 53\% | 42\% | 38\% | 52\% | 48\% |
| 12-17 | 11\% | 14\% | 15\% | 8\% | 18\% |
| 18-24 | 13\% | 15\% | 17\% | 11\% | 7\% |
| 25-34 | 20\% | 23\% | 24\% | 21\% | 22\% |
| 35-44 | 23\% | 22\% | 21\% | 24\% | 25\% |
| 45-54 | 19\% | 19\% | 15\% | 21\% | 18\% |
| 55-64 | 10\% | 5\% | 6\% | 11\% | 5\% |
| 65+ | 5\% | 2\% | 2\% | 5\% | 4\% |
| $\$ 75 \mathrm{~K}+$ <br> HH Income | 39\% | 36\% | 45\% | 40\% | 33\% |
| White | 76\% | 69\% | 72\% | 78\% | 66\% |
| AfricanAmerican | 10\% | 14\% | 11\% | 9\% | 14\% |
| Hispanic or Latino | 9\% | 9\% | 10\% | 9\% | 13\% |

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## Appendix D

\left.|  | U.S. Population Composition for |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| the On-Demand Media Consumer Scale |  |  |$\right]$

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## About Arbitron

Arbitron Inc. (NYSE: ARB) is an international media and marketing research firm serving radio broadcasters, cable companies, advertisers, advertising agencies and outdoor advertising companies in the United States, Mexico and Europe. Arbitron's core businesses are measuring network and local market radio audiences across the United States; surveying the retail, media and product patterns of local market consumers; and providing application software used for analyzing media audience and marketing information data. The Company has also developed the Portable People Meter $\left(\mathrm{PPM}^{\mathrm{SM}}\right)$, a new technology for media and marketing research.

Arbitron's marketing and business units are supported by its research and technology organization, located in Columbia, Maryland. Arbitron has approximately 1,700 employees; its executive offices are located in New York City.

Through its Scarborough Research joint venture with VNU, Inc., Arbitron also provides media and marketing research services to the broadcast television, magazine, newspaper and online industries.

## About Edison Media Research

Edison Media Research conducts survey research and provides strategic information to radio stations, television stations, newspapers, cable networks, record labels, Internet companies and other media organizations.

Edison Media Research works with many of the largest American radio ownership groups, including Entercom, ABC Radio, Infinity, Bonneville and Westwood One, and also conducts strategic and perceptual research for a broad array of companies including AOL/Time Warner, Yahoo!, Sony Music, Princeton University, Northwestern University, Universal Music Group, Time-Life Music and the Voice of America. Edison Media Research also conducts research for successful radio stations in South America, Africa, Asia, Canada and Europe.

Beginning in 2004, Edison Media Research conducts all exit polls and election projections for the six major news organizations-ABC, CBS, CNN, FOX, NBC and the Associated Press-and designed and operated the CNN RealVote election projection system in 2002.

All of Edison Media Research's industry studies can be found on the company's Web site at www.edisonresearch.com and can be downloaded free of charge.

[^1]ARBITRON
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[^0]:    *How to read: Forty-six percent (46\%) of the U.S. population age 12 and older are male vs. $58 \%$ of those who have listened to online radio in the last month.

[^1]:    $\mathrm{PPM}^{\mathrm{SM}}$ is a mark of Arbitron Inc. HD Radio ${ }^{\mathrm{TM}}$ is a trademark of iBiquity Digital Corporation. TiVo ${ }^{\circledR}$ is a registered trademark of TiVo Inc. $\mathrm{iPod}^{\circledR}$ is a registered trademark of Apple Computer, Inc. BlackBerry ${ }^{\circledR}$ is a registered trademark of Research In Motion Limited.

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