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Pew Internet & American Life PROJECT

a project of the Tides Center

Content Creation Online

44% of U.S. Internet users have contributed their thoughts and their files to the online world.

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Summary of findings

44% of Internet users have created content for the online world through building or posting to Web sites, creating blogs, and sharing files

In a national phone survey between March 12 and May 20, 2003, the Pew Internet & American Life Project found that more than 53 million American adults have used the Internet to publish their thoughts, respond to others, post pictures, share files and otherwise contribute to the explosion of content available online. Some 44% of the nation's adult Internet users (those 18 and over) have done at least one of the following:

- 21% of Internet users say they have posted photographs to Web sites.

- 17% have posted written material on Web sites.

- 13% maintain their own Web sites.

- 10% have posted comments to an online newsgroup. A small fraction of them have posted files to a newsgroup such as video, audio, or photo files.

- 8% have contributed material to Web sites run by their businesses.

- 7% have contributed material to Web sites run by organizations to which they belong such as church or professional groups.

- 7% have Web cams running on their computers that allow other Internet users to see live pictures of them and their surroundings.

- 6% have posted artwork on Web sites.

- 5% have contributed audio files to Web sites.

- 4% have contributed material to Web sites created for their families.

- 3% have contributed video files to Web sites.

■ 2% maintain Web diaries or Web blogs, according to respondents to this phone survey. In other phone surveys prior to this one, and one more recently fielded in early 2004, we have heard that between 2% and 7% of adult Internet users have created diaries or blogs. In this survey we found that 11% of Internet users have read the blogs or diaries of other Internet users. About a third of these blog visitors have posted material to the blog.

Most of those who do contribute material are not constantly updating or freshening content. Rather, they occasionally add to the material they have posted, created, or shared. For instance, more than two thirds of those who have their own Web sites add new content only every few weeks or less often than that. There is a similar story related to the small proportion of Americans who have blogs.

The most eager and productive content creators break into three distinct groups:

■ **Power creators** are the Internet users who are most enthusiastic about content-creating activities. They are young – their average age is 25 – and they are more likely than other kinds of creators do things like use instant messaging, play games, and download music. And they are the most likely group to be blogging.

■ **Older creators** have an average age of 58 and are experienced Internet users. They are highly educated, like sharing pictures, and are the most likely of the creator groups to have built their own Web sites. They are also the most likely to have used the Internet for genealogical research.

■ **Content omnivores** are among the heaviest overall users of the Internet. Most are employed. Most log on frequently and spend considerable time online doing a variety of activities. They are likely to have broadband connections at home. The average age of this group is 40.

Part 1.

Content Creation Online

The material people contribute to the online world

The maxim is true: Anyone can be a publisher on the Web and many Internet users are. They have contributed to the online commons by creating or contributing to Web sites, posting photos, and sharing files. They are taking advantage of new Web applications like blogging and, in many cases, faster, bigger Internet connections to facilitate their contributions.

In a survey fielded between March 12 and May 20, 2003, the Pew Internet & American Life Project sought to measure the extent of these phenomena. Using a broad and encompassing definition of "content creation," we found that 44% of adult American Internet users – more than 53 million people – have contributed material to the online world. Content creation in our definition includes creating a Web site, posting material to another Web site for work, family or another organization, posting materials to a personal or another person's Weblog or online diary. It also includes posting photos, artwork, writing, or audio and video files to the World Wide Web, to a chat room or discussion or newsgroup. The average number of content creating activities for a content creator is relatively small – 1.7 activities – and that suggests the most Internet users are content for now to find a small number of ways to make their contribution.

Web sites

Some 13% of Internet users have their own Web site. Most do not refresh the material on their site very often: 10% of Web site owners post to their sites daily or more often, but the plurality (42%) update their site once a month or less often.

A relatively small portion of other users has contributed information to a Web site. Four percent have contributed to a family Web site, 8% have contributed to a Web site for a business and 7% contributed to a Web site for an organization they belonged to, like a club, a church or a professional group. 30% of all Internet users have visited the Web sites of other families or individuals.

How often do you post material on your Web site?	
More than 15 million American adults say they have their own Web site. Here's how often they freshen the content.	
Several times a day	4%
About once a day	6%
3-5 days a week	7%
1-2 days a week	11%
Every few weeks	25%
Less often	42%
Do not know/refused	5%

*Source: Pew Internet & American Life Project March-May 2003 survey.
N=202. Margin of error is ±6%.*

Web cams

Web cams, short for Web cameras, are small video cameras that are attached to a computer that broadcasts live video or still shots of the person at the computer across the Internet or to a Web page. Some 7% of all Internet users have ever used a Web cam to post live images to a Web site. Somewhat less than half (40%) of Web cam users use Web cams while chatting with someone else.

Weblogs/Blogs

In this survey, we found that a mere 2% of Internet users in this survey reported writing a weblog or online diary. Earlier surveys and a follow up check in early 2004 indicate that between 2% and 7% of Internet users publish a 'blog. Within this tiny group, only about 10% report updating their blog daily. Most weblog writers update their blogs once a week or less often.

Even though only a small number of Internet users are writing blogs, a slightly larger number of Net users are visiting them. Eleven percent of Internet users report visiting blogs written by others. And of these blog readers, a third report posting to or commenting on the blog entries that they have read.

Blog readers most frequently visit the online diaries of friends (56% have done so), strangers (46% have visited the blogs of people they have never met) and family members (a quarter report visiting family blogs).

Sharing files

Whether or not they have created original content to the Internet world, a greater percentage (though still not an overwhelming number of users) make content available online. One in five Internet users report posting photographs to the net, and 17% of Internet users have posted writing. Just about 5% of Internet users have posted artwork, audio files or video files to the Internet.

Some users are not just posting for others to view, some are actively sharing files. Twenty one percent of Internet users allow others to download files from their computer, including music and video files. However, these users were not included in the group of content creators. Surprisingly, Content Creators are less likely to say they download music than other Internet users. And as we reported more extensively in our recent Music Downloading Memo[1] two-thirds of these filesharers do not care about the copyright status of the files they share.

Newsgroups

One in five Internet users report visiting online newsgroups, forums where users can post their thoughts to a discussion that takes place over time. More than half of newsgroup users have posted comments to newsgroups, but a mere 4% have used newsgroups as a way to share photo, audio or video files.

Demographics of Content Creators

Who creates content? Content creators as a group are younger than the average American. However, in the Internet population, all age cohorts are equally as likely to create content. Content creators are more likely to be urban and suburban than rural, perhaps explained by the greater levels of broadband connectivity in urban centers than in rural areas. Content creators as a group are evenly divide between men and women and show similar racial and ethnic breakdowns as Internet users as whole.

Content creators are likely to have higher levels of education – 46% have a college degree or more compared to 26% of all Americans. Income levels are also generally higher among content creators, with 31% living in households earning more that $75,000 annually, compared to 18% of all Americans who live in such households.

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[1] "Music Downloading, Filesharing and Copyright: A Pew Internet Project Data Memo" is available at:
http://www.pewinternet.org/reports/toc.asp?Report=96

Who creates content	
The percentage of online content creators who come from each demographic group.	
Men	51%
Women	49%
Race/ethnicity	
Whites	77%
Blacks	9%
Hispanics	9%
Age	
18-29	28%
30-49	48%
50-64	20%
65+	4%
Household income	
Less than $30,000	19%
$30,000-$50,000	21%
$50,000-$75,000	17%
$75,000 +	31%
Education level	
Did not graduate from HS	6%
High school grad	19%
Some college	29%
College degree +	46%
Type of home Internet connection	
Dial up	63%
Broadband	37%

Source: Pew Internet & American Life Project March-May 2003 survey. N for Internet users=1,555. Margin of error is ±3%. In the Race/Ethnicity category, 6% of respondents fall into the "other"category.

Content creators are also disproportionately likely to be students—20% of all content creators are full-time or part-time students (about evenly split between the two groups), while only 14% of Americans identify themselves as students. However, given that many universities offer extremely high bandwidth facilities to their students and may make creating online content a part of the required coursework for a student, its not surprising that students are so well represented among content creators.

Broadband connectivity is somewhat more prevalent in the homes of content creators than other Internet users—37% have high-speed connections of some kind, compared to 29% of all Internet users.

Who is most likely to create content	
The percentage of each group of Internet users who have created online content of one kind of another.	
Men	45%
Women	44%
Race/ethnicity	
Whites	45%
Blacks	44%
Hispanics	39%
Age	
18-29	45%
30-49	47%
50-64	43%
65+	28%
Household income	
Less than $30,000	40%
$30,000-$50,000	43%
$50,000-$75,000	44%
$75,000 +	54%
Education level	
Did not graduate from HS	41%
High school grad	34%
Some college	40&
College degree +	57%
Type of Internet connection	
Dial up	40%
Broadband	57%

Source: Pew Internet & American Life Project March-May 2003 survey. N for Internet users=1,555. Margin of error is ±3%.

Content Creators—Three Groups

In a more in-depth analysis of content creators, the Project noticed that there are three distinct groups of Internet users who create content: Power creators, Older creators and Content Omnivores.

Power Creators

Power creators are the Internet users who are most enthusiastic about content-creating activities. These users, on average, have done more of the content-creating activities than others, with a mean of 2 activities. This group is quite similar to the Young Tech Elite,

detailed in our recent *Consumption of Information Goods and Services in the United States* report.[2]

These creators are much younger than the other two types of creators, with an average age of 25 (compared to 58 in the Older group and 40 for the Omnivores). They are slightly more likely to be male (56% of the group). Race and ethnicity are not much of a factor—this group looks like the Internet population at large, with a slightly larger percentage of Hispanics. Eighteen percent of this group identify themselves as Hispanic, compared to 11% of the whole Internet-using population.

The youth of this group informs many of the activities that they do. Instant messaging is extremely popular with this group, with two-thirds saying that have used instant messaging. Online game playing is also prevalent in this group with more than half participating in this activity. Statistically, young people are a more mobile as a group than older Americans, and Power content creators are no exception. This group is far more likely to search online for a job (63%) or a place to live (50%) than other creators.

In another nod to youth, this group also downloads music at a much greater rate than their other content creating compatriots, and are far more likely to report posting audio files and artwork to a Web site.

Power creators might also be called the Bloggers—12% of this group has a blog and close to a third (29%) has ever visited one, compared to less than 3% of other creators, and much lower levels of reported blog visits in the other two groups.

Power creators are also the most likely of all creators to have broadband Internet access—40% of power creators have high-speed access.

Older Creators

Older creators are most notable for their greater age—the average for this group is 58. This group of creators are long-time users—the average length of time online for older creators is 6 years, making older creators simultaneously experienced users. The average age of this group may also explain the high level of retirees—22% of Older creators are retired, and about half work full-time.

Older creators along with Content omnivores are a highly educated group—half of each group has a college degree or graduate degree, and another quarter have some college experience. The incomes of Older creators are also high—more than 50% earn more than $50,000 annually in household income.

Older creators are also not likely to be parents of children under 18 living at home. Less than 16% live with a minor child in their household. Thirty-one percent of Power creators

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[2] To learn more about the Young Tech Elite, please visit *The Consumption of Information Goods and Services* report at http://www.pewinternet.org/reports/toc.asp?Report=103

and almost 70% of Content omnivore (see following section) are the parent or guardians of resident children.

This group is also more likely than other content creators to live in rural areas, a factor which may partially explain their somewhat lower level of broadband internet access. Nevertheless the 36% of older creators with broadband is more than the 31% of American Internet-using households with high-speed access. This group is the least likely to live in an urban area.

This group does not engage in a particularly wide variety of online activities. Older creators' main content creation activity is the building and maintenance of a personal Web site. More than a third (34%) of this group has its own personal Web site. They are also just as likely to use a Web cam (18%) and post photos (36%) and video (8%) to a Web site as power creators. They are just as likely or slightly more likely than other creators to have contributed to or maintain a Web site for a business or an organization.

Similar to other older Americans, Older creators are also more enthusiastic about online genealogical activities than other creators—a third (33%) have ever searched online for information about their family history.

Content Omnivores

Content omnivores as a group have tried more of all kinds of Internet activities—including content creating ones. They are online frequently, and are more likely than other creators to have emailed, read news or surfed for information on a favorite hobby on a typical day. Still, they differ from power creators in that they have not embraced the newest of the new—most have never used a Web cam (only 13% have), and they do not keep a blog (3% do), though they do visit them, with 17% of Omnivores having ever visited the blog of a friend, relative or stranger.

Omnivores are the workhorses of the content creating crowd—they are online all the time and they also work full-time, with 75% employed full-time and another 7% employed part-time. Surprisingly, another 12% are students. These content creators are, like Older creators, highly educated with high incomes, with half with a college or graduate degree, and half with incomes over $50,000 annually. Omnivores mostly live in suburban (52%) or urban (31%) areas. This group is also contains a slightly larger percentage of women (53% women, 47% men), and is overwhelming made up of parents—69% have children under 18 living at home.

Content omnivores are, by a very slightly margin, the least likely of all content creators to have broadband Internet access. Nevertheless, they are frequent and dedicated users of the Internet and have tried a wide variety of activities. Omnivores seek finance information online (60% have ever done so), visit government Web sites (79% have), buy products and purchase travel online (78% and 73% respectively).

When creating their own content, Omnivores tend toward more tried and true content areas on the Web. More than a quarter (28%) have their own Web site, and they are just as likely as other creators to have contributed to a family, business or organizational Web site. They have posted photos online (30%) as well as pieces of writing (27%). This group shies away from newer or more fraught content creating or sharing technologies. A little less than a third (31%) have downloaded music (similar to the number of Omnivores who sought religious information online), and only 4% have ever posted audio or video files, and only 6% have ever shared any artwork. As mentioned before only 13% have ever used a Webcam, and only 3% (compared to 12% of power users) have a blog.

Methodology and questionnaire.

This Pew Internet & American Life Project report is based on the findings of a daily tracking survey on Americans' use of the Internet. Telephone interviews were conducted by Princeton Survey Research Associates between March 12 and March 19 and then from April 29-May 20, 2003 among a sample of 2,515 adults, 18 and older. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 2 percentage points. For results based Internet users (n=1,555) the margin of sampling error is plus or minus 3 percentage points. Also, some preliminary data from February 2004 was included in the report to help create an estimate for the findings on blog creation. 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.

The sample for this survey is a random digit sample of telephone numbers selected from telephone exchanges in the continental United States. The random digit aspect of the sample is used to avoid "listing" bias and provides representation of both listed and unlisted numbers (including not-yet-listed numbers). The design of the sample achieves this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange, and bank number.

New sample was released daily and was kept in the field for at least five days. This ensures that complete call procedures were followed for the entire sample. Additionally, the sample was released in replicates to make sure that the telephone numbers called are distributed appropriately across regions of the country. At least 10 attempts were made to complete an interview at every household in the sample. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Interview refusals were re-contacted at least once in order to try again to complete an interview. All interviews completed on any given day were considered to be the final sample for that day. The overall response rate was 32.8%.

Non-response in telephone interviews produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population, and these subgroups are likely to vary also on questions of substantive interest. In order to compensate for these known biases, the sample data are weighted in analysis. The demographic weighting parameters are derived from a special analysis of the most recently available Census Bureau's Current Population Survey (March 2002). This analysis produces population parameters for the demographic characteristics of adults age 18 or older, living in households that contain a telephone. 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.

Questionnaire and answers

[Note: CONT13 & CONT 14 were not used to create the category of "Content Creators."]

CONT01 Do you have your own web site?

Based on Internet users [N=1,555]

CURRENT

%		
	13	Yes
	87	No
	*	Don't know/Refused

CONT02 How often do you post material to the site?

Based on those who have their own web site [N=202]

CURRENT

%		
	4	Several times a day
	6	About once a day
	7	3-5 days a week
	11	1-2 days a week
	25	Every few weeks
	42	Less often
	5	Don't know/Refused

CONT03 Have you ever contributed material to (INSERT)? (If YES, Have you contributed material to the site in the last three months?

Based on Internet Users [N=1,555]

		YES	YES, IN LAST THREE MONTHS	NO	DON'T KNOW/ REFUSED
a	A web site for your family	4	4	92	*
b	A business web site	8	12	81	0
c	A web site for an organization you belong to, such as a church, club, or professional group	7	9	83	*

CONT04 Do you ever visit the web sites of other families or individuals?

Based on Internet users [N=1,555]

	CURRENT	
%	30	Yes
	70	No
	*	Don't know/Refused

CONT05 Do you use a web cam or web camera to make live pictures appear on a web site?

Based on Internet users [N=1,555]

	CURRENT	
%	7	Yes
	93	No
	*	Don't know/Refused

CONT06 Do you use the web cam to stream video while conversing with someone else?

Based on those who use a web cam [N=104]

	CURRENT	
%	40	Yes
	60	No
	0	Don't know/Refused

CONT07 Do you write a web diary, web log or blog that is posted online?

Based on Internet users [N=1,555]

	CURRENT	
%	2	Yes
	97	No
	*	Don't know/Refused

CONT08 How frequently do you update the material on your blog?

Based on those who write a web diary or web log [N=36]

	CURRENT	
%	3	Several times a day
	7	About once a day
	10	3-5 days a week
	21	1-2 days a week
	39	Every few weeks
	20	Less often
	0	Don't know/Refused

CONT09 Have you ever visited the web diaries or blogs of other people?

Based on Internet users [N=1,555]

%	CURRENT	
	11	Yes
	88	No
	*	Don't know/Refused

CONT10 Have you ever written or posted material to another person's blog?

Based on those who visit others' web diaries or web logs [N=174]

%	CURRENT	
	34	Yes
	66	No
	0	Don't know/Refused

CONT11 Do you ever visit the web diaries or blogs of (INSERT)?

Based on those who visit others' web diaries or web logs [N=174]

		YES	NO	DON'T KNOW/ REFUSED
a	Friends	52	47	*
b	Family members	25	75	0
c	People you've never met	46	54	0

CONT12 Now I'd like to ask about various types of files people can post online to web sites. Do you ever post (INSERT) on the Internet?

Based on Internet users [N=1,555]

		YES, HAVE DONE THIS	NO, DO NOT DO THIS	DON'T KNOW/ REFUSED
a	Photographs	21	79	*
b	Audio files	5	94	*
c	Video files	3	97	0
d	Artwork	6	94	0
e	Writing	17	83	*

CONT13 Do you allow others to download files from your computer, such as music or video files?

Based on Internet users [N=1,555]

%	CURRENT	
	21	Yes
	78	No
	1	Don't know/Refused

CONT14 Do you care whether or not the files you allow others to download from your computer are copyrighted, or isn't that something you care much about?

Based on those who allow others to download files from own computer [N=310]

	CURRENT	
%	30	Yes, care
	65	No, don't care much
	5	Don't know/Refused

CONT15 Have you ever been to an online newsgroup?

Based on Internet users [N=1,555]

	CURRENT	
%	20	Yes
	80	No
	*	Don't know/Refused

CONT16 Do you ever post your comments to the newsgroup?

Based on those who have been to online newsgroup [N=297]

	CURRENT	
%	51	Yes
	49	No
	0	Don't know/Refused

CONT17 Do you post files to the newsgroup such as video, audio or photo files?

Based on those who have been to online newsgroup [N=297]

	CURRENT	
%	4	Yes
	96	No
	0	Don't know/Refused