Internet Issues Awareness Research from United States & Germany October 2017 **Executive Summary** Data Sources, Key Findings, Next Steps Introduction **Data Sources** 10 11 Limitations of the Data **Internet Users' Awareness** 12 **Internet Users' Engagement** 19 Trends on Social Media 23 **Discussion of Findings**

Annex 1-3 •

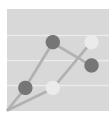
*Version 0.1

44

41-44

Table of Contents

- 3 Figures & Tables4 Executive Summary
- **9** Introduction
- 10 Data Sources
- 12 Internet Users' Awareness
- 19 Internet Users' Engagement
- **26** Internet Users' Attitudes
- **39** Discussion of Findings
- 41 Annex 1–Mozilla's Internet health issues
- 42 Annex 2-Mozilla's Ipsos survey questionnaire
- 44 Annex 3–Keywords tracked in Crimson Hexagon



FIGURES

Figure 1: Percentage of Internet users aware of Internet health issues in the United States, July 2016-March 2017

Figure 2: Percentage of Internet users aware of Internet health issues in Germany, July 2016-March 2017

Figure 3: Percent of people in the United States and Germany who are 'very familiar' with contemporary issues

Figure 4: Percentage of people in the United States who care about Internet health issues, by issue

Figure 5: Percentage of people in Germany who care about Internet health issues, by issue

Figure 6: Number of social media posts in English that mention Internet health issues, in the United States, July 2016-March 2017

Figure 7: Number of social media posts in English that mention Internet health issues, in Germany, July 2016-March 2017

Figure 8: Number of social media posts in English that mention Internet health issues, except online privacy and security, in the United States, July 2016-March 2017

Figure 9: Number of social media posts in English that mention Internet health issues except online privacy and security, in Germany, July 2016-March 2017

Figure 10: Number of social media posts by Internet health issue, in the United

States and Germany (adjusted by population size), July 2016-March 2017

Figure 11: Percentage of people who think the following elements of the Internet have become worse in the last 12 months

Figure 12: Percentage of people saying they are 'very worried' about the following issues

Figure 13: Opinion about the Internet in United States and Germany

Figure 14: Actions taken in the past six months



TABLES

Table 1: Summary of Findings

Table 2: Awareness of Internet health issues in the United States and Germany, by gender, March 2017

Table 3: Awareness of Internet health issues in the United States, by age group, March 2017

Table 4: Awareness of Internet health issues in Germany, by age group, March 2017

Table 5: Percentage of people who are 'very familiar' with different issues in Germany, by socioeconomic characteristics

Table 6: Percentage of people who are 'very familiar' with different issues in the United States, by socioeconomic characteristics

Table 7: Percentage of people who care about Internet health issues in the United States and Germany, by gender, March 2017

Table 8: Percentage of people who care about Internet health issues in the United States, by age, March 2017

Table 9: Percentage of people who care about Internet health issues in Germany, by age, March 2017

Table 10: Percentage of people in Germany who feel that the following elements of the Internet have become worse, by socioeconomic characteristics

Table 11: Percentage of people in the United States who feel that the following elements of the Internet have become worse, by socioeconomic characteristics

Table 12: Percentage of people in Germany who are 'very worried' about the following issues, by socioeconomic characteristics

Table 13: Percentage of people in the United States who are very worried about the following issues, by socioeconomic characteristics

Table 14: Opinion about the Internet in Germany, by socioeconomic characteristics

Table 15: Opinion about the Internet in the United States, by socioeconomic characteristics

Table 16: Actions taken in the past six months by the German public, by socioeconomic characteristics

Table 17: Actions taken in the past six months by the United States public, by socioeconomic characteristics

Executive Summary

ABOUT THIS REPORT

Mozilla's mission is to ensure the Internet is a global public resource, open and accessible to all. We do this by creating technology and fueling the broader movement for a healthy Internet.

To be effective in this work, we need to better understand what Internet health issues people are aware of, and what they think about the trends and events that impact Internet health. We also want to know what Internet health issues people are most concerned about, and whether they are taking action to address those concerns. We're investing in research to help us gain insight into these questions.

We plan to share what we learn through our Attitudes Toward Internet Issues reports. This is the first such report. It provides an overview and comparative analysis of the research Mozilla has done in the United States and Germany on this topic over the past year, in order to underscore the most relevant — and reveal new — insights. Our goal is to enable people and organizations who also care about Internet health to also utilize these insights.

DATA SOURCES

In this October 2017 report, we draw on three sources:

- The Mozilla & Firefox Global Brand
 Tracking Study from July 2016, October 2016, January 2017 and March 2017, conducted by the System1 Group in the United States and Germany
- An Ipsos poll conducted on behalf of Mozilla in the United States and Germany (May 2017)
- 3. Social media traffic tracked via Crimson Hexagon (July 2016-March 2017)

KEY FINDINGS

Online privacy and security is the most well-known Internet health issue, in both the United States and Germany.

- Just over 60% of people surveyed in both countries indicate they are aware of this issue.
- Social media data correlates with this finding; traffic about online privacy and security surpassed traffic about the other Internet health issues.

Awareness of all five Internet health issues increased between July 2016 and March 2017, in both the United States and Germany.

- The up-trend was mild, but notable for all five issues.
- Open innovation was the slowest to increase, particularly in Germany.

Men are generally more aware of Internet health terms and issues than women, in both countries.

- However, the gender gap is much smaller in Germany than in the United States.
- In Germany, women are slightly more aware of online privacy and security than men (69% and 67% respectively). This is the only case in which women were more aware of an Internet health issue than men.

But women tend to care more about online privacy and security than men, in both the United States and Germany.

- In the United States, 75% of women versus 64% of men care about online privacy and security.
- In Germany, 82% of women versus 68% of men care about online privacy and security.

The System1 Group poll and Ipsos poll return different results related to how many people care about Internet health in the United States and Germany.

- In the System1 Group poll, Germans care more about web literacy and online privacy and security, while Americans care more about decentralization and open innovation. Respondents from both countries care equally about digital inclusion.
- However, the Ipsos poll addresses the question differently, and finds that Americans are more worried about the state of the Internet and more likely to take action to protect the Internet, compared to Germans.
- As a result, further research is required to understand the differences in these findings.

Overall knowledge of the term 'Internet health' is limited in both the United States and Germany.

- In the United States, 16-25 and 26-35 year olds are the most aware of Internet health issues. Similarly, in Germany, the youngest people surveyed (16-25 year olds) are the most aware.
- In the United States, the oldest age group surveyed (46+ year olds) is the most aware of online privacy and security.

Income and education play an important role in awareness of and engagement with Internet health.

 The Ipsos survey indicates that people in both the United States and Germany with higher income and higher education are on average two times more likely to report familiarity with the term 'Internet health' than people with other socioeconomic backgrounds. Awareness of and concern about Internet health issues do not necessarily correlate when accounting for age.

- In Germany, the oldest people surveyed (46+ year olds) are most concerned about Internet health issues.
- In both countries, the youngest people surveyed (16-25 year olds) are the most aware of Internet health issues, but expressed the least concern about most of these issues.

Concern about Internet health does not necessarily translate into action.

 The System1 Group survey indicates that in both the United States and Germany, women are the most concerned about online privacy and security. However, as demonstrated by the Ipsos poll, women are also less likely than men to have taken any action to promote a healthy Internet during the past six months.

NEXT STEPS

Mozilla will incorporate these findings into our strategy. We are also continuing to invest in research to better understand what the broader public knows about Internet health issues, and we plan to release the next report at approximately the same time next year.

We'd very much like to hear what you found helpful or confusing, what questions you still have and what you would like to see more research on. Share your thoughts with us: ati@mozillafoundation.org.

UNITED STATES

GERMANY

Awareness (Do people know about the issues?)

Most known issue (source: System1 Group)	Online privacy and security	Online privacy and security
Least known issue (source: System1 Group)	Decentralization	Open innovation
Trend	Awareness increased from July 2016 to March 2017. (source: System1 Group) Internet health and NSA surveillance are the least known social issues. (source: Ipsos)	Awareness increased from July 2016 to March 2017. (source: System1 Group) Internet health and EU digital copyright reform are the least known social issues. (source: Ipsos)
By gender (source: Ipsos)	Except online privacy and security, men are more aware of all Internet health issues than women. The gender gap is much wider than in Germany.	Except online privacy and security, men are more aware of Internet health issues than women. The gap is much more narrow than in the United States.
By age (source: System1 Group)	Younger age groups are more aware than others. 46+ year olds are more aware of online privacy and security.	Younger age groups are more aware than others. 36-45 years old have the least knowledge overall.
By education (source: Ipsos)	People with a graduate degree are two to three times more familiar with Internet health issues, compared to people with an undergraduate degree and lower.	People with higher education are two times more familiar with Internet health issues compared to people with primary or lower secondary education and below.
By income (source: Ipsos)	Higher income correlates with higher awareness of Internet health issues. People with annual income of over \$75K are on average two times more likely to be aware of Internet health issues, compared to people in lower income brackets.	Higher income correlates with higher awareness of Internet health issues. People with an annual income of over €60K are on average three times more likely to be aware of Internet health issues compared to lower income brackets.

Engagement (Do people care about the issues?)

Issue with the most engagement (source: System1 Group)	Online privacy and security	Online privacy and security
Issue with the least engagement (source: System1 Group)	Digital inclusion	Decentralization
Trend (source: System1 Group)	Engagement level slightly decreasing between July 2016 and March 2017.	Engagement level strongly decreasing for decentralization and slightly decreasing for the other four issues between July 2016 and March 2017.

(source: System1 Group) security compared to men. Men care 1.5 times about all issues compared to men. Men care 1.5 times	ed to men.
26-35 and 36-45 year olds care more about Internet health issues. By age (source: System1 Group) The youngest age group (16-25 year olds) is about Internet health is more informed, but also less concerned, about Internet health issues.	lso less concerned,

Actions to promote a healthy Internet (What are people doing?) (source: Ipsos)

Overall	68% of people surveyed have taken action in the past six months (see Annex 2 for list of actions).	60% of people surveyed have taken action in the past six months (see Annex 2 for list of actions).
By gender	Women are less likely to take action.	Women are less likely to take action.
By age	Older generations are less likely to take action.	Older generations are less likely to take action.
By education	The likelihood to take action increases with the level of education.	No clear trend with education, but respondents with general upper secondary level education are the most likely to take action.
By income	The likelihood to take action increases with the respondent's household income.	Respondents with income over €60K are most likely to take action.

Introduction

In 2016, Mozilla developed a strategy to promote Internet health.

Understanding — and working to increase — public awareness of and engagement with Internet health issues (see Annex 1 for more detail) is an important step toward building a movement for an Internet that is open and accessible to all.

In 2016 and 2017, Mozilla worked with System1 Group and Ipsos to conduct research to better understand awareness, attitude and behaviour related to Internet health in the United States and Germany. This report provides an in-depth secondary analysis of that research, as well as insight into social media data on the same topics.

The key questions we are trying to answer with this research and this report are:

What is the level of public awareness of Internet health, and in particular five core Internet health issues (privacy & security, open innovation, decentralization, web literacy, digital inclusion)? How is this different (or similar) in different countries? How is public opinion evolving over time: Are people becoming more aware and engaged in Internet health? What issue(s) — if any — are becoming a concern for the public?

What actions is the public taking to shape a healthy Internet?

This report is organized in the following way:

- 1. Section one outlines the data sources used in our analysis.
- 2. Section two explores Internet users' awareness of Internet health issues.
- 3. Section three explores Internet users' engagement with Internet health issues
- 4. The report ends with discussion based on the analysis, plus next steps.

Data Sources

This report draws on three sources of data:

1.

System 1 Mozilla & Firefox Global Brand Tracking Study (July 2016, October 2016, January 2017 and March 2017)

The System1 Group surveys track brand awareness of Mozilla and Firefox, and include two questions about awareness of and engagement with Internet health issues. The survey allows us to disaggregate findings by age and gender of the respondent.

These surveys are conducted online, on a quarterly basis, with a representative sample of Internet users in the United States, Germany, Taiwan and India. The individual respondents are different in each survey, but the sample group is always representative of Internet users in the relevant country.

This report analyzes responses to the two questions about awareness of and engagement with Internet health, and only looks at responses from the United States and Germany. These questions remain the same, allowing us to track changes over time.

We chose to focus only on the results from the United States and Germany because other existing research allows us to validate the findings of the surveys in those two countries. We require more longitudinal data to validate findings in Taiwan and India 2.

Ipsos poll on Internet health awareness in the United States and Germany (May 2017)

The American survey was conducted online on May 25 and 26, 2017. A sample of 1,007 American adults aged 18+ completed the survey in English. The German survey was conducted online on May 26-31, 2017. A sample of 1,093 German adults aged 16-70 completed the survey in German. The sample was randomly drawn from Ipsos' and its partners' online panel and calibrated by Ipsos to be representative of the United States and German populations, respectively.

3.

Social media traffic tracked via Crimson Hexagon (July 2016-March 2017)

Mozilla uses Crimson Hexagon to track real-time social media traffic about Internet health issues (online privacy and security, open innovation, decentralization, web literacy, digital inclusion).

This tool enables us to track posts, likes and comments that contain specific keywords on Twitter, Facebook, Instagram, Google+, blogs, forums, news articles and other sources. In this report, we look at posts from July 2016 to March 2017 to be consistent with the System1 Group data.

LIMITATIONS OF THE DATA



Limitations of web-based surveys

Online polling can sometimes lead to selection bias. For example, people who volunteer to complete surveys online may not be representative of the full diversity of a country's population. (e.g. They may be more likely to have regular Internet access than the general population.) This can be addressed in part by calibrating the sample to be reflective of a country's population, which was done with both Ipsos and System1 Group surveys.



Limitations in self-reporting

The survey responses measure people's self-reported levels of awareness and concern about Internet health issues. As a result, results may be skewed by a person's self-perception (e.g. over or underestimating their levels of knowledge) or self-reporting bias (e.g. wanting to give the "right" answer).



Limitations in language

Crimson Hexagon currently only tracks social media posts in English. As a result, the data about Germany from this source is less reliable because English is not the dominant language in that country.

Internet Users' Awareness

The System1 Group surveys ask the following question to measure public awareness of Internet health issues:

Please tell us if you have heard of these challenges / opportunities the Internet is facing. (You can select as many or as few as you like.)

- Online privacy and security People often have little
 visibility into how their data is collected and used on the
 Internet, and can't trust that it's safe. Companies and
 governments aren't doing enough to protect our online data.
- Open innovation¹ It can be hard for entrepreneurs, inventors and Internet users to create, innovate and compete online because tech companies are overly-protective of their work and governments have created very strict copyright laws.
- Decentralization The biggest Internet companies design online experiences that prevent people from accessing content across the entire web, and instead keep us inside their own platforms. Internet users are often cornered

- on websites and see search results that force them to preferred sites.
- Web literacy More people need the skills to be informed
 and involved in the digital world so we have more control
 over our online experiences, and can move beyond just
 consuming content to creating and influencing the web.
- Digital inclusion People everywhere don't have equal access to the Internet and can't participate in shaping our digital world. The Internet doesn't reflect the diversity of the people who use it.
- · None of the above

Figures 1 and 2 on the following pages provide an overview of responses from the United States and Germany. On average, respondents say they are aware of two of the five Internet health issues. About 20% of all Internet users said they have never heard about any of these issues.

The United States and Germany demonstrate similar trends in awareness for most Internet health issues, although German respondents are slightly more aware compared to their American counterparts. Online privacy and security is the most well-known issue, with more than 60% of Internet users in both countries saying they are aware of this concept. There is a significant gap between levels of awareness of online privacy and security and all other issues. In both countries, web literacy is the second most well-known, followed closely by digital inclusion. Decentralization and open innovation are the least known in both countries.

¹ Mozilla is now calling this openness.

Looking at the trends over time, there is an increase in overall awareness between July 2016 to March 2017 in both the United States and Germany, with the most significant upswing occurring between October 2016 and January 2017.

In Germany, Internet users' awareness of all issues increases between July 2016 and March 2017. However, open innovation seems to evolve more slowly than the other issues. About 20% of all Internet users said they have never heard about any of these issues.

FIGURE 1. PERCENTAGE OF INTERNET USERS AWARE OF INTERNET HEALTH ISSUES IN THE UNITED STATES, JULY 2016-MARCH 2017

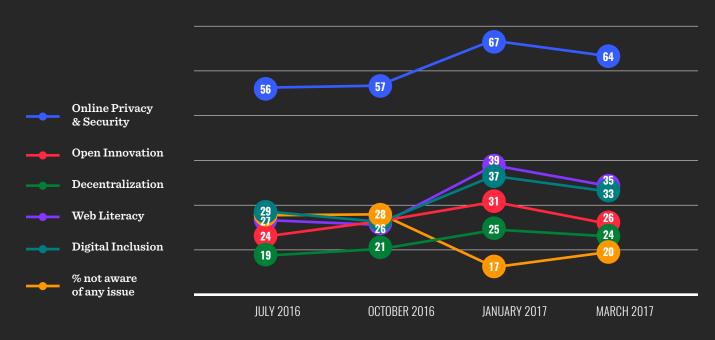
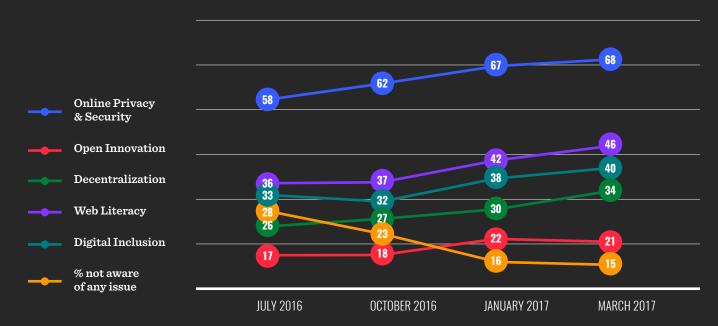


FIGURE 2. PERCENTAGE OF INTERNET USERS AWARE OF INTERNET HEALTH ISSUES IN GERMANY, JULY 2016-MARCH 2017



To assess how these results differentiate by gender and age, we focus on the March 2017 data because it is the most recent.

In both the United States and Germany, male respondents indicate higher awareness than female respondents of all issues except online privacy and security (see Table 2). In the United States, men are about 1.5 times more aware than women, while in Germany the gap is more narrow.

NB: In all tables, the highest values are highlighted darker in green, and the lowest values are lightly highlighted in pink — except for the percentage not aware of any issue, where we instead highlight the lowest in green because this is more desirable.

Highest value Lowest value

Table 2: Awareness of Internet health issues in the United States and Germany, by gender, March 2017

	UNITED STATES		GERMANY	
INTERNET HEALTH ISSUES	Male	Female	Male	Female
Online privacy and security	62.1%	64.9%	67.4%	69.4%
Open innovation	36.2%	16.2%	25.3%	16.4%
Decentralization	30.4%	17.4%	36.6%	31.3%
Web literacy	38.9%	30.1%	49.9%	42.5%
Digital inclusion	37.2%	28.6%	40.9%	39.6%
% not aware of any issue	16.1%	23.1%	11.3%	18.7%
Average number of issues each respondent is aware of	2.4	2.0	2.5	2.4

Table 3: Awareness of Internet health issues in the United States, by age group, March 2017

AGE OF RESPONDENT 16-2526 - 3536 - 4546+ **INTERNET HEALTH ISSUES** 61.8% Online privacy and security 60.3% 66.5% 69.1% Open innovation 32.8% 28.9% 19.8% 18.8% Decentralization 23.5% 25.2% 23.8% 21.0% Web literacy 30.9% 35.7% 39.7% 29.3% Digital inclusion 36.1% 33.5% 30.5% 28.4% % not aware of any issue 19.3% 14.9% 22.6% 25.9% Average number of issues 2.4 2.2 2.2 2.3 each respondent is aware of

16-25 and 26-35 year olds in the United States seem to be the most aware of Internet health issues, compared to other age groups. The oldest American respondents (46+) are the most aware of online privacy and security.

In Germany, the youngest respondents (16-25 year olds) indicated the most awareness of all Internet health issues (see Table 4), while the 36-45 year olds have the least awareness.

The oldest American respondents are the most aware of online privacy and security. In Germany, the youngest are most aware.

Table 4: Awareness of Internet health issues in Germany, by age group, March 2017

AGE OF RESPONDENT

INTERNET HEALTH ISSUES	16-25	26-35	36-45	46+
Online privacy and security	74.3%	70.0%	60.4%	70.2%
Open innovation	25.7%	21.7%	17.9%	13.1%
Decentralization	38.4%	32.9%	30.8%	33.3%
Web literacy	51.9%	44.6%	43.8%	41.7%
Digital inclusion	48.5%	41.3%	32.1%	36.9%
% not aware of any issue	8.9%	15.4%	19.2%	19.0%
Average number of issues each respondent is aware of	2.6	2.5	2.3	2.4

Question from the Ipsos poll

The Ipsos poll assessed people's knowledge of Internet health issues compared to their knowledge of other important issues like the economy, civil rights and climate change. A representative sample of people in the United States and Germany were asked the following question:

Note: Available multiple-choice answers were: Very familiar, Somewhat familiar, Not very familiar, Never heard of it before. For the analysis in this report, we focused on the proportion of people indicating that they were 'very familiar' with the issue.

How much, if anything, do you know about each of the following issues:

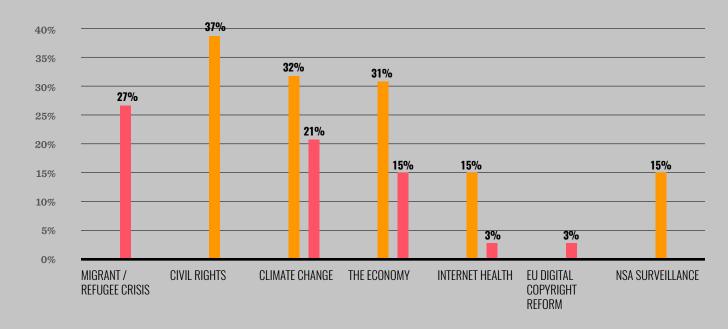
- 1. Internet health
- 2. Civil rights / Migrant refugee crisis¹
- 3. Climate change
- 4. The economy
- 5. NSA surveillance / EU digital copyright reform²

Findings indicate that the most well-known issue in the United States is 'civil rights,' with 39% of respondents saying they are 'very familiar' with the concept (see Figure 3). Internet health is the least

known issue in the country, with only 15% of respondents indicating they are 'very familiar' with the concept. Internet health is also the least known issue in Germany, with just 3% of the population saying they

are 'very familiar' with the concept. It is important to acknowledge that the survey did not ask people to explain any of the issues presented.

FIGURE 3. PERCENT OF PEOPLE IN THE UNITED STATES AND GERMANY WHO ARE 'VERY FAMILIAR' WITH CONTEMPORARY ISSUES



 $^{1\ \} These\ are\ context-specific\ issues.\ `Civil\ rights'\ was\ used\ in\ the\ United\ States,\ while\ `Migrant\ refugee\ crisis'\ was\ used\ in\ Germany.$

 $^{2\,}$ These are context-specific issues. 'NSA surveillance' was used in the United States and 'EU digital copyright' reform was used in Germany.

We disaggregated these findings to understand how this breaks down among socioeconomic groups. As Tables 5 and 6 show, in both the United States and Germany, male respondents and younger respondents (particularly those aged 25-34) are the most likely to say they are familiar with Internet health issues. Knowledge may also be connected to socioeconomic status, as people who had completed higher education and those who have a household income of over \$75k in the

United States and over €60K in Germany are on average two times more likely than other respondents to report that they are 'very familiar' with Internet health.

Table 5: Percentage of people who are 'very familiar' with different issues in Germany, by socioeconomic characteristics

		INTERNET HEALTH	THE Economy	CLIMATE Change	MIGRANT/ Refugee Crisis	EU DIGITAL Copyright Reform	NUMBER OF RESPONDENTS
Gender of	Men	4.6%	21.9%	21.6%	28.4%	4.3%	544
respondent	Women	2.0%	8.5%	20.9%	26.5%	1.3%	549
	16-24	5.6%	14.3%	28.4%	29.4%	4.6%	147
	25-34	7.0%	18.1%	17.0%	25.4%	7.1%	189
	35-44	2.3%	12.7%	19.9%	26.1%	2.2%	198
Age of respondent	45-54	1.7%	15.7%	20.6%	28.3%	0.7%	254
	55-64	1.6%	14.9%	20.3%	29.6%	1.1%	207
	65-70	2.4%	15.6%	25.0%	24.5%	1.6%	98
	Primary/Lower secondary	2.0%	11.9%	18.7%	25.6%	1.8%	217
Level of Education	General upper secondary	4.0%	14.6%	26.5%	28.4%	6.6%	159
of respondent	Vocational upper secondary	2.5%	10.5%	17.3%	23.0%	1.2%	416
	Higher Education	5.1%	25.1%	26.2%	34.7%	3.6%	301
	€60,001 and +	10.8%	39.9%	40.0%	46.5%	4.7%	58
5 1 1	€36,001 to €60,000	3.9%	19.0%	25.2%	34.4%	3.0%	258
Respondent's Household Annual	€18,001 to €36,000	2.4%	14.9%	19.9%	28.4%	2.7%	410
Income	UP TO €18,000	4.7%	9.7%	20.6%	22.0%	3.5%	209
	Not declared	0.4%	6.9%	12.4%	13.3%	1.1%	158
TOTAL		3.3%	15.2%	21.3%	27.4%	2.8%	1093

Table 6: Percentage of people who are 'very familiar' with different issues in the United States, by socioeconomic characteristics

		INTERNET HEALTH	THE ECONOMY	CLIMATE CHANGE	CIVIL RIGHTS	NSA Surveillance	NUMBER OF RESPONDENTS
Gender of respondent	Men	17.3%	33.5%	36.1%	37.9%	19.1%	456
	Women	13.2%	28.8%	29.1%	39.5%	10.4%	551
Age of respondent	18-24	17.8%	26.6%	43.1%	40.5%	11.9%	89
	25-34	27.8%	33.4%	41.0%	42.8%	21.8%	223
	35-44	16.3%	28.6%	28.0%	39.7%	18.2%	177
	45-54	15.2%	28.9%	36.1%	37.6%	16.9%	161
	55-64	6.2%	35.8%	20.6%	37.0%	8.1%	161
	65-70	7.8%	27.8%	23.7%	33.2%	6.7%	103
	70-92	7.0%	33.7%	36.3%	37.4%	11.2%	93
Education of respondent	High school and below	9.9%	24.9%	21.4%	31.0%	7.4%	203
	Undergraduate	11.8%	30.9%	31.0%	37.7%	14.4%	587
	Graduate & Post Graduate	27.7%	36.2%	44.5%	47.4%	20.8%	217
Household Annual Income	\$100 000 and +	20.1%	34.8%	39.0%	43.0%	18.4%	143
	\$75 000 - \$100 000	22.4%	39.6%	33.6%	34.6%	24.9%	265
	\$50 000 - \$75 000	12.4%	30.2%	35.3%	38.3%	12.1%	199
	\$25 000 - \$50 000	7.5%	24.8%	21.5%	30.9%	9.7%	201
	<\$25 000	12.8%	26.0%	30.2%	45.4%	8.1%	199
TOTAL		15.2%	31.1%	32.4%	38.8%	14.6%	1007

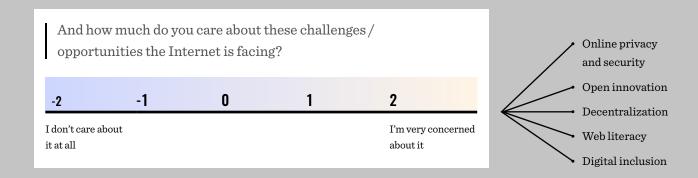
Internet health is not a well-known concept in the United States or Germany

Overall, these findings tell us that while people are somewhat aware of Internet health issues, particularly online privacy and security, based on System1 Group data, ultimately the concept of Internet health is not very well known in the United States or Germany.

Internet Users' Engagement

To measure Internet users' engagement with Internet health issues, we will look at people who stated they care about the topic. In this section, we use data from the System1 Group survey and Crimson Hexagon.

In the System1 Group survey, the following question was asked to people who responded that they are aware of each issue.



For this analysis, we refer to all those who selected '2' or '1' as people who care about the associated Internet health issue.

All respondents who chose '0,' '-1,' or '-2' we consider people who don't care about that issue.

In both the United States and Germany, the results suggest a correlation between awareness and engagement. Online privacy and security is not only the issue people are most aware of in both countries, but it is also the issue people care the most about (see Figures 4 and 5).

German Internet users care more about web literacy and online privacy and

In both the United States and Germany, the results suggest a correlation between awareness and engagement.

security, while American users care more about decentralization and open innovation. Both Americans and Germans care equally about digital inclusion.

In the United States, the trend over time shows engagement either remaining stationary or decreasing slightly for some of the issues (see Figure 4). The changes observed between July 2016 and March

2017 are quite minor and are not statistically significant. A similar stationary trend is also observable in Germany, except for decentralization, where there is a gradual linear decrease of interest over time from 71% in July 2016 to 55% in March 2017 (see Figure 5).

FIGURE 4- PERCENTAGE OF PEOPLE IN THE UNITED STATES WHO CARE ABOUT INTERNET HEALTH ISSUES, BY ISSUE

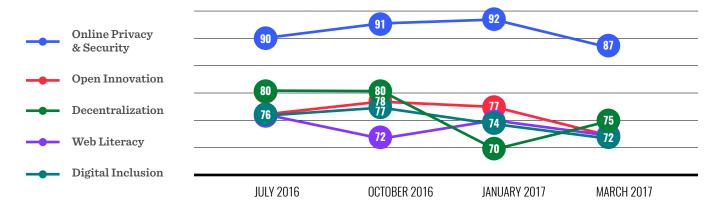
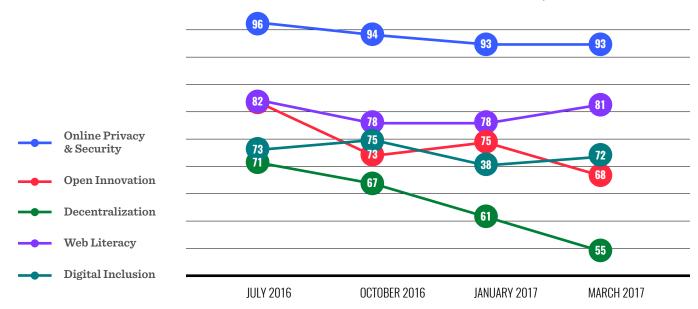


FIGURE 5. PERCENTAGE OF PEOPLE IN GERMANY WHO CARE ABOUT INTERNET HEALTH ISSUES, BY ISSUE



In both the United States and Germany, women tend to care more about online privacy and security than men (Table 7). In the United States, women express less concern than men about all other Internet health issues. American women are in fact two times less concerned than their male counterparts about the other four issues. In Germany, it is the opposite, except for decentralization: German women are more concerned than men about all the other issues, though the differences are generally minor.

26-35 and 36-45 year olds in the United States are the age groups that expressed the most concern about Internet health issues (see Table 8).

American women are two times less concerned than their male counterparts about issues other than privacy and security.

Table 7: Percentage of people who care about Internet health issues in the United States and Germany, by gender, March 2017

	UNITED STATES		GERMANY	
Internet health issues	Male	Female	Male	Female
Online privacy and security	86.2%	88.5%	88.8%	96.1%
Open innovation	74.3%	67.2%	67.3%	69.7%
Decentralization	76.0%	73.9%	55.5%	54.0%
Webliteracy	73.5%	70.8%	80.9%	81.9%
Digital inclusion	73.0%	71.1%	69.9%	74.2%

Table 8: Percentage of people who care about Internet health issues in the United States, by age, March 2017

	AGE				
Internet health issues	16-25	26-35	36-45	46+	
Online privacy and security	85.7%	85.6%	91.8%	83.9%	
Open innovation	56.4%	81.4%	86.4%	68.8%	
Decentralization	62.5%	85.2%	76.8%	76.5%	
Web literacy	64.7%	83.3%	66.7%	72.0%	
Digital inclusion	62.8%	86.4%	70.8%	60.9%	

In Germany, 16-25 year olds are the age group with the highest awareness of all five Internet health issues (see Table 9). However, awareness does not correlate with concern. 16-25 year old Germans rank either lowest or second lowest in levels of concern about every issue. Contrary to trends in the United States, and their own reported levels of awareness, 46+ year old Germans express the most concern about the majority of Internet health issues.

In Germany, 46+ year olds express the most concern about the majority of Internet health issues.

Table 9: Percentage of people who care about Internet health issues in Germany, by age, March 2017

	AGE			
Internet health issues	16-25	26-35	36-45	46+
Online privacy and security	88.6%	95.2%	91.0%	100%
Open innovation	67.2%	71.2%	69.8%	54.5%
Decentralization	44.0%	64.6%	56.8%	57.1%
Web literacy	74.8%	82.2%	84.8%	91.4%
Digital inclusion	64.3%	73.7%	76.6%	83.9%

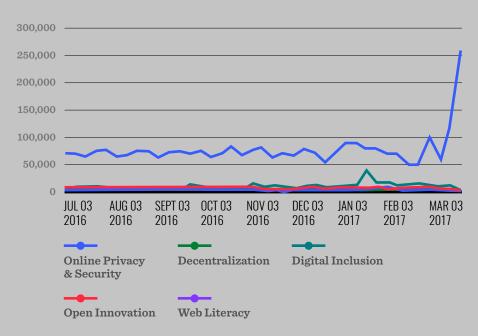
Trends on social media

When analyzing social media mentions of keywords related to Internet health issues between July 2016 and March 2017, we observed patterns that are similar to those in the System1 Group data.

In both the United States and Germany, online privacy and security appears to have the most social media posts during this period, and by a significant margin — 20 to 40 times more than the other Internet health issues (see Figures 6 and 7).

The remaining four issues have a fairly similar number of posts throughout this period, as Figures 8 and 9 demonstrate by excluding online privacy and security and focusing on the others. In both the United States and Germany, digital inclusion experienced a spike in the number of posts in February through early March. However, while the rate of posts in the United States fell back down to the same level as the other issues, in Germany it continued to fluctuate.

FIGURE 6. NUMBER OF SOCIAL MEDIA POSTS IN ENGLISH THAT MENTION INTERNET HEALTH ISSUES, IN THE UNITED STATES, JULY 2016-MARCH 2017



Also notable is the difference in volume of social media posts: there were considerably more posts on all Internet health issues in the United States than in Germany. For instance, on average United States users posted 36 times more than their German counterparts about online privacy and security, before adjusting for the population size. Even after adjusting for the population size, there are still nine times more posts in the United States than in Germany. This same trend remains consistent across all issues (see Figure 10).

This finding may seem to contradict the previous observation that German Internet users tend to care more about web literacy and online privacy and security than United States Internet users. However, there are several possible methodological explanations for this divergence, including:

- The Crimson Hexagon tool only tracked and analyzed social media posts in English, which would exclude any posts in German or other languages.
- People stating that they care about an issue and posting about that same issue on social media do not necessarily measure a comparable kind of engagement. For example, a person might care about online privacy and security and not take any action, or take measures to protect themselves online but not post about it on social media.

FIGURE 7- NUMBER OF SOCIAL MEDIA POSTS IN ENGLISH THAT MENTION INTERNET HEALTH ISSUES, IN GERMANY, JULY 2016-MARCH 2017

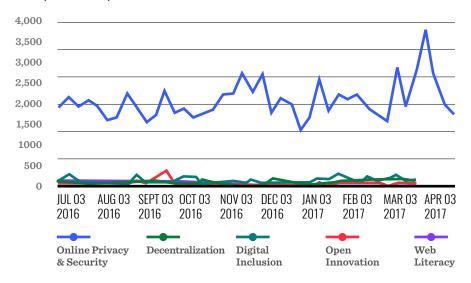


FIGURE 8- NUMBER OF SOCIAL MEDIA POSTS IN ENGLISH THAT MENTION INTERNET HEALTH ISSUES, EXCEPT ONLINE PRIVACY AND SECURITY, IN THE UNITED STATES, JULY 2016-MARCH 2017

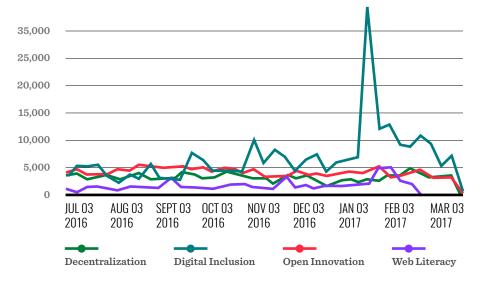


FIGURE 9- NUMBER OF SOCIAL MEDIA POSTS IN ENGLISH THAT MENTION INTERNET HEALTH ISSUES EXCEPT ONLINE PRIVACY AND SECURITY, IN GERMANY, JULY 2016-MARCH 2017

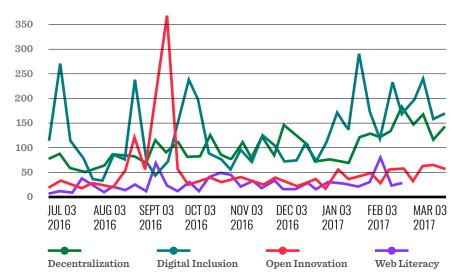
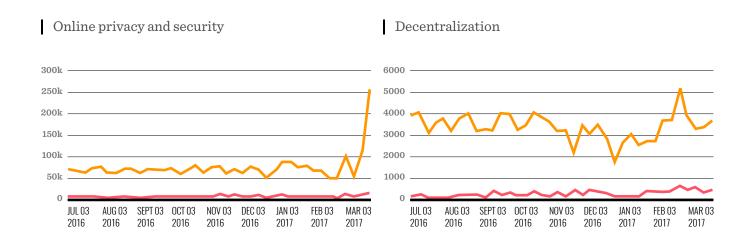
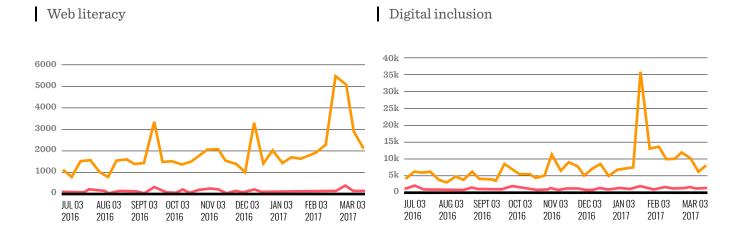
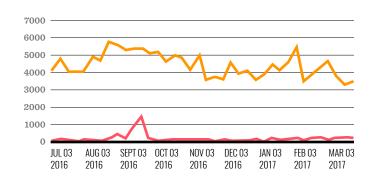


FIGURE 10. NUMBER OF SOCIAL MEDIA POSTS BY INTERNET HEALTH ISSUE, IN THE UNITED STATES AND GERMANY (ADJUSTED BY POPULATION SIZE), JULY 2016-MARCH 2017





Open innovation



Internet Users' Attitudes

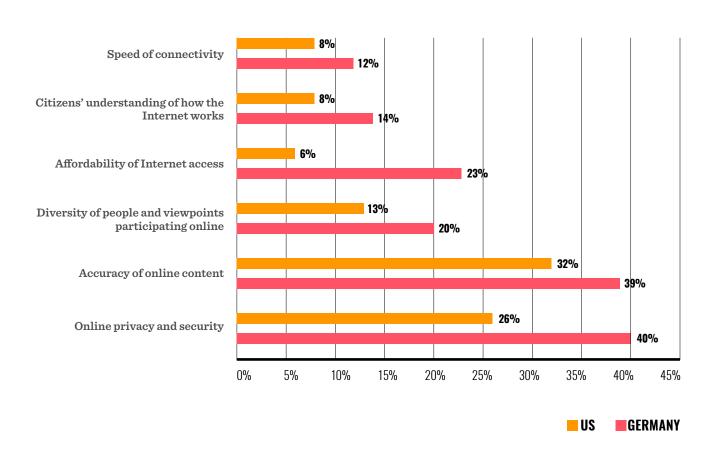
In addition to examining public awareness of Internet health, the Ipsos poll also gathered data on public attitudes and actions related to Internet health.

In the United States and Germany, we posed questions to a representative sample of the population to better understand: their perception of the evolution of the quality of the Internet; their overall perception of the Internet; their level of concern about different Internet health issues; and the actions they have been taking to promote a healthy Internet.

Online privacy and accuracy of online content appear to be the issues of most concern to both the United States and German public. 40% of American respondents and 26% of German respondents stated that online privacy and security has become worse during the last year. The accuracy of online content elicited a similar response, with about a third of the German (32%) and United States (39%) respondents saying this has become worse.

In both the U.S. and Germany, online privacy and accuracy of online content appear to be the issues of most concern.

FIGURE 11. PERCENTAGE OF PEOPLE WHO THINK THE FOLLOWING ELEMENTS OF THE INTERNET HAVE BECOME WORSE IN THE LAST 12 MONTHS



In Germany, when we look at variations among socioeconomic groups (see Table 10), we do not notice a strong difference.

However, more male respondents than female respondents seem to believe the Internet is becoming worse — particularly related to online privacy and security, the accuracy of online content

and the diversity of people and viewpoints participating online.

However, in the United States the opposite is observed. American women expressed more concern than men about elements of the

Internet becoming worse, particularly regarding online privacy and security, accuracy of online content and the diversity of people and viewpoints participating online (see Table 11).

Table 10: Percentage of people in Germany who feel that the following elements of the Internet have become worse, by socioeconomic characteristics

		ONLINE PRIVACY AND SECURITY	ACCURACY Of Online Content	GERMANY'S CITIZENS' UNDERSTANDING OF HOW THE INTERNET WORKS	DIVERSITY OF PEOPLE AND VIEWPOINTS PARTICIPATING ONLINE	AFFORDABILITY OF INTERNET ACCESS	SPEED OF	NUMBER OF Respondents
Gender of respondent	Men	29.2%	37.4%	9.1%	15.1%	6.7%	7.7%	544
-	Women	22.2%	26.9%	7.2%	10.4%	5.1%	9.2%	549
Age of respondent	16-24	24.4%	29.5%	7.8%	16.5%	6.3%	8.9%	147
	25-34	17.5%	29.9%	9.7%	10.3%	5.4%	5.8%	189
	35-44	19.8%	24.6%	7.4%	13.4%	6.7%	5.7%	198
	45-54	29.2%	36.5%	8.4%	9.8%	7.4%	10.5%	254
	55-64	31.2%	35.3%	10.0%	12.5%	5.4%	11.1%	207
	65-70	35.5%	38.8%	3.1%	18.4%	2.1%	7.8%	98
Level of Education of respondent	Primary/ Lower secondary	24.8%	25.3%	9.7%	13.0%	9.1%	12.6%	217
	General upper secondary	27.6%	32.3%	8.4%	12.5%	4.2%	6.7%	159
	Vocational upper secondary	26.0%	31.8%	6.1%	11.9%	5.0%	7.4%	416
	Higher Education	25.1%	38.3%	9.8%	13.8%	5.7%	7.7%	301
Respondent's Household Annual Income	€60,001 and+	25.7%	30.6%	12.7%	15.5%	10.2%	9.0%	58
	€36,001 to €60,000	29.6%	36.0%	9.0%	13.1%	4.4%	7.7%	258
	€18,001 to €36,000	27.0%	32.7%	4.7%	12.1%	4.4%	8.4%	410
	UP TO €18,000	24.3%	30.4%	11.9%	13.3%	10.6%	10.4%	209
	Not declared	18.5%	27.6%	9.7%	12.2%	5.4%	7.4%	158
TOTAL		25.7%	32.2%	8.2%	12.7%	5.9%	8.5%	1093

Table 11: Percentage of people in the United States who feel that the following elements of the Internet have become worse, by socioeconomic characteristics

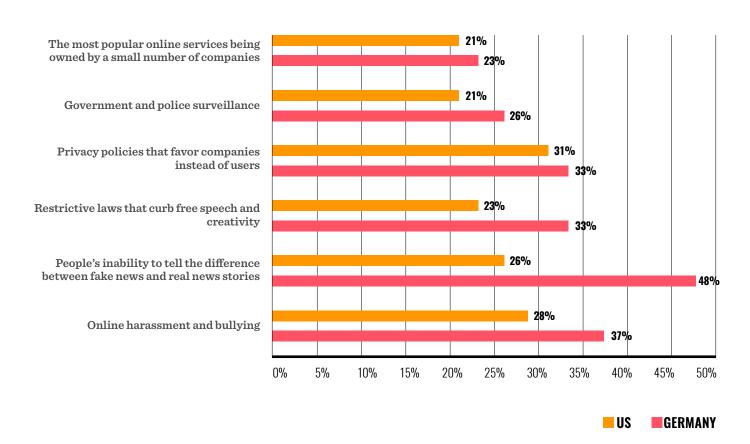
		ONLINE Privacy And Security	ACCURACY Of Online Content	AMERICAN CITIZENS' UNDERSTANDING OF HOW THE INTERNET WORKS	DIVERSITY OF PEOPLE AND VIEWPOINTS Participating Online	AFFORDABILITY OF INTERNET ACCESS	SPEED OF Connectivity	NUMBER OF Respondents
Gender of respondent	Men	37.9%	36.8%	15.0%	18.1%	23.9%	12.4%	456
	Women	41.9%	40.5%	13.9%	22.7%	22.5%	10.7%	551
Age of respondent	18-24	38.3%	49.9%	17.4%	18.7%	25.3%	17.3%	89
	25-34	30.8%	26.8%	13.5%	21.5%	17.1%	8.2%	223
	35-44	31.2%	29.7%	15.5%	17.4%	17.2%	7.2%	177
	45-54	35.0%	36.3%	11.4%	20.0%	19.8%	9.4%	161
	55-64	51.4%	44.1%	11.8%	17.5%	31.3%	15.9%	161
	65-70	54.5%	56.1%	17.8%	24.1%	36.1%	15.6%	103
	70-92	51.3%	47.9%	18.2%	28.5%	23.6%	13.1%	93
Education of respondent	High school and below	37.7%	33.9%	11.7%	24.3%	29.1%	9.9%	203
	Undergraduate	43.4%	41.6%	16.0%	20.5%	24.4%	12.9%	587
	Graduate & Post Graduate	33.1%	35.4%	12.7%	17.4%	15.6%	9.3%	217
Household Annual	\$100 000 and +	43.7%	44.9%	13.6%	22.2%	15.2%	7.8%	143
Income	\$75 000 - \$100 000	30.3%	32.1%	13.6%	20.7%	20.9%	11.7%	265
	\$50 000 - \$75 000	46.1%	40.8%	13.0%	19.9%	25.5%	13.1%	199
	\$25 000 - \$50 000	40.7%	39.2%	14.3%	21.7%	30.1%	12.5%	201
	<\$25 000	33.1%	29.8%	18.7%	16.0%	28.4%	15.6%	199
TOTAL		40.0%	38.7%	14.4%	20.5%	23.2%	11.5%	1007

Older respondents in both the United States and Germany are generally more likely to believe that more elements of the Internet have become worse, especially regarding online privacy and security and accuracy of online content.

When asked how worried they are about different issues when using the Internet, about a third of both United States and German respondents said they are 'very worried' about most of the topics listed.

About a third of U.S. and German respondents report being 'very worried' about these Internet health topics.

FIGURE 12- PERCENTAGE OF PEOPLE SAYING THEY ARE 'VERY WORRIED' ABOUT THE FOLLOWING ISSUES



Overall, Americans seem more worried than Germans. The most worrisome issue appears to be fake news, with close to half of the American public (48%) saying they are 'very worried' about the issue. This is followed by online harassment (37%) and privacy

policies that favor companies, the latter of which is of almost equal concern in both the United States (33%) and Germany (31%).

Table 12: Percentage of people in Germany who are 'very worried' about the following issues, by socioeconomic characteristics

		ONLINE HARASSMENT AND BULLYING	THE MOST POPULAR ONLINE SERVICES BEING OWNED BY A SMALL NUMBER OF COMPANIES	PEOPLE'S INABILITY TO TELL THE DIFFERNCE BETWEEN FAKE NEWS AND REAL NEWS STORIES	RESTRICTIVE LAWS THAT CURB FREE SPEECH AND CREATIVITY	PRIVACY POLICIES THAT FAVOR COMPANIES INSTEAD OF INDIVIDUAL USERS	GOVERNMENT AND POLICE SURVEILLANCE	NUMBER OF RESPONDENTS
Gender of	Men	24.4%	24.4%	24.4%	26.8%	32.3%	25.2%	544
respondent	Women	32.2%	18.5%	26.8%	19.9%	29.1%	17.4%	549
Age of respondent	16-24	35.7%	17.9%	23.3%	23.5%	28.9%	22.8%	147
	25-34	26.3%	21.1%	32.3%	24.9%	37.3%	28.1%	189
	35-44	21.8%	17.4%	15.3%	19.4%	20.2%	14.0%	198
	45-54	28.3%	22.9%	26.9%	22.8%	31.7%	23.0%	254
	55-64	30.9%	27.7%	28.5%	27.9%	36.4%	23.5%	207
	65-70	27.4%	19.1%	28.0%	20.2%	27.6%	11.7%	98
Level of Education of respondent	Primary/ Lower secondary	32.2%	20.5%	31.0%	18.4%	27.8%	25.8%	217
	General upper secondary	28.1%	18.3%	22.6%	32.5%	33.1%	25.8%	159
	Vocational upper secondary	28.8%	20.8%	25.3%	25.8%	29.0%	19.3%	416
	Higher Education	24.3%	24.9%	23.4%	18.5%	34.1%	18.1%	301
Respondent's Household	€60,001 and +	31.6%	27.4%	30.9%	24.8%	37.8%	19.9%	58
Annual Income	€36,001 to €60,000	26.8%	23.0%	25.1%	27.1%	30.9%	21.0%	258
	€18,001 to €36,000	29.2%	22.3%	24.6%	21.7%	27.7%	24.3%	410
	UP TO €18,000	31.8%	20.1%	30.1%	25.4%	34.9%	22.2%	209
	Not declared	23.2%	16.3%	22.2%	19.0%	30.7%	14.2%	158
TOTAL		28.2%	21.4%	25.6%	23.4%	30.7%	21.3%	1093

In Germany, people with higher incomes tend to be more concerned with Internet health issues than people with lower incomes. In both countries, online harassment and bullying appears to be the biggest concern for women (32% and 41% in

Germany and the United States, respectively) and for 18-24 year olds (36% and 49% in Germany and the United States, respectively).

Table 13: Percentage of people in the United States who are very worried about the following issues, by socioeconomic characteristics

		ONLINE Harassment And Bullying	THE MOST POPULAR ONLINE SERVICES BEING OWNED BY A SMALL NUMBER OF COMPANIES	PEOPLE'S INABILITY TO TELL THE DIFFERENCE BETWEEN FAKE NEWS AND REAL NEWS STORIES	RESTRICTIVE LAWS THAT CURB FREE SPEECH AND CREATIVITY	PRIVACY POLICIES THAT FAVOR COMPANIES INSTEAD OF INDIVIDUAL USERS	GOVERNMENT AND POLICE SURVEILLANCE	NUMBER OF RESPONDENTS
Gender of respondent	Men	33.5%	27.6%	50.2%	36.2%	34.5%	28.9%	456
	Women	41.1%	19.2%	46.0%	30.4%	32.1%	24.1%	551
Age of respondent	18-24	48.6%	32.2%	62.2%	37.5%	38.5%	33.3%	89
	25-34	40.1%	26.6%	49.2%	29.1%	34.6%	26.5%	223
	35-44	43.3%	25.2%	45.4%	36.5%	34.6%	28.6%	177
	45-54	34.2%	20.6%	45.7%	32.0%	34.1%	21.1%	161
	55-64	24.1%	14.8%	39.6%	32.3%	23.3%	24.1%	161
	65-70	40.1%	23.1%	51.2%	30.5%	34.7%	21.2%	103
	70-92	37.3%	24.2%	53.4%	38.2%	38.2%	34.3%	93
Education of respondent	High school and below	39.1%	18.4%	42.2%	29.3%	27.7%	23.6%	203
	Undergraduate	36.3%	20.7%	51.1%	33.9%	34.2%	27.7%	587
	Graduate & Post Graduate	38.9%	33.3%	45.0%	34.6%	35.4%	25.3%	217
Household Annual Income	\$100 000 and +	35.0%	27.4%	49.8%	32.3%	28.2%	24.5%	143
	\$75 000 - \$100 000	39.6%	30.6%	44.4%	34.7%	38.9%	31.3%	265
	\$50 000 - \$75 000	34.9%	22.9%	55.0%	35.4%	40.6%	24.3%	199
	\$25 000 - \$50 000	35.2%	17.8%	47.3%	33.5%	34.0%	25.3%	201
	<\$25 000	46.2%	16.6%	40.8%	30.7%	28.5%	29.8%	199
TOTAL		37.4%	23.3%	48.1%	33.2%	33.3%	26.4%	1007

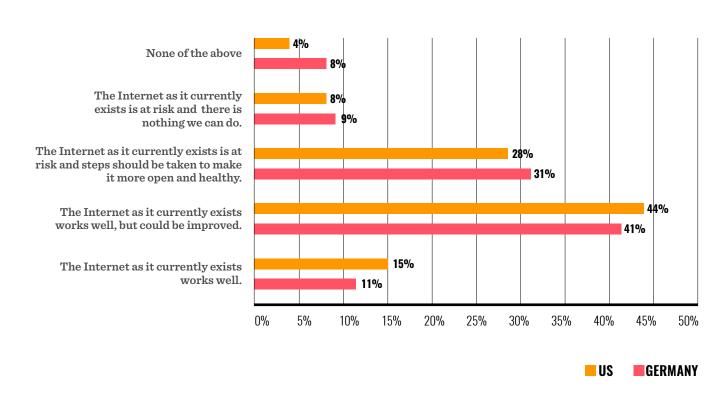
During the poll, respondents also provided their opinion about the overall state of Internet health by choosing one of the statements presented in Figure 13 below.

Based on these responses, Americans and Germans seem to have similar opinions regarding the state of the Internet. Roughly 40% of respondents in both the United States and Germany think that the Internet is working well, though it isn't perfect. Slightly less than a third (31% in the United States, and 28% in Germany) believe that the Internet is at risk and that action should be taken to improve it.

In Germany, more men tend to think that the Internet is at risk and steps are needed to make it more open and healthy. In the United States, the reverse is true, with more women stating that the Internet is at risk. In terms of age, Germans 55-64 years old and Americans 65-70 years old are most likely to choose this statement.

Roughly 40% of Americans and Germans think the Internet is working well, though it isn't perfect. Less than a third believe the Internet is at risk.

FIGURE 13. OPINION ABOUT THE INTERNET IN UNITED STATES AND GERMANY



In terms of income, we observe opposite trends in the United States and Germany. In Germany, people who earn the most money (more than \leqslant 36K) are more likely to say that the Internet

is at risk and more action should be taken to make it healthier. However, in the United States people with lower incomes (under \$50K) are more likely to choose the statement.

Table 14: Opinion about the Internet in Germany, by socioeconomic characteristics

		THE INTERNET AS IT CURRENTLY EXISTS WORKS WELL	THE INTERNET AS IT CURRENTLY EXISTS WORKS WELL, BUT COULD BE IMPROVED	THE INTERNET AS IT CURRENTLY EXISTS IS AT RISK AND STEPS SHOULD BE TAKEN TO MAKE IT MORE OPEN AND HEALTHY	THE INTERNET AS IT CURRENTLY EXISTS IS AT RISK AND THERE IS NOTHING WE CAN DO	NONE OF THE Above	TOTAL	NUMBER OF Respondents
Gender of respondent	Men	16.2%	42.6%	29.7%	7.4%	4.0%	100.0%	544
	Women	14.4%	45.3%	25.9%	9.5%	4.9%	100.0%	549
Age of respondent	16-24	14.4%	45.9%	26.1%	6.7%	6.9%	100.0%	147
	25-34	18.0%	42.3%	28.6%	8.0%	3.0%	100.0%	189
	35-44	14.1%	47.2%	25.2%	6.0%	7.6%	100.0%	198
	45-54	17.4%	45.4%	27.1%	7.7%	2.4%	100.0%	254
	55-64	12.1%	40.7%	31.9%	10.2%	5.1%	100.0%	207
	65-70	15.4%	40.7%	27.7%	15.4%	0.8%	100.0%	98
Level of Education of respondent	Primary/ Lower secondary	18.3%	42.2%	22.2%	13.5%	3.8%	100.0%	217
	General upper secondary	10.6%	50.7%	28.2%	5.6%	4.8%	100.0%	159
	Vocational upper secondary	15.4%	42.6%	27.8%	9.6%	4.5%	100.0%	416
	Higher Education	15.4%	43.4%	32.2%	4.5%	4.6%	100.0%	301
Respondent's Household	€60,001 and +	12.5%	44.6%	32.2%	7.3%	3.5%	100.0%	58
Annual Income	€36,001 to €60,000	17.0%	42.4%	31.9%	7.9%	0.9%	100.0%	258
	€18,001 to €36,000	18.2%	43.7%	27.0%	7.6%	3.5%	100.0%	410
	UP TO €18,000	12.8%	44.5%	27.4%	9.3%	6.0%	100.0%	209
	Not declared	9.4%	46.3%	22.7%	11.1%	10.6%	100.0%	158
TOTAL		15.3%	44.0%	27.8%	8.5%	4.4%	100.0%	1093

Table 15: Opinion about the Internet in the United States, by socioeconomic characteristics

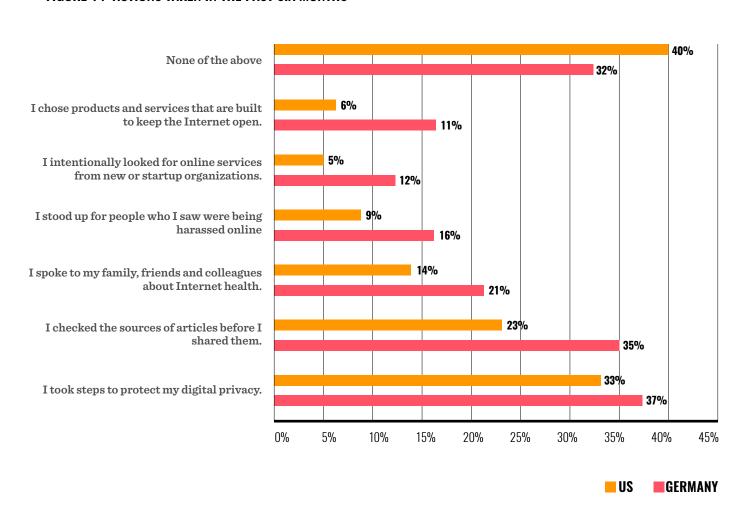
		THE INTERNET AS IT CURRENTLY EXISTS WORKS WELL.	THE INTERNET AS IT CURRENTLY EXISTS WORKS WELL, BUT COULD BE IMPROVED.	THE INTERNET AS IT CURRENTLY EXISTS IS AT RISK AND STEPS SHOULD BE TAKEN TO MAKE IT MORE OPEN AND HEALTHY.	THE INTERNET AS IT CURRENTLY EXISTS IS AT RISK AND THERE IS NOTHING WE CAN DO.	NONE OF THE ABOVE	%	NUMBER OF Respondents
Gender of respondent	Men	15.3%	39.9%	27.7%	9.5%	7.7%	100.0%	456
	Women	7.8%	42.3%	33.3%	8.4%	8.2%	100.0%	551
Age of respondent	18-24	14.5%	44.5%	29.1%	2.8%	9.0%	100.0%	89
•	25-34	16.9%	30.1%	31.5%	13.9%	7.6%	100.0%	223
	35-44	12.6%	41.0%	27.9%	10.2%	8.4%	100.0%	177
	45-54	11.9%	42.3%	30.7%	7.5%	7.6%	100.0%	161
	55-64	10.5%	42.1%	28.7%	9.0%	9.6%	100.0%	161
	65-70	2.1%	44.1%	38.1%	8.9%	6.8%	100.0%	103
	70-92	4.3%	55.0%	31.3%	4.2%	5.3%	100.0%	93
Education of respondent	High school and below	6.9%	43.4%	23.9%	11.2%	14.7%	100.0%	203
	Undergraduate	8.5%	42.5%	33.4%	7.9%	7.6%	100.0%	587
	Graduate & Post Graduate	22.0%	36.0%	28.8%	9.7%	3.5%	100.0%	217
Household Annual	\$100 000 and +	14.8%	47.8%	25.1%	8.1%	4.2%	100.0%	143
Income	\$75 000 - \$100 000	18.1%	32.2%	29.4%	15.6%	4.6%	100.0%	265
	\$50 000 - \$75 000	9.8%	41.9%	30.7%	7.3%	10.3%	100.0%	199
	\$25 000 - \$50 000	6.0%	41.7%	36.8%	6.9%	8.5%	100.0%	201
	<\$25 000	8.1%	34.3%	34.0%	9.3%	14.3%	100.0%	199
TOTAL		11.4%	41.1%	30.6%	8.9%	7.9%	100.0%	1007

The Ipsos poll also examined what, if any, actions respondents have taken to improve Internet health in the past six months.

Respondents were asked to choose as many options as applied to them from the list in Figure 14.

The majority of respondents in both the US and Germany said they have taken at least one action to promote a healthy Internet during the past six months.

FIGURE 14. ACTIONS TAKEN IN THE PAST SIX MONTHS



The majority of respondents in both the United States (62%) and Germany (52%) said they have taken at least one of these actions. The most common actions taken in both of these countries was to protect

one's digital privacy, and to check the source of an online article before sharing it. Looking at data by socioeconomic background (Table 16 and 17 below), it appears that in both countries, men, the youngest

generations (16-34 years), people with higher incomes and people with higher education are generally more active in promoting a healthy Internet.

Table 16: Actions taken in the past six months by the German public, by socioeconomic characteristics

		I SPOKE TO MY FAMILY, FRIENDS AND COLLEAGUES ABOUT INTERNET HEALTH.	I CHECKED THE SOURCES OF ARTICLES BEFORE I SHARE THEM.	I INTENTIONALLY LOOKED FOR ONLINE SERVICES FROM NEW OR STARTUP ORGANIZATIONS.	I STOOD UP FOR PEOPLE WHO I SEE ARE BEING HARASSED ONLINE.	I CHOSE PRODUCTS AND SERVICES THAT ARE BUILT TO KEEP THE INTERNET OPEN.	I TOOK STEPS TO PROTECT My Digital Privacy.	NONE OF THE ABOVE.	NUMBER OF RESPONDENTS
Gender of respondent	Men	15.7%	24.2%	6.4%	11.2%	8.3%	35.1%	35.5%	544
	Women	12.3%	21.2%	3.2%	7.6%	3.2%	30.7%	44.0%	549
Age of respondent	16-24	19.9%	28.5%	9.8%	22.8%	7.6%	36.3%	29.5%	147
	25-34	15.9%	26.5%	6.8%	13.9%	8.1%	37.5%	29.4%	189
	35-44	12.6%	23.7%	5.2%	5.9%	5.6%	28.5%	40.2%	198
	45-54	14.2%	21.0%	2.6%	7.5%	4.5%	31.2%	46.3%	254
	55-64	10.9%	17.7%	1.8%	3.9%	5.3%	33.4%	45.3%	207
	65-70	9.8%	18.8%	4.0%	3.4%	2.9%	30.9%	46.0%	98
Level of Education of respondent	Primary/ Lower secondary	13.7%	18.7%	5.3%	11.7%	6.6%	28.3%	38.1%	217
	General upper secondary	17.2%	31.6%	7.8%	14.1%	7.7%	42.2%	29.5%	159
	Vocational upper secondary	11.5%	18.5%	3.4%	6.2%	3.6%	26.5%	49.9%	416
	Higher Education	16.0%	26.9%	4.7%	9.6%	7.1%	40.5%	32.2%	301
Respondent's Household	€60,001 and +	16.5%	29.4%	11.2%	15.4%	9.5%	52.2%	30.8%	58
Annual Income	€36,001 to €60,000	17.5%	24.2%	6.1%	8.8%	6.4%	40.5%	34.0%	258
	€18,001 to €36,000	12.7%	20.0%	3.9%	7.6%	4.3%	30.8%	45.7%	410
	UP TO €18,000	14.5%	22.7%	5.8%	12.9%	8.6%	29.7%	36.4%	209
	Not declared	10.3%	24.3%	1.6%	8.8%	4.1%	22.6%	40.6%	158
ГОТАL		14.0%	22.7%	4.8%	9.4%	5.8%	32.9%	39.7%	1093

In Germany, close to half of women (44%) and slightly more than a third of men (35%) have taken no action during the last 6 months. Similarly, inactivity seems to increase with age: 29% of German respondents 16-34 years old said they had not taken any action, and this increased

to 46% of people aged 45+. In the United States, the youngest respondents (18-34) are the most likely to have taken any of the actions listed.

In terms of socioeconomic characteristics, taking action seems to be correlated with

the income of the respondent: Germans and Americans who make more than €60K and \$75K, respectively, appear to be more active in promoting a healthy Internet.

Table 17: Actions taken in the past six months by the United States public, by socioeconomic characteristics

		I SPOKE TO MY FAMILY, FRIENDS AND COLLEAGUES ABOUT INTERNET HEALTH.	I CHECKED THE SOURCES OF ARTICLES BEFORE I SHARE THEM.	I INTENTIONALLY LOOKED FOR ONLINE SERVICES FROM NEW OR STARTUP ORGANIZATIONS.	I STOOD UP FOR PEOPLE WHO I SAW ARE BEING HARASSED ONLINE.	I CHOSE PRODUCTS AND SERVICES THAT ARE BUILT TO KEEP THE INTERNET OPEN.	I TOOK STEPS TO Protect My Digital Privacy.	NONE OF THE ABOVE	NUMBER OF RESPONDENTS
Gender of respondent	Men	22.4%	32.4%	13.2%	16.2%	12.2%	36.8%	29.3%	456
	Women	19.6%	36.5%	10.7%	16.7%	9.4%	37.7%	34.3%	551
Age of respondent	18-24	29.1%	49.4%	12.7%	38.5%	18.2%	52.0%	10.3%	89
•	25-34	32.1%	41.0%	23.6%	23.0%	18.6%	40.6%	17.6%	223
	35-44	27.5%	42.5%	14.8%	23.9%	12.9%	35.3%	29.2%	177
	45-54	19.2%	26.6%	14.9%	11.5%	9.4%	40.6%	34.7%	161
	55-64	7.3%	27.4%	1.3%	7.7%	4.3%	29.7%	46.7%	161
	65-70	8.5%	26.3%	2.4%	3.2%	2.5%	26.5%	52.7%	103
	70-92	17.6%	26.2%	3.7%	4.6%	5.0%	38.2%	35.8%	93
Education of respondent	High school and below	11.0%	23.2%	8.0%	11.3%	6.5%	23.1%	40.6%	203
	Undergraduate	18.2%	34.1%	10.1%	17.6%	9.9%	39.0%	34.1%	587
	Graduate & Post Graduate	35.6%	44.6%	19.4%	17.6%	16.3%	43.9%	19.8%	217
Household Annual	\$100 000 and +	29.9%	39.1%	13.9%	21.1%	10.7%	49.3%	26.3%	143
Income	\$75 000 - \$100 000	20.8%	37.9%	19.2%	10.6%	16.0%	30.5%	27.8%	265
	\$50 000 - \$75 000	19.8%	30.6%	7.8%	15.6%	10.7%	29.7%	33.8%	199
	\$25 000 - \$50 000	16.4%	32.1%	9.7%	14.8%	8.7%	37.2%	39.3%	201
	<\$25 000	11.4%	31.0%	9.4%	16.0%	9.3%	29.1%	33.9%	199
TOTAL		21.0%	34.6%	11.9%	16.5%	10.8%	37.3%	31.9%	1007

Discussion of Findings

1

One of the most intriguing findings of this research is that awareness of Internet health issues does not directly translate into engagement in (i.e. caring about) these issues, particularly for younger respondents.

The data we have at present doesn't provide sufficient information to explain why this is. However, some hypotheses we currently have are:

People who have grown up with the Internet and social media — and the accompanying "online privacy paradox" — might be more comfortable, resigned and / or desensitized to the tradeoff of privacy for convenience.

Younger individuals may have less direct experience with the negative consequences of limited online privacy and security, leading them to be less concerned or fearful. On the other hand, older respondents and women may have more experience with negative consequences and therefore feel more vulnerable.

2

Being concerned about the state of the Internet does not necessarily translate into taking action to promote a healthy Internet.

The System1 Group survey indicates that women are the most concerned about online privacy and security and more concerned about four out of five issues in Germany compared to men. But, women are also less likely to have taken any action to improve the Internet as demonstrated by the Ipsos poll. More insight into the root causes of this disconnect is needed. For example, might there be a lack of awareness of how to address the issue they are most concerned about? (e.g. are people concerned about online privacy and security, but unsure how to protect themselves?)

3.

In both the United States and Germany, excluding online privacy and security, women reported lower levels of awareness of Internet health issues than men.

If this is indicative of a real gap in awareness between men and women in both these countries, it is vital that we work to address it. However, it's also possible that the difference in self-reported levels of awareness between genders may be related to other factors, such as women's tendency to underestimate their abilities or knowledge, as demonstrated by recent research. If the latter is the case, it remains important to address by requires a different approach.

Women in Germany, despite being in general less aware than men about the Internet Health issues are more concerned with all the issues except Decentralization.

Discussion of Findings

4.

The findings also indicate that online privacy and security is far more dominant in public consciousness than other Internet health issues.

Finding out more about what led to this could illuminate tactics or strategies that worked well with this issue, and learnings could be applied to other issues. For example, people may currently find online privacy and security easier to relate to their day-to-day lives, which may increase their awareness and engagement. Prominent news stories related to online privacy and security in the last year — like the United States Federal Communications Commission's consumer privacy ruling in October 2016 — may also have influenced public engagement with and awareness of this particular topic.

5.

It also seems that there's a great deal to be done to raise awareness of and engagement with the other four Internet health issues.

One way forward may be to focus on messaging or actions that address specific segments of the population, by speaking to both their experiences / interests and what we know about their levels of awareness / engagement.

NEXT STEPS

Mozilla is working to incorporate these findings into our strategy. We are also continuing to invest in research that will help us better comprehend what the broader public understands about Internet health issues. We plan to produce future editions of this report, and will share the insights we glean from ongoing research efforts.

Mozilla's Internet health issues

ONLINE PRIVACY AND SECURITY

Internet users should be able to have greater choice over what information they share with what organizations, and for what benefit. They should have the freedom to express themselves online without unwarranted surveillance. And, they should be able to safeguard their information against attacks.

OPEN INNOVATION

People who want to change the world should be able to build products and understand different points of view through open source code and idea sharing. Copyright and patent laws should be reformed so that in this digital age, they foster collaboration and economic opportunity.

DECENTRALIZATION

There shouldn't be online monopolies or oligopolies. Instead, big and small businesses — and individuals from around the world — should all be able to contribute to and provide online services. Internet users should be able to reap the benefits of competition and exposure to different ways of thinking.

DIGITAL INCLUSION

People — no matter where they live in the world, their income, their language, the color of their skin, their political affiliation, their religion, their physical ability, their sexual orientation or their gender — should have unfettered access to the Internet. They should be able to both consume and create online so that the Internet reflects the diversity of the people who use it.

WEB LITERACY

People everywhere should have the knowledge they need to tap into the full power of the Internet — and to use it to make their lives and the world better. This means that everyone needs the skills to read, write and participate online. For this to happen, web literacy must be foundational in education, alongside skills like reading and math.

Mozilla's Ipsos survey questionnaire

MOZILLA SURVEY OF INTERNET HEALTH

Methodology: Online Survey N=1,000 U.S. adults and N=1,000 German adults

1. How much, if anything, do you know about each of the following issues:

UNITED STATES

[Progressive grid, randomize]

- A. Internet health
- B. Civil rights
- c. Climate change
- D. The economy
- E. NSA surveillance
- o Very familiar
- o Somewhat familiar
- o Not very familiar
- o Heard of but know nothing
- o Never heard of it before
- o Don't know [Anchor]

GERMANY

[Progressive grid, randomize]

- A. Internet health
- B. Migrant / refugee crisis
- c. Climate change
- D. The economy
- E. EU digital copyright reforms
- o Very familiar
- o Somewhat familiar
- o Not very familiar
- o Heard of but know nothing
- o Never heard of it before
- o Don't know [Anchor]

2. Do you think the following aspects of the Internet in [COUNTRY] have gotten better, worse or stayed the same in the last 12 months?

[Randomize]

- A. Online privacy and security
- B. Accuracy of online content
- **c.** [COUNTRYS] citizens' understanding of how the Internet works
- **D.** Diversity of people and viewpoints participating online
- E. Affordability of Internet access
- F. Speed of connectivity
- o Much better
- o Somewhat better
- o The same
- o Somewhat worse
- o Much worse
- o Don't know [Anchor]

3. How worried are you, if at all, about the following when you use the Internet?

$[Progressive\ grid, randomize]$

- A. Online harassment and bullying
- B. The most popular online services being owned by a small number of companies
- c. People's inability to tell the difference between fake news and real news stories
- $\begin{tabular}{ll} \textbf{D.} & Restrictive laws that curb free \\ & speech and creativity \\ \end{tabular}$
- Privacy policies that favor companies instead of individual users
- F. Government and police surveillance
- o Very worried
- o Somewhat worried
- o Not very worried
- o Not at all worried
- o Don't know [Anchor]

4. Which of the following is closer to your opinion about the state of the Internet?

[Rotate]

- A. The Internet as it currently exists works well.
- B. The Internet as it currently exists works well, but could be improved
- c. The Internet as it currently exists is at risk and steps should be taken to make it more open and healthy.
- D. The Internet as it currently exists is at risk and there is nothing we can do.
- E. None of the above [Anchor]

5. In the past six months, have you done any of the following actions? Select all that apply.

[Randomize]

- A. I spoke to my family, friends and colleagues about Internet health.
- **B.** I checked the sources of articles before I shared them.
- c. I intentionally looked for online services from new or startup organizations.
- D. I stood up for people who I saw are being harassed online.
- E. I chose products and services that are built to keep the Internet open.
- F. I took steps to protect my digital privacy.
- G. Other, specify [anchor, open end]

Keywords tracked in Crimson Hexagon

DECENTRALIZATION KEYWORDS

(("Interoperability" OR "Online Monopolies" OR "Walled Garden" OR "Facebook Instant Articles"))

DIGITAL INCLUSION KEYWORDS

(("Zero rating" OR "Equal rating" OR "Net Neutrality" OR "Free Basics" OR "women in tech"))

ONLINE PRIVACY AND SECURITY KEYWORDS

("online privacy" OR "private browsing" OR "online security" OR

"password protection" OR "cyber crime" OR "identity theft" OR

"online surveillance" OR "surveillance law" OR "snoopers charter"

OR "encrypt" OR "encryption" OR "encrypted") OR (("privacy" OR

"data" OR "security" OR "secure" OR "surveillance") AND ("online" OR

"Internet" OR "web"))~5

OPEN INNOVATION KEYWORDS

(("Open Standards" OR "Permission Free" OR "Copyright" OR "Nonproprietary standards" OR "Cross Platform" OR "open source" OR "patent") AND ("internet" OR"online"))~10

WEB LITERACY KEYWORDS

(("Digital Literacy" OR "web literacy" OR "Online Participation" OR "teach the web" OR "women in stem" OR "learning digital skills"))