Study Overview

• The Infinite Dial is the longest-running survey of digital media consumer behavior in America
• The annual reports in this series have covered a wide range of digital media and topics since 1998
• For 2018, The Infinite Dial tracks and covers new research on mobile behaviors, Internet Radio, Podcasting, Social Media, Smart Speakers and more
Study Methodology

- In January/February 2018, Edison Research conducted a national telephone survey of 2000 people aged 12 and older, using random digit dialing techniques to both cell phones and landlines.
- Survey offered in both English and Spanish languages.
- Data weighted to national 12+ population figures.
Smartphone Ownership

Total Population 12+

2009: 10%
2010: 14%
2011: 31%
2012: 44%
2013: 53%
2014: 61%
2015: 71%
2016: 76%
2017: 81%
2018: 83%

Estimated 233 Million
MEDIA & TECHNOLOGY
Tablet Ownership

Total Population 12+

% owning a tablet

2013: 29%
2014: 39%
2015: 49%
2016: 51%
2017: 53%
2018: 50%

Estimated 141 Million
Smart Speaker Awareness

Total Population 12+

<table>
<thead>
<tr>
<th>Device</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amazon Alexa</td>
<td>57%</td>
<td>71%</td>
</tr>
<tr>
<td>Google Home</td>
<td>45%</td>
<td>56%</td>
</tr>
</tbody>
</table>
Total Population 12+

Smart Speaker Ownership

% owning either Amazon Alexa or Google Home devices

2017: 7%
2018: 18%

Estimated 51 Million
Smart Speaker Ownership

Base: Own a Smart Speaker

- Own both Amazon Alexa and Google Home: 11%
- Own Google Home but not Amazon Alexa: 17%
- Own Amazon Alexa but not Google Home: 72%
Number of Smart Speakers in Household

Base: Own a Smart Speaker

- One: 67%
- Two: 22%
- Three or more: 11%
Number of Radios Owned in Home

Total Population 12+

<table>
<thead>
<tr>
<th>Year</th>
<th>Zero</th>
<th>One to three</th>
<th>Four or more</th>
<th>Mean (# of Radios)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>4%</td>
<td>65%</td>
<td>31%</td>
<td>2.9</td>
</tr>
<tr>
<td>2018</td>
<td>29%</td>
<td>60%</td>
<td>11%</td>
<td>1.6</td>
</tr>
</tbody>
</table>
Number of Radios Owned in Home (Age 18-34)

- **2008**
  - Zero: 6%
  - One to three: 70%
  - Four or more: 24%
  - Mean: 2.7

- **2018**
  - Zero: 50%
  - One to three: 45%
  - Four or more: 5%
  - Mean: 1.0
Radio Ownership and Smart Speaker Ownership

Total Population 12+

- Own a radio but no Smart Speaker: 58%
- Own a Smart Speaker but no radio: 5%
- Own both: 13%
- Own neither: 24%
SOCIAL MEDIA
Social Media Brand Awareness

Total Population 12+

<table>
<thead>
<tr>
<th>Social Media</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>93%</td>
<td>95%</td>
<td>94%</td>
</tr>
<tr>
<td>Twitter</td>
<td>87%</td>
<td>87%</td>
<td>90%</td>
</tr>
<tr>
<td>Instagram</td>
<td>83%</td>
<td>88%</td>
<td>87%</td>
</tr>
<tr>
<td>Snapchat</td>
<td>71%</td>
<td>82%</td>
<td>83%</td>
</tr>
<tr>
<td>Pinterest</td>
<td>63%</td>
<td>70%</td>
<td>69%</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>52%</td>
<td>58%</td>
<td>58%</td>
</tr>
</tbody>
</table>
Social Media Usage

Base: Age 12+ and currently ever use Facebook, Snapchat, Twitter, Instagram, Pinterest, or LinkedIn

*2008-2012: Ever use Facebook, Twitter, or LinkedIn

% currently ever use

- 2008*: 10%
- 2009*: 21%
- 2010*: 44%
- 2011*: 53%
- 2012*: 57%
- 2013: 63%
- 2014: 66%
- 2015: 70%
- 2016: 77%
- 2017: 80%
- 2018: 77%

Estimated 216 Million
Total Population 12+

Social Media Brand Usage

- Facebook: 2016 (64%), 2017 (62%), 2018 (67%)
- Instagram: 2016 (29%), 2017 (34%), 2018 (36%)
- Pinterest: 2016 (25%), 2017 (30%), 2018 (31%)
- Snapchat: 2016 (23%), 2017 (29%), 2018 (31%)
- LinkedIn: 2016 (20%), 2017 (22%), 2018 (22%)
- Twitter: 2016 (21%), 2017 (23%), 2018 (21%)

% currently ever use social media brand
Facebook Usage

% currently ever use Facebook

<table>
<thead>
<tr>
<th>Age 12-34</th>
<th>Age 35-54</th>
<th>Age 55+</th>
</tr>
</thead>
<tbody>
<tr>
<td>79%</td>
<td>72%</td>
<td>49%</td>
</tr>
<tr>
<td>67%</td>
<td>69%</td>
<td>49%</td>
</tr>
</tbody>
</table>

2017 | 2018
Social Media Brand Used Most Often

Base: Age 12+ and currently ever use Facebook, Snapchat, Twitter, Instagram, Pinterest, or LinkedIn

2017
- Facebook: 63%
- Snapchat: 9%
- Instagram: 10%
- LinkedIn: 4%
- Pinterest: 6%
- Twitter: 3%
- Others: 5%

2018
- Facebook: 57%
- Snapchat: 14%
- Instagram: 12%
- LinkedIn: 4%
- Pinterest: 5%
- Twitter: 3%
- Others: 3%

Sentence: The image shows the percentage of users who used different social media brands most often in 2017 and 2018, based on the infinite dial study. The data is collected from users who are 12 years or older and currently ever use Facebook, Snapchat, Twitter, Instagram, Pinterest, or LinkedIn.
Social Media Brand Used Most Often (Age 12-34)

Base: Currently ever use Facebook, Snapchat, Twitter, Instagram, Pinterest, or LinkedIn

**2017**
- Facebook: 48%
- Snapchat: 19%
- Instagram: 18%
- Pinterest: 5%
- Twitter: 3%
- Others: 7%

**2018**
- Facebook: 35%
- Snapchat: 29%
- Instagram: 22%
- Pinterest: 4%
- Twitter: 5%
- Others: 5%
ONLINE AUDIO
Monthly Online Audio Listening

Total Population 12+

% listening to Online Audio in last month

Online Audio = Listening to AM/FM radio stations online and/or listening to streamed audio content available only on the Internet

The Infinite Dial © 2018 Edison Research and Triton Digital
Monthly Online Audio Listening

% listening to Online Audio in last month

Online Audio = Listening to AM/FM radio stations online and/or listening to streamed audio content available only on the Internet

The Infinite Dial © 2018 Edison Research and Triton Digital
Weekly Online Audio Listening

Total Population 12+

Online Audio = Listening to AM/FM radio stations online and/or listening to streamed audio content available only on the Internet

% listening to Online Audio in last week

Estimated 160 Million
Average Time “Weekly Online Audio Listeners” Spend Listening to Online Audio

Base: Weekly Online Audio Listeners

<table>
<thead>
<tr>
<th>Year</th>
<th>Hours:Minutes in last week</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>6:13 33M people</td>
</tr>
<tr>
<td>2009</td>
<td>6:31 43M people</td>
</tr>
<tr>
<td>2010</td>
<td>8:02 44M people</td>
</tr>
<tr>
<td>2011</td>
<td>9:17 57M people</td>
</tr>
<tr>
<td>2012</td>
<td>9:46 76M people</td>
</tr>
<tr>
<td>2013</td>
<td>11:56 87M people</td>
</tr>
<tr>
<td>2014</td>
<td>13:19 95M people</td>
</tr>
<tr>
<td>2015</td>
<td>12:53 119M people</td>
</tr>
<tr>
<td>2016</td>
<td>12:08 136M people</td>
</tr>
<tr>
<td>2017</td>
<td>14:39 148M people</td>
</tr>
<tr>
<td>2018</td>
<td>13:40 160M people</td>
</tr>
</tbody>
</table>

Online Audio = Listening to AM/FM radio stations online and/or listening to streamed audio content available only on the Internet
Online Audio Listening in Car

“Have you ever listened to Internet Audio in a car by listening to the stream from a cell phone that you have connected to a car audio system?”

Base: Own a cell phone; 95%

% saying yes:
- 2010: 6%
- 2011: 11%
- 2012: 17%
- 2013: 21%
- 2014: 26%
- 2015: 35%
- 2016: 37%
- 2017: 40%
- 2018: 44%
AUDIO BRANDS
Audio Brand Awareness

Total Population 12+

- Pandora: 85%
- iHeartRadio: 67%
- Spotify: 65%
- Apple Music*: 60%
- Amazon Music: 60%
- Google Play All Access: 51%
- Napster: 44%
- SoundCloud: 38%
- NPR One: 20%
- Slacker: 18%
- Radio.com: 17%
- TuneIn Radio: 16%
- 8Tracks: 11%
- Tidal: 10%
- AccuRadio: 8%
- Deezer: 7%

*Asked as “Apple Music, the paid music subscription from Apple”
Listened in the last month to...

Total Population 12+

- Pandora: 31%
- Spotify: 20%
- iHeartRadio: 11%
- Apple Music*: 10%
- Amazon Music: 9%
- SoundCloud: 9%
- Google Play All Access: 6%

*Asked as “Apple Music, the paid music subscription from Apple”

Brands lower than 6% Age 12+ not shown
Listened in the last month to...

Total Population 12+

- **Pandora**: 32% (2016), 32% (2017), 31% (2018)
- **Spotify**: 18% (2016), 20% (2017), 13% (2018)
- **iHeartRadio**: 12% (2016), 13% (2017), 11% (2018)
- **Apple Music***: 8% (2016), 10% (2017), 12% (2018)
- **Amazon Music**: 6% (2016), 6% (2017), 9% (2018)
- **SoundCloud**: 11% (2016), 9% (2017), 11% (2018)
- **Google Play All Access**: 5% (2016), 6% (2017), 6% (2018)

*2016: *Asked as Apple Music, formerly known as iTunes Radio
2017-2018: *Asked as Apple Music, the paid music subscription from Apple
Listened in the last month to…
(Age 25-54)

- Spotify: 12% (2016), 16% (2017), 18% (2018)
- SoundCloud: 8% (2016), 8% (2017), 8% (2018)
- Google Play All Access: 5% (2016), 8% (2017), 9% (2018)

*2016: “Asked as Apple Music, formerly known as iTunes Radio
2017-2018: *Asked as Apple Music, the paid music subscription from Apple
Listened in the last week to...

Total Population 12+

- Pandora: 23%
- Spotify: 16%
- Apple Music*: 9%
- iHeartRadio: 7%
- Amazon Music: 6%
- Google Play All Access: 5%

*Asked as “Apple Music, the paid music subscription from Apple”

Brands lower than 5% Age 12+ not shown
Listened in the last week to...

Total Population 12+

- **Pandora**: 25% (2018), 23% (2017), 23% (2016)
- **Spotify**: 10% (2016), 15% (2017), 16% (2018)
- **Apple Music***: 8% (2016), 7% (2017), 9% (2018)
- **iHeartRadio**: 8% (2016), 9% (2017), 9% (2018)
- **Amazon Music**: 4% (2016), 4% (2017), 4% (2018)
- **Google Play All Access**: 4% (2016), 4% (2017), 5% (2018)

*2016: "Asked as Apple Music, formerly known as iTunes Radio"
2017-2018: *Asked as Apple Music, the paid music subscription from Apple*
Audio Brand Used Most Often

Base: Currently ever use any audio brand

- Pandora: 35%
- Spotify: 21%
- Apple Music: 10%
- Amazon Music: 8%
- iHeartRadio: 8%
- Google Play: 5%
- Others: 13%
Audio Brand Used Most Often

Base: Currently ever use any audio brand

<table>
<thead>
<tr>
<th></th>
<th>Pandora</th>
<th>Spotify</th>
<th>Apple Music*</th>
<th>iHeart Radio</th>
<th>Amazon Music</th>
<th>Google Play</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>12+ Population</td>
<td>35%</td>
<td>21%</td>
<td>10%</td>
<td>8%</td>
<td>8%</td>
<td>5%</td>
<td>13%</td>
</tr>
<tr>
<td>Own a Smart Speaker</td>
<td>34%</td>
<td>23%</td>
<td>10%</td>
<td>5%</td>
<td>15%</td>
<td>6%</td>
<td>7%</td>
</tr>
</tbody>
</table>

*Asked as Apple Music, the paid music subscription from Apple
Weekly YouTube Usage

“Have you used YouTube to watch music videos or listen to music in the last week?”

Total Population 12+

% used YouTube in last week

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33%</td>
<td>41%</td>
<td>43%</td>
<td>43%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Estimated 129 Million
IN-CAR MEDIA
Audio Sources Used in Car

Base: Age 18+ and has driven/ridden in car in last month; 88%

- AM/FM Radio: 82%
- CD Player: 49%
- Owned Digital Music: 45%
- Online Radio: 28%
- Podcasts: 23%
- Satellite Radio: 21%

% currently ever using audio source in car
Audio Sources Used in Car

Base: Age 18+ and has driven/ridden in car in last month; 88%

- **AM/FM Radio**: 84% (2016), 82% (2017), 82% (2018)
- **CD Player**: 56% (2016), 49% (2017), 45% (2018)
- **Owned Digital Music**: 38% (2016), 45% (2017), 45% (2018)
- **Online Radio**: 21% (2016), 26% (2017), 28% (2018)
- **Podcasts**: 19% (2016), 23% (2017), 23% (2018)
- **Satellite Radio**: 19% (2016), 22% (2017), 21% (2018)

% currently ever using audio source in car
# Audio Source Used Most Often in Car

Base: Age 18+ and has driven/ridden in car in last month, and use any audio source in car

<table>
<thead>
<tr>
<th>Year</th>
<th>AM/FM Radio</th>
<th>CDs/Own music collection</th>
<th>Online Audio</th>
<th>Satellite Radio</th>
<th>Podcasts</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>60%</td>
<td>17%</td>
<td>8%</td>
<td>11%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>63%</td>
<td>15%</td>
<td>8%</td>
<td>12%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>57%</td>
<td>15%</td>
<td>9%</td>
<td>14%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>56%</td>
<td>15%</td>
<td>12%</td>
<td>13%</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>
In-Dash Information and Entertainment Systems

Base: Age 18+ and has driven/ridden in car in last month; 88%

Estimated 42 Million

% have an in-dash system in car

- 2013: 6%
- 2014: 8%
- 2015: 10%
- 2016: 12%
- 2017: 12%
- 2018: 15%
Audiobook Listening

Total Population 12+

% ever listened to an audiobook

- 2015: 43%
- 2016: 43%
- 2017: 45%
- 2018: 44%

Estimated 124 Million
Last Listened to an Audiobook

Within the past four weeks: 30%
Six months to less than 12 months ago: 22%
One month to less than six months ago: 12%
One year to two years ago: 16%
More than two years ago: 20%

Base: Ever listened to an audiobook
Number of Audiobooks Listened to in Past 12 Months

Base: Listened to audiobook in past 12 months

- **Three to Four**: 27%
- **Two**: 20%
- **Five to Ten**: 19%
- **Eleven or more**: 15%
- **One**: 19%

Median of three audiobooks listened to
PODCASTING
Podcasting Familiarity

Total Population 12+

% familiar with the term podcasting

2006 22%
'07 37%
'08 37%
'09 43%
'10 45%
'11 45%
'12 46%
'13 46%
'14 48%
'15 49%
'16 55%
'17 60%
2018 64%

Estimated 180 Million
Podcast Listening

Total Population 12+

% ever listened to a podcast

Estimated 124 Million
Monthly Podcast Listening

Total Population 12+

% listening to a podcast in last month

- 2008: 9%
- '09: 11%
- '10: 12%
- '11: 12%
- '12: 14%
- '13: 12%
- '14: 15%
- '15: 17%
- '16: 21%
- '17: 24%
- 2018: 26%

Estimated 73 Million
Monthly Podcast Listening

% listening to a podcast in last month

Monthly Podcast Listening

% listening to a podcast in last month

Men
- 2014: 17%
- 2015: 24%
- 2016: 27%
- 2017: 27%
- 2018: 17%

Women
- 2014: 13%
- 2015: 16%
- 2016: 18%
- 2017: 21%
- 2018: 24%
Weekly Podcast Listening

Total Population 12+

- 2013: 7%
- 2014: 8%
- 2015: 10%
- 2016: 13%
- 2017: 15%
- 2018: 17%

Estimated 48 Million
Number of Podcasts Listened to in Last Week

Base: Weekly Podcast Listeners

- One: 18%
- Two: 17%
- Three: 13%
- Four or Five: 21%
- Six to Ten: 17%
- 11 or more: 14%

Average of seven podcasts listened per week
## Device Used Most Often to Listen to Podcasts

Base: Ever Listened to a Podcast

<table>
<thead>
<tr>
<th>Year</th>
<th>Computer</th>
<th>Smartphone/Tablet/Portable device</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>42%</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>34%</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>33%</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>29%</td>
<td>69%</td>
<td></td>
</tr>
</tbody>
</table>
Location Listened to Podcasts Most Often

Base: Ever Listened to a Podcast

- At home: 49%
- In car/truck: 22%
- At work: 11%
- Riding public transportation: 4%
- Working out: 4%
- Walking around: 3%
- Other: 7%
Listen to Podcast Most Often in Car/Truck

Base: Ever Listened to a Podcast

<table>
<thead>
<tr>
<th>Year</th>
<th>% Listen to Podcast Most Often in Car/Truck</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>16%</td>
</tr>
<tr>
<td>2016</td>
<td>17%</td>
</tr>
<tr>
<td>2017</td>
<td>18%</td>
</tr>
<tr>
<td>2018</td>
<td>22%</td>
</tr>
</tbody>
</table>
**Podcasting Listening**

“Think about the podcast episodes you listen to. Do you typically listen to..?”

Base: Ever Listened to a Podcast

- Most of the podcast: 45%
- The entire podcast episode: 35%
- Less than half the podcast: 12%
- Just the beginning of the podcast: 5%
- Don't Know: 3%
“Do you ever increase the speed of your podcasts in order to listen to them faster?”

- Yes: 19%
- No: 81%

Base: Ever Listened to a Podcast
Smart Speaker adoption is growing at a faster rate than the early days of smartphones. Brands and advertisers need to quickly develop an audio strategy that accounts for this dramatic change.
Observations

While AM/FM radio faces a “home hardware challenge," particularly among 18-34 year-olds, radio remains by far the dominant medium in the car.
The percentage of Americans who use social media has tapered off, led by the first-ever decline in Facebook usage. Facebook also experienced a dramatic fall-off as the "most-used" service amongst younger people.
In streaming audio, Pandora maintains a stable percentage of users and remains the category leader. Growth in Spotify, Apple Music, and Amazon Music are all contributing to the continued growth in audio consumption.
Podcasting continues its steady growth, with even more significant gains in the vehicle. After remaining fairly steady for several years, the number of podcasts consumed by weekly listeners has also gone up--matching the medium's increased Share of Ear.
Save the Date

Infinite Dial Canada
April 4, 2018 at 2pm Eastern
Details to follow

Infinite Dial Australia
Late April 2018
Details to follow