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Americans and their gadgets

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http://pewinternet.org/Reports/2010/Gadgets.aspx

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Overview

In recent years the digital world has expanded far <u>beyond</u> the <u>desktop</u>¹, and consumers can now choose from an array of devices capable of satisfying their need for "anytime, anywhere" access to news, information, friends and entertainment. This report examines the latest research from the Pew Research Center's Internet & American Life Project regarding seven key appliances of the information age:

- **Cell phones** 85% of Americans now own a cell phone. Cell phone ownership rates among young adults illustrate the extent to which mobile phones have become a necessity of modern communications: fully 96% of 18-29 year olds own a cell phone of some kind.
- **Desktop and laptop computers** Three quarters (76%) of Americans own either a desktop or laptop computer. Since 2006, laptop ownership has grown dramatically (from 30% to 52%) while desktop ownership has declined slightly.
- **Mp3 players** Just under half of American adults (47%) own an mp3 player such as an iPod, a nearly five-fold increase from the 11% who owned this type of device in early 2005.
- Game consoles Console gaming devices like the Xbox and PlayStation are nearly as common as mp3 players, as 42% of Americans own a home gaming device. Parents (64%) are nearly twice as likely as non-parents (33%) to own a game console.
- Tablet computers and e-book readers Compared to the other devices in this list, e-book readers (such as the Kindle) and tablet computers (such as the iPad) are relatively new arrivals to the consumer technology scene and are owned by a relatively modest number of Americans. However, these devices are proving popular with traditional early adopter groups such as the affluent and highly educated--ownership rates for tablets and e-book readers among college graduates and those earning \$75,000 or more per year are roughly double the national average.

These findings are based on a survey of 3,001 American adults (ages 18 and older) conducted between August 9 and September 13, 2010. The margin of error is +/- 3 percentage points. Interviews were conducted in English and Spanish, and the survey included 1,000 cell phone interviews.

¹ <u>http://www.pewinternet.org/Reports/2009/5-The-Mobile-Difference--Typology.aspx</u> <u>http://www.pewinternet.org/Reports/2010/Mobile-Access-2010.aspx</u>

Americans and their Technology Devices

When it comes to personal communication devices, the cell phone remains the "gadget of choice" among Americans in 2010—fully 85% of all adults (and three-quarters of teens²) now own a mobile phone. Computers are the second-most commonly owned piece of personal technology, as six in ten Americans own a desktop computer and half own a laptop. Just under half of all adults own an mp3 player (47%) or console gaming device (42%), while e-book readers and tablet computers are currently each owned by around one in twenty adults.

% of American adults who own each device 100% 85% 80% 59% 60% 52% 47% 42% 40% 20% 5% 4% 0% Cell phone Tablet Desktop Laptop mp3 player Game e-Book computer computer console reader computer

Gadget Ownership, 2010

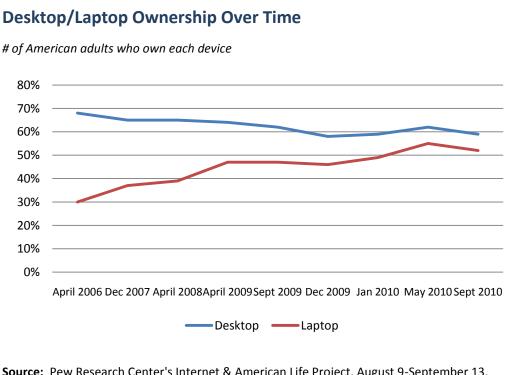
Source: Pew Research Center's Internet & American Life Project, August 9-September 13, 2010 Tracking Survey. N=3,001 adults 18 and older, including 1,000 reached via cell phone. Interviews were conducted in English (n=2,804) and Spanish (n=197).

Eight in ten American adults (78%) own two or more of these devices, and the median adult owns three of the seven gadgets we asked about in our survey. Among other factors, device ownership is highly correlated with age. For example, the typical adult under the age of 45 owns four devices, while the typical adult between the ages of 55 and 64 owns two and the typical senior (65 or older) owns just one. Those with high levels of income and education are also more likely to own a relatively large number of devices compared to those with lower income and education levels.

² http://pewinternet.org/Reports/2010/Teens-and-Mobile-Phones.aspx

Desktop and Laptop Computers

As the internet has increasingly gone mobile³, laptop computers have grown in popularity. Since 2006, the proportion of Americans who own a desktop computer has fallen slightly from 68% to 59%, while the proportion with a laptop computer has increased dramatically—from 30% in April 2006 to 52% in September 2010.



Source: Pew Research Center's Internet & American Life Project, August 9-September 13, 2010 Tracking Survey. N=3,001 adults 18 and older, including 1,000 reached via cell phone. Interviews were conducted in English (n=2,804) and Spanish (n=197).

18-29 year olds are currently the only major demographic group for whom laptops are notably more commonplace than desktop computers. Nearly three-quarters of 18-29 year olds (72%) own a laptop computer, compared with 56% who have a desktop computer. Overall, computer ownership is most prevalent within higher-income households, as more than nine in ten households with an annual income of \$50,000 or more contain a computer of some kind.

Interestingly, rural residents are just as likely as non-rural residents to own a desktop computer (56% of rural residents and 61% of non-rural residents do so) but are significantly less likely than non-rural dwellers to own a laptop computer (39% vs. 55%).

³ http://pewinternet.org/Reports/2010/Mobile-Access-2010.aspx

Computer Ownership

% of all adults in each group who have a computer

	Desktop	Laptop	Any Computer
Total	59%	52%	76%
Gender			
Men	60	54	78
Women	59	51	75
Age			
18-29	56	72	88
30-49	67	61	83
50-64	63	44	76
65+	39	21	45
Race/Ethnicity			
White, non-Hispanic	61	53	79
Black, non-Hispanic	58	45	67
Hispanic	54	50	70
Household Income			
Less than \$30,000	42	38	59
\$30,000-\$49,999	65	51	84
\$50,000-\$74,999	76	62	92
\$75,000+	79	79	98
Education level			
Less than High School	31	23	42
High School Diploma	53	42	69
Some College	66	60	86
College+	74	72	94
Geography			
Urban	59	55	77
Suburban	62	55	79
Rural	56	39	70

Cell Phones

Cell phone ownership has become near-ubiquitous in recent years, as 85% of all adults—and a majority of adults within each major demographic cohort—now own a mobile phone of some kind. Cell phone ownership is especially prominent among young adults, as 96% of 18-29 year olds now own a mobile phone. Yet even among seniors ages 65 and older—a group not traditionally known for its high levels of technology use—nearly six in ten (58%) now own a mobile phone. Put another way, cell phones are as prevalent among seniors as game consoles or desktop computers are among 18-29 year olds. Indeed, seniors are roughly 50% more likely to own a cell phone than to use the internet (40% of seniors are internet users).

Cell Phone Ownership

% of all adults in each group who have a cell phone

Total	85%
Gender	
Men	88
Women	82
Age	
18-29	96
30-49	90
50-64	85
65+	58
Race/Ethnicity	
White, non-Hispanic	85
Black, non-Hispanic	79
Hispanic	84
Household Income	
Less than \$30,000	75
\$30,000-\$49,999	90
\$50,000-\$74,999	93
\$75,000+	95
Education level	
Less than High School	69
High School Diploma	82
Some College	91
College+	90
Geography	
Urban	84
Suburban	86
Rural	77

Mp3 players

Just under half of American adults have an iPod or other mp3 player, a figure that has quadrupled since early 2005 (at that time 11% of Americans owned this type of device). As with cell phones, young adults are especially likely to own an mp3 player—75% of 18-29 year olds do so.

Mp3 Player Ownership

% of all adults in each group who have an mp3 player

Total	47%
Gender	
Men	47
Women	46
Age	
18-29	75
30-49	58
50-64	31
65+	10
Race/Ethnicity	
White, non-Hispanic	47
Black, non-Hispanic	46
Hispanic	43
Household Income	
Less than \$30,000	32
\$30,000-\$49,999	48
\$50,000-\$74,999	58
\$75,000+	70
Education level	
Less than High School	26
High School Diploma	38
Some College	53
College+	62
Geography	
Urban	49
Suburban	50
Rural	30

Game consoles

Game console ownership is highly correlated with age and parental status. While six in ten adults between the ages of 18 and 49 own a gaming device, this drops to one-quarter for 50-64 year olds and just 6% for those ages 65 and older. Similarly, adults with children living at home are nearly twice as likely as non-parents to own a game console (64% of parents do so, compared with 33% of non-parents).

Game Console Ownership

% of all adults in each group who have a game console like an Xbox or PlayStation

Total	42%
Gender	
Men	45
Women	40
Age	
18-29	62
30-49	61
50-64	25
65+	6
Race/Ethnicity	
White, non-Hispanic	41
Black, non-Hispanic	42
Hispanic	47
Household Income	
Less than \$30,000	34
\$30,000-\$49,999	47
\$50,000-\$74,999	47
\$75,000+	54
Education level	
Less than High School	31
High School Diploma	43
Some College	50
College+	41
Geography	
Urban	40
Suburban	46
Rural	34

e-Book Readers and Tablet Computers

At the moment, ownership of e-book readers and tablet computers is concentrated among college graduates and those with relatively high household incomes. Around one in ten Americans with annual household incomes of \$75,000 or more own a tablet PC or e-book reader, while fewer than 5% of households earning less than \$50,000 per year contain one of these devices.

e-Book Reader and Tablet Computer Ownership

% of all adults in each group who have an e-book reader or tablet computer

	e-Book Reader	Tablet Computer	
Total	5%	4%	
Gender			
Men	4	5	
Women	5	3	
Age			
18-29	5	5	
30-49	5	5	
50-64	5	4	
65+	4	1	
Race/Ethnicity			
White, non-Hispanic	5	3	
Black, non-Hispanic	7	3	
Hispanic	4	6	
Household Income			
Less than \$30,000	3	2	
\$30,000-\$49,999	2	3	
\$50,000-\$74,999	5	5	
\$75,000+	12	9	
Education level			
Less than High School	1	2	
High School Diploma	4	3	
Some College	3	2	
College+	9	7	
Geography			
Urban	5	4	
Suburban	5	4	
Rural	3	2	

Methodology

This report is based on the findings of a daily tracking survey on Americans' use of the Internet. The results in this report are based on data from telephone interviews conducted by Princeton Survey Research Associates International between August 9 and September 13, 2010, among a sample of 3,001 adults, age 18 and older. Interviews were conducted in English and Spanish. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling is plus or minus 2.5 percentage points. For results based Internet users (n=2,065), the margin of sampling error is plus or minus 2.9 percentage points. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

A combination of landline and cellular random digit dial (RDD) samples was used to represent all adults in the continental United States who have access to either a landline or cellular telephone. Both samples were provided by Survey Sampling International, LLC (SSI) according to PSRAI specifications. The landline sample for this survey was designed to generalize to the U.S. adult population and to oversample African-Americans and Hispanics. To achieve these objectives in a cost effective manner, the design uses standard list-assisted random digit dialing (RDD) methodology, but telephone numbers are drawn disproportionately from telephone exchanges with higher than average density of African-American and/or Hispanic households. The cellular sample was not list-assisted, but was drawn through a systematic sampling from dedicated wireless 100-blocks and shared service 100-blocks with no directory-listed landline numbers.

New sample was released daily and was kept in the field for at least five days. The sample was released in replicates, which are representative subsamples of the larger population. This ensures that complete call procedures were followed for the entire sample. At least 7 attempts were made to complete an interview at a sampled telephone number. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Each number received at least one daytime call in an attempt to find someone available. For the landline sample, half of the time interviewers first asked to speak with the youngest adult male currently at home. If no male was at home at the time of the call, interviewers asked to speak with the youngest adult female currently at home. If no female was available, interviewers asked to speak with the youngest adult male at home. For the cellular sample, interviews were conducted with the person who answered the phone. Interviewers verified that the person was an adult and in a safe place before administering the survey. Cellular sample respondents were offered a post-paid cash incentive for their participation. All interviews completed on any given day were considered to be the final sample for that day.

Disproportionate sampling and non-response in telephone interviews can produce biases in surveyderived estimates. The dataset was weighted in two stages. The first stage of weighting corrected for the disproportionate landline sample design and also accounted for the overlapping landline and cellular sample frames as well as different probabilities of selection associated with the number of adults in the household. The second stage of weighting matched overall sample demographics to population parameters. The demographic weighting parameters are derived from a special analysis of the most recently available Census Bureau's March 2009 Annual Social and Economic Supplement. This analysis produces population parameters for the demographic characteristics of adults age 18 or older. These parameters are then compared with the sample characteristics to construct sample weights. The weights are derived using an iterative technique that simultaneously balances the distribution of all weighting parameters.

Table 1.5ampl	e Dispositio	n
Landline	Cell	
53,160	17,075	Total Numbers Dialed
2,613	441	Non-residential
2,430	32	Computer/Fax
21		Cell phone
27,936	6,428	•
4,308	311	
15,852	9,863	Working numbers
29.8%	57.8%	Working Rate
1,436	104	No Answer / Busy
2,734	2,370	Voice Mail
84	17	Other Non-Contact
11,598	7,372	Contacted numbers
73.2%	74.7%	Contact Rate
1,020	1,027	Callback
8,303	, 4,597	Refusal
2,275	1,748	
19.6%	23.7%	Cooperation Rate
2010,0	2017 /0	
158	60	Language Barrier
	646	
2,117	1,042	Eligible numbers
93.1%	59.6%	Eligibility Rate
551170	001070	
116	42	Break-off
2,001	1,000	Completes
94.5%	96.0%	Completion Rate
13.6%	17.0%	Response Rate

Following is the full disposition of all sampled telephone numbers:

The disposition reports all of the sampled telephone numbers ever dialed from the original telephone number samples. The response rate estimates the fraction of all eligible respondents in the sample that were ultimately interviewed. At PSRAI it is calculated by taking the product of three component rates:

- Contact rate the proportion of working numbers where a request for interview was made
- Cooperation rate the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused
- Completion rate the proportion of initially cooperating and eligible interviews that were completed

Thus the response rate for the landline sample was 13.6 percent. The response rate for the cellular sample was 17.0 percent.

August Health Tracking Survey 2010

Data for August 9 – September 13, 2010

Princeton Survey Research Associates International for the Pew Research Center's Internet & American Life Project

Sample: n = 3,001 national adults, age 18 and older, including 1,000 cell phone interviews Interviewing dates: 08.09.10 - 09.13.10

Margin of error is plus or minus 3 percentage points for results based on Total [n=3,001] Margin of error is plus or minus 3 percentage points for results based on internet users [n=2,065] Margin of error is plus or minus 3 percentage points for results based on cell phone users [n=2,485] Margin of error is plus or minus 3 percentage points for results based on online health seekers [n=1,655]

		YES	NO	DON'T KNOW	REFUSED
a.	A desktop computer				
	Current	59	40	*	*
	May 2010	62	38	*	*
	January 2010	59	41	0	*
	December 2009	58	42	*	*
	September 2009	62	37	0	*
	April 2009	64	36	*	*
	April 2008	65	34	*	
	Dec 2007	65	35	*	
	April 2006	68	32	*	
b.	A laptop computer or netbook ⁴				
	Current	52	48	*	*
	May 2010	55	45	*	0
	January 2010	49	51	*	*
	December 2009	46	53	*	*
	September 2009	47	53	*	*
	April 2009	47	53	*	*
	April 2008	39	61	*	
	Dec 2007	37	63	*	
	April 2006	30	69	*	

Q10 As I read the following list of items, please tell me if you happen to have each one, or not. Do you have... [INSERT ITEMS IN ORDER]?

Q10 continued...

⁴ Through January 2010, item wording was "A laptop computer [IF NECESSARY: includes a netbook]."

		YES	NO	DON'T KNOW	REFUSED
c.	A cell phone or a Blackberry or iPhone or other device that				
	is also a cell phone ⁵				
	Current	85	15	*	*
	May 2010	82	18	*	0
	January 2010 ⁶	80	20	0	*
	December 2009	83	17	0	*
	September 2009	84	15	*	*
	April 2009	85	15	*	*
	April 2008	78	22	*	
	Dec 2007	75	25	*	
	Sept 2007	78	22	*	
	April 2006	73	27	*	
	January 2005 ⁷	66	34	*	
	November 23-30, 2004	65	35	*	
d.	An electronic book device or e-Book reader, such as a Kindle or Sony Digital Book				
	Current	5	95	*	*
	May 2010	4	96	*	*
	September 2009	3	97	*	*
	April 2009	2	98	*	*
e.	An iPod or other MP3 player ⁸				
	Current	47	53	*	*
	May 2010	46	54	*	0
	September 2009	43	57	*	0
	April 2009	45	55	*	*
	December 2007	34	66	*	
	April 2006	20	79	*	
	February 2005	11	88	1	
	January 2005	11	88	1	
					Q10 continued

⁵ Prior to April 2009, item wording was "A cell phone." From April 2009 thru December 2009, item wording was "A cell phone or a Blackberry or iPhone or other device that is also a cell phone." Beginning December 2007, this item was not asked of the cell phone sample, but results shown here reflect Total combined Landline and cell phone sample.

⁶ In January 2010, item wording was "A cell phone or a Blackberry or iPhone or other handheld device that is also a cell phone."

⁷ Through January 2005, question was not asked as part of a series. Question wording as follows: "Do you happen to have a cell phone, or not?"

⁸ Through February 2005, question was not asked as part of a series. Question wording as follows: "Do you have an iPod or other MP3 player that stores and plays music files, or do you not have one of these?"

Q10 continued...

		YES	NO	DON'T KNOW	REFUSED
f.	A game console like Xbox or Play Station				
	Current	42	57	*	*
	May 2010	42	58	*	*
	September 2009	37	63	*	*
	April 2009	41	59	*	*
g.	A tablet computer like an iPad				
	Current	4	96	*	*
	May 2010	3	97	*	0