## Pew Research Center

# Tech Adoption Climbs Among Older Adults 

Roughly two-thirds of those age 65 and older go online and a record share now own smartphones - although many seniors remain relatively divorced from digital life

By Monica Anderson and Andrew Perrin

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## Tech Adoption Climbs Among Older Adults

Roughly two-thirds of those age 65 and older go online, and a record share now own a smartphone - although many seniors remain relatively divorced from digital life

A record 46 million seniors live in the United States today, and older Americans - those age 65 and older - now account for $15 \%$ of the overall U.S. population. By 2050, $22 \%$ of Americans will be 65 and older, according to U.S. Census Bureau projections. ${ }^{1}$

At the same time America is graying, recent Pew Research Center surveys find that seniors are also moving towards more digitally connected lives. Around four-in-ten (42\%) adults ages 65 and older now report owning smartphones, up from just $18 \%$ in 2013. Internet use and home broadband adoption among this group have also risen substantially. Today, $67 \%$ of seniors use the internet a 55-percentage-point increase in just under two decades. And for the first time, half of older Americans now have broadband at home.

## Smartphone adoption among seniors has nearly quadrupled in the last five years

\% of U.S. adults who say they have or use the following


Source: Survey conducted Sept.29-Nov.6, 2016. Trend data are from previous Pew Research Center surveys.
"Tech Adoption Climbs Among Older Adults"
pew research center

[^0]Yet despite these gains, many seniors remain largely disconnected from the digital revolution. One-third of adults ages 65 and older say they never use the internet, and roughly half (49\%) say they do not have home broadband services. Meanwhile, even with their recent gains, the proportion of seniors who say they own smartphones is 42 percentage points lower than those ages 18 to 64 .

And as is true for the population as a whole, there are also substantial differences in technology adoption within the older adult population based on factors such as age, household income and educational attainment.

Seniors ages 65 to 69 are about twice as likely as those ages 80 and older to say they ever go online ( $82 \%$ vs. $44 \%$ ) or have broadband at home ( $66 \%$ vs. $28 \%$ ), and they are roughly four times as likely to say they own smartphones (59\% vs. 17\%).

Adoption rates also vary greatly by household income. Fully $87 \%$ of seniors living in households earning $\$ 75,000$ or more a year say they have home broadband, compared with just $27 \%$ of seniors whose annual household income is below $\$ 30,000$.
Educational differences follow a similar pattern, with college graduates adopting technology at much higher rates than seniors with lower levels of formal education.

These younger, relatively affluent and/or highly educated seniors are helping to drive much of the recent growth in technology adoption among the older population as a whole. For example, smartphone ownership among seniors whose annual household income is $\$ 75,000$ or more increased by 39 percentage points since 2013 - 15 points higher than the growth reported among seniors overall.

It also remains the case that older adults face unique barriers to using and adopting new technologies. Some $34 \%$ of older internet users say they have little to no confidence in their ability to use electronic devices to perform online tasks, while $48 \%$ of seniors say that this statement describes them very well: "When I get a new electronic device, I usually need someone else to set it up or show me how to use it."

Still, older Americans who use the internet tend to view technology in a positive light and incorporate digital technology into their everyday lives. Fully $58 \%$ of adults ages 65 and older say technology has had a mostly positive impact on society, while roughly threequarters of internet-using seniors say they go online on a daily basis - and nearly one-in-ten go online almost constantly.

## Most seniors say they need help using new electronic devices

$\%$ of U.S. adults who say the statement, 'When I get a new electronic device, I usually need someone else to set it up or show me how to use it,' describes them very or somewhat well, by age


Note: NET category calculated prior to rounding.
Source: Survey conducted Oct. 13- Nov. 15, 2015.
"Tech Adoption Climbs Among Older Adults"
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These findings are based on several nationally representative Pew Research Center surveys. The main findings on technology adoption are from a phone survey of 3,015 U.S. adults conducted Sept. 29-Nov. 6, 2016. The margin of sampling error at the $95 \%$ confidence interval for results based on the total sample is plus or minus 2 percentage points. Details about the other surveys used in this report are available in the methodology. The terms "seniors", "older Americans" and "older adults" are used interchangeably in this report to denote adults living in the U.S. who are ages 65 and older.

## 1. Technology use among seniors

Although seniors consistently have lower rates of technology adoption than the general public, this group is more digitally connected than ever. In fact, some groups of seniors - such as those who are younger, more affluent and more highly educated - report owning and using various technologies at rates similar to adults under the age of 65 .

Still, there remains a notable digital divide between younger and older Americans. And many seniors who are older, less affluent or with lower levels of educational attainment continue to have a distant relationship with digital technology.

Four-in-ten seniors now own smartphones, more than double the share that did so in 2013

With smartphone ownership in the U.S. more than doubling in the past five years, Americans are embracing mobile technology at a rapid pace. And while adoption rates among seniors continue to trail those of the overall population, the share of adults ages 65 and up who own smartphones has risen 24 percentage points (from $18 \%$ to $42 \%$ ) since 2013. Today, roughly half of older adults who own cellphones have some type of smartphone; in 2013, that share was just $23 \%$.

Smartphone ownership among seniors varies substantially by age: $59 \%$ of 65- to 69-year-olds own smartphones, but that share

Roughly four-in-ten seniors are smartphone owners
\% of U.S. adults ages 65 and older who say they own the following ...


Source: Survey conducted Sept.29-Nov.6, 2016.
"Tech Adoption Climbs Among Older Adults"
PEW RESEARCH CENTER
falls to $49 \%$ among 70- to 74-year-olds. Smartphone adoption drops off considerably among adults in their mid-70s and beyond. Some $31 \%$ of 75 - to 79 -year-olds say they own smartphones, while only $17 \%$ of those ages 80 and older are smartphone owners.

Smartphone ownership is also highly correlated with household income and educational attainment. Fully $81 \%$ of older Americans whose annual household income is $\$ 75,000$ or more say they own smartphones, compared with $27 \%$ of those living in households earning less than \$30,000 a year. Additionally, around two-thirds of seniors with bachelor's or advanced degrees report owning smartphones ( $65 \%$ ), compared with $45 \%$ of those who have some college experience and $27 \%$ of those who have high school diplomas or less.

Seniors in these high-adoption groups have seen the largest growth in smartphone ownership in recent years. Since 2013, smartphone adoption among older adults who

## Large increases in smartphone ownership among older adults who are affluent, well educated and younger

\% of U.S. adults ages 65 and up who say they own smartphones


Source: Survey conducted Sept.29-Nov.6, 2016.
"Tech Adoption Climbs Among Older Adults"
PEW RESEARCH CENTER live in households earning \$75,000 or more a year has increased by 39 percentage points; those with at least bachelor's degrees, as well as those who are ages 65 to 69 , have each seen a $30-$ point increase in smartphone adoption over that time.

## Internet use and broadband adoption among seniors varies across demographic groups

As is true of the population as a whole, internet adoption among seniors has risen steadily over the last decade and a half. When the Center began tracking internet adoption in early 2000, just 14\% of seniors were internet users. But today, $67 \%$ of adults ages 65 and older say they go online.

The share of seniors who subscribe to home broadband services has also risen - albeit at a slower rate than internet use. Around half of seniors (51\%) now say they have highspeed internet at home. This represents a modest uptick from 2013, when $47 \%$ of older adults were broadband adopters.

As is true of the general public, internet and broadband adoption among older adults varies substantially across a number of demographic factors - most notably age, household income and educational attainment.

Younger seniors use the internet and subscribe to home broadband at rates that are comparable to the overall population. Fully $82 \%$ of 65 - to 69 -year-olds are internet users, and two-thirds say they have broadband internet connections at home. (Internet use and broadband adoption rates for the overall population are $90 \%$ and $73 \%$, respectively).

On the other hand, fewer than half of seniors ages 80 and up (44\%) report using the internet and just $28 \%$ say they have home broadband service. Adoption rates for seniors in their 70 fall in between these two groups.

Internet and broadband adoption rates also differ considerably by household income and educational attainment. Around nine-in-ten seniors whose annual household income is \$75,000 or more say they go online (94\%) or have high-speed internet at home ( $87 \%$ ). Those shares drop to $46 \%$ and $27 \%$, respectively, among older adults living in households earning less than $\$ 30,000$ a year. College graduates are far more likely than those with high school educations or less to say they use the internet ( $92 \%$ vs. $49 \%$ ) or have home broadband service ( $82 \%$ vs. $30 \%$ ).

## Tablet ownership grows among older Americans, while e-reader adoption stalls

Roughly one-third (32\%) of seniors say they own tablet computers, while about one-in-five (19\%) report owning ereaders. While this represents a double-digit increase in tablet ownership since 2013, the share of older Americans who own e-readers has stayed largely unchanged over that time period. (This mirrors adoption trends in the broader population as well).

Tablet ownership is especially common among seniors with more education and those living in higher-income households. Some $62 \%$ of older adults with annual household incomes of $\$ 75,000$ or more say they own tablet computers, while $56 \%$


Among seniors, roughly a third own tablets and a fifth own e-readers
$\%$ of U.S. adults ages 65 and older who say they own the following ...

Source: Survey conducted Sept.29-Nov.6, 2016.
"Tech Adoption Climbs Among Older Adults "
PEW RESEARCH CENTER of college-degree earners say the same. Each represents a more than 20-point increase since 2013 (at that point, $39 \%$ of highincome seniors and $31 \%$ of college graduates in this age group owned tablets).

By comparison, fewer than one-in-five seniors in households earning less than \$30,000 a year (16\%) or who have high school diplomas or less (18\%) own tablets. E-reader adoption follows a similar pattern, albeit from a lower baseline level of overall ownership.

Younger seniors are also more likely than their older counterparts to own tablets or e-readers, although these differences are especially pronounced in the case of tablets. Some $41 \%$ of 65 - to 69 -year-olds report having tablet computers, compared with $20 \%$ of those ages 80 and older. The age gap in e-reader ownership is narrower: $21 \%$ of 65 -to 69 -year-olds and $13 \%$ of those ages 80 and older are e-reader owners.

## Social media use among older Americans steadily increases

Social media is increasingly becoming an important platform where people find news and information, share their experiences and connect with friends and family. And just as internet adoption and smartphone ownership has grown among seniors, so has social media use.

Today, $34 \%$ of Americans ages 65 and up say they ever use social networking sites like Facebook or Twitter. This represents a seven-point increase from 2013, when $27 \%$ of older adults reported using social media. Still, a majority of seniors do not use social media, and the share that do is considerably smaller than that of the general population.

As with other forms of digital technology, younger seniors are more likely than their older counterparts to use social media. More than four-in-ten (45\%) seniors under the age of 75 say they ever use social networking sites, compared with $20 \%$ of those ages 75 and older. Social networking use is also relatively common among those who have at least some college experience and those whose annual household income is $\$ 50,000$ or more.


Source: Survey conducted Sept.29-Nov.6,
2016.
"Tech Adoption Climbs Among Older Adults"
PEW RESEARCH CENTER

## 2. Barriers to adoption and attitudes towards technology

Digital technology has transformed the way people communicate, get news, shop and even find love. And as more tasks migrate online, there are unique barriers and challenges that may hinder some older Americans from going online and using new technology. But despite these challenges, many seniors have a positive outlook about technology and the benefits it can provide. And once online, many older adults engage deeply with online content and activities.

## Older adults face unique barriers to adoption, ranging from physical challenges to a lack of comfort and familiarity with technology

One challenge facing older adults with respect to technology is the fact that many are simply not confident in their own ability to learn about and properly use electronic devices.

For example, just 26\% of internet users ages 65 and over say they feel very confident when using computers, smartphones or other electronic devices to do the things they need to do online, according to a 2015 Pew Research Center survey. Roughly one-third describe themselves as only a little (23\%) or not at all (11\%) confident in their ability to use electronic devices to do necessary online activities.

## Seniors are less confident when using electronic devices

\% of U.S. internet users who say they feel___ confident when using computers, smartphones or other electronics to do the things they need to do online, by age


Similarly, a 2016 report from the Center found that "digitally ready" Americans - meaning those who are confident in their digital skills and in their ability to find trustworthy information online - tend to be disproportionately under the age of 65 . Meanwhile, older groups make up a larger share of those who are described as "digitally unprepared."

Hand in hand with this lack of confidence in their own ability to use digital technology, seniors are also more likely than those in other age groups to say they need others to show them how to use new devices. Around threequarters of Americans ages 65 and up say the statement, "When I get a new electronic device, I usually need someone else to set it up or show me how to use it," describes them either very (48\%) or somewhat (25\%) well.

Older adults may also face physical challenges that might make it difficult to use or manipulate devices. Some $28 \%$ of U.S. adults ages 65 and up say they have health problems, disabilities or handicaps that keep them from participating fully in work, school, housework or other activities. ${ }^{2}$ And seniors who report that they have a disability are less likely than those who do not to utilize a variety of digital assets - from the internet in general, to devices such as smartphones or tablet computers. ${ }^{3}$

## Most seniors say they need help using new electronic devices

$\%$ of U.S. adults who say the statement, 'When I get a new electronic device, I usually need someone else to set it up or show me how to use it,' describes them very or somewhat well, by age


Note: NET category calculated prior to rounding.
Source: Survey conducted Oct. 13- Nov. 15, 2015.
"Tech Adoption Climbs Among Older Adults"
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## Only around a third of disabled seniors say they have home broadband

$\%$ of U.S. adults ages 65 and older, in each group, who say they have or use the following

| - Any disability - No disability |  |
| :---: | :---: |
| Go online | 55 - 72 |
| Home broadband | 36 - 57 |
| Smartphone | 32 - 46 |
| Tablet computer | 21 - 36 |
|  | $\begin{array}{lll}0 & 50 & 100\end{array}$ |

Source: Survey conducted Sept.29-Nov.6, 2016.
"Tech Adoption Climbs Among Older Adults"
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[^1]
## Once seniors are online, they engage at high levels with digital devices and content

Once online, most seniors make the internet a standard part of their daily routine. Roughly three-quarters of older internet users go online at least daily, including $17 \%$ who say they go online about once a day, $51 \%$ who indicate they do so several times a day and $8 \%$ who say they use the internet almost constantly. Among older adults who own smartphones, this figure is even higher: $76 \%$ of these smartphone-owning older adults use the internet several

## Roughly three-quarters of internet users ages 65 and up say they go online daily



Source: Survey conducted Mar. 7-April 4, 2016.
"Tech Adoption Climbs Among Older Adults"
PEW RESEARCH CENTER times a day or more.

Similarly, a relatively small share of older adults use social media - but those who use these platforms tend to be highly active and engaged. For instance, fully $70 \%$ of older adults who use Facebook indicate that they log in to the service on a daily basis. Other Pew Research Center surveys have found that older adults who say they get news on social media engage with news on these platforms at similar rates as social media news consumers who are ages 18 to 29 .

And even though playing video games is much more common among younger adults, many seniors are taking part in this tech-based activity. One-in-four adults ages 65 or older say they play online video games, according to a Pew Research Center survey conducted in 2015.

## Most older adults say technology has had a mostly positive impact on society

Despite these concerns and challenges, there are a number of areas in which seniors hold relatively positive views of technology and technology-related topics. For instance, at a broad level, $58 \%$ of seniors feel that technology has had a mostly positive effect on society, while just $4 \%$ feel that impact has been mostly negative.

Although older adults are less inclined than other age groups to say they like trying new technology, some seniors do show a strong preference for early tech adoption. On a six-item index that classifies Americans' preferences for new technology and products, around one-in-five adults ages 65 and older (21\%) hold strong preferences for being early tech adopters. ${ }^{4}$

Seniors also place a high value on the importance of home broadband service, according to a survey conducted by the Center in 2017. The vast majority of adults ages 65 and older say they believe having access to high-speed internet at home is either essential (42\%) or important (49\%). This puts older Americans on par with Americans of other ages when it comes to the importance of home broadband service.

## Most seniors say technology has had a mostly positive effect on society

\% of U.S. adults ages 65 and up who say technology has had a $\qquad$ impact on society


Note: Respondents who did not give an answer are not shown.
Source: Survey of U.S. adults conducted
March 2-28, 2016.
"Tech Adoption Climbs Among Older Adults" PEW RESEARCH CENTER

[^2]
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## Methodology

The analysis in this report is based on several Pew Research Center surveys. The main findings on technology adoption are from a telephone survey of 3,015 U.S. adults conducted Sept. 29-Nov. 6, 2016. Fully 757 respondents were interviewed on landline telephones, and 2,258 were interviewed on cellphones, including 1,342 who had no landline telephones.

The findings on frequency of internet use are based on a Pew Research Center phone survey conducted March 7-April 4, 2016, among a national sample of 1,520 U.S. adults. The margin of error for the full sample is of plus or minus 2.8 percentage points. Fully 381 respondents were interviewed on landline telephones, and 1,139 were interviewed on cellphones, including 636 who had no landline telephones.

The findings on confidence and whether people need assistance when using electronic devices is based on a phone survey of 2,752 U.S. adults conducted Oct. 13-Nov. 15, 2015. The margin of error for the full sample is of plus or minus 2.1 percentage points. Fully 963 respondents were interviewed on landline telephones, and 1,789 were interviewed on cellphones, including 1,059 who had no landline telephones.

Each of these surveys was conducted by interviewers at Princeton Data Source under the direction of Princeton Survey Research Associates International. A combination of landline and cellphone random-digit-dial samples were used; both samples were provided by Survey Sampling International. Interviews were conducted in English and Spanish. Respondents in the landline sample were selected by randomly asking for the youngest adult male or female who was at home. Interviews in the cellphone sample were conducted with the person who answered the phone, if that person was 18 years of age or older. For detailed information about our survey methodology, visit: http://www.pewresearch.org/methodology/u-s-survey-research/

The combined landline and cellphone samples are weighted using an iterative technique that matches gender, age, education, race, Hispanic origin and nativity, and region to parameters from the 2013 Census Bureau's American Community Survey and population density to parameters from the Decennial Census. The sample also is weighted to match current patterns of telephone status (landline only, cellphone only or both landline and cellphone) based on extrapolations from the 2014 National Health Interview Survey. The weighting procedure also accounts for the fact that respondents with both landlines and cellphones have a greater probability of being included in the combined sample and adjusts for household size among respondents with landline phones. The margins of error reported and statistical tests of significance are adjusted to account for the survey's design effect, a measure of how much efficiency is lost from the weighting procedures.

The data on perceptions of technology's impact on society is from a survey conducted as part of the American Trends Panel (ATP), created by Pew Research Center, a nationally representative panel of randomly selected U.S. adults living in households. Respondents who self-identify as internet users and who provided an email address participate in the panel via monthly self-administered web surveys, and those who do not use the internet or decline to provide an email address participate via the mail. The panel is being managed by Abt SRBI. Data in this report are drawn primarily from the March wave of the panel, conducted March 2-28, 2016, among 4,726 respondents ( 4,243 by web and 483 by mail). The margin of sampling error for the full sample of 4,726 respondents from the March wave is plus or minus 2.2 percentage points.

Members of the American Trends Panel were recruited from two large, national landline and cellphone random-digit-dial (RDD) surveys conducted in English and Spanish. At the end of each survey, respondents were invited to join the panel. The first group of panelists were recruited from the 2014 Political Polarization and Typology Survey, conducted from Jan. 23 to March 16, 2014.

The margin of error for the Sept. 29-Nov. 6, 2016, survey is plus or minus 2.0 percentage points. The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the $95 \%$ level of confidence for different groups in the survey:

|  | Sample size | Margin of error in <br> percentage points <br> U.S. adults |
| :--- | :---: | :---: |
| Age | 3,015 | +-2.0 |
| All 65+ | 740 | $+/-4.1$ |
| $65-69$ | 285 | $+/-6.6$ |
| $70-74$ | 185 | $+/-8.2$ |
| $75-79$ | 116 | $+/-10.4$ |
| 80+ | 154 | $+/-9.0$ |
| Among 65+ |  |  |
| Educational attainment | 246 | $+/-7.1$ |
| High school or less | 180 | $+/-8.3$ |
| Some college | 313 | $+/-6.3$ |
| College+ | 182 | $+/-8.3$ |
| Annual household income | 134 | $+/-9.6$ |
| <\$30,000 | 105 | $+/-10.9$ |
| \$30,000-<\$50,000 | 193 | $+/-8.0$ |
| \$50,000-<\$74,999 |  |  |
| \$75,000+ | 185 | $+/-8.2$ |
| Disability status | 555 | $+/-4.7$ |
| Has a disability |  |  |
| Does not have a disability |  |  |
| Source: Survey conducted Sept.29-Nov.6, 2016. |  |  |
| "Tech Adoption Climbs Among 0lder Adults" |  |  |
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In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

Pew Research Center undertakes all polling activity, including calls to mobile telephone numbers, in compliance with the Telephone Consumer Protection Act and other applicable laws.

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## Topline questionnaire

Data for Sept. 29-Nov. 6, 2016
Princeton Survey Research Associates International for Pew Research Center
Sample: $\mathbf{n = 3 , 0 1 5}$ adults age 18 or older nationwide, including $\mathbf{2 , 2 5 8}$ cellphone interviews
eminuseDo you use the internet or email, at least occasionally?
intmos Do you access the internet on a cellphone, tablet or other mobile handheld device, at least occasionally?

|  | USES INTERNET | DOES NOT USE <br> INTERNET |
| ---: | :---: | :---: |
| November 2016 | 90 | 10 |
| May 2016 | 87 | 13 |
| April 2016 | 87 | 13 |

home3nw Do you ever use the internet or email at HOME?
Based on all internet users [ $\mathrm{N}=2,749$ ]

November 2016
April 2016
November 2015

| YES | NO | (VOL.) <br> DON'T KNOW | (VOL.) <br> REFUSED |
| :---: | :---: | :---: | :---: |
| 92 | 8 | 0 | $*$ |
| 90 | 10 | $*$ | 0 |
| 90 | 10 | 0 | $*$ |

ввноме1Do you subscribe to dial-up internet service at home... OR do you subscribe to a higherspeed broadband service such as DSL, cable, or fiber optic service?
ввноме2[ASK IF BBHOME1=DIAL-UP:] Just to confirm, you use a dial-up connection to the internet at home, and not a higher-speed broadband connection?

Based on those who use the internet at home

|  | DIAL-UP | BROADBAND | (VOL.) вотн DIAL-UP AND BROADBAND | (VOL.) <br> ACCESS NET ON CELL OR TABLET ONLY | (VOL.) <br> NO HOME NET ACCESS | (VOL.) NONE OF THE ABOVE | (VOL.) DK | (VOL.) REF. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov 2016 [ $\mathrm{N}=2,564$ ] | 3 | 88 | 1 | 3 | 2 | n/a | 3 | * |
| April 2016 [ $\mathrm{N}=672$ ] | 3 | 86 | 1 | 4 | 3 | n/a | 3 | * |
| Nov 2015 [ $\mathrm{N}=2,217$ ] | 3 | 84 | 1 | 4 | 3 | n/a | 5 | 1 |

## SUMMARY OF HOME BROADBAND

Based on Total

|  | NOV 2016 |  |  | APRIL 2016 | NOV 2015 | JULY 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 73 | Home broadband users | 70 |  | 67 |  |
|  | 27 | No home broadband/DK | 30 | 33 |  | 37 |

DEVICE1a Next, do you have a cellphone, or not?

|  | YES | NO | (VOL.) DON'T KNOW | (VOL.) REFUSED |
| ---: | :---: | :---: | :---: | :---: |
| November 2016 | 95 | 5 | 0 | 0 |
| May 2016 | 92 | 8 | 0 | 0 |
| April 2016 | 92 | 8 | 0 | 0 |

## SUMMARY OF SMARTPHONE OWNERSHIP

smarti [FORM A:] Some cellphones are called "smartphones" because of certain features they have. Is your cellphone a smartphone such as an iPhone, Android, Blackberry or Windows phone, or are you not sure?
smart2 [FORM B:] Is your cellphone a smartphone, or not?
Based on all cellphone owners

November 2016 [ $\mathrm{N}=2,926]$
$\left.\begin{array}{ccccc}\text { YES, SMARTPHONE } & \begin{array}{c}\text { NO, NOT A } \\ \text { SMARTPHONE }\end{array} & \text { DON'T KNOW }\end{array}\right)$ REFUSED
snsint2 Do you ever use social media sites like Facebook, Twitter or LinkedIn?
Based on all internet users [ $\mathrm{N}=2,749$ ]

November 2016
May 2016
November 2015

| YES | NO | (VOL.) DON'T <br> KNOW | (VOL.) REFUSED |
| :---: | :---: | :---: | :---: |
| 77 | 23 | $*$ | $*$ |
| 74 | 26 | 0 | $*$ |
| 74 | 26 | $*$ | $*$ |

devices Please tell me if you happen to have each of the following items, or not. Do you have... [INSERT ITEMS IN ORDER]?
b. A handheld device made primarily for ebook reading, such as a Nook or Kindle ereader but NOT the Amazon Fire

| November 2016 | 22 | 78 | $*$ | $*$ |
| :--- | :--- | :--- | :--- | :--- |
| April 2016 | 17 | 82 | $*$ | 0 |
| April 2015 | 19 | 80 | 1 | $*$ |

c. A tablet computer like an iPad, Samsung Galaxy Tab, Microsoft Surface Pro, or Amazon Fire

| November 2016 | 51 | 49 | $*$ | 0 |
| :--- | :--- | :--- | :--- | :--- |
| April 2016 | 48 | 52 | $*$ | $*$ |
| April 2015 | 45 | 54 | $*$ | $*$ |
| A desktop or laptop computer |  |  |  |  |
| November 2016 | 78 | 22 | $*$ | $*$ |
| April 2016 | 74 | 26 | 0 | 0 |
| April 2015 | 73 | 27 | 0 | $*$ |

Data for Oct. 13-Nov. 15, 2015
Princeton Survey Research Associates International for Pew Research Center Sample: $\mathbf{n = 2 , 7 5 2}$ adults age 18 or older nationwide, including $\mathbf{1 , 7 8 9}$ cellphone interviews

Q19 Please tell me how well each of the following statements describes you. First: [INSERT ITEMS; RANDOMIZE]. [READ FOR FIRST ITEM, THEN AS NECESSARY: Does this describe you very well, somewhat well, not too well, or not well at all?] Next: [INSERT NEXT ITEM].

|  | SOMEWHAT <br> VERY WELL <br> WELL | NOT TOO <br> WELL | NOT WELL |
| :--- | :---: | :---: | :---: | :---: | :---: |
| WT ALL |  |  |  |$\quad$ (VOL.) DK $\quad$| (VOL.) |
| :---: |
| REFUSED |

a. When I get a new electronic device, I usually need someone else to set it up or show me how to use it.
$26 \quad 20$
11
42
1
1

Q20 Overall, how confident do you feel using computers, smartphones, or other electronic devices to do the things you need to do online? Do you feel very confident, somewhat confident, only a little confident, or not at all confident?

Based on all internet users or smartphone owners [ $\mathrm{N}=2,458$ ]

|  | CURRENT |  |
| :---: | :---: | :--- |
| $\%$ | 54 | Very confident |
|  | 32 | Somewhat confident |
|  | 10 | Only a little confident |
|  | 4 | Not at all confident |
|  | $*$ | (VOL.) Don't know |
|  | $*$ | (VOL.) Refused |

Data for March 7-April 4, 2016
Princeton Survey Research Associates International for Pew Research Center Sample: $\mathbf{n = 1 , 6 0 1}$ people age 16 or older nationwide, including 1,200 cellphone interviews
intrreq About how often do you use the internet? [READ]
Based on all internet users [ $\mathrm{N}=1,416$ ]

|  | CURRENT |  |  |
| :---: | :---: | :---: | :---: |
| $\%$ | 28 | Almost constantly | JULY 2015 |
|  | 49 | Several times a day | 24 |
|  | 10 | About once a day | 49 |
|  | 7 | Several times a week, OR | 11 |
|  | 6 | Less often? | 7 |
|  | $*$ | (VOL.) Don't know | 8 |
|  | $*$ | (VOL.) Refused | $*$ |
|  |  |  | 1 |

```
2016 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL
WAVE }15\mathrm{ March
    March 2-March 28, 2016
    TOTAL N=4,726
```


## ASK FORM 2 :

TECH1
Overall, would you say technology has had a mostly positive effect on our society or a mostly negative effect on our society?

```
Mar 2-Mar 28
    2016
    N=2,316
    5 2 ~ M o s t l y ~ p o s i t i v e
        8 Mostly negative
        38 Equal positive and negative effects
        2 No answer
```


[^0]:    ${ }^{1}$ See U.S. Census Bureau's "Facts for Features" blog post "Older Americans Month: May 2016".

[^1]:    2 Due to the nature of the surveys associated with this data, certain Americans with disabilities are likely undercounted. The figures reported are from phone surveys that were conducted via landlines and cellphones and likely under covered adults who are deaf or have difficulty speaking. In addition, our surveys do not cover those living in institutionalized group quarters, which may include some severely disabled individuals.
    ${ }^{3}$ Read more on technology adoption by disability status in Pew Research Center's 2017 blog post, "Disabled Americans are less likely to use technology."

[^2]:    4 Pew Research Center created an "early adopter index" that classifies Americans' preferences for new technology products based on six survey questions. See Pew Research Center's 2016 blog post "28\% of Americans are 'strong' early adopters of technology."

