About this study
This report, Privacy, security and safety online, is the third installment from Ericsson ConsumerLab investigating matters of user privacy, integrity and security online.* The first report examined these issues on a high level, trying to map and understand the consumer, service provider and regulatory landscape. While the second report went on to explore different consumer benefits of sharing personal information, in this third report we look further into consumer concerns surrounding the usage of internet.

As this report is based on an online survey, it should be noted that in countries with low internet penetration, the online population is often dominated by early adopters who are likely to display an equal, if not higher, level of maturity as that of the average user in markets with high internet penetration.

*) Previous reports are: Consumer privacy in an online world (2012) and Personal Information Economy (2013).
INTERNET REACHES CRITICAL MASS

Internet maturity globally is reaching critical mass. People across the globe are becoming dependent on online connectivity in everyday life, work, and communication with authorities.

If the potential of the internet thus far has been determined by technological advances, further realization of this potential will demand a deeper, more sociologically grounded understanding of the norms and rules of engagement on the internet.

KEY FINDINGS

› Consumers express concerns, which directly affect their online behavior
  - 68 percent have felt hesitant towards expressing opinions on the Internet.
  - 90 percent of those concerned say that it has a direct effect on their online behavior.

› However, these concerns do not reduce internet activity
  - Only 4 percent state that privacy issues reduce their use of internet.

› On the internet you are who you are
  - 89 percent enter their correct personal information when registering on different sites.
  - 81 percent use their correct information when commenting or expressing personal opinions online.

› Uncertainty on when, where and how to assess risks online leads to consumers adopting coping strategies
  - 93 percent say they use some form of coping strategy to deal with risks online.
  - 58 percent are careful about what websites they visit.
  - 53 percent avoid giving out personal information online.

› Strong support for internet freedom, but users acknowledge the risks of libel online
  - Across the studied markets, there is strong support for third party moderation on issues of personal integrity such as personal threats, bullying and slander. 80 percent find censorship of personal threats on the internet acceptable.
CONCERNS AFFECT BEHAVIOR BUT NOT USAGE

Internet used in many everyday activities
Internet has shifted from being one specific aspect of consumers’ lives, to becoming an important infrastructure for many aspects of everyday life. As this shift has accelerated, the need for legal and social codes of conduct, or ground rules, has become evident.

Risks influence the development of online activity
According to the latest Ericsson Mobility Report from November 2013, there are now 1.9 billion smartphone subscriptions, anticipated to grow to 5.6 billion by 2019. As a part of this development and a growing maturity, consumers are becoming aware of online hazards. In the study, 70 percent of respondents find that safety issues such as viruses or fraud are a problem to them on the internet, 59 percent worry about surveillance online and to 56 percent privacy issues are a concern.

It is evident that these concerns have not stopped the growth of internet; quite to the contrary, the number of internet users continues to grow unabatedly.

The results from the study do show that issues of privacy, security and safety have a direct effect on how the internet is approached and used. It affects the degree of both commercial and social interaction online.

However, what is notable is that among those who express concerns only 4 percent state that these issues have resulted in them using the internet less. This goes across all markets in the study.

“I should probably care more than I do, but what am I going to do with that frustration? Cut myself off from everything, or not pay bills online?”

— Male, 20, U.S.

Figure 1: Share of consumers who consider matters of security a problem, while on their computer or mobile phone, and the behavioral effects of those concerns.

Behavioral effects of security concerns online

- 70% consider security issues a problem while online
- 44% use the internet less
- 44% I am more careful with what I write on the internet (e.g. on social networking sites or in forums)
- 44% I am more careful with what personal information I give out about myself (e.g. when registering on sites)
- 29% I am more careful when it comes to which websites I am visiting
- 10% It affects my internet use in other ways
- 4% It doesn’t affect my internet use at all

Source: Ericsson ConsumerLab, Privacy, security and safety online, 2014
Base: All, 3,311 respondents

Multiple choice question, sum adds up to more than 100 percent.
ONLINE CONCERNS AND INCREASED INTERNET USE

Experience and hearsay combined determine consumer perception of risk
When it comes to first hand experiences of security risks, 68 percent have experienced computer viruses themselves but only 11 percent have been subject to fraud online. However, 31 percent state that someone close to them has been exposed to internet fraud. Another issue which has attracted much public attention is personal identities being hijacked (e.g. a friend posting in your name on Facebook) or stolen, and whereas 27 percent say that someone close to them have experienced this, only 13 percent have actually had their identity tampered with online.

Consumer perception of risks builds on a blend of first-hand experiences and hearsay, from friends and acquaintances to media reporting. This creates awareness that risks exists but uncertainty about when, where and how to assign and assess risk.

Consumers use coping strategies to tackle online risks
Just as various coping strategies are a natural part of everyday life offline, consumers also use coping strategies on internet in order to handle perceived and actual risks. Of the respondents, 93 percent say that they take some form of protective measures when using the internet. In addition to direct protection in the form of anti-virus software, coping strategies include indirect measures such as being careful when it comes to what websites to visit.

On the social web, sharing personal information and opinions is both a prerequisite and a key functionality. Personal information is a wide term, covering everything from: name, interest, political views and opinions to consumption patterns. Online and in real life we constantly share personal information, more or less actively and concisely. Given the wide range of personal information it comes as no surprise that different types of personal information varies in sensitivity. Neither is it a paradox that 89 percent of users say that they share personal information and opinions online at least weekly. Simultaneously, results also show that 86 percent have felt hesitant to share personal information online and that 68 percent have felt hesitant to express their opinions.

Not connecting the dots
While 70 percent believe that companies can access and use their personal information for commercial purposes, 56 percent claim that they would share less personal information if they received a personalized ad based on something they discussed in an email. Personalized ads are today a prevalent feature of free email services. Yet people do not seem to recognize this fact or to pay attention to it.

Companies employ complex processes to collect and apply personal information and it is not easy for consumers to connect all the dots and understand how, when and for what purpose their information is used.

Figure 2: Have you or someone close to you experienced any of the following?

<table>
<thead>
<tr>
<th>Issue</th>
<th>Myself</th>
<th>Someone close to me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Censorship online</td>
<td>14%</td>
<td>19%</td>
</tr>
<tr>
<td>Virus on mobile phone</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>Virus on computer</td>
<td>68%</td>
<td>42%</td>
</tr>
<tr>
<td>Paid for something online that never was delivered</td>
<td>14%</td>
<td>20%</td>
</tr>
<tr>
<td>Receiving threats online</td>
<td>9%</td>
<td>20%</td>
</tr>
<tr>
<td>Someone hacking your e-mail account</td>
<td>28%</td>
<td>29%</td>
</tr>
<tr>
<td>Someone hacking your social networking account</td>
<td>20%</td>
<td>32%</td>
</tr>
<tr>
<td>Surveillance</td>
<td>14%</td>
<td>20%</td>
</tr>
<tr>
<td>Identity theft online</td>
<td>13%</td>
<td>27%</td>
</tr>
<tr>
<td>Online fraud</td>
<td>11%</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: Ericsson Source: Ericsson ConsumerLab, Privacy, security and safety online, 2014
Base: All, 3,311 respondents

86% have felt hesitant to share personal information
68% have felt hesitant to express their opinions online

ERICSSON CONSUMERLAB PRIVACY, SECURITY AND SAFETY ONLINE 5
PERSONAL SAFETY IS KEY

Other people the main concern online
Out of the respondents 48 percent agree that their online behavior would be seriously affected if they found out that individuals not acquainted to them could access and use their personal information.

On the internet you are who you are; the results of the study show that users predominately use their real identity online. 89 percent enter their correct personal information (as in real name and email et cetera) when registering on different sites and 81 percent do not use aliases when commenting or expressing personal opinions online.

Even among an advanced internet sample, just over one in 10 users go so far as to hide their IP address, a behavior that can be interpreted as anything from an attempt of trying to protect your own identity, in order to stay safe from online threats, to an attempt to conceal more or less illegal online activity.

“If it’s only companies [that can access your information], you don’t have to be careful about how you use your smartphone.”
— Female, 17, Sweden

“It’s not [social networks] that are making the world corrupt. It’s the people that are on it.”
— Female, 20, U.S.

Support for the protection of personal integrity
There is firm support for freedom of speech among the respondents in the survey. Only 8 percent state that it is not important. At the same time, users acknowledge the inevitable risks of libel online. Across the studied markets, there is support for third party moderation, particularly on issues of personal integrity such as threats, bullying and slander. 80 percent believe it is OK to censor or block personal threats on internet.

For non-personal issues concerning religion, government and one’s country there is less support for censorship, across all markets. In many cases there are small variations between countries.

“OK to censor or block content on the Internet”

- Personal threats: 80% OK, 20% Not OK
- Bullying: 79% OK, 21% Not OK
- Information that can compromise national security: 79% OK, 21% Not OK
- Pornographic content: 78% OK, 22% Not OK
- Slander: 76% OK, 24% Not OK
- Violent content: 73% OK, 27% Not OK
- Racist opinions or content: 70% OK, 30% Not OK
- Sexist opinions or content: 67% OK, 33% Not OK
- Criticism against one’s country: 48% OK, 52% Not OK
- Religious criticism: 47% OK, 53% Not OK
- Criticism against government/state: 32% OK, 68% Not OK

Figure 3: Share who agree their online behavior would be seriously affected if they found out that others could access and use their personal information online.

Yes, if it were other individuals not acquainted with me

Yes, if it were a national security agency

Yes, if it were a financial institution

Figure 4: In which cases is it acceptable to censor or block content on the Internet?
If one just looks at the numbers presented in this report, consumer concerns seem to be quite high. However, given that 96 percent say they will use internet as much or more in the future, we detect no sign of privacy concerns hindering the growing use of internet. Obviously, as internet becomes an increasingly important part of just about everything in our lives, hiccups as well as outright attacks will continue to happen. However, so far the backlashes we have seen have been limited in time or have affected a relatively small group of individuals, while the majority of consumers agree that the benefits of internet use outweigh the concerns. We have passed the point of no return – as individuals, we can no longer really imagine a life without internet. Internet is no longer a separate layer on top of the physical society, they are continuously merging and hence also needs to be viewed and treated as one.

Having said that, uncertainties continue to influence our online behavior. The possible aftereffect of backlashes, although they will not bring a disruptive change in the general usage of internet, will contribute to the evolution and discussion on how internet should be used. Matters of trust and the importance of respecting human rights issues such as the right to privacy will lead to a continued discussion concerning personal safety online and will not likely fade away.

It is clear from the study that as individuals, we perceive other individuals to be the main threat, not companies or institutions. Our main focus is feeling secure on a personal level. In this way internet is just another platform of social activity as real as any other physical arena and inextricably intertwined with our everyday lives. Internet can and will be misused, but the blame goes to the perpetrator.

Going forward, successful services and solutions will have to be better at catering to consumer needs to feel secure personally. Transparency will be increasingly important and also encompass the idea that information should be both understandable and accessible. As an example, consumers need to not only click “yes” under terms and conditions online, they need to also understand what it means to them – abstract legal terms are not good enough, they need to concretely explain: How will others get access to me and my personal information?

Consumers will also remain as sensitive to issues of libel online as they are offline, if not more. Engaging with consumers in order to find the right balance between openness and measures to protect against various forms of online threats will be of utmost importance.

In combination with earlier ConsumerLab research on this and related topics, results show that consumers support measures to protect personal integrity, examples of which can be:

- **Build consumer awareness around risk assessment online**
- **Built-in protective measures from the onset – privacy by design**
  - Embedding privacy measures in the design of technology, in order to protect consumers’ personal information and privacy.
- **Moderation of forums and social media to reduce slander, bullying and other behaviors that threaten personal integrity**
- **Consequent usage of transparency and permissibility in handling personal information**
  - Earlier Ericsson ConsumerLab studies have pointed to the importance of clarity, being transparent and asking for consumers’ permission when using personal information.
- **Offering consumers value sharing when commercially exploiting personal information**
  - Consumer trust is also gained by ensuring that any commercial use of personal information is reciprocated by returning consumers some form of value, monetary or in the form of improved service or product experience.
Ericsson is a world-leading provider of communications technology and services. We are enabling the Networked Society with efficient real-time solutions that allow us all to study, work and live our lives more freely, in sustainable societies around the world.

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