

Industry Agenda

The Internet Trust Bubble Global Values, Beliefs and Practices

William H. Dutton, Ginette Law, Gillian Bolsover and Soumitra Dutta



© World Economic Forum

2013 - All rights reserved.

The views expressed are those of various participants in the discussion and do not necessarily reflect the views of all participants, the organizations with which they are affiliated, or of the World Economic Forum.

REF 131113

Contents

- 3 Preface
- 4 Foreword
- 5 Introduction
- 7 Methodology
- 10 1. Internet Values
- 21 2. Online Beliefs and Concerns
- 26 3. Trust and Authenticity
- 27 4. Internet Practices: Patterns of Use
- 36 Conclusion: Summary and Discussion of General Patterns and Themes
- 39 References

Preface



Alan Marcus
Senior Director,
Head of Information
and Communication
Technology
Industries, World
Economic Forum

Hyperconnectivity is increasing digital interconnection of people – and things – anytime and anywhere. This is the defining story of our times. The “clock speed” of societal change has accelerated to the point beyond the capacity of conventional comprehension and governmental direction. We all live in a hyperconnected world that is being catapulted into an uncertain future.

Digital technology is becoming a medium of daily life, business and governance, shaping future societies and economies. At the centre of this change is the emerging understanding that the Internet is not an inexorable natural force, but, rather, a human artefact that can be shaped.

The critical driver of the Internet’s future does not lie in the rarefied rooms of government officials and big companies but in the attitudes of the citizens and consumers they are serving. The Internet Trust Bubble report focuses on the attitudes of global users of the Internet, their practices, habits of expression as well as attitudes towards privacy, security and trust. The Internet is a global commons and findings presented in the following pages indicate that global citizens are aware of this, and express beliefs and attitudes that seek to preserve and enhance this asset.

Organizations need to engage and empower individuals more effectively and efficiently. Rather than merely providing a binary yes-or-no consent at the initial point of collection, individuals need new ways to exercise choice and control, especially where data uses most affect them. They need a better understanding of the overall value exchange so that they can make truly informed choices.

Furthermore, understanding the dynamics of hyperconnectivity and its impact on leadership has become a global priority. New insights and understandings are vital for leaders as they manage the transition from a “complicated” world driven by top-down, command and control systems to a “complex” world characterized by decentralized, non-linear change.

If leaders are better able to understand the changing attitudes of empowered citizens and consumers, they will be able to harness the opportunities of such engagement more effectively and build on their hyperconnected constituents in creating more effective leadership.

Constituents of the World Economic Forum are convinced that hyperconnectivity is a huge opportunity. If we are able to build on the existing values and enhance them through our systems, designs and practices, we will build a better world for us all.

Foreword

The values, beliefs and attitudes of Internet users around the world are critical factors in shaping the future vitality of the Internet. However, they have been largely overlooked by research that has focused on technological change, global Internet governance and national policies and practices. This report describes these attitudes, beliefs and practices related to expression, privacy and security online, building on an earlier study. We find broad support for the potential opportunities tied to the Internet around freedom of expression, but also serious concerns over privacy, security and trust that could undermine the realization of these opportunities in globally networked societies, including common perceptions of governmental surveillance of the online world. The findings that emerge from this study could spell trouble for the future of the Internet unless they are effectively addressed in the coming years.

In 2010, the Internet Values Project¹ conducted its first online survey of more than 5,000 Internet users worldwide, enquiring about their perceptions, values and uses of the Internet. This project was based at the Oxford Internet Institute but was conducted in collaboration with INSEAD, along with the World Economic Forum and comScore. The report, written for the World Economic Forum and entitled *The New Internet World: A Global Perspective on Freedom of Expression, Privacy, Trust and Security Online*,² concluded that a new global Internet culture was developing as the majority of Internet users were from countries not prominent in the Internet's early years.

The basic thesis was that the arrival of these new Internet users has marked a shift from the Old Internet World, which was dominated by users in North America and Western Europe, to a New Internet World, in which users in Asia and other rapidly developing regions are now the majority online. The Internet's shifting demographics led to the key questions driving the study, including: How might the changing demographics of Internet users shift the values, beliefs and practices underpinning the Internet? For example, will the influx of users from non-democratic countries or those without the tradition of a free press mean that Internet users worldwide are less supportive of freedom of expression and other core values tied to the Internet?

In 2010, we found that users from countries that had more recently come online shared many of the same values underpinning freedom of expression and the protection of privacy that were prominent among users within countries of the Old Internet World. Moreover, in some cases, the countries driving the transition into the New Internet World held even somewhat stronger views about the freedom of the Internet and outpaced users from older adopting

countries in their innovative use of the Internet, such as the origination of online content. The 2010 report concluded that users in the New Internet World shared a common set of values and beliefs that would likely lead to a continued support for freedom of expression, the protection of privacy and other fundamental aspects of the values that underpinned the Old Internet World.

To build on and extend these findings, we conducted a new survey in 2012 with refined concepts, improved questions and enhanced samples of over 11,000 respondents. This new survey more than doubled the number of respondents of the original. It also increased the number of countries represented and was offered in nine languages to ensure that we had a reliable and valid reading of the uses and values of users in the New Internet World. This report describes the results of our 2012 survey and its implications for the future of the Internet. It is not designed to replace the 2011 *New Internet World* report; rather, we recommend that the 2011 report be perceived as supplemental to this subsequent report.

Acknowledgements

This report and the project on which it is based would not have been possible without the collaboration of the World Economic Forum and comScore, which fielded the core survey.

The project began while Soumitra Dutta was at INSEAD. We are grateful to INSEAD and, subsequently, to the Johnson Business School at Cornell University for enabling Professor Dutta to be a principal in this project.

We are also grateful to ictQatar for supporting this project, enabling us to field the survey in more Middle Eastern and North African countries. Support was also provided by Oxford Martin's Global Cyber Security Capacity Centre, funded by the UK Foreign and Commonwealth Office, on which Bill Dutton is a co-principal investigator, as the findings directly relate to key attitudes and beliefs related to online privacy and security.

We are specifically grateful to Dr Grant Blank for his expert advice on data management and analysis and Nesrine Abdel-Sattar, who contributed to the production of the Arabic language questionnaire.

¹ IVP (previously named the Global Internet Values Project) is an Oxford Internet Institute project conducted in collaboration with the Samuel Curtis Johnson School of Graduate Business at Cornell University (<http://www.oi.ox.ac.uk/research/projects/?id=65>).

² Dutta, S., Dutton, W. H. and Law, G. (2011). The New Internet World. A Global Perspective on Freedom of Expression, Privacy, Trust and Security Online. Contribution to: *The Global Information Technology Report 2010-2011. Transformations 2.0*. World Economic Forum, April 2011.

Introduction

Discussion of the future of the Internet is most often focused on technological innovations. However, one of the greatest changes confronting the Internet is social – tied to its changing population of users and their experiences online. The diffusion of the Internet in the 21st century has shifted the centre of gravity of its population of users away from North American and Western European countries to the emerging countries of Asia and the global South. Has this social shift in use of the Internet altered the attitudes, beliefs and practices underpinning expression, privacy and security online? How are users worldwide experiencing contemporary technologies and applications of the Internet? Do networked individuals remain enthusiastic about the Internet or have doubts and fears been fostered by their experiences online?

This report addresses these broad questions, describing the findings of a global online survey of users from countries around the world. We found the following.

There is strong support for the values and attitudes underpinning freedom of expression on the Internet. In some respects, users in the emerging countries of the Internet world are less complacent and more supportive of freedom of expression online than are users in the countries of the Old Internet World. In fact, in 2012, users from the countries more recently moving online, those composing the New Internet World, are more likely to support norms underpinning freedom of expression online than do users from countries of the Old Internet World, who were early to adopt the Internet, and report higher levels of perceived freedom in expressing themselves on the Internet.

However, there is concern worldwide over the privacy of personal information. Awareness of the risks to privacy are global, but not evenly distributed, with users in countries that have more recently embraced the Internet being somewhat less aware of the risks and more trusting in their use of the Internet. Moreover, many users around the world indicate that they are not taking measures designed to protect their privacy and security online. In addition, there is evidence of large proportions of the online world lacking trust in the authenticity and appropriateness of information on the Internet, often looking towards the government to address problems in ways that could put values of the Internet at risk, such as freedom of expression. At the same time, a surprisingly high proportion of users take governmental monitoring and surveillance of the Internet for granted, even before the disclosures of Edward Snowden and his claims about US and other governmental surveillance initiatives.

These attitudes and beliefs might well signal a looming crisis of trust in the freedom, privacy, security and value of the Internet as a global information and communication resource. However, there are also some indicators of positive change. For example, users in the emerging countries of the Internet world, such as China and Brazil, are among the most active in originating content, such as in posting their views and opinions online. They are more often using the Internet as a medium of expression, and therefore have as great a stake as other users worldwide in maintaining freedom of expression, privacy and security online.

The detailed findings that support these general conclusions are described in this report. Together, these findings point out the need for global initiatives to recognize the support underpinning freedom of expression and privacy, but also to raise awareness of the risks to these values, and also educate users about measures they can take to enhance their capacity to protect their privacy and security online, and critically assess the information and other services that they can access in what is a continually evolving New Internet World.

Background

The worldwide diffusion of the Internet and related information and communication technologies (ICTs), such as mobile phones, personal computers, tablets and other electronic devices, has been one of the key developments of the 21st century's "network society" (Castells 2001). The number of individuals with household access to the Internet surpassed 2.4 billion in 2012, accounting for one-third of the world's population.³

As the use of ICTs is being increasingly integrated into everyday life and work across the world, a global, versus nation-centric, perspective on the Internet is becoming more vital. Key questions about the Internet are international in nature. However, research has been largely nation-centric or regional, with relatively little conducted on global patterns.

Some exceptions include the World Internet Project⁴, which enables some cross-national comparisons, but even this project is anchored in national studies. There have been a few global surveys, such as a 2010 BBC survey on attitudes towards freedom of expression. In particular, the BBC survey raised questions about the level of commonality and variation cross-nationally that drove us to investigate further the patterns of online activities, and attitudes and behaviours concerning trust, privacy, security and freedom of expression in our first Internet Values Survey.

Based on the 2010 survey of users in 13 countries and secondary analysis of existing data, we arrived at four major themes: 1) a shifting centre of gravity in the global population of Internet users; 2) evidence of a global convergence of attitudes and values among Internet users; 3) a reinforcement of core Internet values among users in rapidly developing countries; and 4) the more active involvement of users within the countries emerging online in new uses of the Internet, such as social networking and user-generated content. As a sensitizing concept, designed to bring the reader into a set of concrete empirical findings, the 2010 report developed the concept of the "New Internet World" to underscore the extent and importance of the ongoing changes in the world's Internet demographics and their implications for the expression, privacy and security online.

³ <http://www.internetworldstats.com/stats.htm>.

⁴ The World Internet Project aspires to cross-nationally compare trends in Internet use and impact over time. See: <http://www.worldinternetproject.net/#about>.

Approach of This Study

Results from the 2010 survey highlighted the emergence of a global Internet culture where a worldwide diversity of users shared remarkably similar perceptions and attitudes related to core Internet values, such as freedom of expression, privacy, trust and security. There were some notable differences, such as users from newly adopting Internet countries being somewhat more liberal, for example by being more supportive of freedom of expression, producing more online content and being more sociable online. The 2012 survey reconfirms these results while contributing greater precision, allowing us to enhance our notions of how users in countries that were prominent in the Old Internet World differ from those who have only come online in more recent waves of adoption.

By expanding the sample of countries surveyed, and deepening our analysis of the survey responses, we found it useful to operationalize a set of categories that distinguish countries of the New Internet World on the basis of levels of Internet penetration. This provided a parsimonious way to categorize countries by how recently their population has joined the Internet world. Countries with large proportions of Internet users, such as the US, came online early, forming the core of the Old Internet World. While countries differ in the rate at which they have moved online, the percentage of users online generally separates the early adopting countries from later adopters, who are most central in shaping the New Internet World.

On the basis of penetration, countries were grouped in four categories (see Table 1). They include:

1. Fringe Internet penetration (FIP), with less than 25% penetration, such as India, South Africa and Pakistan
2. Low Internet penetration (LIP), with 25%-50% penetration, such as Brazil, China, Mexico and Egypt
3. Moderate Internet penetration (MIP), between 50% and 75% Internet penetration, such as Argentina, Italy and Spain
4. High Internet penetration (HIP), with more than 75% of their population online, including Germany, Japan, Australia and USA

Generally, the fringe and low penetration countries are those entering and changing the makeup of the Internet world, so we call them the “New Internet World”. Countries with low levels of penetration are either later adopters or have not prioritized the Internet. For example, a number of countries in the Middle East embraced the Internet somewhat later but supported its rapid diffusion. Likewise, the moderate and high internet penetration countries were part of the old Internet world, so we label these countries as the “Old Internet World”, even though all countries are literally members of the New Internet World. This typology enables us to move away from countries, regions or continents as categories of Internet users to a set of categories more anchored to the adoption and diffusion of the Internet.

Table 1: Internet Penetration Groupings

Categories	% Internet Penetration	% Online Population ⁵
Fringe Internet penetration (FIP)	< 25%	16%
Low Internet penetration (LIP)	25%-50%	43%
Moderate Internet penetration (MIP)	> 50%-75%	14%
High Internet penetration (HIP)	> 75%	27%

Given this approach to the study and the categorization of users and countries, we are primarily interested in two main questions. First, are there broad patterns of values, concerns and uses that underpin a general Internet culture? Second, are there some values, concerns and uses that distinguish users in countries of the Old Internet World, such as the US, from users in emerging countries of the New Internet World, such as China?

Whatever we find from our 2012 survey, it is clear that users could become more or less diverse in their patterns of values, concerns and uses over time. The continual evolution of new technologies and the Internet suggest, however, that one of the most dramatic changes occurring is social and not simply technological. Specifically, there is a rapidly developing shift in the population of the Internet world. Two-thirds of the world's population remains offline and we do not know if the values and attitudes shaping the Internet will shift when the majority of the global population will be connected to the Internet. This is why we continue to expand our research to follow the development of user Internet values, concerns and uses.

Structure of This Report

This report begins with a section that describes the survey methodology that underpins this study. We then move to the substantive discussion of findings on the emergence and evolution of the New Internet World (NIW) and the patterns of use of NIW users. This is presented in four separate but interrelated topics that define four sections of the findings. The first section summarizes how users perceive fundamental Internet values such as freedom of expression, government control, data protection and security, and trust. The second section focuses on dominant online concerns related to censorship, surveillance, privacy and authenticity. The third section examines general patterns of Internet uses, while the fourth section addresses mobile Internet uses. A brief conclusion then seeks to draw the key patterns and themes from the study.

⁵ According to the Internet World Stats, June 2012: <http://www.internetworldstats.com/stats.htm>.

Methodology

The data presented in this report derives from the second survey (conducted in 2012) by the Internet Values Project (IVP). Survey questions were based upon a collection of well-known Internet surveys including the World Internet Project (WIP)⁶, the OxiS Surveys⁷, the Pew Internet and American Life Project⁸, comScore⁹ and the BBC World Service Internet poll¹⁰. IVP researchers reworked the original IVP survey with teams from the World Economic Forum, removing certain questions that yielded little variance and refining others to gain more precision. New questions were also added to measure the most relevant themes of today.

The survey was conducted online almost simultaneously by comScore and Toluna, two world leading market research firms, between July and September 2012. Toluna focused on collecting data from the Middle East and North Africa (MENA) region while comScore focused on collecting data from other regions of the world. The online questionnaire was programmed to randomize questions, force answers and to minimize non-response biases, “Don’t know” answers were treated as missing data.

A total of 11,225 cases were retained from users in 63 countries by combining the data collected from both firms. The survey was conducted in nine languages: Arabic, English, French, German, Italian, Japanese, Korean, Simplified Chinese and Spanish, both Iberian and Latin American.

⁶ <http://www.worldinternetproject.net>.

⁷ <http://microsites.oii.ox.ac.uk/oxis/>.

⁸ <http://pewinternet.org>.

⁹ <http://www.comscore.com>.

¹⁰ BBC (2010) “Four in Five Regard Internet Access as a Fundamental Right: Global Poll”, BBC News, news.bbc.co.uk/2/shared/bsp/hi/pdfs/08_03_10_BBC_internet_poll.pdf.



Samples aimed to represent online Internet populations and not the general population. Only countries with sample sizes of more than 300 were retained for country-level analysis (in comparison with the 2010 survey, in which countries with samples of more than 200 were retained). This meant that 20 countries could be analysed individually – Argentina, Australia, Brazil, Canada, China, Colombia, Egypt, France, Germany, India, Italy, Japan, South Korea, Mexico, Peru, Saudi Arabia, South Africa, Spain, the United Kingdom and the United States – seven more than in the 2010 survey¹². Overall, sampling and methodology were improved from the 2010 IVP survey; yet, new results reinforced and extended the previous findings, confirming the validity and reliability of the initial study.

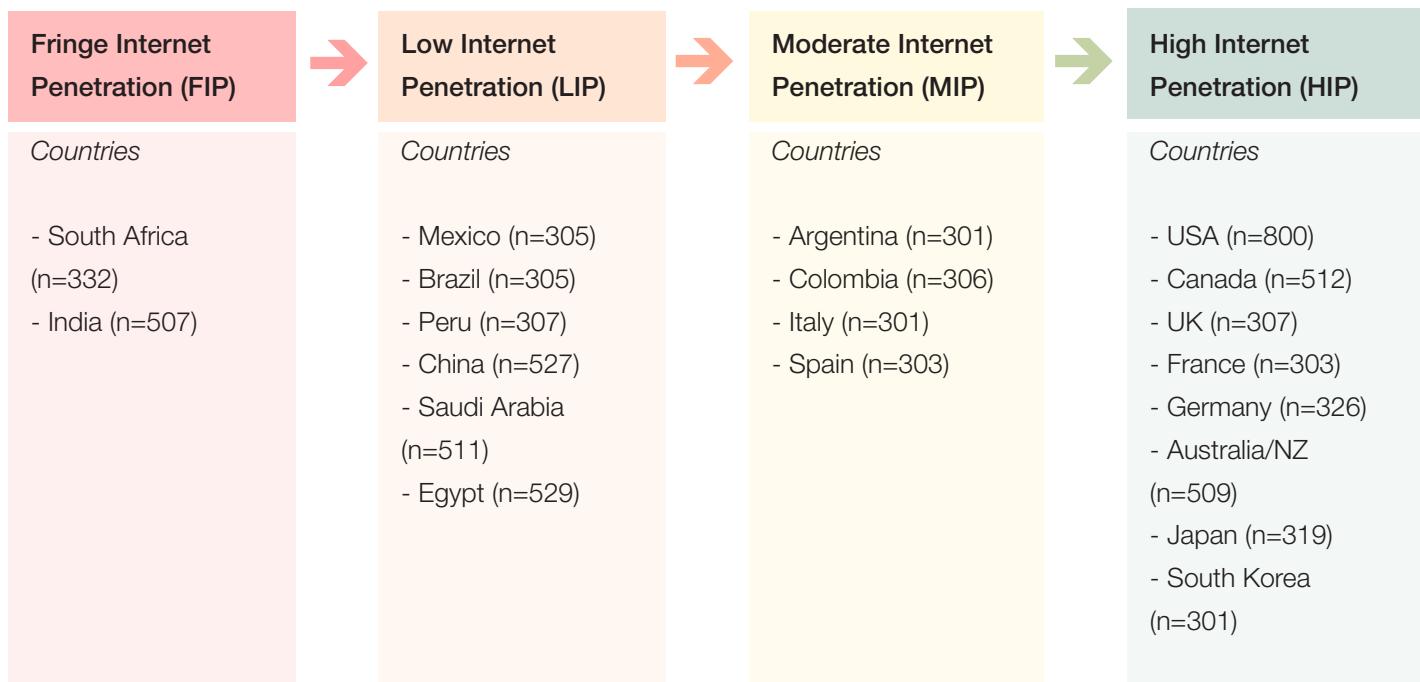
¹² A full description of the methodology is available at the end of this report.

Table 2: Survey Sample

	Groups	% of Internet Penetration	Sample (N)	Sample (%) ¹¹
New Internet World	Fringe	< 25%	1,647	14.7
	Low Internet penetration	25%-50%	3,553	31.7
Old Internet World	Moderate Internet penetration	> 50%- 75%	2,259	20.1
	High Internet penetration	> 75%	3,766	33.6
Total			11,225	100

¹¹ Sample has been weighted according to the total online population. See the Methodology appendix for more details.

Figure 1: Regions and Countries by Internet Penetration¹³



¹³ Groupings based on Internet World Stats, December 2012.

Sampling

Sampling was based on the total online population in each of the targeted countries and regions, rather than the general population. The aim of this research was to study the values, concerns and uses of Internet users; non-users were automatically excluded. The overall sample was stratified to the quota targets we set with the research team to best represent each country's online population. In cases where general demographics (age, gender and income) in a given quota cell were not representative of the online population, sample weighting was applied.

At 95% confidence levels, results of 50% had the following margins of error:

- +/- .92% for the total sample
- +/- 2.53% for FIP sample
- +/- 1.72% for LIP sample
- +/- 2.05% for MIP sample
- +/- 1.53% for HIP sample

Weighting

Post-stratification weights were used after an exploratory analysis of the data to gain fuller representation of the emerging countries of the “New” Internet world.

Table 3: Weights

Internet Penetration Groups	% of Online	% of Sample	Weight
FIP (< 25%)	16%	13%	1.23
LIP (25%-50%)	43%	29%	1.48
MIP (> 50%-75%)	14%	21%	0.67
HIP (> 75%)	27%	37%	0.73
Total	100%	100%	

*Countries with n/a data were treated as an FIP country.
Source: Internet World Stats 2012

Principal Component Analysis and Component-based Scores

The survey included over 200 items. Items were initially grouped on the basis of their content at face value, such as grouping questions designed to provide an indicator of attitudes towards privacy. A principal component analysis was then conducted to determine if the items should be grouped together or broken up into more discrete components. We used principal component analysis with a varimax (orthogonal) rotation of factors. Only components with an eigenvalue greater than 1 were retained. Components with a slightly inferior value were retained if the additional components explained more than 15% of variance after the rotation.

Items that loaded greater than .50 on a component were retained for analysis. Factor-based composite mean scores were created with the remaining items from a component to give a broad yet precise overview of all the data. Composite scores were not created for components with less than three items. In this case, items were presented individually.

Cronbach's alpha was applied to constructs to confirm the internal consistencies of the scales. Twelve out of the 19 constructs had an acceptable alpha greater than .70. The other seven remaining scales had an alpha greater than .50. Cronbach's alpha is a lower-bound estimate of reliability that is highly sensitive to a small number of test items and assumes that items meet the conditions of the tau-equivalent model¹⁴. In the instance where alpha values seemed questionable, the constructs were tested by their relationship with test items to determine their construct validity. However, if items correlated significantly with these constructs ($p > .001$) and loaded strongly onto a component, we retained them as part of the construct's indicator.

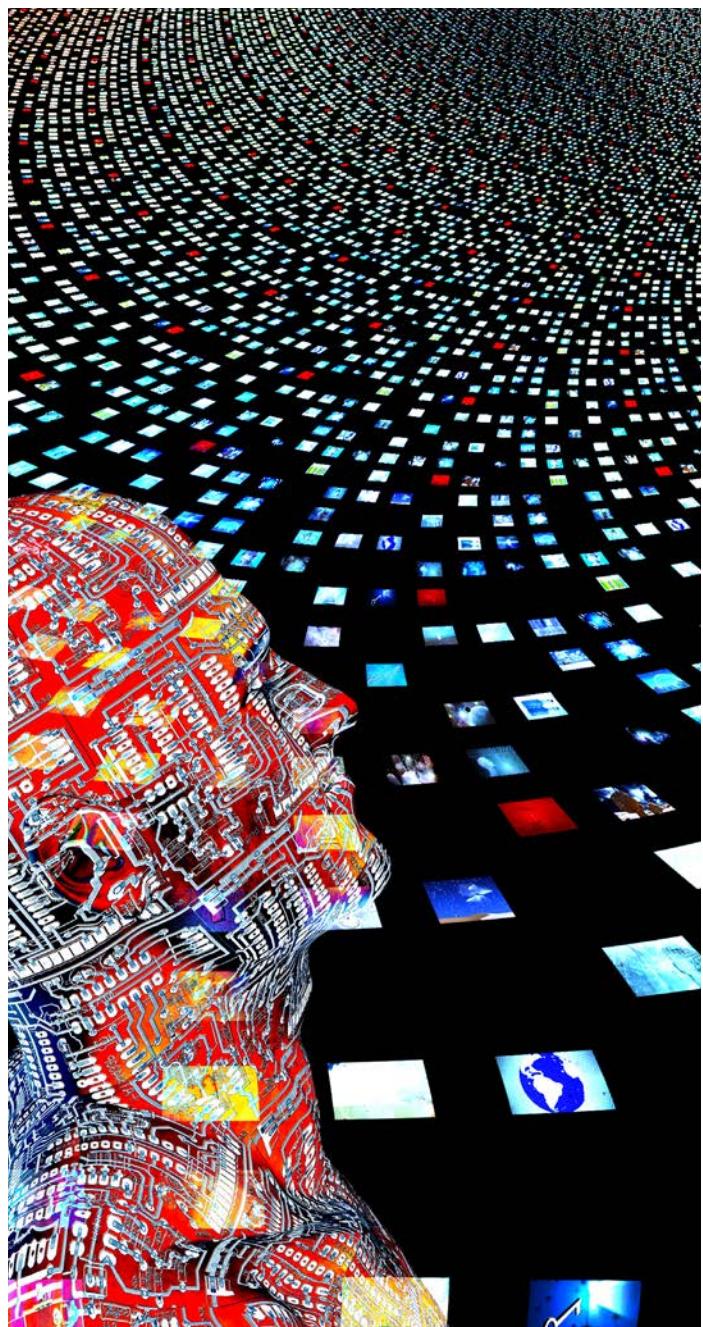
Over the years, online surveys have been criticized for not representing the general population. This is because online surveys are limited to people who have access to the Internet, automatically excluding a percentage of the population that is offline. However, this does not pose a severe limitation on our study since its main purpose is to study the attitudes and beliefs of Internet users.

There are still some major threats to validity in online surveys. These are primarily anchored in the self-selection of respondents that are tied to sampling and non-response biases. Respondents were recruited through online global panels composing more than 5 million users. ComScore and Toluna used a wide variety of recruiting techniques over thousands of diverse websites, which reduced the likelihood of collecting falsified or biased data from repeated panellist members.

Non-response issues were addressed by employing mandatory answers to encourage respondents to complete the entire survey. Problems such as these are not unique to online surveys; mail, self-selected or self-administered questionnaires also share these limitations.

The 2010 edition of the survey was only conducted in English. In 2012, the survey was translated into nine languages, covering languages spoken by more than 75% of the online population. Ideally, all users would be able to complete the survey in their native tongue. But translations are costly and time-consuming. As we continue to improve the concepts and techniques used at the Internet Values Project (IVP), we hope to continue to progress in this area over time. We already feel confident in this area with this first improvement, as results tended to replicate well the findings of the first edition of the survey.

A limitation of this survey is the number of panellists that could be found in some small and low Internet penetration countries, restricting the coverage of certain parts of the global Internet population. This also made it difficult to collect country samples that were large enough for a country-level analysis. Similarly to the language issue, we have managed to improve in this area since the last survey was conducted and expect to continue to make progress in the future as more people move online.



¹⁴ Tavakol, M. and Dennick, R. (2011) "Making sense of Cronbach's alpha", *International Journal of Medical Education*, 2: pp 53-55. <http://www.ijme.net/archive/2/cronbachs-alpha.pdf>.

Findings: Trouble in the New Internet World

1. Internet Values

Worldwide, Internet users value freedom of expression, privacy and security. However, large proportions of users perceive these opportunities to be at risk online. There is global support for freedom of expression online, but overall, the Internet is not perceived to be a bastion of free expression. There is also a widespread perception of surveillance – being observed online. A large proportion of users worldwide believe they put their privacy at risk when they go on the Internet, and they have mixed feelings about third parties sharing their personal data. While these findings are somewhat mitigated by the users expressing a marginally higher level of trust in online actors and information sources than in traditional offline actors, these patterns could indicate problems for the future of the Internet worldwide. Specifically:

- 54% of users – a bare majority – agree that the Internet is a safe place to express their opinions
- 71% of users say they are careful about what they do or say online
- 18% of users totally agree it is acceptable for anyone to use personal data that they make public
- Two-thirds believe that organizations, companies and agencies ask for too much personal information online
- Levels of trust in online news sites are almost identical to those in traditional media

- One in two users trust online information written and edited by many people (e.g. Wikipedia)
- 43% of users say they trust social media as an information source

Freedom of expression

There is broad support worldwide for online freedom of expression. More than 75% of users said the Internet should be a fundamental human right, while 70% agreed that people should be able to say what they feel about their government online (see Table 4).

However, user experiences and perceptions of freedom of expression online were lower. While 69% of users said they could express themselves freely on the Internet, only about 50% of respondents said the Internet was a safe place to express their opinions.

Overall, users expected higher standards of freedom of expression than they currently experienced, regardless of whether they were from the New or Old Internet World. Internet penetration was negatively related to supportive norms and experiences of freedom of expression online. That is, users from the NIW were more likely to support freedom of expression norms and report experiencing greater freedom of expression online than their OIW counterparts.

Table 4: User Norms for Freedom of Expression Online

"How much do you agree..."	% who agree*	Mean
1. Access to the Internet should be a fundamental right for all people.	78.2	5.7
2. People should be able to say what they feel about their government on the Internet.	75.3	5.54
3. There are times when people should be able to be anonymous on the Internet.	61	4.83

Valid N listwise (10452)

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

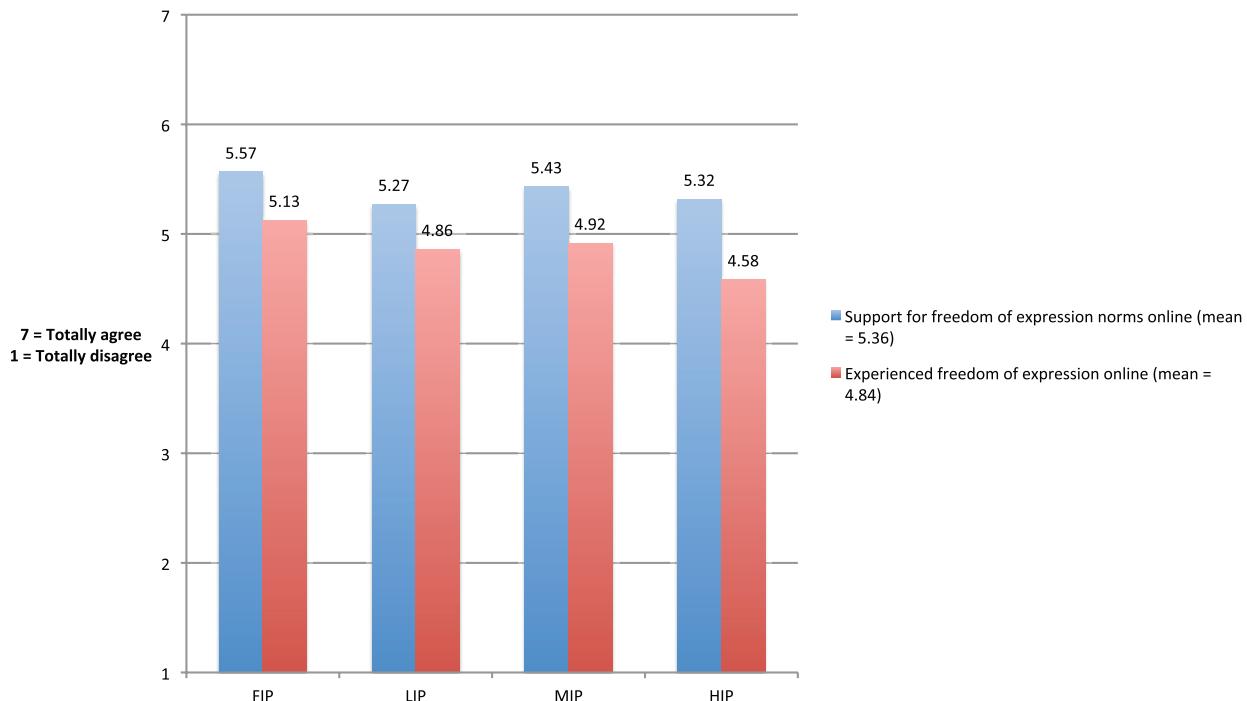
User experiences of freedom of expression online

"How much do you agree..."	% who agree*	Mean
1. "I can express myself freely online."	69.1	5.19
2. "I feel free to say things online that others might not agree with."	62.0	4.89
3. "It is OK for people to express their ideas on the Internet, even if they are extreme."	58.4	4.71
4. "The Internet is a safe place to express my opinions."	53.8	4.54

Valid N listwise (10291)

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

Chart 1: User Norms and Experiences of Freedom of Expression Online



Despite this relationship, which is statistically significant, users did not vary greatly between Internet penetration groups, highlighting a surprising level of convergence in attitudes and beliefs regarding freedom of expression in terms of user norms and experiences across countries of the Old and New Worlds.

Government control

There is a prevailing perception of government surveillance online by Internet users. In 2012, well before the headlines

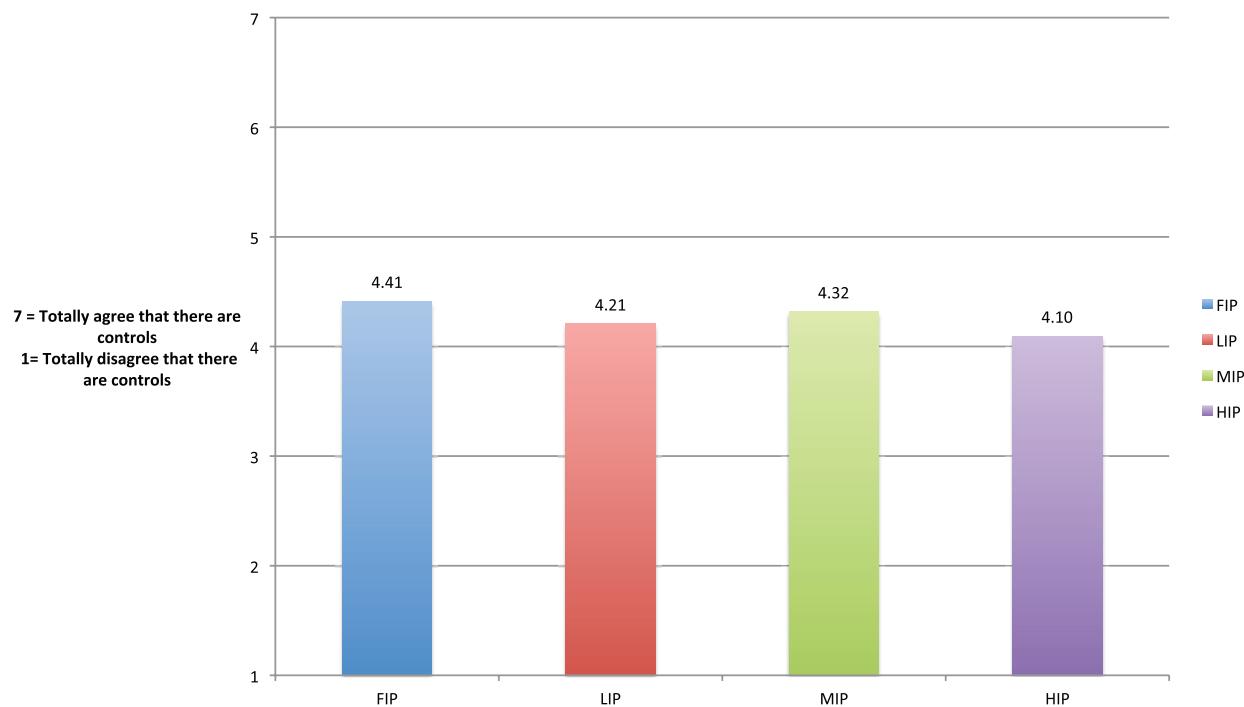
on Edward Snowden and the exposure of government surveillance programmes, roughly one in two users said that government authorities monitored their online activity. More than 70% of users reported being careful about what they did or said online. Users from the NIW were more likely to perceive higher levels of government control of the Internet in their countries; yet, there was not a great difference in perceptions between the New and Old Internet Worlds.

Table 5: Perceptions of Government and Regulator Control Online

"How much do you agree..."	% who agree*	Mean
1. I am very careful about what I do or say on the Internet.	71.4	5.34
2. In my work place (or at school), there are controls on what I can do and access online.	54.2	4.43
3. The government monitors what people do on the Internet."	50.2	4.3
4. In my country, the government tries to prevent people from getting some information that is on the Internet.	37.8	3.58
5. In my household, there are controls on what I can do and access online.	36.1	3.45
Valid N listwise (8793)		

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

Chart 2: Perceived Levels of Government Control of the Internet



Perceived levels of government monitoring correlated negatively with Internet penetration; users from NIW countries were more likely to agree that the government controlled the Internet in their country. Some inconsistencies were found in the LIP group (see Chart 3). Egyptian and Peruvian users, who live in historically less liberal democratic states, disagreed more than other LIP users that government controls of the Internet were present in their country. This difference could be explained by Egypt and Peru's lower Internet penetration

rates (26.4 and 34.1% respectively) compared to other LIP countries. Indeed, users from these LIP boundary countries exhibited some FIP characteristics contrary to the overall tendencies of the LIP group.

Group means hovered around 4 on a 7-point scale, indicating a level of ambiguity or uncertainty among respondents, with users neither agreeing nor disagreeing that government authorities were controlling the Internet in their countries.

Chart 3: Perceived Levels of Government Control of the Internet: LIP Countries

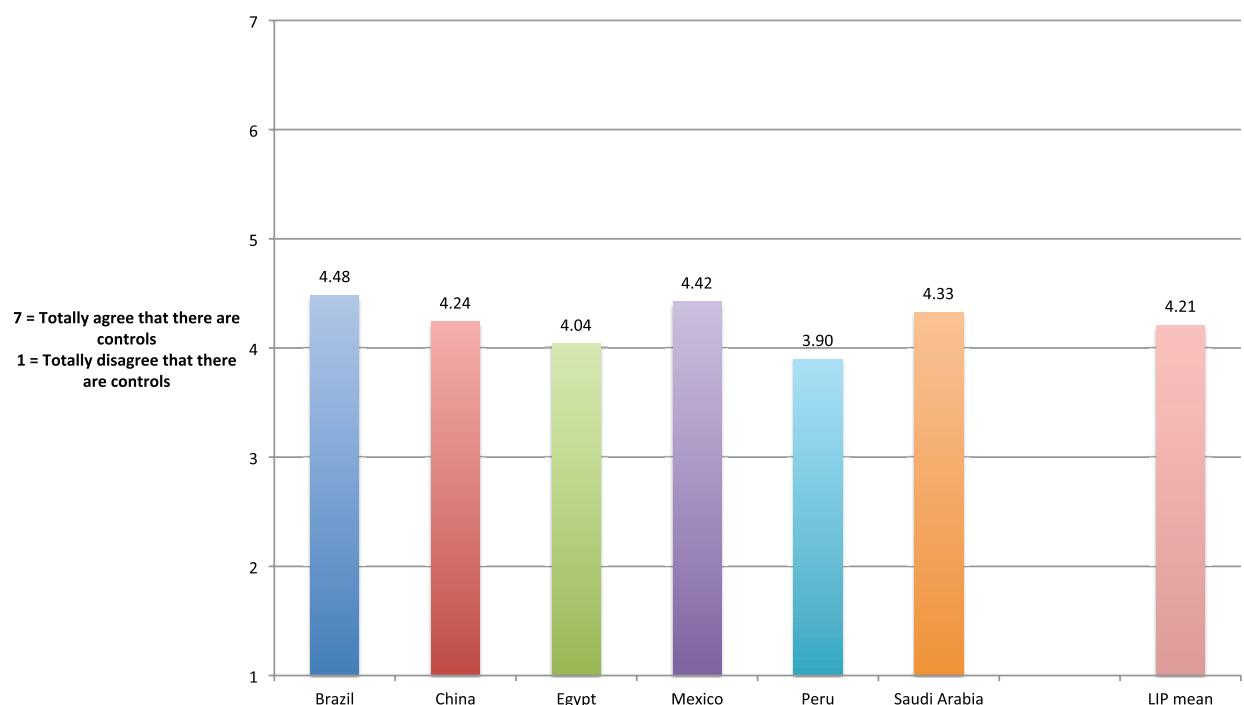


Table 6: Government Authorities or Regulators Should Monitor Online Activity

"How much do you agree..."	% who agree*	Mean
1. Monitor content posted on the Internet	48.7	4.29
2. Know with whom I communicate online	38.9	3.72
3. Track my online activity	29.7	3.19
N (10691)		

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

Government should block and censor online content

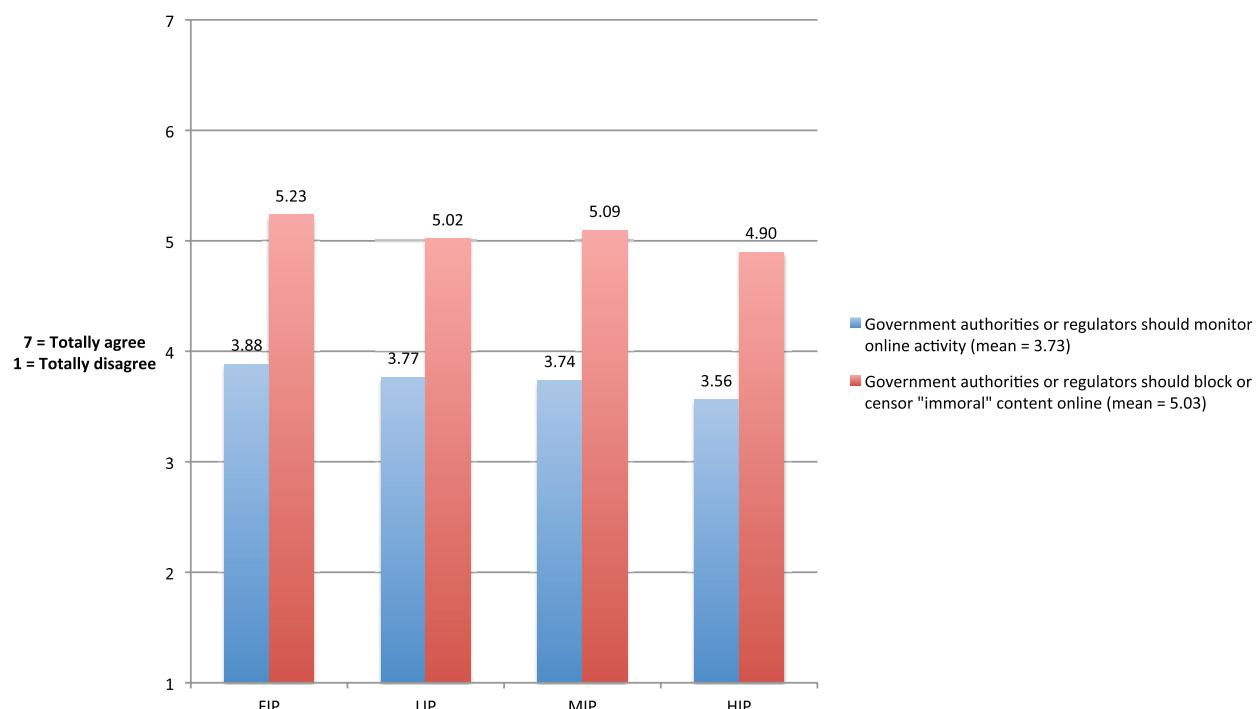
"How much do you agree..."	% who agree*	Mean
1. Censor Internet content to protect children	73	5.5
2. Block the distribution of pornography	67.3	5.25
3. Censor content that is "discriminatory" or "racist"	63.5	5
4. Block the sharing of copyrighted material	51.9	4.45
N (10325)		

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

Overall, users generally opposed government monitoring of the Internet. Disagreement was stronger among users in countries with higher levels of Internet penetration – the Old Internet World. However, support for blocking or censoring certain content deemed “immoral” (e.g. child pornography, racism) was relatively high, with NIW users more likely to support the control of immoral content. For the most part,

users across the categories of countries exhibited similar views on government monitoring and control of online content. Users do not want the government to record what they do online; however, they expect the government to be responsible for keeping the Internet “decent”.

Chart 4: Norms on Government Monitoring and Blocking



Data protection and security

Users worldwide said that their personal data was not properly protected or secured on the Internet. Roughly two in three users thought people who go on the Internet put their privacy at risk. With respect to a willingness to share personal information online, there were divided opinions. Twenty per cent totally agreed that it was okay for organizations to share their personal information with others, as long as they knew how it would be used, while another 20% totally disagreed. NIW users were more likely to say that under certain circumstances, the sharing of their personal data

online was permissible. OIW users may be more reluctant to share personal information because they were more likely to perceive violations of their privacy online.

Most users said that they were too often solicited by organizations or companies to share personal data online. They are aware that they put their privacy at risk when they go online; they feel that their personal data is being collected, but cannot always identify by whom or for what reason. These tendencies are higher among users in the Old Internet World

Chart 5: Data Sharing Online

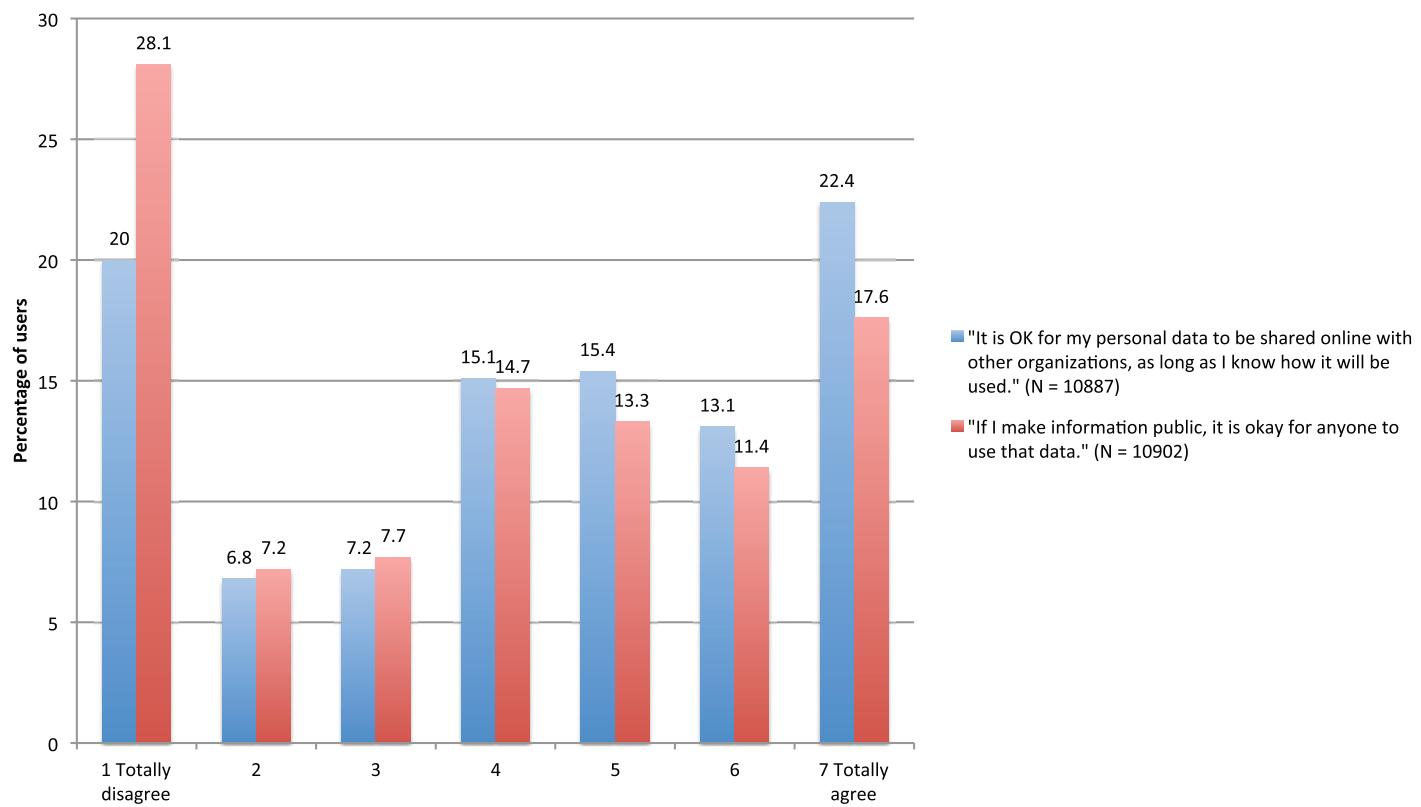
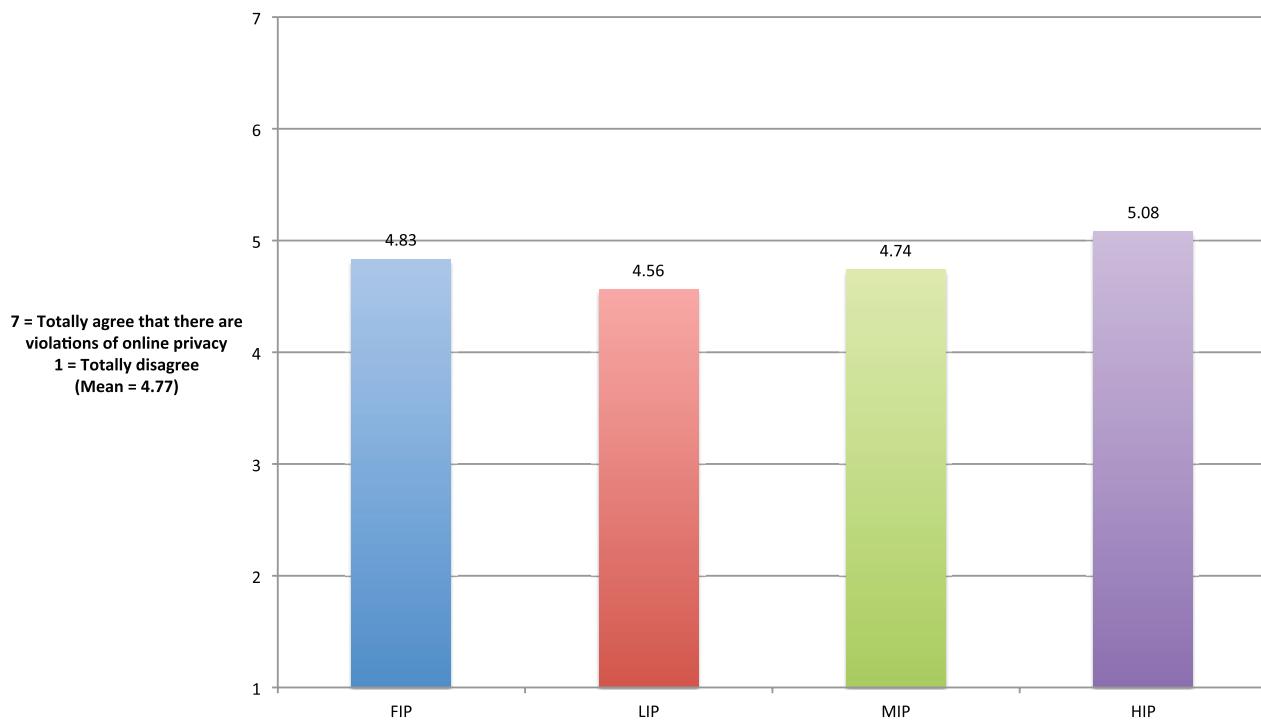


Table 7: Perceived Violation of Privacy

"How much do you agree..."	% who agree*	Mean
1. Organizations, companies and agencies ask for too much personal information online.	67.3	5.09
2. People who go on the Internet put their privacy at risk.	60.7	4.81
3. There is personal information about me that is collected on the Internet for reasons I do not know.	58.2	4.63
4. People I do not know may have access to my online personal information.	56.9	4.56
N (9790)		
* Percentage of people who answered 5, 6 or 7 on a 7-point scale		

Chart 6: Perceived Violations of Online Privacy

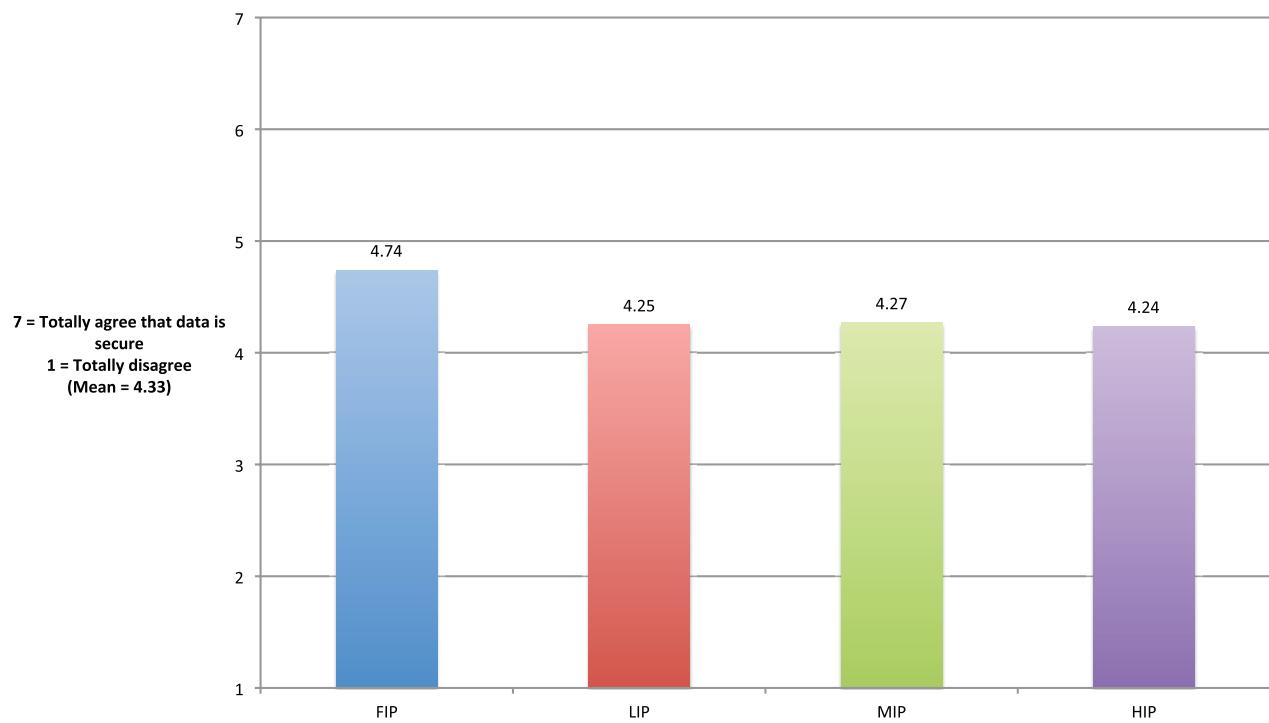


Overall, users were not very confident about the security of their data online. Nor did they feel very safe in providing personal information online, such as their name, birthdate or telephone number. Feelings of data security were inversely related to Internet penetration; yet, there were only subtle differences in means between penetration groups, reconfirming the broadness of an evolving global Internet culture.

Table 8: Data Security Online

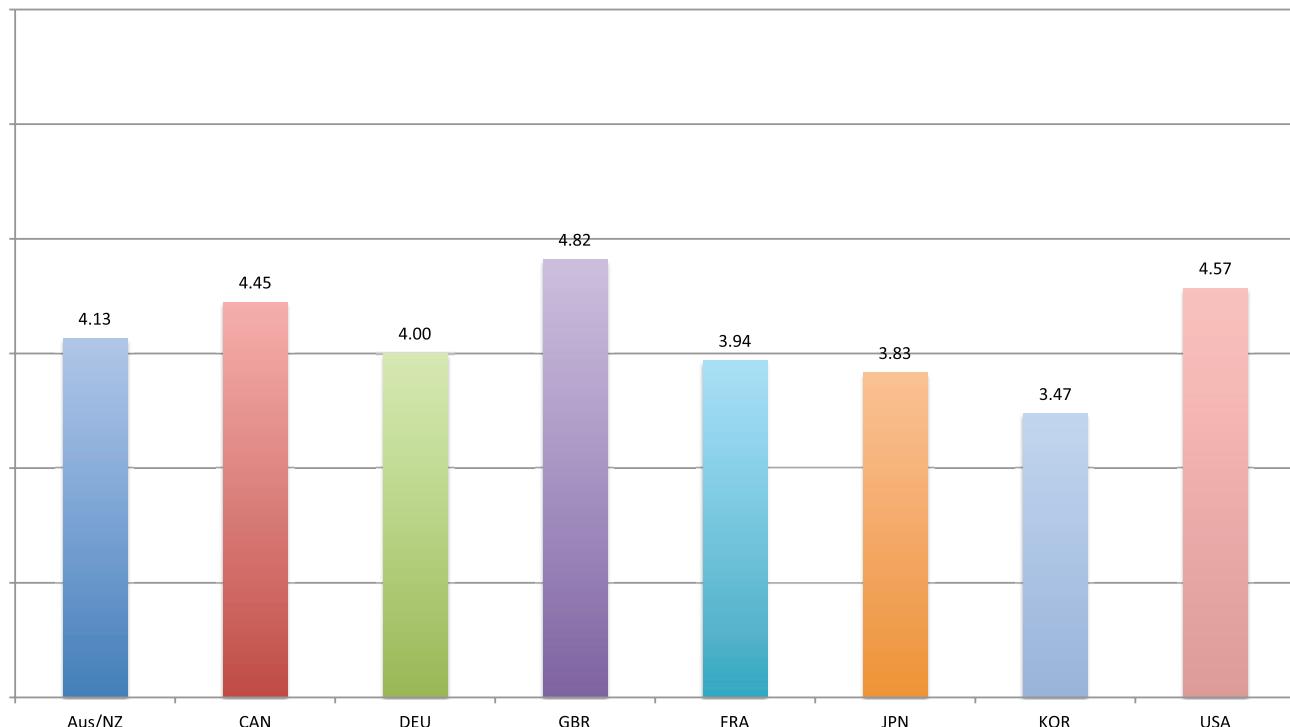
"How much do you agree..."	% who agree*	Mean
1. I have control over the information I disclose about myself online.	61.5	4.88
2. The personal data I put online is kept safe.	45.2	4.18
3. I feel safe providing some personal information such as my name, birth date, or phone number on the Internet.	40.8	3.9
N (10208)		
* Percentage of people who answered 5, 6 or 7 on a 7-point scale		

Chart 7: User Perceptions of Data Security Online



Although users from the OIW were more likely to disagree that their data is secure online, certain HIP countries countered this trend. Respondents in the United Kingdom, USA and Canada thought their data was more secure than users within other HIP users.

Chart 8: Perceptions of Data Security Online: HIP Countries



Trust in online sources and actors

Levels of trust were generally higher in the offline world than online, and NIW users were more trusting than OIW users. Trust in online and offline actors to protect personal data correlated negatively with Internet penetration, as did trust in online and offline sources, meaning that NIW users were more likely to be trusting of online and offline actors and sources than were OIW users.

Table 9: Offline Actors

"To what extent do you trust the following institutions to protect your personal data?"	% who trust*	Mean
1. Banks and financial institutions	60.5	4.79
2. Those providing health and medical services	55.1	4.58
3. Government authorities (e.g. tax authorities, social security authorities)	52.9	4.45
4. Telephone companies	44.1	4.09
5. Shops and department stores	38.9	3.87
Valid N listwise (10417)		

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

Online Actors

"To what extent do you trust the following institutions to protect your personal data?"	% who trust*	Mean
1. Internet service providers (ISPs)	45.4	4.16
2. Mobile phone operators	43.7	4.07
3. Search engine companies	39.6	3.89
4. Companies that provide social networking services	37.4	3.78
5. Online marketers and advertisers	29	3.35
Valid N listwise (10291)		

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

Offline banks and financial institutions were the most trusted to protect users' personal data, while shops and department stores were the least. However, overall trust in online actors to protect personal information was relatively low. Less than 50% of users trusted Internet service providers or mobile phone operators to keep their data safe, and only 29% of users trusted online marketers and advertisers to protect their data. Levels of trust diminished in both online and offline actors as Internet penetration increased. Years of experience also correlated negatively with trust in online and offline actors. This may indicate the misuse of user personal information and the development of negative experiences with these actors over time.

Chart 9: Trust in Online and Offline Actors

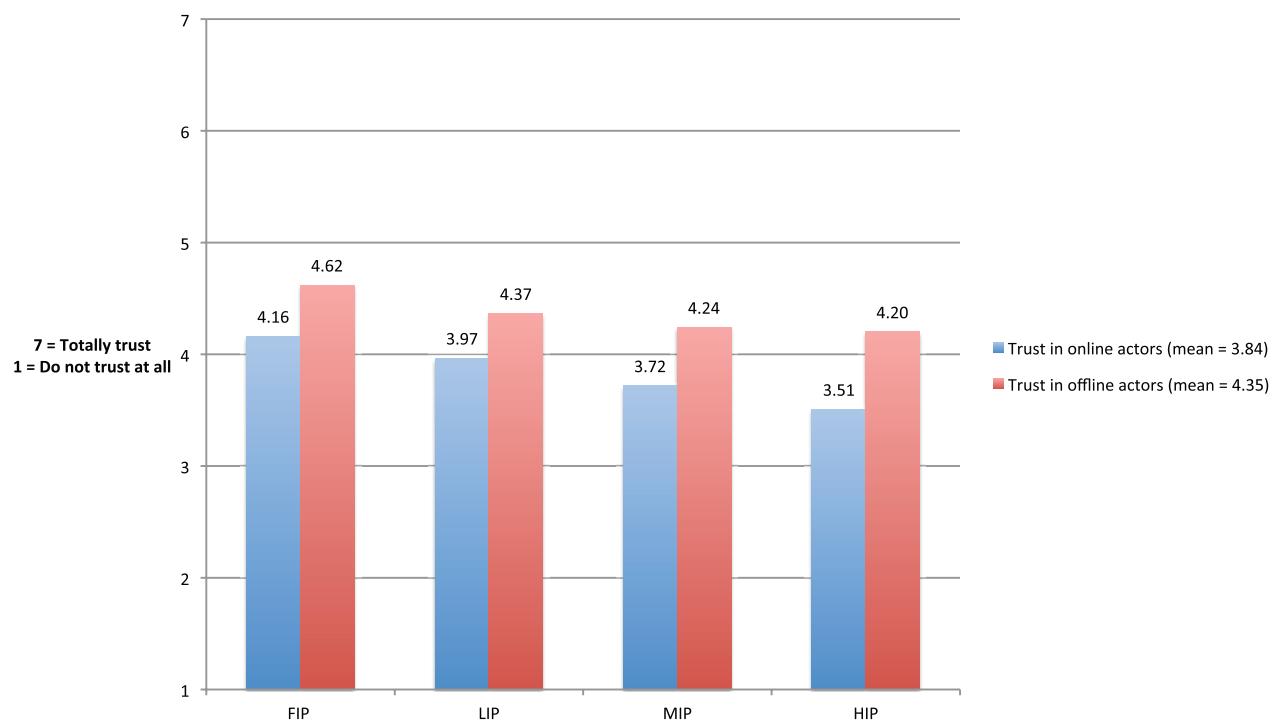
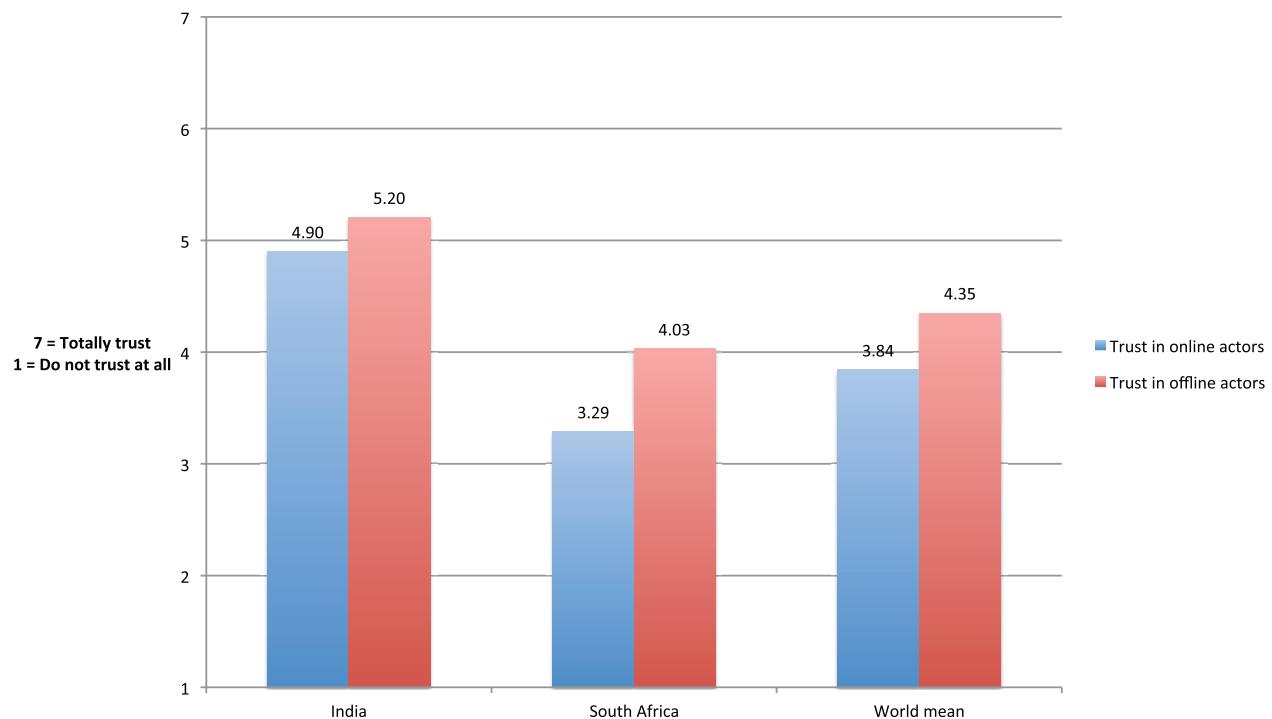


Chart 10: Trust in Online and Offline Actors: FIP Countries



Trust in actors is a good example of irregular responses from FIP countries. Respondents from India and South Africa displayed more extreme opinions. For example, Indian users were the most trustful of online and offline actors, while South Africans were well below average in their trust. Only German users exhibited lower levels of trust (3.14 on a scale of 7) than South African users.

Table 10: Online Sources

"To what extent do you trust the following sources of information?"	% who trust*	Mean
1. Online news sites	56.8	4.65
2. Results of an online search engine	56.1	4.65
3. Online information written and edited by many people (e.g. Wikipedia)	52.2	4.47
4. Social media	43.2	4.17
5. Citizens' blogs	39.2	4.02
Valid N listwise (10514)		

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

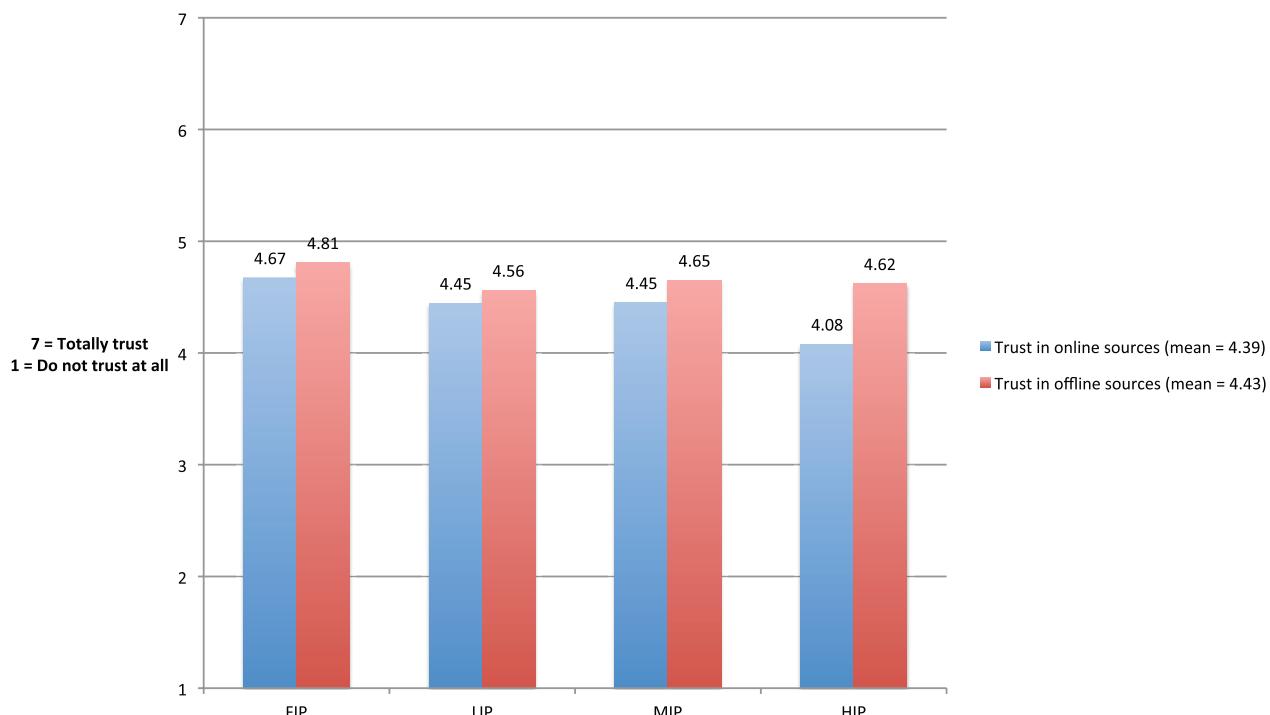
Offline Sources

"To what extent do you trust the following sources of information?"	% who trust*	Mean
1. Television news	58.4	4.67
2. Radio reports	56.4	4.62
3. Newspapers	56.3	4.61
Valid N listwise (10761)		

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

While users were slightly more trusting of offline sources in general, trust in online news was almost identical to its offline counterpart. Users tended to be more trusting of professional or branded sources of information than amateur or unknown sources.

Chart 11: Trust in Online and Offline Sources



There is a greater trust gap in the countries with the highest Internet penetration, where users are significantly more distrustful of online information. More generally, trust in online and offline sources was inversely related to Internet penetration; NIW countries were more likely to be trusting of online information sources. However, users from the MIP group seemed to counter this trend, while there was some

variation in trust of offline sources in LIP countries. For example, Italian users showed higher trust in online sources than users in other MIP countries, possibly due to the public debate over the integrity of the mass media in the country. More generally, the quality of the mass media might drive more or less trust in new media.

Chart 12: Trust in Online Sources: MIP Countries

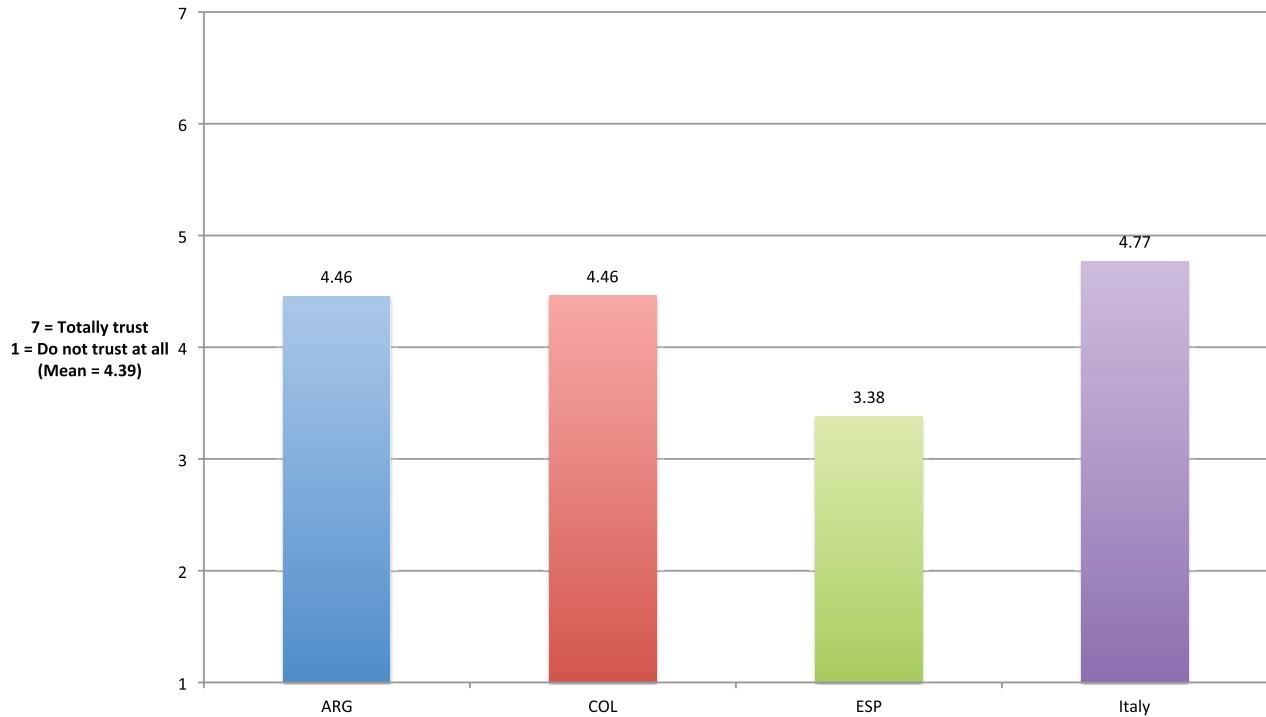
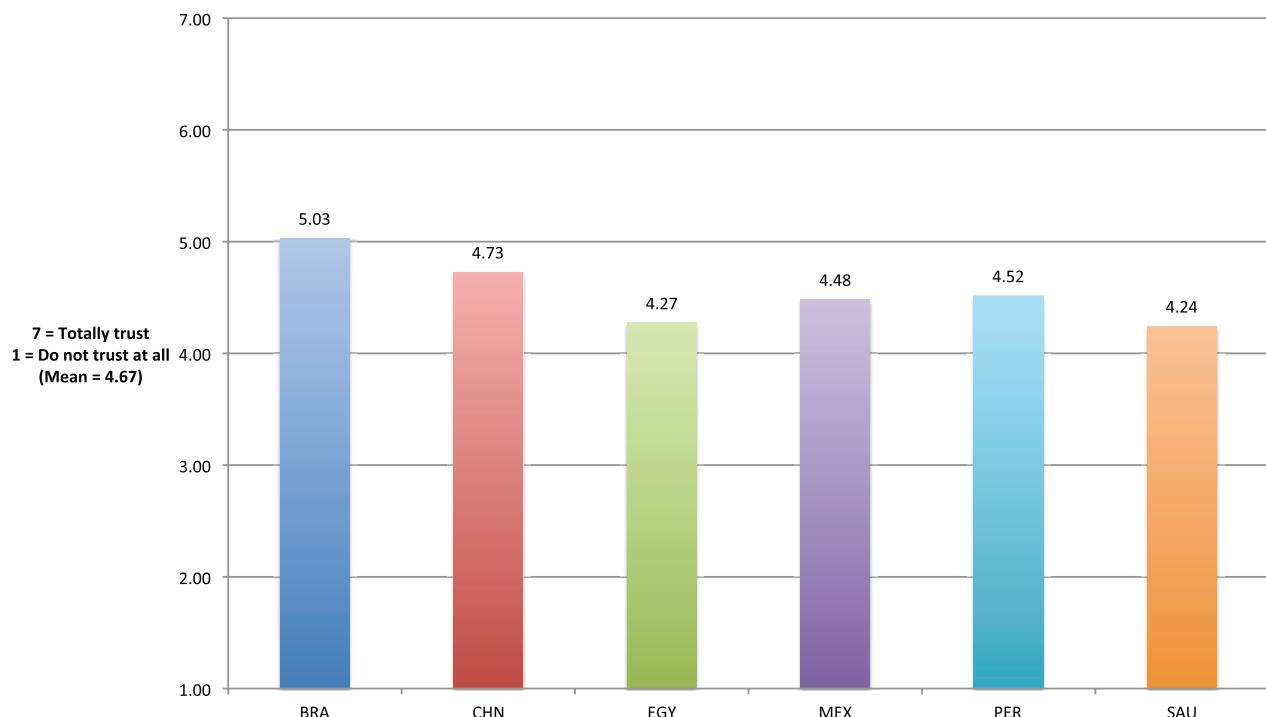


Chart 13: Trust in Offline Sources: LIP Countries



While there was an association between trust in offline sources and Internet penetration, in LIP countries trust may also be related to regional contexts. MENA countries in the LIP group, for example, exhibited slightly lower levels of trust in offline sources than other LIP countries. This could be explained by concerns over the quality of the mass media in these countries.¹⁵ Freedom House reported that media freedom in the MENA region continued to be among the lowest in the world in 2012.¹⁶

2. Online Beliefs and Concerns

There is widespread global concern over censorship, privacy and authenticity online. Concern over online censorship was relatively high and tended to be stronger in NIW countries. In contrast, concern over online surveillance increased with Internet penetration. There was no relationship between concern over privacy or authenticity and Internet penetration. Levels of concern were relatively high for online privacy, underlining the universality of the issue.

- Half of all users were concerned about their opinions being censored online.

- Sixty-three per cent were concerned about their online communication being monitored.
- One in two users was concerned about someone knowing what they searched for online.
- More than 60% of users were worried about their reputation being damaged by an online post or about the misuse of their personal data online.
- Only 40% of users said they often or always read privacy policies before using a website or service.
- One in four users was very concerned about the authenticity of online information.

Censorship online

Users who support freedom of expression were more likely to be concerned about censorship online. Overall, users were most concerned about their online communication being monitored (two in three users or 63%), while more than half (59%) indicated they were concerned about their opinion being censored. Group means varied around 4.5 on a 7-point scale, highlighting feelings of uncertainty about the issue of censorship. Concern over online censorship was inversely related to Internet penetration; users in NIW countries were more likely to be concerned about Internet censorship.

Table 11: Concerns over Freedom of Expression Online

“How concerned are you about...”	% who agree*	Mean
1. Your online communication being monitored	63.2	4.93
2. Information online being censored or filtered	58.7	4.73
3. Your opinion being censored online	53.6	4.47

Valid N listwise (10524)

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

Online surveillance

Concern over online surveillance was positively related to Internet penetration, meaning that users in the OIW were more likely to be concerned about surveillance than were users in the NIW. However, fully half (50%) of users agreed they were concerned about someone knowing whom they e-mailed or messaged, or what they downloaded, read or searched online. Importantly, this scepticism pre-dated the revelations and media coverage of Edward Snowden. India and South Africa countered global trends by exhibiting higher than average concerns (5.46 and 4.89 respectively) over online surveillance, bringing the FIP mean up to 4.76 on a 7-point scale, highlighting the more extreme range of opinions in FIP countries.

¹⁵ Freedom of the Press 2013: Middle East Volatility amid Global Decline” (May 1, 2013), Freedom House, Washington. <http://www.freedomhouse.org/article/freedom-of-the-press-2013-middle-east-volatility-amid-global-decline>.

¹⁶ Ibid.

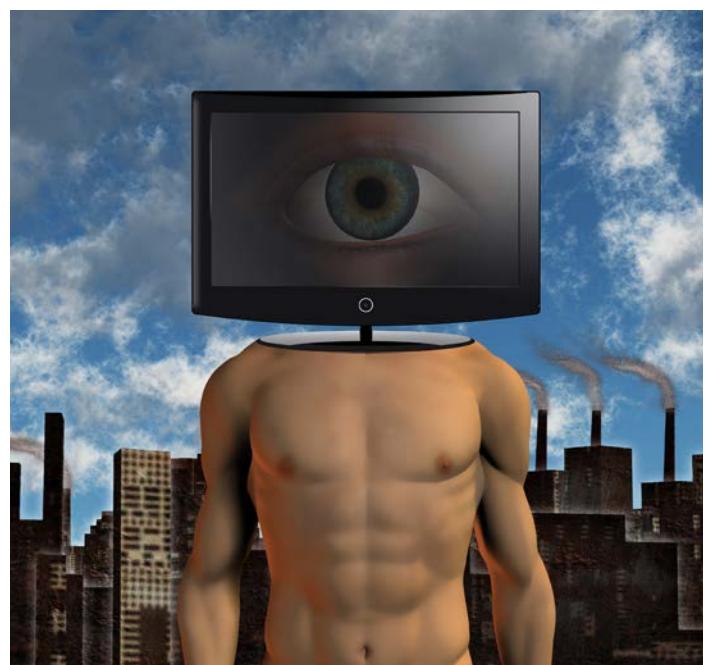
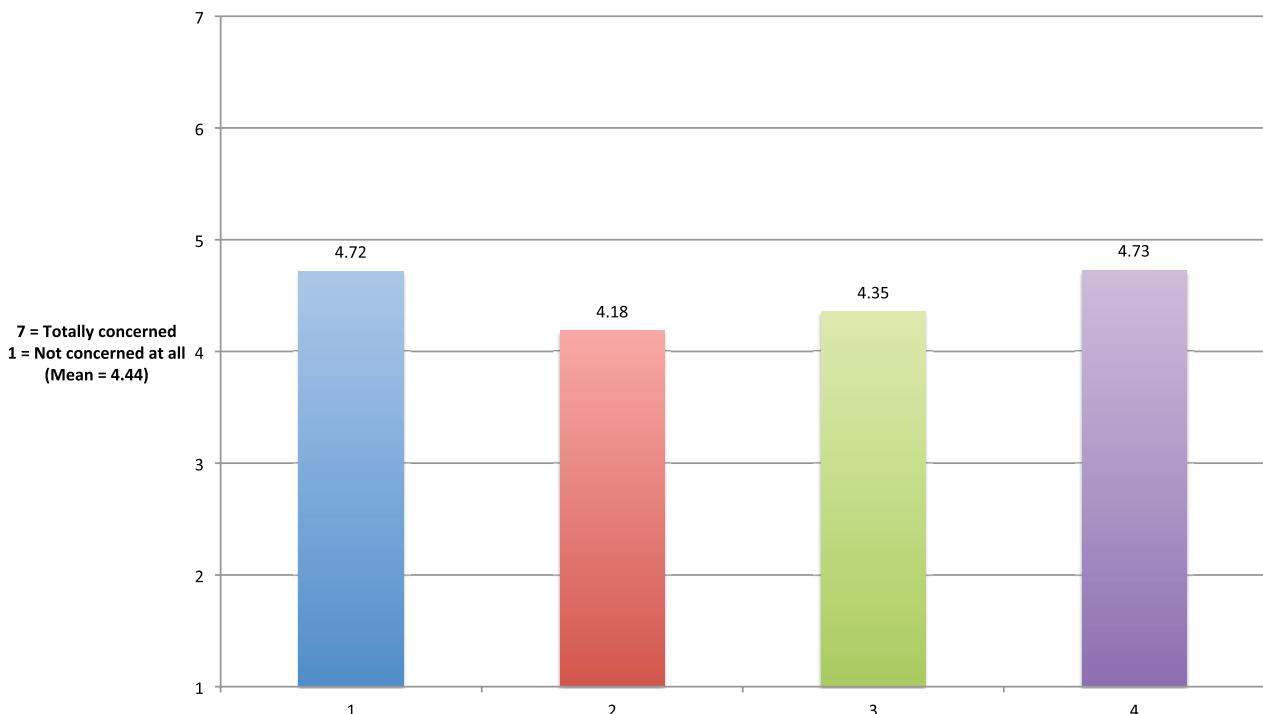


Table 12: Concerns about Online Surveillance

"How concerned are you about someone knowing..."	% who agree*	Mean
1. Who you e-mail or message online	56.5	4.55
2. What you download or read on the Internet	53.1	4.41
3. What you search for online	52.5	4.36
Valid N listwise (10788)		

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

Chart 14: Concerns about Online Surveillance*Online privacy*

Concern over online privacy is high worldwide. There was no relationship between concerns over online privacy and Internet penetration. Overall, concern regarding online privacy was higher than that of online censorship, with infringement or misuse of personal data causing the greatest amount of concern. Reputation damage and misunderstanding of personal opinions have also raised considerable concern.

Table 13: Concerns related to Online Privacy

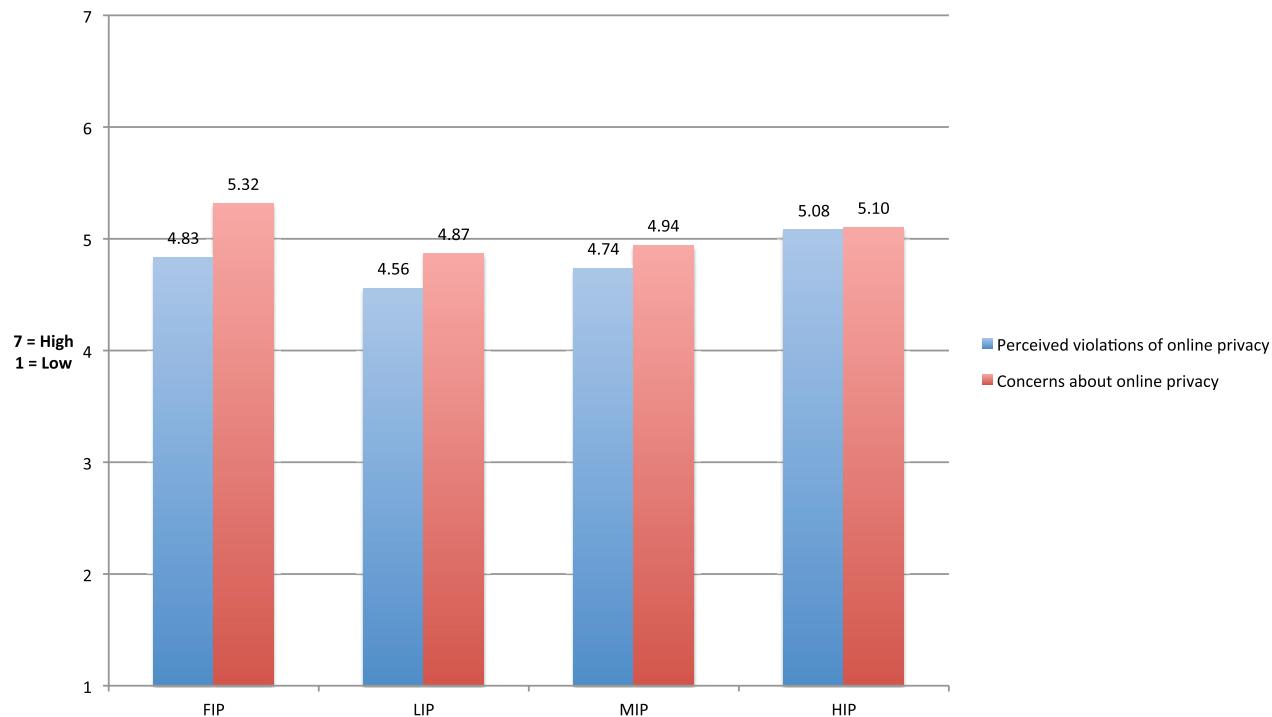
"How concerned are you about...?"	% who agree*	Mean
1. Someone breaking into your Internet account or e-mail	72.2	5.39
2. Information you provided for one purpose is being used for another purpose online	67.3	5.12
3. Your reputation being damaged by what someone posts online	61.7	4.87
4. Your views or behaviours being misunderstood online	57.4	4.66
Valid N listwise (10495)		

* Percentage of people who answered 5, 6 or 7 on a 7-point scale

Levels of concern over online privacy were generally higher than might be expected on the basis of the beliefs of users about the prevalence of privacy violations on the Internet. Yet, levels of perceived online privacy violations were similar to

levels of concerns across groups and countries. On average, there was only a small (.3 point) difference between levels of privacy violation and concerns.

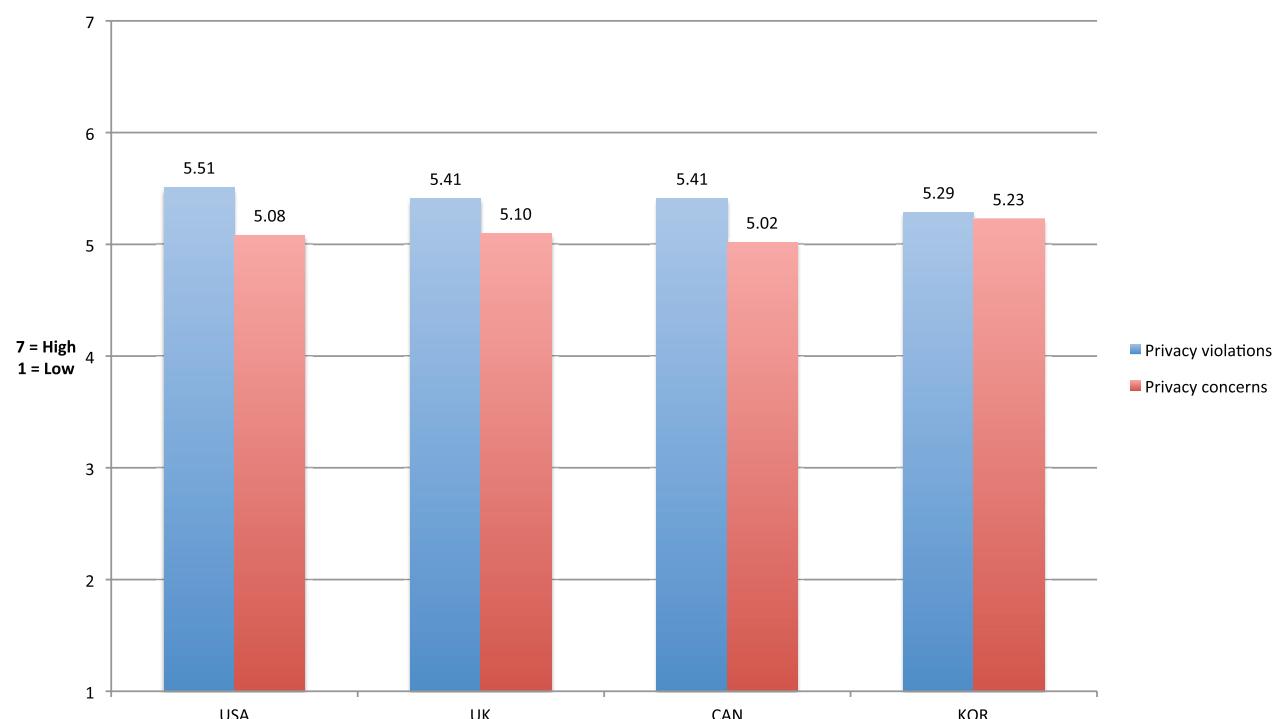
Chart 15: Online Privacy Violation and Concerns



Four countries were exceptions to this pattern, where levels of concern were inferior to levels of experienced violation of privacy online: Canada, South Korea, the United Kingdom

and the USA. The reason for these exceptions is unclear, but it is possible to speculate that there is more trust in privacy protection in these countries.

Chart 16: Online Privacy Violation and Concerns: HIP Exceptions



Despite concerns over online privacy, many users reported infrequently taking action to protect their privacy. Although roughly two in three users reported scanning their computers and mobile gadgets for viruses or spyware often or always, only 40% of users worldwide often or always read privacy policies before using a website or online service. That said, privacy policies are notoriously long and legalistic, putting many users in a position of having no choice but to trust in a policy if they wish to use a service. Therefore, even this estimate of those reading privacy policies could be overstated.

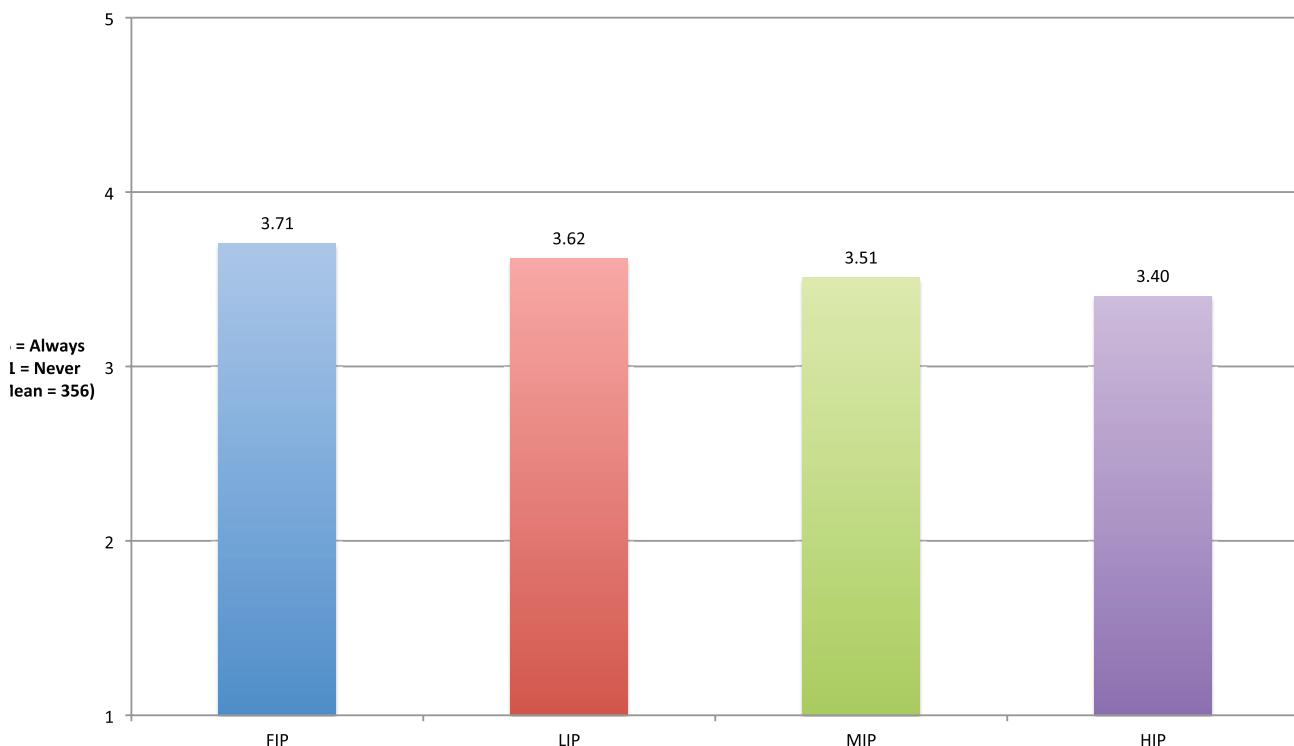
Table 14: Engaging in Privacy Protecting Actions Online

“Do you ever...”	% of users who often or always do*	Mean
1. Scan your computer or mobile gadgets for viruses or spyware	65.4	3.87
2. Check your privacy and security settings online	54.5	3.6
3. Read privacy policies before using a website or service	40.7	3.2
Valid N listwise (10729)		

* Percentage of people who answered 4 or 5 on a 5-point scale

Surprisingly, Internet penetration correlated negatively with actions aimed at protecting online privacy; NIW users were more likely to take action to protect their privacy online, underlying the proactivity of users from the New Internet World.

Chart 17: Engaging in Privacy Protecting Actions Online



Japanese users seemed to exhibit a level of concern over their privacy online that is disproportionate to their experiences and the protective measures adopted (Charts 18 and 19). Users in this country were exceptional in their reporting of perceived experiences of online privacy violations, concerns and engagement in privacy protecting actions on the Internet. Their level of concern greatly surpassed perceived experienced violations of online privacy compared to other

users (almost by a 1-point difference in comparison to the average .3 difference). In contrast, Japanese users engaged less frequently than the global average in privacy protection action.

Japanese Users: Outliers in Online Privacy

Chart 18: Online Privacy Violation and Concerns: Japan

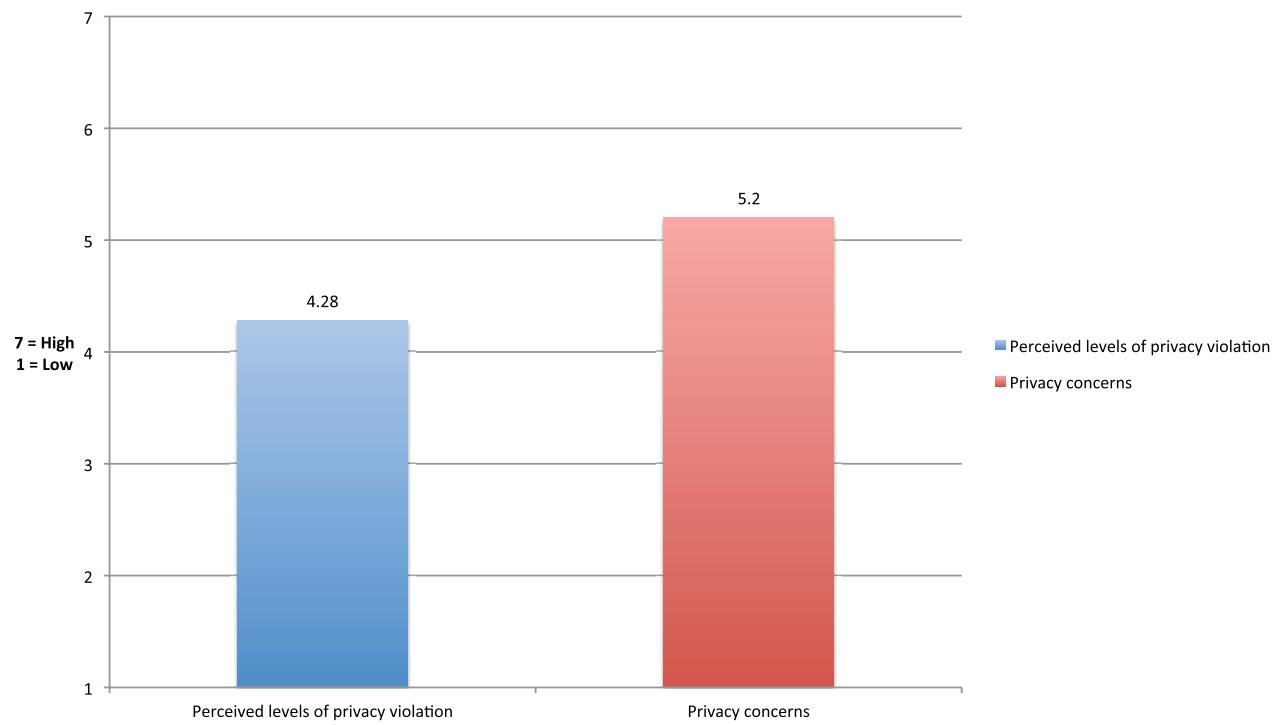
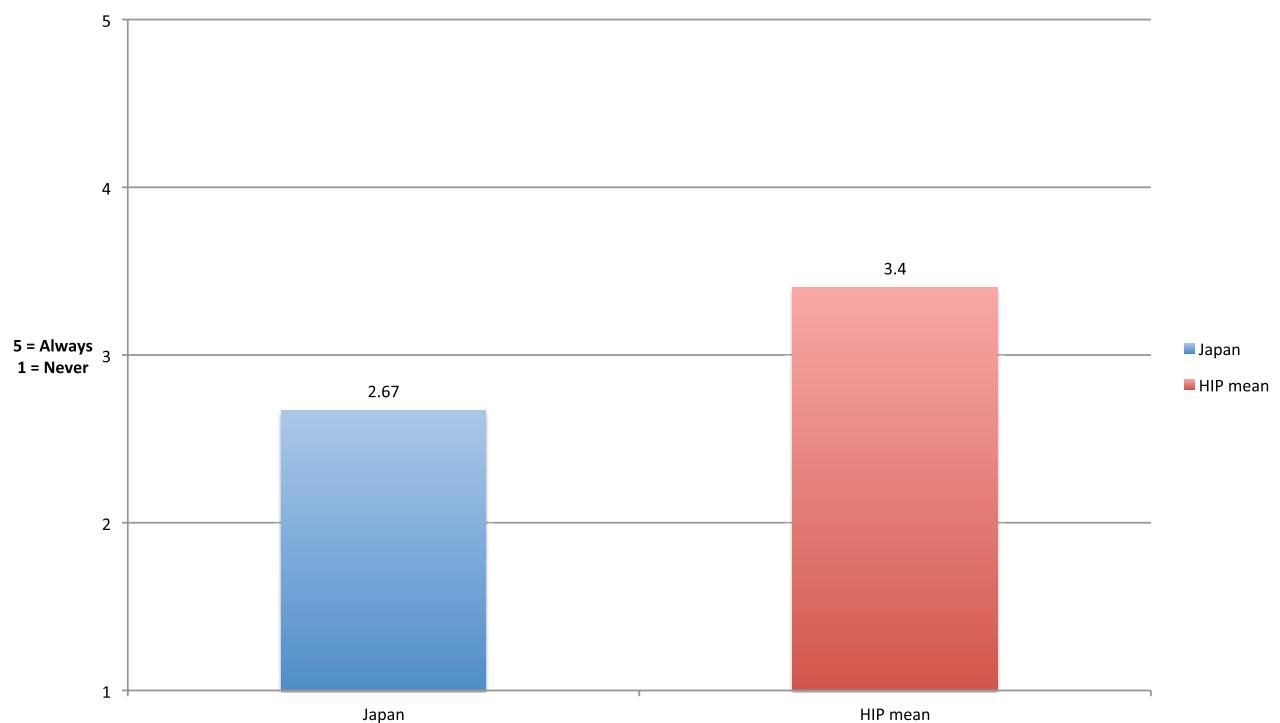


Chart 19: Levels of Online Privacy Protection Actions: Japan



3. Trust and Authenticity

Concern over receiving inaccurate or misleading information online was fairly high. More than one in four users said they were very concerned about being misinformed or misled on the Internet; almost 65% were at least somewhat concerned. Internet penetration rates were not correlated with concern, demonstrating that there is widespread concern over the authenticity of information worldwide.

Chart 20: Authenticity: "How concerned are you about..."

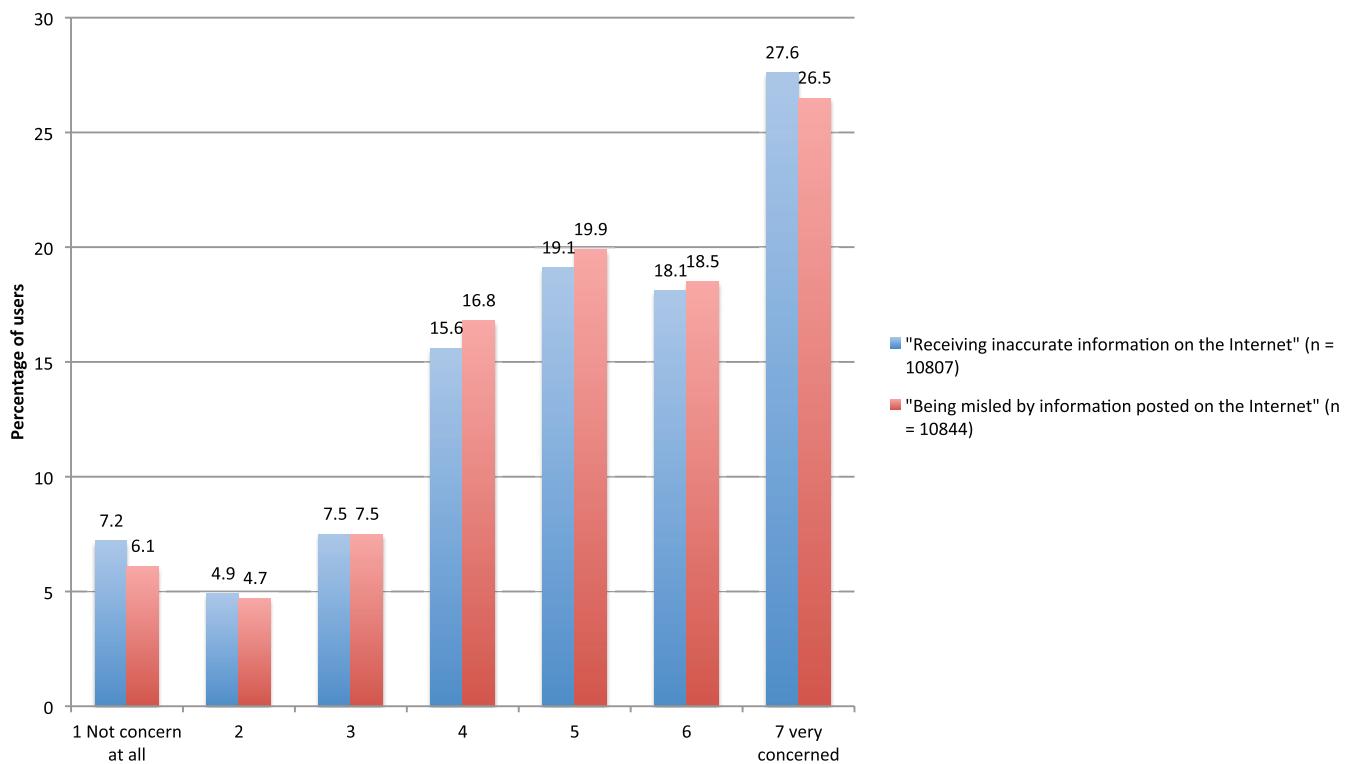


Chart 21: Concern over Online Authenticity: Misleading or Inaccurate Information Online

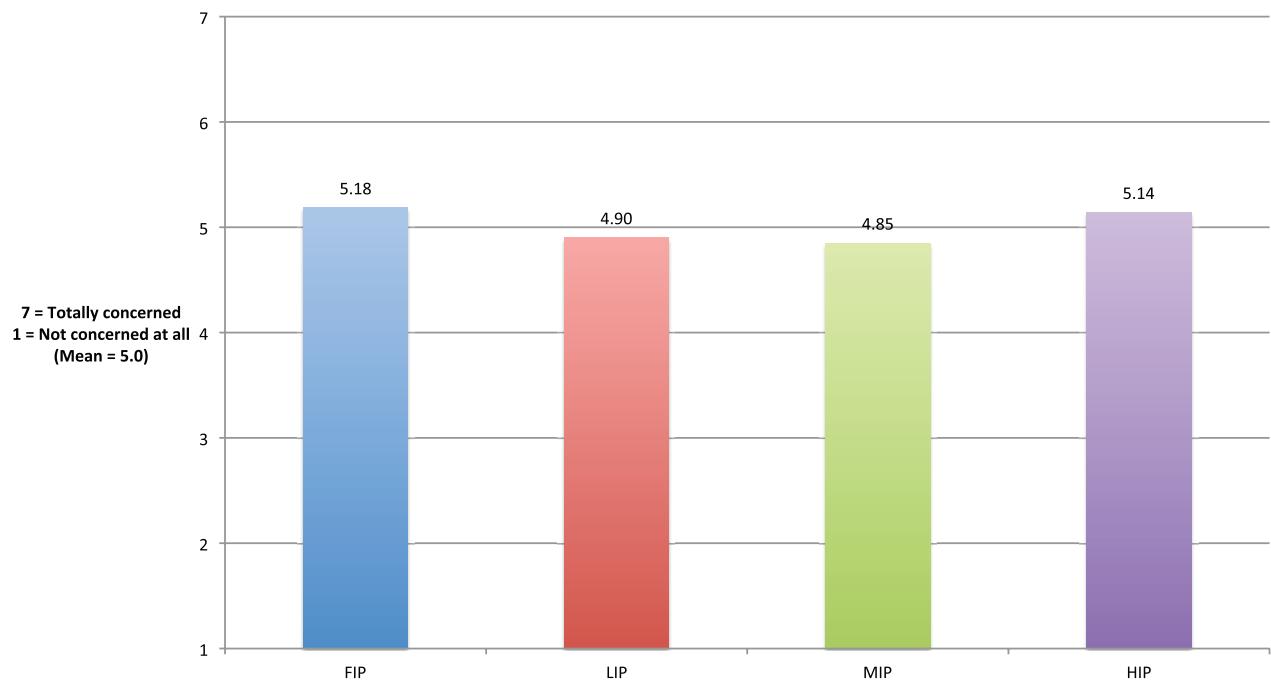
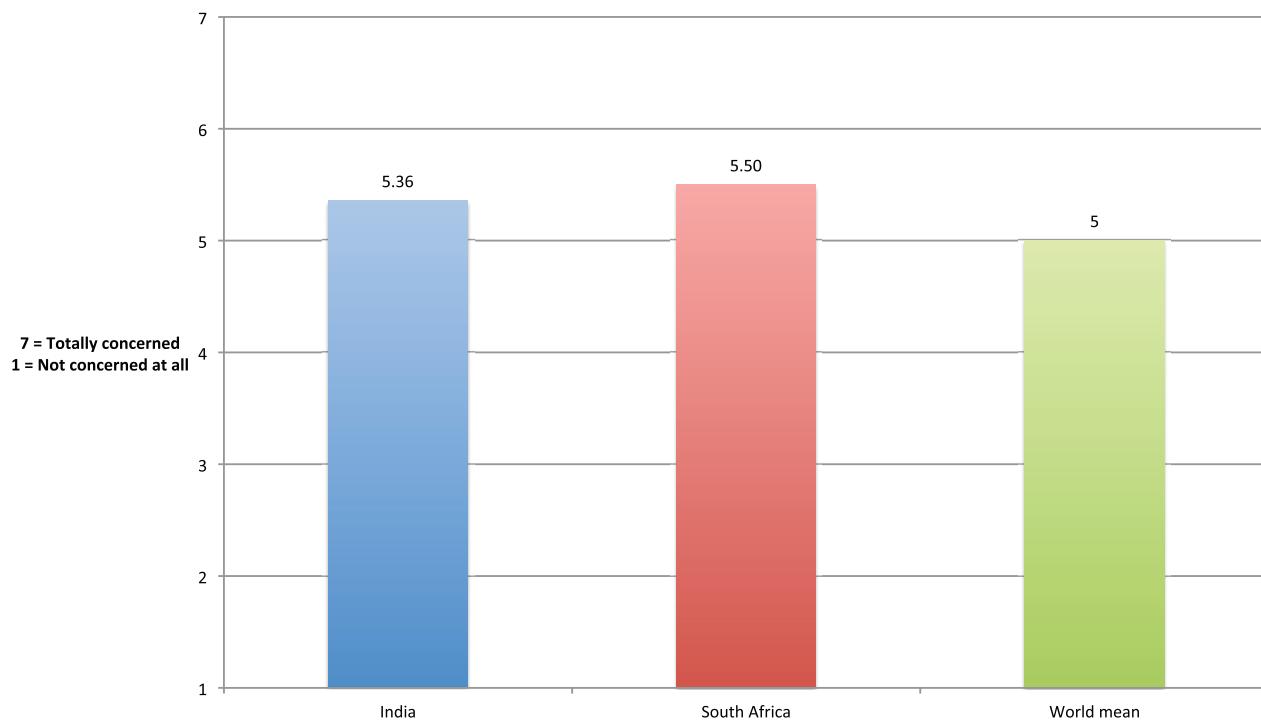


Chart 22: Concern over Online Authenticity: FIP Countries



Length of time using the Internet was correlated with concerns over misleading or inaccurate information, indicating that experience may lead to an increase of bad experiences, or an exposure to misleading online information over time as well as exposure to continuing debate in the media over the trustworthiness of the Internet.

Information seeking

The majority of users use the Internet frequently for getting information, with most respondents seeking online information at least once a week. Checking e-mail remained the most common use; almost 95% of users use the Internet daily or weekly for this purpose. Nine out of 10 users also reported using the Internet daily or weekly to surf or browse the Internet for information. Checking news and getting updates on things of personal interest were also very popular. This underlines the growing centrality of the Internet as a source for information. This is especially true for NIW users who use the Internet more frequently for these purposes than do users in the countries of the Old Internet World.

4. Internet Practices: Patterns of Use

Internet users rely heavily on the Internet as a resource for information. In the United Kingdom, for example, it is most often the first place users go for information about a wide range of topics (Dutton and Blank 2013). It is also an important source of entertainment and an important tool for communicating with friends and family members. Despite popular narratives, users are generally still reluctant to engage with strangers online. Activities tied to users generating content online that are quick and related to social media were the most popular. Overall, NIW users are more varied and innovative in their uses than OIW users, with respect to communicating and creating online information.

- Ninety per cent of users go online daily or weekly to check their e-mail, and to surf or browse the Web.
- Almost 70% of users watch videos online daily or weekly.
- Only about one in four users says they often or always accept being “friends” or making “connections” online with someone they do not know personally.
- Eighty-three per cent of users say they communicate online with their friends or family members on a daily or weekly basis.
- Sixty-two per cent of users worldwide post a message on a social media platform, such as Facebook or Twitter, daily or weekly.

Table 15: Information Seeking

"How often do you..."	% who do daily or weekly*	Mean
1. Check e-mail	94.2	4.74
2. Surf or browse the Web for information	91	5.58
3. Check the news	85.1	4.39
4. Get updates on things that interest you	77.3	4.08
Valid N listwise (10952)		

* Percentage of users who answered 4 or 5 on a 5-point scale

Entertainment

At least one in two users worldwide used the Internet daily or weekly to watch a video, download content or get music online. Two in three users watched videos on the Internet daily or weekly.

Table 16: Entertainment

"How often do you..."	% who do daily or weekly*	Mean
1. Watch videos online	69.6	3.8
2. Download online content (music, videos, etc.)	60	3.53
3. Get music	55.5	3.4
Valid N listwise (10787)		

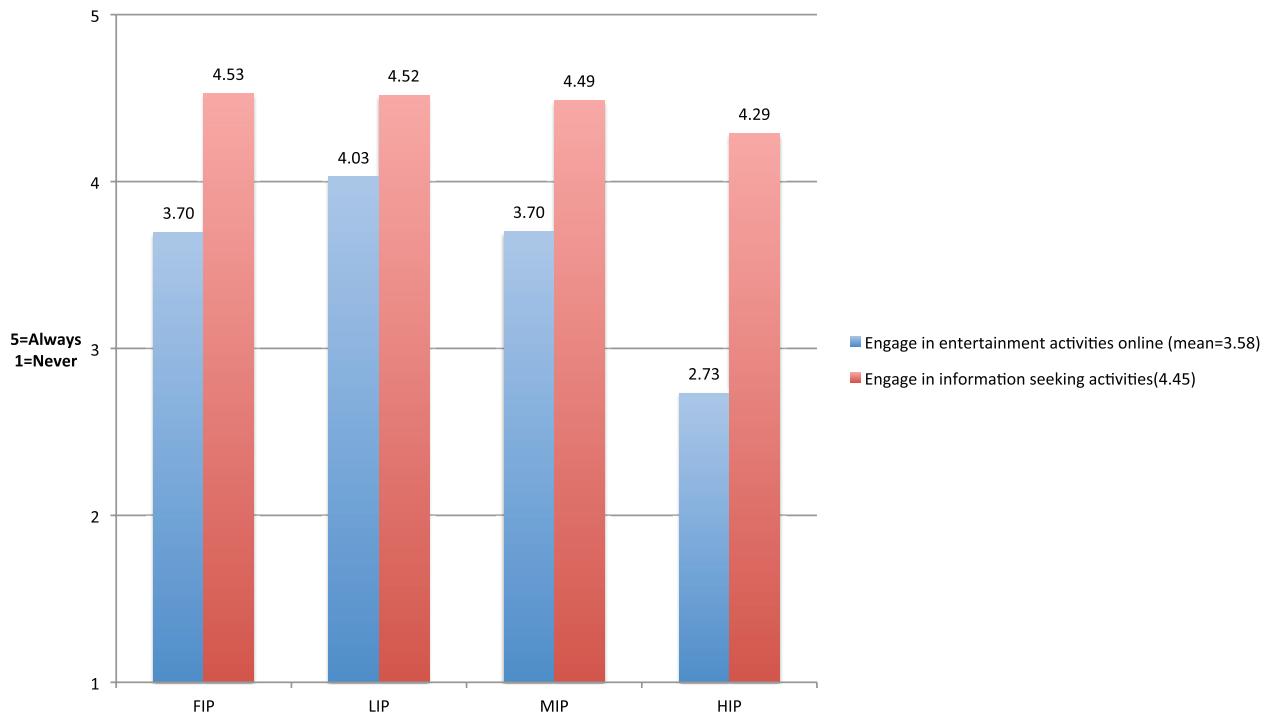
* Percentage of users who answered 4 or 5 on a 5-point scale

Users within the emerging Internet countries were likely to use the Internet more often for entertainment. One potential reason for this is that offline sources of entertainment are often more limited in NIW countries. Saudi Arabia, for example, has been cited as the world's top YouTube nation in part due to a lack of entertainment outlets (e.g. movie theatres) and limited, conservative content in the country¹⁷. Large populations of young people and tightly controlled offline media in NIW countries may also contribute to this greater reliance on the Internet.



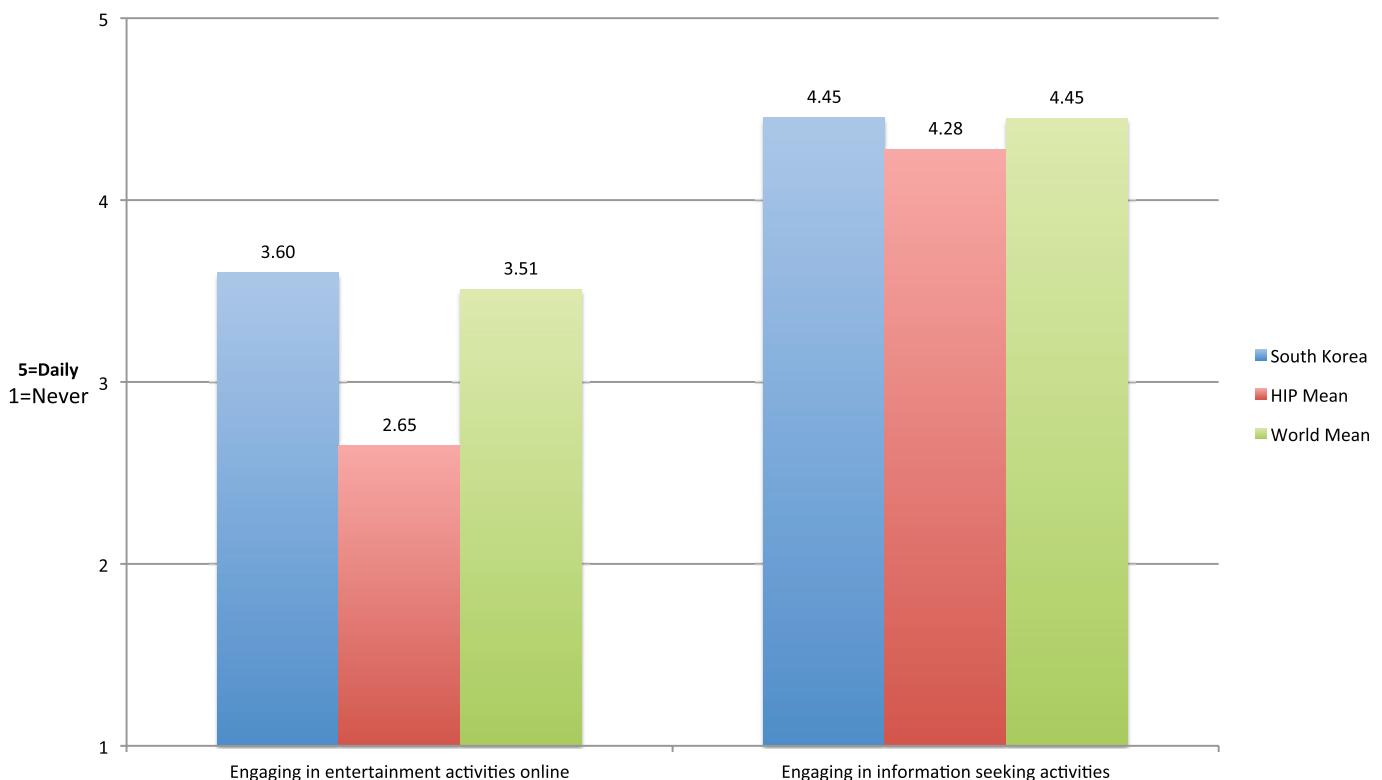
¹⁷ Ayed, Nahlah (April 1, 2013), "Nahlah Ayed: Why Saudi Arabia is the world's top YouTube nation", CBC. <http://www.cbc.ca/news/world/story/2013/03/28/f-ayed-cairo-saudi-youtube-nation.html>.

Chart 23: Engaging in Entertainment and Information-Seeking Activities



South Korea: Defying HIP Information-Seeking and Entertainment Uses

Chart 24: South Korea: Entertainment and Information-Seeking Uses



South Korean users used the Internet for information-seeking and entertainment activities more frequently than other HIP countries. Roughly one in three South Korean users watched videos, downloaded online content or got music on the Internet daily, compared to only one in 10 HIP users. Internet use for seeking information in South Korea was also higher. Roughly 10% more users in South Korea engaged in these types of activities on a daily basis. This might be an outcome

of South Korea's investment in fast broadband networks that better support video distribution and make Internet use faster and more reliable. In contrast, South Korean users were below the HIP average in their frequency of checking e-mails, resembling MIP countries in this area. This could be attributed to a greater reliance in South Korea on mobile texting and phone use for interpersonal communication.

Engaging online with acquaintances and strangers

Worldwide, users prefer and more often engage with “friends” than strangers on the Internet. Eighty-three per cent of users said they communicated with friends or family members online daily or weekly. Sixty-five per cent said they used the Internet daily or weekly to communicate with work colleagues or business contacts. NIW users were more likely to engage with both existing contacts and strangers at a higher frequency.

A country's level of Internet penetration and engagement with both strangers and acquaintances are inversely related. The frequency of use of the Internet for communication purposes diminishes between FIP, LIP and MIP groups, then drops considerably between MIP and HIP groups. This may be indicative of social fatigue among users who live in countries where the prevailing presence of the Internet is becoming intrusive or overwhelming. Or, it could indicate a more enthusiastic involvement with the affordances of the Internet in the NIW.

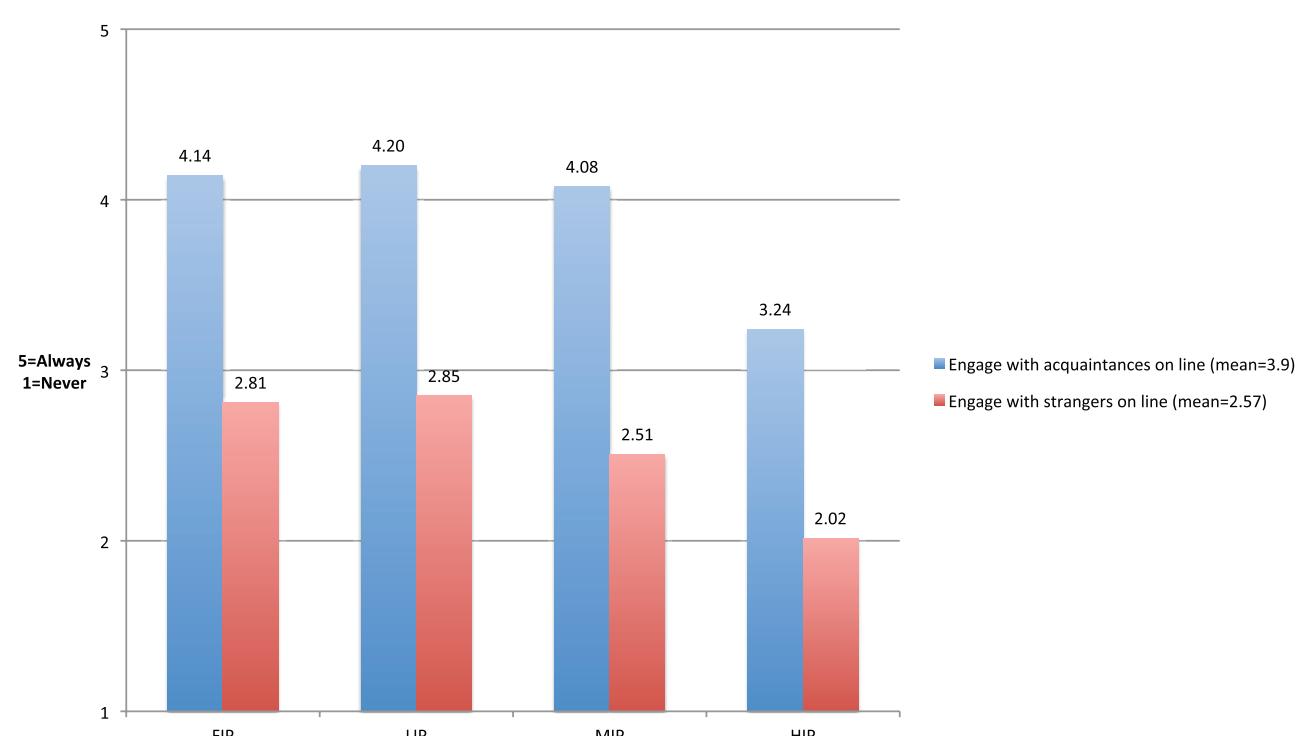
Table 17: Engaging with Strangers

“Do you ever...”	% who often or always do*	Mean
1. Meet people online whom you have not met in person	29	2.72
2. Accept to be “friends” or make “connections” online with someone you do not know personally	26	2.65
3. Personally meet someone you first met through the Internet	20.2	2.35
N(10742)		
* Percentage of users who answered 4 or 5 on a 5-point scale		

Engaging with Acquaintances

“How often do you...”	% who do daily or weekly*	Mean
1. Communicate with friends or family members	83.9	4.3
2. Use social media platforms that enable you to share messages, photos and links with your friends	73.9	3.97
3. Communicate with work colleagues or business contacts	69.3	3.78
4. Share pictures of friends, family or colleagues	61.6	3.6
N(10747)		
* Percentage of users who answered 4 or 5 on a 5-point scale		

Chart 25: Engaging with Acquaintances and Strangers Online



Generating content and using social media

Overall, activities that were quick and related to social networking platforms were more popular worldwide than time-consuming and skill-demanding activities, such as writing a blog or posting a podcast. Activities that were politically driven (e.g. express a political opinion, sign a petition online) were also less popular. Online or offline, most people were not involved in politics. NIW countries were more likely to use the Internet for content-creating activities, highlighting their more varied and innovative use of the Internet.

Internet users are a good example of how fringe Internet penetration countries are sometimes similar and sometimes very different. For example, Indian and South African users resemble each other in their engagement with acquaintances online, while they greatly differ in their engagement with strangers. They are also similar in their information-seeking uses, while varying in their entertainment uses.

Chart 26: Engaging with Acquaintances and Strangers: FIP Countries

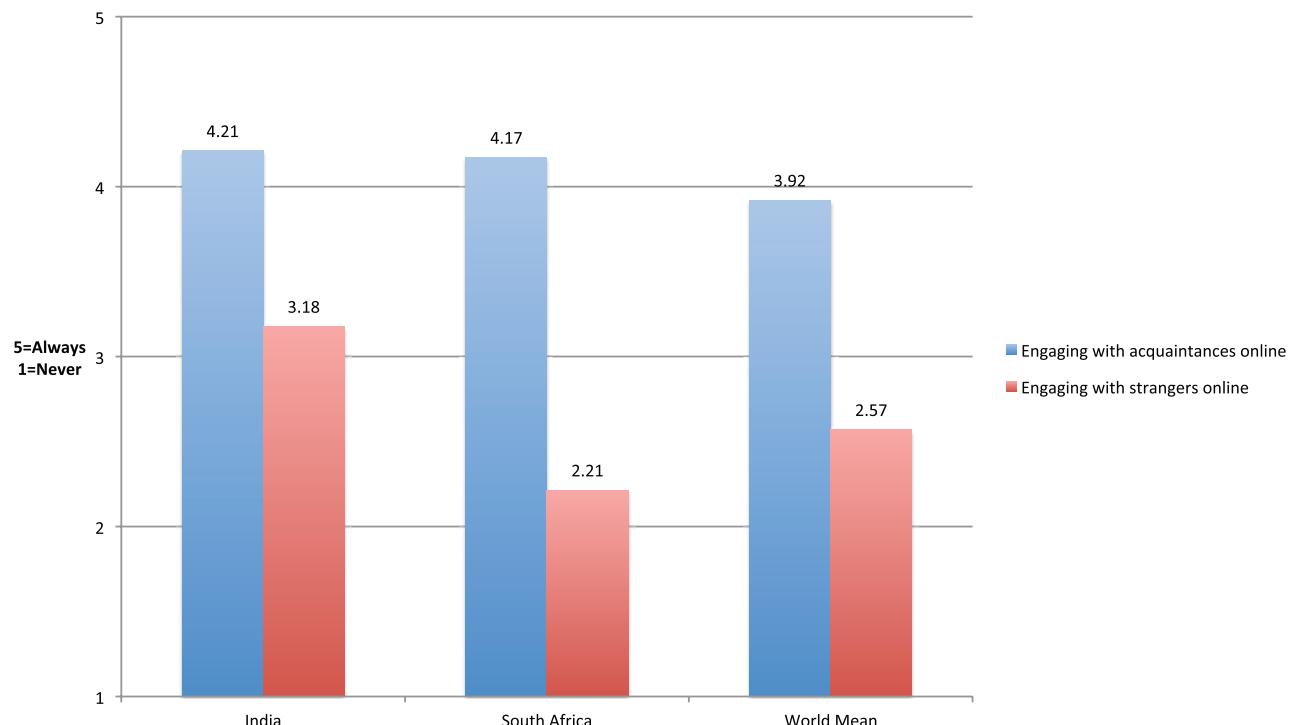


Chart 27: Engaging in Entertainment and Information-Seeking Activities: FIP Countries

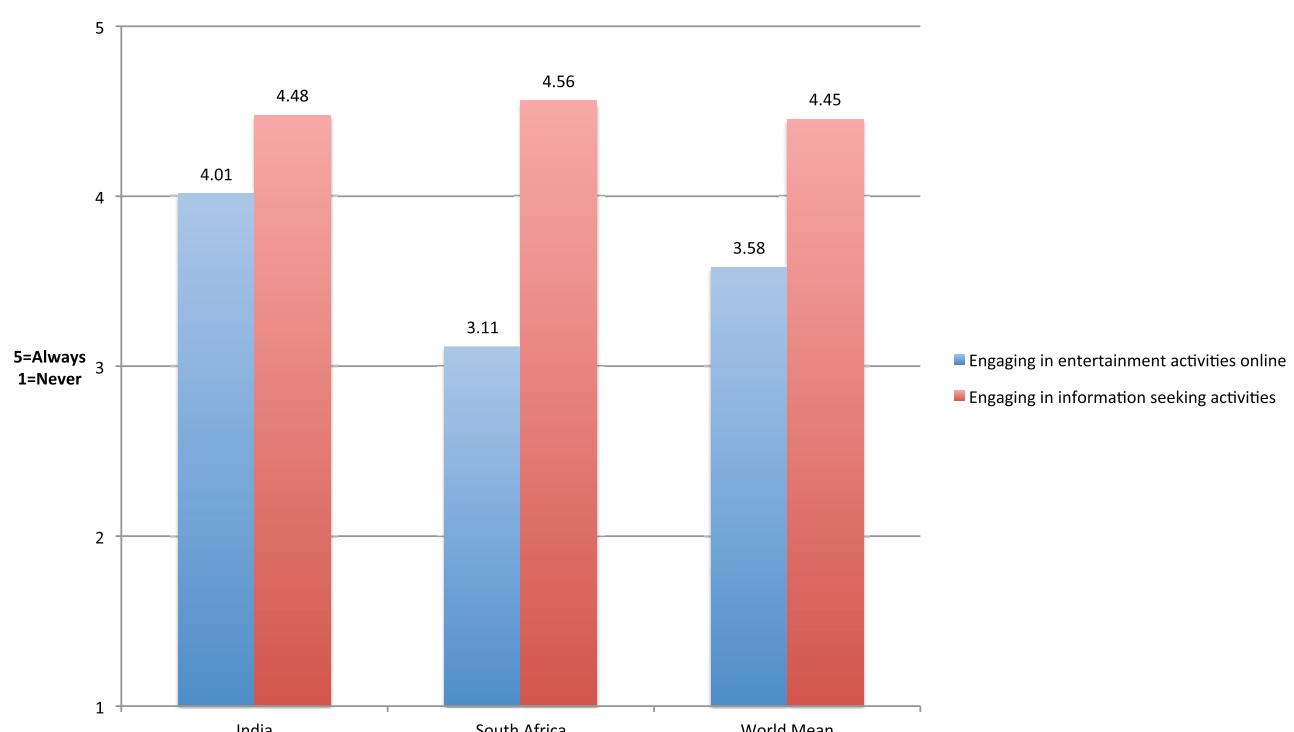


Table 18: User-generated and Social Media Activities

"How often do you..."	% who do daily or weekly*	Mean
1. Post a message on a social media platform	61.9	3.56
2. Post pictures or photos	51.6	3.28
3. Use a distribution list for sending an e-mail	48.5	3.11
4. Update or create a profile on a social networking site	48.3	3.22
5. Post messages on discussion forums or message boards	45.6	3.04
6. Maintain a personal website	33.5	2.53
7. Write a (Web)blog	30.5	2.45
8. Express an opinion about politics online	32.3	2.41
9. Post a video	27.5	2.54
10. Sign an online petition	23.6	2.28
11. Post a podcast	23.7	2.14

* Percentage of users who answered 4 or 5 on a 5-point scale

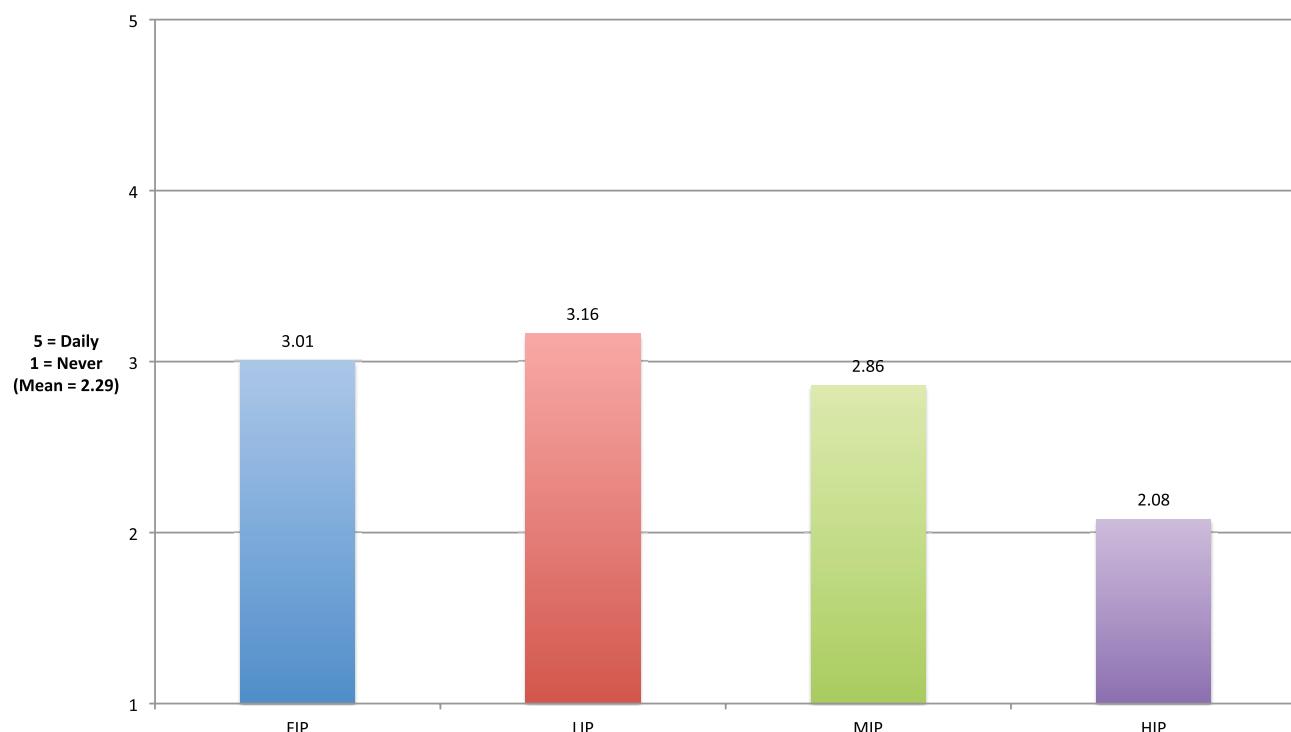
The average user engages in creating some sort of online content less than once a month. Low engagement in user-generated content is not new. The 2011 OxIS report found stabilization in the number of Internet users performing certain activities such as using a distribution list for e-mails (28%), writing a blog (23%) or maintaining a personal website (23%) in the United Kingdom¹⁸. In the US, only 8% of online adults use Twitter daily¹⁹.

Internet penetration correlated negatively with content generation. This may be because early adopters are often more open to participate in a variety of online activities. However, while levels of content generation fall with the length of Internet use among OIW countries, they remain both high and constant among NIW users regardless of the length of time the users have been online.

¹⁸ Dutton, W. H. and Blank, B. (2011) Next Generation Users: The Internet in Britain: Oxford Internet Survey 2011 Report. Oxford Internet Survey 2011. Oxford Internet Institute, University of Oxford, .27.

¹⁹ Smith, A. and Brenner, J. (May 31, 2012). Twitter Use 2012. Pew Research Center's Internet & American Life Project., Washington, DC.

Chart 28: User-generated and Social Media Content Produced by Users



Mobile Internet use

Basic mobile use (making phone calls, sending text messages) is high among all users, but NIW users surpass their OIW counterparts in numbers and exceed OIW users in all other mobile uses.

- Eight out of 10 mobile phone owners use their phone to send text messages.
- Taking and sending photos, browsing on the Internet and listening to music are the most popular non-basic uses of mobile phones.

All types of mobile phone use correlated negatively with Internet penetration; NIW users were more likely to use their mobile phone for a variety of purposes.

Users exhibited few differences between penetration groups, although, sending text messages was slightly lower among HIP countries.

All other types of mobile uses, besides using a mobile phone for taking photos, were relatively low among HIP users. Since the Internet is more established in HIP countries, users may be slower to adopt new technologies. South Korean and Japanese mobile users exhibit unique patterns that could be attributed to a strong mobile industry and networks in their countries (see “Mobile Uses: South Korea and Japan” box).

Chart 29: Basic Mobile Use: “Do you use your mobile phone for...”

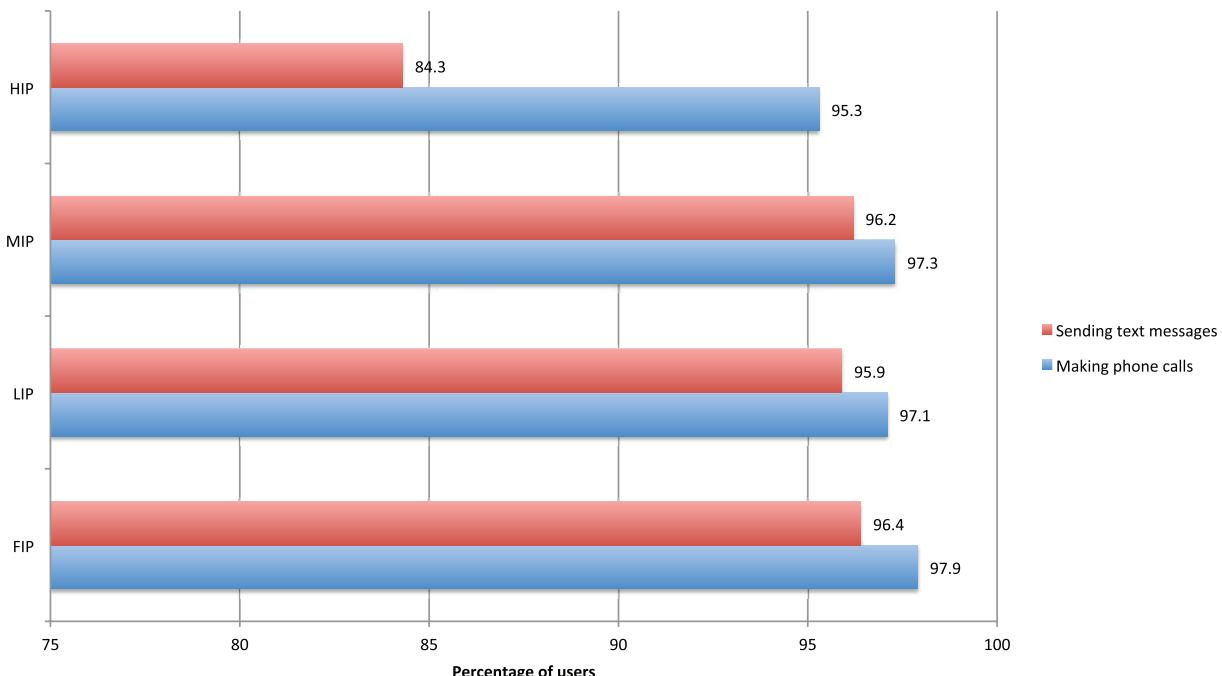


Chart 30: Other Mobile Uses: “Do you use your mobile phone for...”

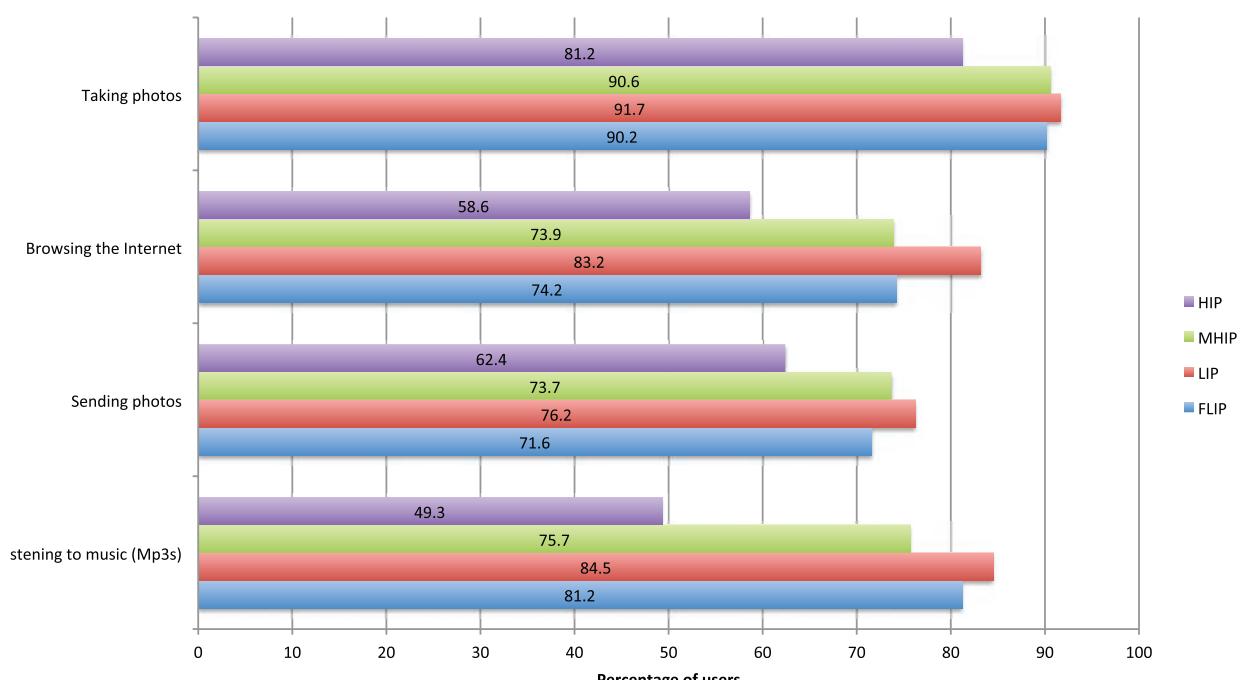
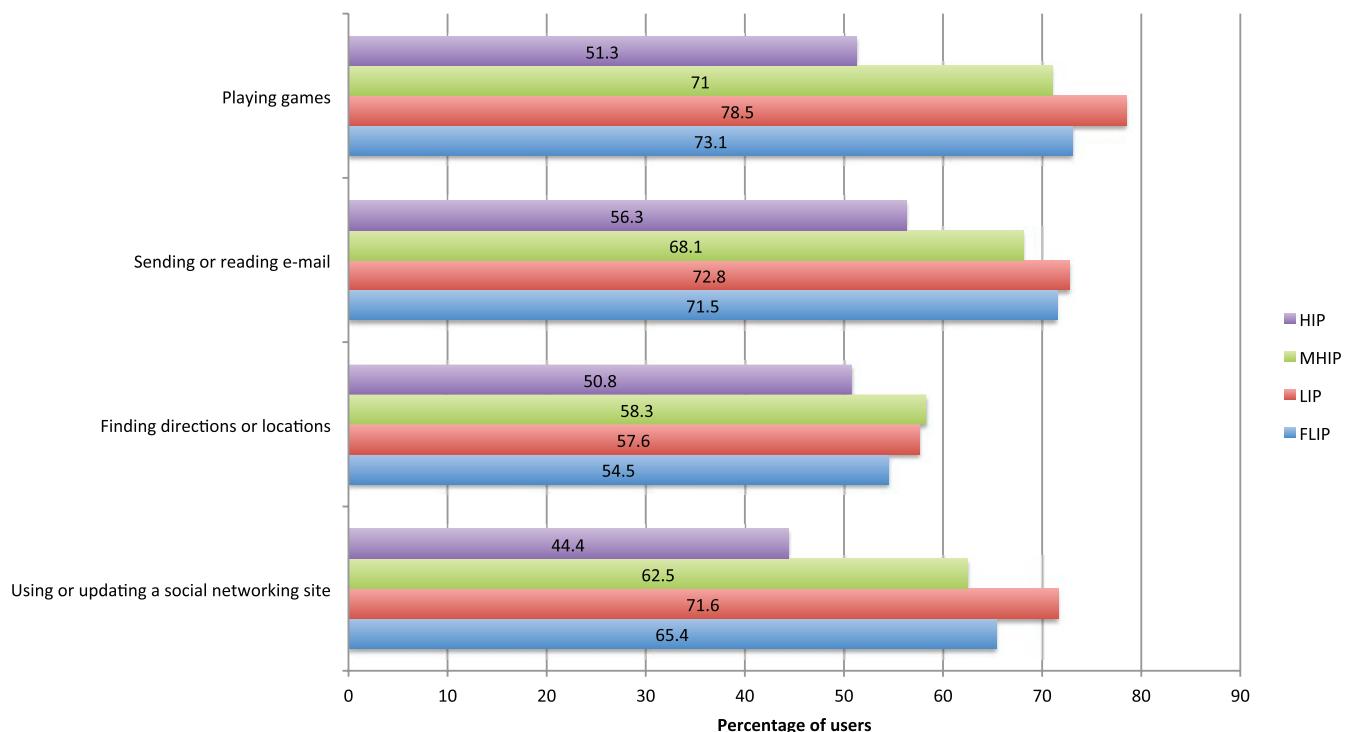


Chart 31: Other Mobile Uses: “Do you use your mobile phone for...”

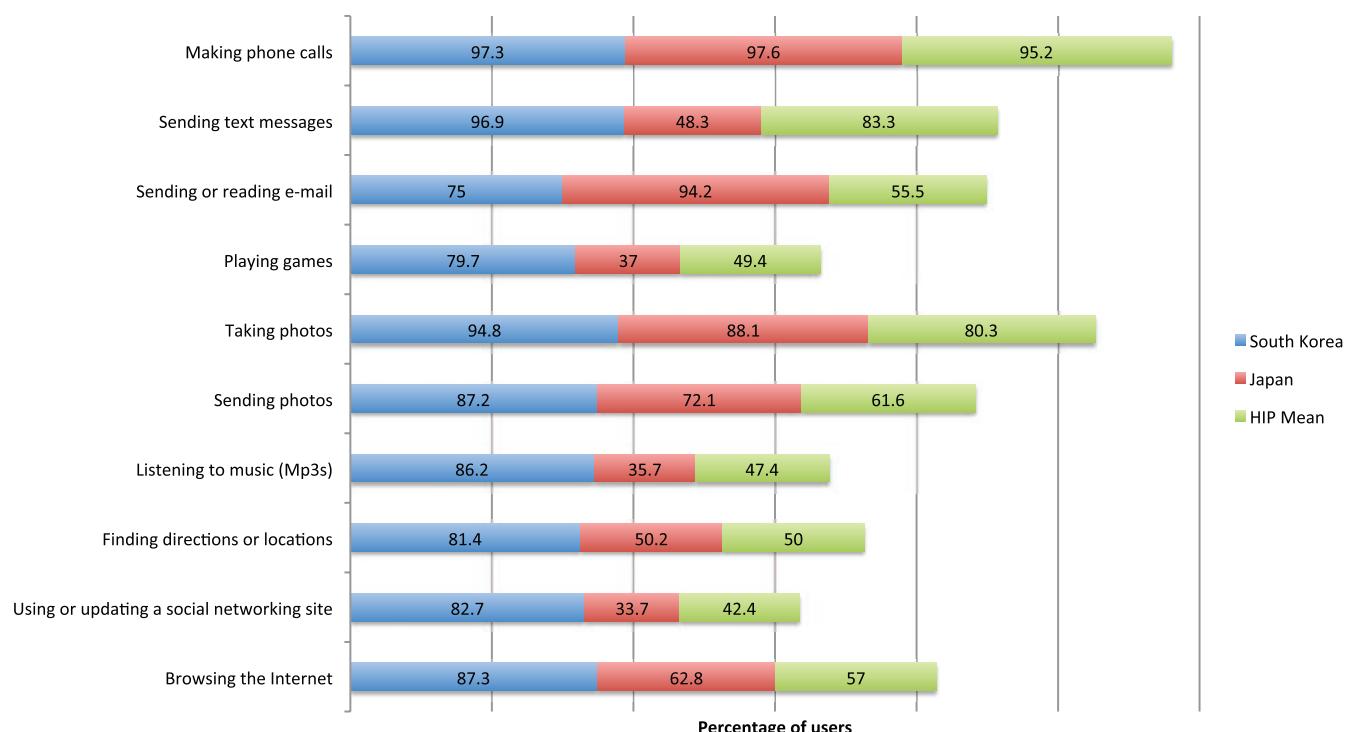


Mobile Uses: South Korea and Japan

South Korean and Japanese users distinguished themselves from other HIP users in their mobile use. South Koreans are all-purpose mobile users. Unlike most HIP users, the majority are highly varied in their mobile activities, using their mobile phones not only to make phone calls or send text messages, but also to take and send photos, read e-mail, play games and listen to music, among other things. This may be related to the location of big industry players such as Samsung and LG in South Korea.

Japanese users, on the other hand, are more particular. While they were an overwhelming number to make phone calls (97.4%) they were far fewer to send text messages (48.3%). Japanese users are avid mobile e-mail users in comparison to most HIP users; yet, their use of the mobile phone for entertainment purposes (playing games, listening to music or using a social networking site) is less frequent than in other HIP countries.

Chart 32: Mobile Uses: South Korea and Japan



Skills and experience online

Although users from the early adopting countries, on average, had used the Internet for longer, users from the emerging countries of the New Internet World were more likely to rate their skills higher. There was no relationship between a country's Internet penetration and the average time spent by its citizens online. Experience, skills and frequency of use all correlated positively with each other, meaning that the more experience users had, the higher they would rate their skills and the more time they would spend online. A key pattern is the tendency for users in the emerging countries of the Internet World, who are the early adopters within their respective countries, to believe themselves to be relatively more skilled and experienced online. Yet, they do not appear to be spending more time online than users from the early countries on the Internet.

Table 19: Correlations with Internet Penetration

Correlations with Internet Penetration		
Experience (years of use)	Positive**	Users from countries with higher Internet penetration tend to have more years of experience.
Skills (self-rated)	Negative**	Users from countries with lower Internet penetration tend to rate their skills higher than those from countries with higher Internet penetration.
Frequency of use (number of hours per week)	No correlation	There was no relationship between Internet penetration and the number of hours a user spends a week online.

**p<.001

Conclusion: Summary and Discussion of General Patterns and Themes

Internet users from countries that more recently joined the Internet world, which we call the New Internet World (NIW), continued from 2010 to 2012 to be as likely, if not more likely, to support norms underpinning freedom of expression online than do users from countries of the Old Internet World (OIW). In addition, users from the NIW reported higher levels of perceived freedom in expressing themselves on the Internet.

A somewhat greater level of support for freedom of expression in the New Internet World may be due to more noticeable differences in individual freedom generally found in the online and offline worlds of countries more recently joining the Internet age, where government control of the press and media tends to be stricter. At the same time, worldwide, this survey suggests that only a bare majority of users believe it is safe to express their views online, and most believe they must guard what they say online.

In addition, while there is general support for privacy and security online, there are widespread beliefs that too much personal information is being gathered online. While users from the Old and New Internet Worlds value privacy, users from the OIW appear to be more protective of their personal data and its security online – perceiving greater risks to privacy and security. Consistent with this concern, users in the OIW were also more likely to believe that there have been violations of their privacy online.

It is possible that there is less of an understanding or consciousness of the possible risks to personal data online in the NIW. Maybe there is stronger awareness of or sensitivity to issues of data protection and privacy in the Old Internet World. It is possible that journalistic coverage of Internet scams and abuses in the Old Internet World have created a “culture of fear” that exceeds more realistic expectations.²⁰ Regardless, more understanding and discussion need to focus on these issues, especially as the “Internet of Things” becomes commercialized, raising added concerns over privacy.

Also, a surprisingly large proportion of users in the emerging countries of the NIW were resigned to government monitoring (such as with respect to moral issues) and perceived higher levels of government control of the Internet. On the one hand, this might simply reflect the reality in many emerging countries of Asia and the Global South. On the other hand, it might also reflect a tendency for users to adapt their expectations to the prevailing political context of governmental policy and practice.

Finally, there is a deficit of trust in new forms of information online, such as the collective intelligence of collaborative networks, and social media as a source of information. Given a general weakness of trust in online information, users from the NIW indicated more trust in online sources and actors than OIW users. Given more years of experience online, it would be reasonable to expect a greater level of trust in the OIW. But the opposite is the case. Again, the findings of this study raise many more questions, suggesting new directions for research.

Perceptions of governmental surveillance of users seem high, but are also surprisingly greater in countries with higher levels of Internet penetration. Users from the Old Internet World – countries with higher proportions of their population online – were more likely to be concerned about surveillance. However, there was general concern over privacy and authenticity of information online. Yet, there seemed to be no relationship between levels of Internet penetration and concern over online privacy or authenticity, despite differences in the importance granted to these issues by NIW and OIW users.

Worldwide, there has been a major trend towards the adoption of more mobile Internet devices, such as smartphones and tablets. However, users from the emerging countries of the NIW were more likely than OIW users to employ the Internet for a wide variety of uses across all platforms. NIW users also used mobile phones for more tasks than OIW users. This is not surprising, as mobile phone use is usually higher than computer use in NIW countries. Mobile phone use is also generally higher in NIW countries.

Two of many possible explanations for these patterns are, firstly, a population new to the Internet may be more inclined to readily adopt new technology that enters the market at the same time since everything is novel to them, while prior users may need more time to adapt their habits, as they are accustomed to pre-existing Internet technologies – such as so-called Web 1.0. Secondly, online activities may be fulfilling a need that is not being met offline. For example as mentioned earlier, high YouTube use in Saudi Arabia might compensate for a lack of entertainment outlets offline.²¹ Thus, users from NIW countries may engage more frequently in different types of Internet uses to satisfy needs that users in OIW countries may be able to meet offline or through more traditional media, such as television.

²⁰ Research on television viewers led to the concept of a culture of fear driven by the violence on television in contrast to the real world (Gerbner 1998).

²¹ Ayed, N. (1 April 2013). "Why Saudi Arabia is the World's top YouTube nation", CBC. <http://www.cbc.ca/news/world/story/2013/03/28/f-ayed-cairo-saudi-youtube-nation.html>.

An Internet Trust Bubble?

The 2012 Internet Values Project survey vastly extended the scope of the 2010 survey to include a far more diverse group of Internet users worldwide. This dataset of over 11,000 users offered many insights into the beliefs, attitudes and practices of users worldwide; however, a few particularly important points stood out.

Regardless of their situation, Internet users overwhelmingly support freedom of expression online. Despite the fact that the provision of this new communication technology has not spread freedom to the developing countries that adopted it as early Internet pioneers hoped, it seems that Internet users worldwide have internalized this discourse. Indeed, users in low Internet penetration countries, a group that includes Brazil, China, Mexico and Egypt, sometimes showed more support for freedom of expression norms than their counterparts in countries that were early adopters. This finding provides hope that, although the technological determinist conception of the Internet automatically spreading freedom has always been misleading, widespread expectations of and support for freedom of expression online will lead Internet users to fight to preserve this ideal.

That said, this survey highlighted a potentially problematic situation regarding online freedom. While users worldwide exhibited high levels of support for freedom of expression, they generally did not feel safe in expressing themselves online.

Also, users around the world are concerned about their privacy and security online. Moreover, while concern about online privacy is global, users in Old Internet World countries showed higher levels of awareness about these issues. In contrast, users in New Internet World countries appeared less aware about issues surrounding online privacy and were more trusting of online actors. However, both groups

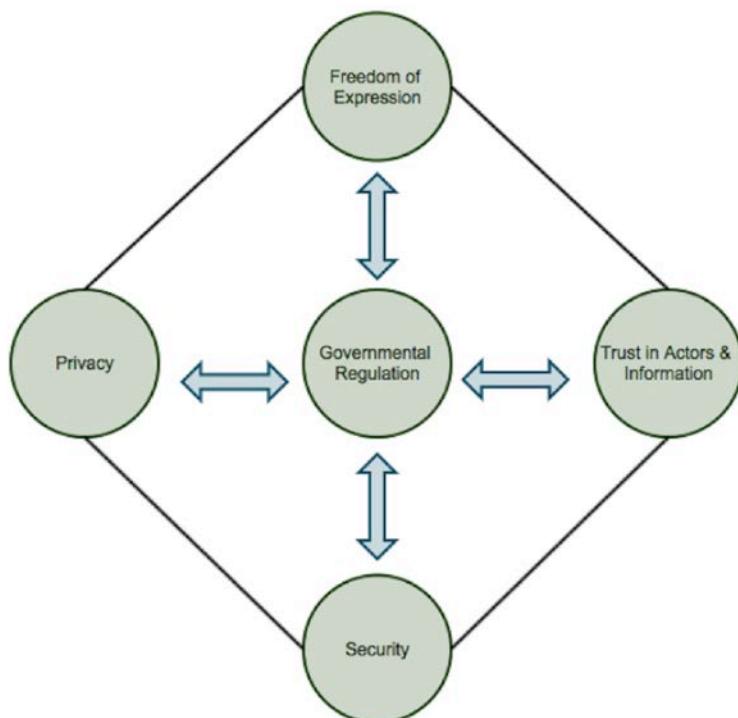
overwhelmingly said that people who used the Internet put their privacy at risk and that personal data was collected about them online without them understanding by whom and for what purpose. Despite this, neither group of users frequently engaged in practices that would protect their privacy and security online, although users in the FIP and LIP nations of the New Internet World were somewhat more likely to take actions to protect themselves.

This finding highlights the public policy importance of acting to protect the privacy of Internet users' personal data, particularly in countries with fewer legislative protections for personal data. However, this also highlights the need for education and to raise awareness of Internet users on how they can act to protect their personal data, particularly for users in New Internet World countries where awareness about these issues is lower.

This report underscores the development of a shared set of values among Internet users worldwide that supports freedom of expression and privacy online; however, it also highlights problems worldwide and in the New Internet World, with widespread doubts about true freedom of expression, privacy, security and authentic information. These beliefs and attitudes could signal a major turning point in the vitality of the global Internet unless these problems can be effectively addressed.

It is in this context that governments are often being asked to "do something". In many respects, the findings of this study highlight the potential for a vicious rather than a virtuous cycle of trust in the Internet to support freedom of expression and privacy online. If trust in the actors and information online is put at risk, then there will be more calls for government to control privacy and freedom of expression in ways that could undercut the vitality of the Internet, such as through a disproportionate level of content filtering or surveillance (see Figure 2).

Figure 2



While there are general patterns across the New Internet World, there are also continued differences in the way that users in the Old and New Internet Worlds use this technology, with New Internet World users producing more content and acting more socially online. In particular, these findings highlight the promise of the New Internet World continuing to support the values that underpin the vitality of the Internet. However, they also point to the need for greater attention to privacy and security-related issues in New Internet World countries, and the need to work to ensure that the expectations of these users that their Internet will be a place where they are free to express themselves and their data is kept safe are met.

There is a surprising degree of convergence in values, concerns and patterns of use among worldwide Internet users, which are generally supportive of a free and open Internet. However, two-thirds of the world's population remains offline. The major changes that will shape the Internet in the future are not simply technical, but also social: as the next 2 billion users come online, the population of the Internet could be dramatically reconfigured. The changes observed between the arrival of the first and second billion users have been significant and continue to occur. Innovation, commercial interests and disruptive technology continue to alter the Internet's landscape, influencing users' perceptions, concerns and uses of the Internet. It is important to continue to study the beliefs and attitudes of users to understand how the Internet might be shaped in the coming years.

References

- Castells, M. (2001). *The Internet Galaxy*. Oxford: Oxford University Press.
- Dutta, S., Dutton, W. H. and Law, G. (2011) *The New Internet World. A Global Perspective on Freedom of Expression, Privacy, Trust and Security Online*. Contribution to: The Global Information Technology Report 2010-2011. Transformations 2.0. World Economic Forum, April 2011.
- Dutton, W. H. and Blank, G. (2013), *Cultures of the Internet: The Internet in Britain 2013*. Oxford Internet Institute, University of Oxford.
- Gerbner, G. (1998), 'Cultivation Analysis: an Overview', *Mass Communication and Society*, 3/4, 175-194.



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

The World Economic Forum is an independent international organization committed to improving the state of the world by engaging business, political, academic and other leaders of society to shape global, regional and industry agendas.

Incorporated as a not-for-profit foundation in 1971 and headquartered in Geneva, Switzerland, the Forum is tied to no political, partisan or national interests.

World Economic Forum
91–93 route de la Capite
CH-1223 Cologny/Geneva
Switzerland

Tel.: +41 (0) 22 869 1212
Fax: +41 (0) 22 786 2744

contact@weforum.org
www.weforum.org