

CONSUMERLAB



10 HOT CONSUMER TRENDS 2016

An Ericsson Consumer Insight Summary Report
December 2015



METHODOLOGY

This report presents insights from various studies that have been conducted by Ericsson ConsumerLab during 2015.

The broadest trend in this report is representative of 1.1 billion people across 24 countries, whereas the narrowest trend is representative of 46 million urban smartphone users in 10 major cities. Source information is given separately for data used on each page.

An additional online survey of smartphone users in 13 major cities across the world was also carried out in October 2015, specifically for this report. It comprises 6,649 urban iOS/Android smartphone users in Istanbul, Johannesburg, London, Mexico City, Moscow, New York, Paris, San Francisco, São Paulo, Shanghai, Singapore, Sydney and Tokyo. Respondents were aged 15–69, and the sample is representative of 68 million urban citizens.

THE VOICE OF THE CONSUMER

Ericsson ConsumerLab has 20 years' experience of studying people's behaviors and values, including the way they act and think about ICT products and services. Ericsson ConsumerLab provides unique insights on market and consumer trends.

Ericsson ConsumerLab gains its knowledge through a global consumer research program based on interviews with 100,000 individuals each year, in more than 40 countries and 15 megacities – statistically representing the views of 1.1 billion people. Both quantitative and qualitative methods are used, and

hundreds of hours are spent with consumers from different cultures. To be close to the market and consumers, Ericsson ConsumerLab has analysts in all of the regions where Ericsson is present, which gives a thorough global understanding of the ICT market and business models.

All reports can be found at:
www.ericsson.com/consumerlab

AN EVENLY DISTRIBUTED FUTURE

The world changed – we didn't

At Ericsson ConsumerLab, we study how consumers use the internet and communications technology in everyday life on a global scale in over 40 countries every year. This is the fifth consecutive year that we have published our 10 Hot Consumer Trends, and we haven't changed our focus at all. Really, what has changed is the world around us. More specifically, there are three important underlying shifts that set the scene for how these trends should be interpreted.

> All consumer trends involve the internet

Today, almost all consumer trends involve the internet, since many aspects of our physical lives are merging with our online habits: shopping, working, socializing, watching TV, studying, traveling, listening to music, eating and exercising are just a few examples.

This is happening because we use mobile broadband or Wi-Fi, rather than cables. We may not be physically more mobile, but our online activities are less restricted by our surroundings than ever before.

> Early adopters are less important

Four years ago, Ericsson ConsumerLab said that women drive the smartphone market by defining mass-market use. But as the speed of technology adoption increases, mass-market use becomes the norm much quicker than before. Successful new products and services now reach the mass market in only a matter of years. This means that the time period when early adopters influence others is shorter than before.

Since new products and services increasingly use the internet, mass markets are not only faster, but are also more important than ever to consumers themselves. Most internet services become more valuable to individuals when many use them.



Almost all consumer trends involve the internet

> Consumers have more influence

Only a few years ago, there was a lot of focus on how the internet is influencing consumers. However, now consumers are using the internet to influence what goes on around them.

For some time, prosumption – consumers participating in the production process – was mostly limited to user-generated media content. However, online user reviews, opinion sharing, petitions and instant crowd activities are now becoming the norm more than an exception. Although not all online activity is carried out by engaged consumers and some may even be classed as 'slacktivism' (lethargic, one-click internet activism), it is still perceived to have real effect. With such a large part of the world's population now online, it is clear that there is strength in numbers.



A future for everyone

Some trends in this report may seem futuristic, but mass markets are appearing quicker than ever. Therefore, it is necessary to ask consumers about new technologies in order to conceptualize the future.

Although we would like to include everyone in the discussion about the future, several trends focus on smartphone users. This is because we believe they have the experience to judge the services we ask about, thanks to their familiarity with using smartphone apps. Essentially, the technologies we ask about, new or not, are like any other app, easily downloaded and just as easily discarded if not of interest.

As the famous science fiction writer William Gibson noted, the future is already here. However, as we are entering an era of inclusivity unlike anything we have ever seen before, this future seems to be much more evenly distributed than he predicted.



1. THE LIFESTYLE NETWORK EFFECT

Imagine a world where new technology is easy to use and inexpensive; where the latest products reach the mass market almost as quickly as they reach the early adopters and industry experts.

That world may actually exist, and it may be the world you live in.

By using the internet, we are becoming increasingly interconnected with others. In our broadest survey covering 24 countries, 4 out of 5 people now experience a lifestyle network effect, where an individual's benefit from a range of online services increases as more people use them.

Thanks to the internet, this network effect happens to almost all new products and services simultaneously, and our research indicates that the accumulated value gets aggregated on a lifestyle level.

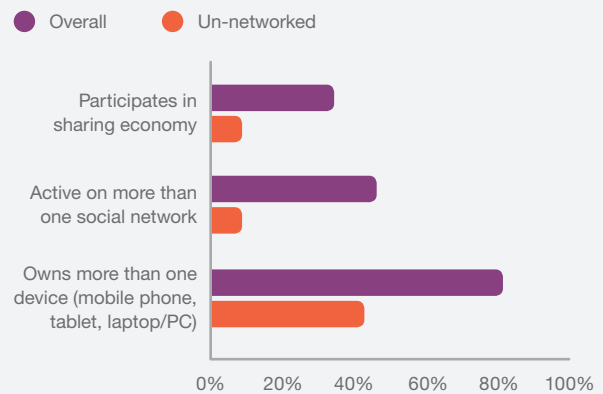
For example, in the US it took over a quarter of a century for TV to be used by a quarter of the population. For PCs it was 16 years, for mobile phones it was 13 years, and it was only 7 years for the web.¹ For networked technologies like these, the quicker everyone else starts using the latest service, the better the service becomes for those who already use it. The world is becoming all-inclusive.

These lifestyle network effects are clearly reflected in people's attitudes and behaviors. 46 percent are active on more than one social network, while 34 percent already participate in various forms of the sharing economy, from rooms, cars and bikes to internet sharing and person-to-person loans.

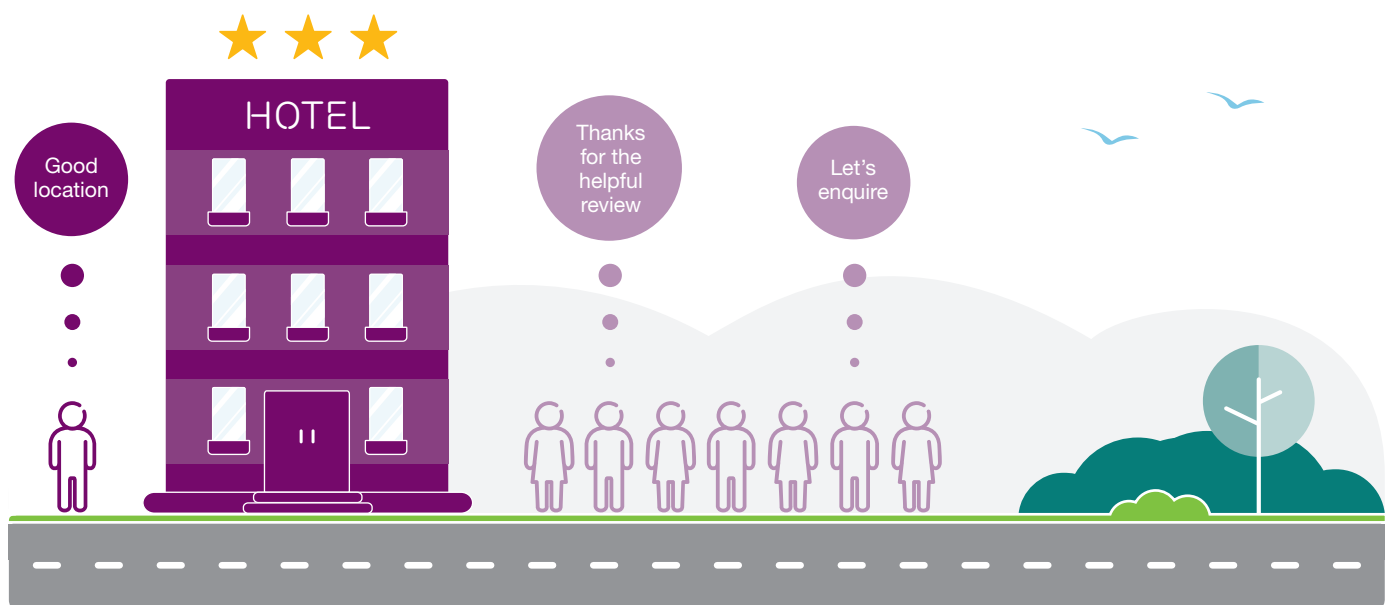
Crowd intelligence is another example of the lifestyle network effect, with 38 percent considering user reviews to be better than expert reviews – and the effect increases as more people write reviews and share their views. 46 percent also believe technology will have a democratizing effect on education.

However, one in five is currently living a life that's not significantly affected by the internet. While most of them have a mobile phone, this un-networked group uses online communities much less and does not experience a lifestyle-changing network effect.

Figure 1: Lifestyle differences



Source: Ericsson ConsumerLab, The Networked Life, 2015
Base: 45,290 respondents aged 15–69 in 24 countries



¹ www.pewresearch.org/fact-tank/2014/03/14/chart-of-the-week-the-ever-accelerating-rate-of-technology-adoption

2. STREAMING NATIVES

The oldest digital natives – the first generation to grow up with the internet – are now in their mid-30s. But the internet is changing and new generations are growing up with their own native behaviors.

One of the more significant changes is the huge amount of video content online. It is said that in 2011, around 30 hours of video was uploaded to YouTube every minute.² Today, estimates indicate that it is more than 300 hours every minute.³

Correspondingly, new generations have a very different online video experience. Today, 20 percent of 16–19 year olds say they watch more than 3 hours of YouTube daily, compared to only 7 percent in 2011. The original internet generation does not follow this behavior and only 9 percent of today’s 30–34 year olds watch 3 hours or more of YouTube daily. Today’s teens are now streaming natives. In fact, 46 percent of them spend an hour or more on YouTube every day.



20 percent of 16–19 year olds watch more than 3 hours of YouTube daily

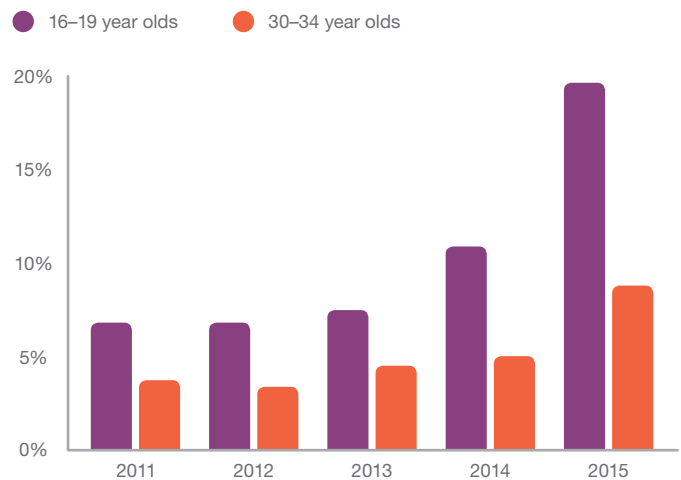
Streaming natives also watch video on different platforms, spending around 59 percent of their total viewing time on mobile screens, which is considerably more than other age groups.

In fact, 28 percent of the total viewing time among streaming natives is on smartphones. They are also the only age group who spend a larger amount of time on smartphones than on any other device.

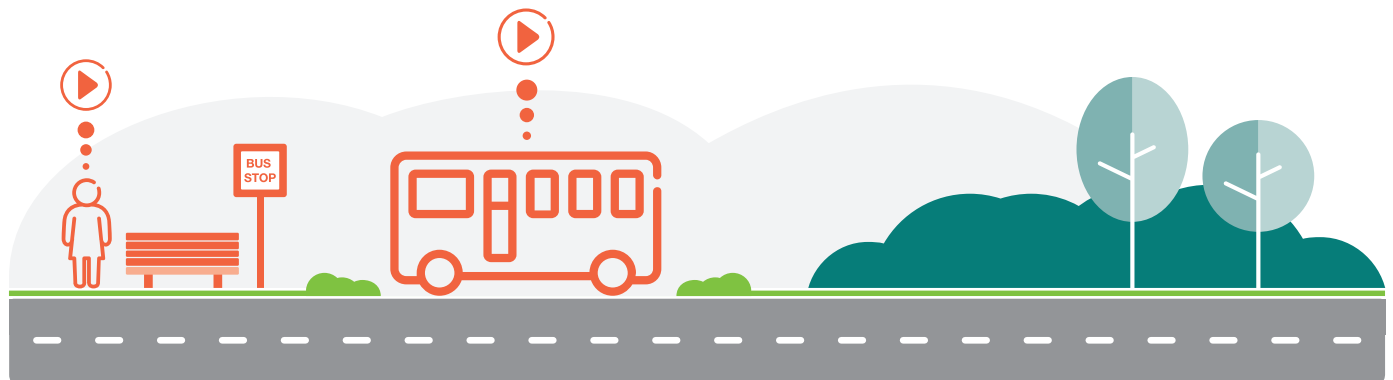
16 percent of streaming natives also stream music for more than 3 hours per day, which is more than the other age groups.



Figure 2: Consumers who watch more than three hours of YouTube daily*



Source: Ericsson ConsumerLab, TV and Media, 2011–2015
 Base: 9,000 respondents aged 16–59 per year over 5 years
 * For China the service measured is called Youku



² www.joaogeraldes.wordpress.com/2010/09/09/2005-2010-youtube-facts-figures-history-statistics
³ www.reelseo.com/youtube-300-hours

3. AI ENDS THE SCREEN AGE

Artificial Intelligence (AI) will enable interaction with objects without the need for a smartphone screen.

The screen age started in the 1950s, when TV entered mainstream popular culture. The number of screens in households continued to multiply with the arrival of PCs, and (more recently) with smartphones and tablets.

In 2011, sales of smartphones and tablets surpassed PC sales.⁴ Incidentally, research conducted by Ericsson ConsumerLab in the same year indicated that smartphone owners in New York and Paris spent more time in front of screens than any other activity.

But constantly having a screen in the palm of your hand is not always a practical solution. After 60 years in the screen age, 1 in 2 smartphone users now thinks that smartphones will be a thing of the past, and that this will happen in just 5 years.

Battery capacity is a real issue for smartphone users and the size of devices is literally getting out of hand. Although most big smartphones have screens less than 6 inches diagonally, our research indicates that 31 percent of smartphone users want a 7–8 inch screen and another 30 percent want a 6 inch screen, while 78 percent want to worry less about the battery dying.

The contradictory demands for power-draining larger screens and a longer battery life however, highlight a need for better solutions, such as the use of intelligent assistants to reduce the need to always touch a screen. In fact, 85 percent of smartphone users think wearable electronic assistants will be commonplace within 5 years. Additionally, one in two believes they will be able to talk to household appliances, as they

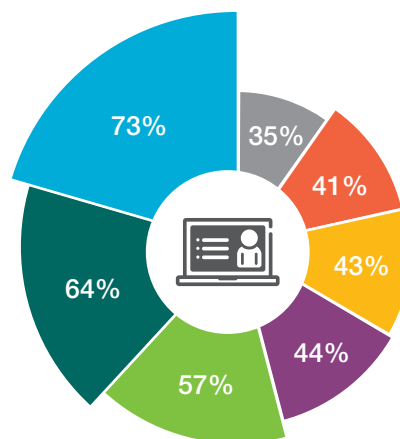
do to people. This way of interacting with objects and surroundings would be possible with an AI interface.

Smartphone users believe AI will take over many common activities, such as searching the net, getting travel guidance and as personal assistants. These are areas already being addressed by current generation AI interfaces in smartphones.

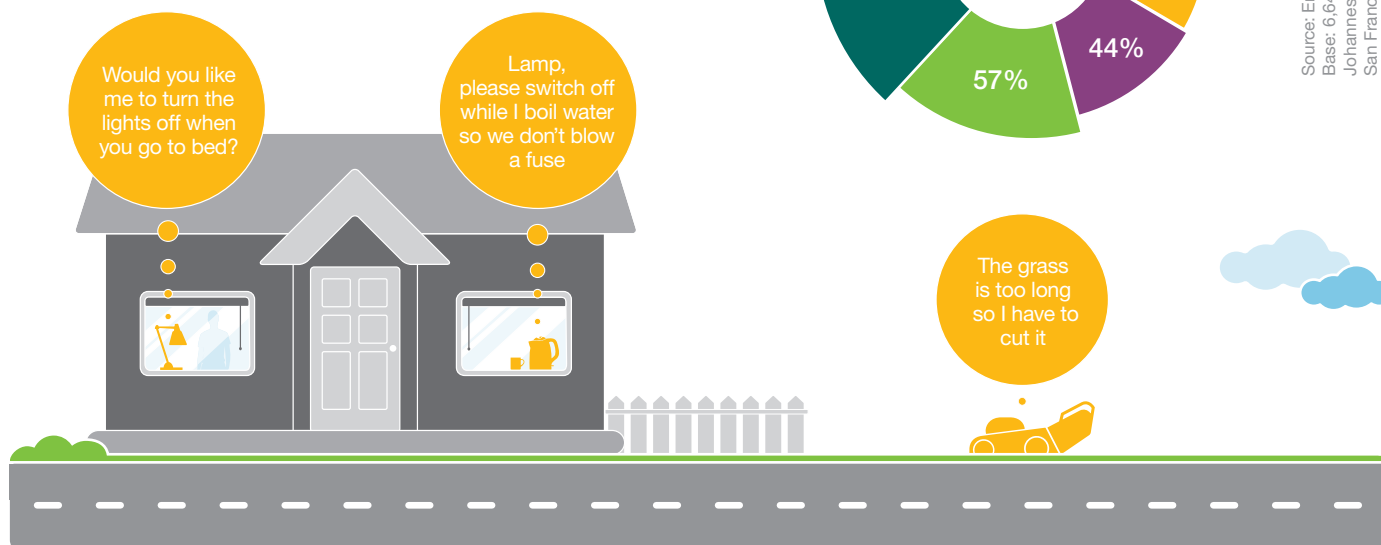
But the desire to use AI for more advanced purposes is apparent. 44 percent think an AI system would be good as a teacher and one third would like an AI interface to keep them company. Furthermore, a third would even rather trust the fidelity of an AI interface than a human for sensitive matters. 29 percent agree they would feel more comfortable discussing their medical condition with an AI system.

Figure 3: Consumers who think using artificial intelligence (AI) would be a good idea

- AI search engine
- AI travel guide
- AI personal assistant
- AI medical advisor
- AI financial advisor
- AI companion to talk to
- AI teacher



Source: Ericsson ConsumerLab, 10 Hot Consumer Trends 2016, 2015
 Base: 6,649 iOS/Android smartphone users aged 15–69 in Istanbul, Johannesburg, London, Mexico City, Moscow, New York, Paris, San Francisco, São Paulo, Shanghai, Singapore, Sydney and Tokyo



⁴ www.canalys.com/newsroom/smart-phones-overtake-client-pcs-2011

4. VIRTUAL GETS REAL

The importance of visual information will continue to grow – especially outside of traditional screens. The way we use visual information will evolve and become more immersed in the physical world around us.

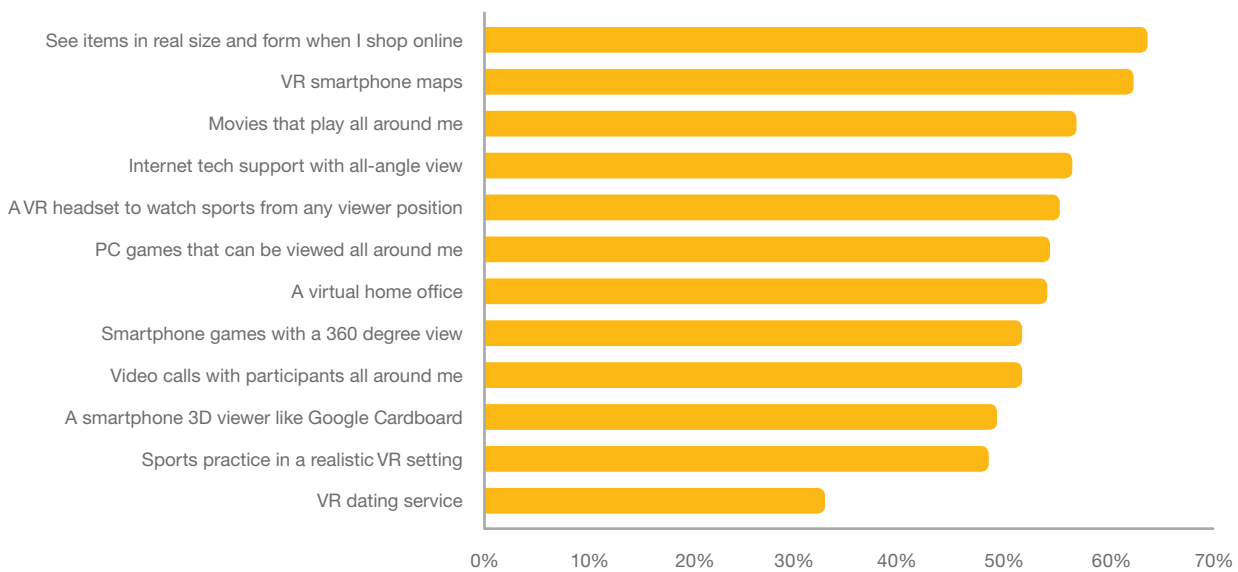
Virtual reality is a popular idea for representing visual information among smartphone users in the future. In fact, 8 out of 10 think at least 1 of the 12 virtual reality (VR) services Ericsson ConsumerLab surveyed is a very good idea. VR smartphone maps, movies that play virtually around the viewer, virtual tech support, and VR headsets for sports were some of the services that sparked the most interest. But one in two would also like to have participants surrounding them in video conferences and a third are interested in dating services that include VR.

Shopping is another area where ‘virtuality’ will have a real impact. Half of the smartphone users surveyed want a 3D selfie that can be used as an avatar to try on clothes online, and 64 percent would like the ability to see an item’s actual size and form when shopping online.

Shopping for certain items may even become a thing of the past, as half of smartphone users want a 3D printer for printing household objects such as spoons, toys and spare parts for appliances. 44 percent even want to print their own food or nutritional supplements.

Devices will also have to evolve with growing demands, for example over 50 percent of consumers think holographic screens will be mainstream within 5 years.

Figure 4: Consumers who think using virtual reality services would be a good idea



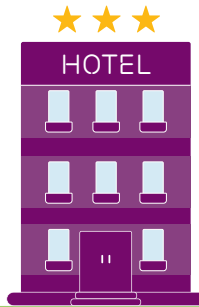
Source: Ericsson ConsumerLab, 10 Hot Consumer Trends 2016, 2015
Base: 6,649 iOS/Android smartphone users aged 15–69 in Istanbul, Johannesburg, London, Mexico City, Moscow, New York, Paris, San Francisco, São Paulo, Shanghai, Singapore, Sydney and Tokyo



10 HOT CONSUMER TRENDS 2016

1. The Lifestyle Network Effect

With diversifying online use, social effects like crowd intelligence and the sharing economy multiply



2. Streaming Natives

Teenagers watch more YouTube video content daily than other age groups



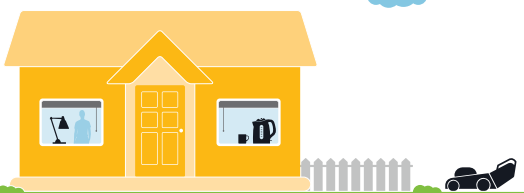
5. Sensing Homes

Bricks used to build homes could include sensors that monitor mold, leaks and electricity issues



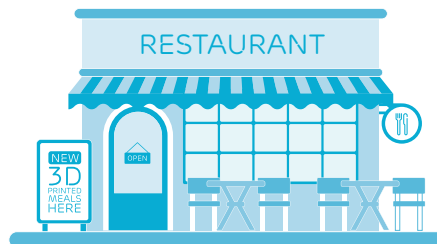
3. AI Ends The Screen Age

Artificial Intelligence will enable interaction with objects without the need for a smartphone screen



4. Virtual Gets Real

Consumers want virtual technology for everyday activities such as sports, and 3D food printing





6. Smart Commuters

Commuters want to use their time meaningfully and not feel like passive objects in transit

7. Emergency Chat

Social networks may become the preferred way to contact emergency services



8. Internables

Internal sensors in our bodies that measure wellbeing may become the new wearables

9. Everything Gets Hacked

Most smartphone users believe hacking and viruses will continue to be an issue



10. Netizen Journalists

Consumers share more information than ever and believe it increases their influence on society



5. SENSING HOMES

Bricks may be the new building blocks of the internet.

Furthering the idea of the Internet of Things, sensors could be integrated into bricks and mortar in your house, literally connecting your home from the ground up.

55 percent of smartphone users believe that within only 5 years, their own homes will have embedded sensors that look for construction errors, mold buildup, water leaks and electricity issues. This means we may have to fundamentally rethink the concept of a smart home, where the internet is every bit as intrinsic to the home as water pipes and electrical wiring. Construction companies will be the builders of internet infrastructure.

In fact, even the air we breathe in our homes could be connected to the internet. Today, 54 percent of smartphone users are very interested in sensors that optimize indoor air quality. In 5 years, 66 percent think homes that use the internet to regulate air quality, ventilation and windows will be commonplace.

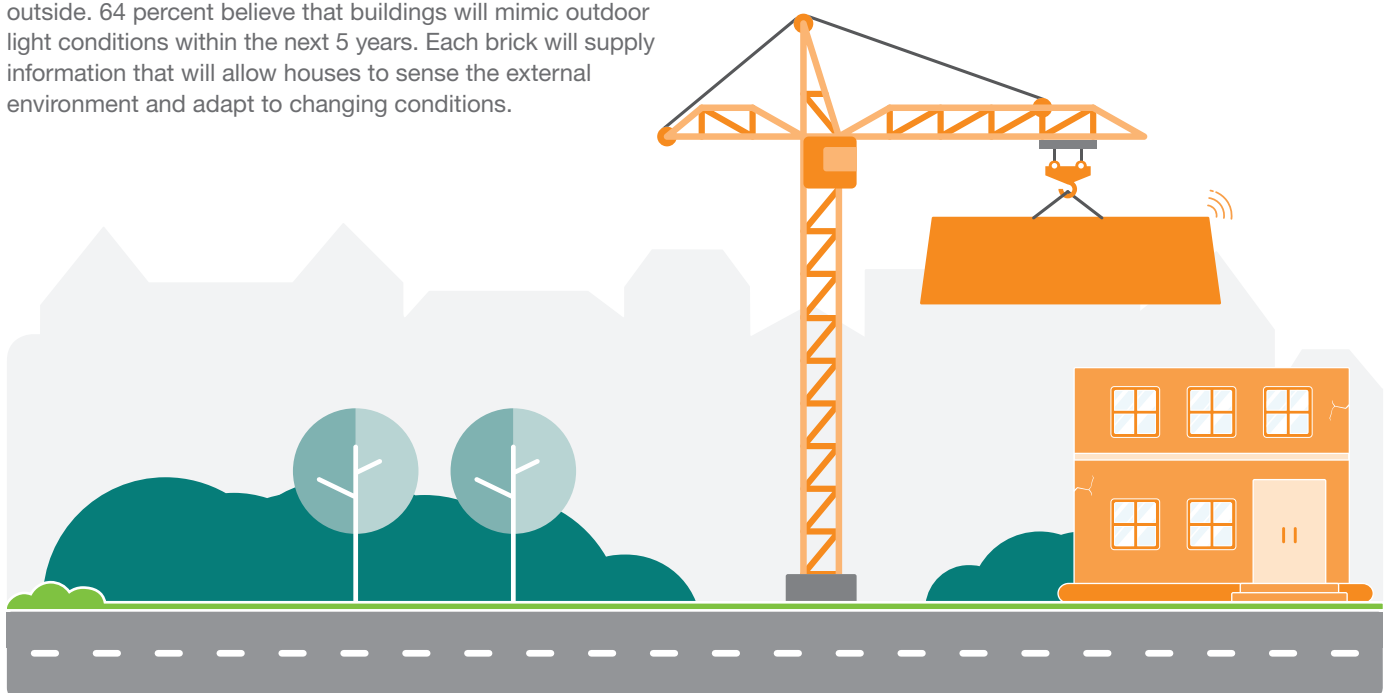


Consumers think buildings will mimic outdoor light conditions

Sensors in future smart homes could also reflect changes outside. 64 percent believe that buildings will mimic outdoor light conditions within the next 5 years. Each brick will supply information that will allow houses to sense the external environment and adapt to changing conditions.



As many as 55 percent of smartphone users believe that homes will have embedded sensors within 5 years



Source: Ericsson ConsumerLab, 10 Hot Consumer Trends 2016, 2015
Base: 6,649 iOS/Android smartphone users aged 15–69 in Istanbul, Johannesburg, London, Mexico City, Moscow, New York, Paris, San Francisco, São Paulo, Shanghai, Singapore, Sydney and Tokyo

6. SMART COMMUTERS



Commuting is becoming an ever more central part of everyday life across the globe. Unfortunately, commuters today perceive commuting time as unproductive and dull, or even frustrating.

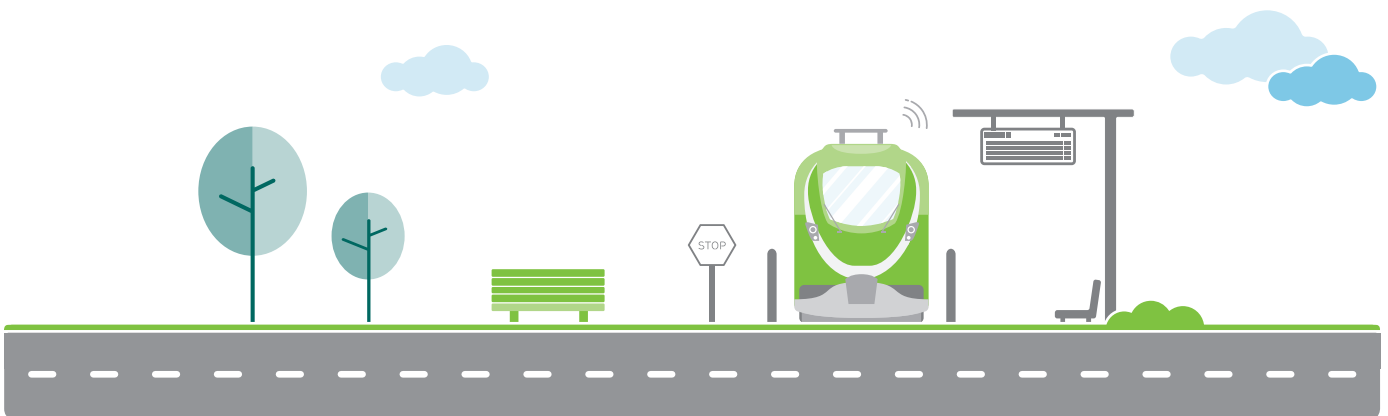
With continued urbanization, average time spent in traffic is also on the rise in many cities. On a weekly basis, commuters globally spend 20 percent more time commuting than doing leisure activities. In fact, half of those spending more than nine hours every week commuting don't think they have enough time for leisure.

Commuters want to use the time spent to be productive, to socialize or to enjoy themselves. For this reason, they are now demanding uninterrupted connectivity while commuting.

However, their demands are yet to be met: 55 percent are dissatisfied with the ability to browse the internet and access social media during their commute, and as many as 66 percent are dissatisfied with video streaming.

Commuters also want real-time crowd information integrated to help them manage their commute, as well as unified payment options and services that span across travel modes. All of this should be personalized to individual needs, and 86 percent say they would use personalized commuting services if they were available.

The future of commuting will not only be about getting people from A to B, but providing commuters with valuable time.



Source: Ericsson ConsumerLab, Commuters Expect More, 2015
Base: 20,293 smartphone commuters from 23 countries

7. EMERGENCY CHAT

Today, more people communicate using text than calling on the phone. Many are also used to instantly sharing photos and videos via social networks.

It is therefore understandable that people increasingly use social media rather than call 911 when accidents quickly become critical. For example, during previous fieldwork we met with smartphone users who said that using a social network after a major earthquake saved their lives. Another example is Facebook, which has recently enabled its Safety Check function for disaster situations.

For this reason, 65 percent of smartphone owners are interested in an emergency app, which would alert them in a crisis or disaster, and provide verified, rumor free information.

Our research also showed that one in two people believes emergency centers will be contacted via social networks rather than calling 911 in three years, and as many think that sending pictures and their location in such emergencies will become routine.



One in two people believes emergency centers will be contacted via social media networks in three years

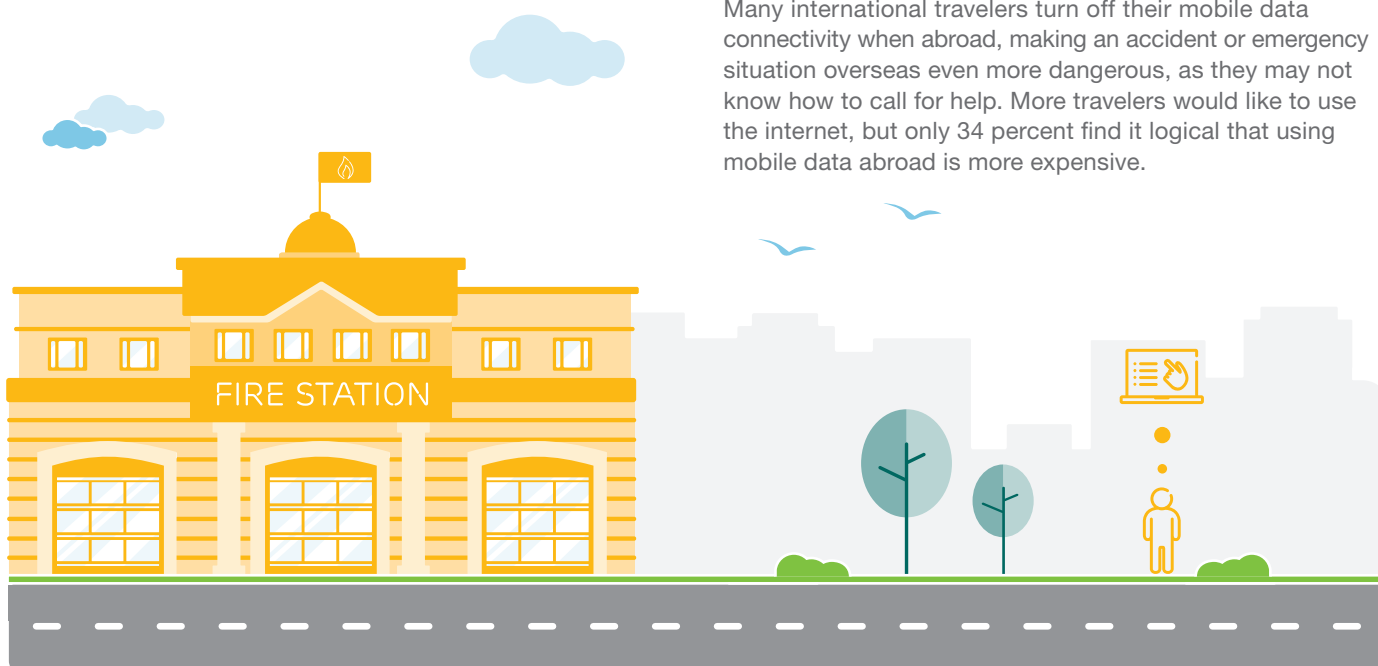
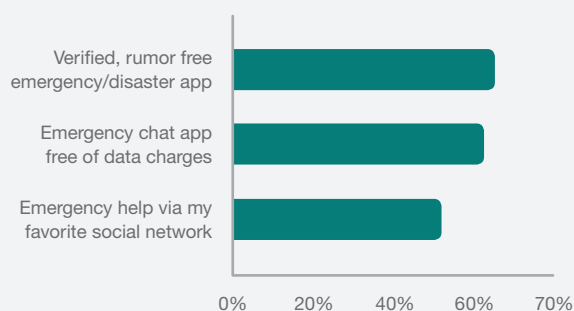


Figure 5: Consumer interest in using social media to contact emergency services



Source: Ericsson ConsumerLab, 10 Hot Consumer Trends 2016, 2015
Base: 5,024 iOS/Android smartphone users in Johannesburg, London, Mexico City, Moscow, New York, San Francisco, São Paulo, Shanghai, Sydney and Tokyo

This of course leads to new challenges. For instance, emergency calls are toll free – but what happens if a user's data allowance runs out in the middle of an emergency chat? 62 percent of the smartphone users we interviewed recognize this issue and would like to have an emergency chat app free of data charges.

Many international travelers turn off their mobile data connectivity when abroad, making an accident or emergency situation overseas even more dangerous, as they may not know how to call for help. More travelers would like to use the internet, but only 34 percent find it logical that using mobile data abroad is more expensive.

8. INTERNABLES

Consumers today enjoy improving their physical wellbeing, while monitoring and quantifying their progress using wearable devices. However, wearing these devices can be aesthetically unattractive and sometimes impractical, getting in the way of performing everyday tasks.

Judging by consumer interest, the next generation of body-monitoring technology may not be worn, but may instead be found within the human body.

These 'internables' will initially have a similar focus to the current external body monitoring devices. Half of all smartphone users believe internal sensors will give updates on their health and wellbeing in three years.

But this is only the beginning; 8 out of 10 smartphone owners would like to augment their sensory perceptions and cognitive

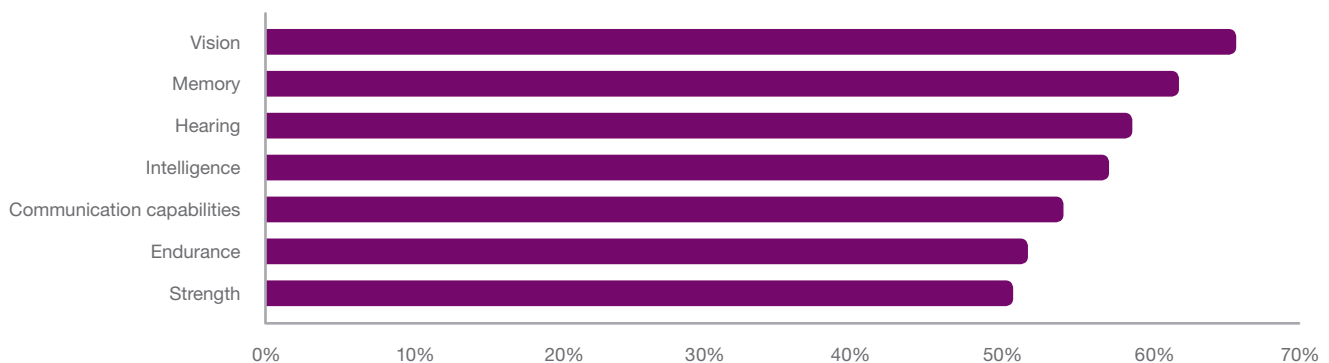
capabilities with technology – the most popular being vision, memory and hearing.

As well as physical improvements, more than half would also like to improve their communication capabilities. Research showed that one in three is very interested in implants that add internet information to what they see and hear, indicating that these internables will be connected to the internet. Internables will, in effect, become the new wearables.



The next generation of health-monitoring technology may be found within the human body

Figure 6: Consumers who would use internal sensors to augment senses and capabilities



Source: Ericsson ConsumerLab, 10 Hot Consumer Trends 2016, 2015
Base: 6,649 iOS/Android smartphone users aged 15–69 in Istanbul, Johannesburg, London, Mexico City, Moscow, New York, Paris, San Francisco, São Paulo, Shanghai, Singapore, Sydney and Tokyo



9. EVERYTHING GETS HACKED

With over 3.2 billion users, the internet has a massive and instantaneous global reach. Unfortunately, this also means that we are becoming vulnerable to cyber-attacks such as viruses and hacking, often highlighted in the news. Consequently, the majority of smartphone users believe a range of organizations, products and services will be hacked or become infected by a virus in the near future.

18 percent say their trust in an organization, product or service is reduced when it's been hacked. Around two thirds believe that PCs, smartphones and social networks will continue to be exposed, whereas only 21 percent see the risk of such issues with kitchen appliances in the near future.

6 in 10 say their trust isn't affected much by hacks and virus attacks, and half think these problems will become part of everyday life within 3 years. Around half also say they will continue using PCs and smartphones in the same way they do today, even after they have been compromised.

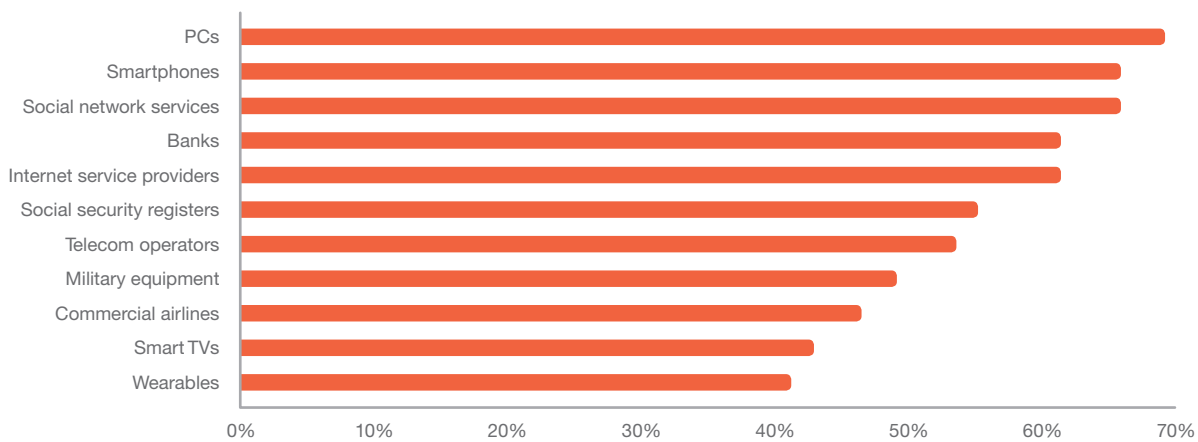
This may be because consumers feel they have no control over these issues, or find it hard to relate to them.

Only 39 percent say they will continue to use a social network service normally once it's suffered an intrusion. Consumers also see that new security services may appear. For instance, 43 percent think we will be required to identify ourselves whenever we use the internet within the next 3 years.

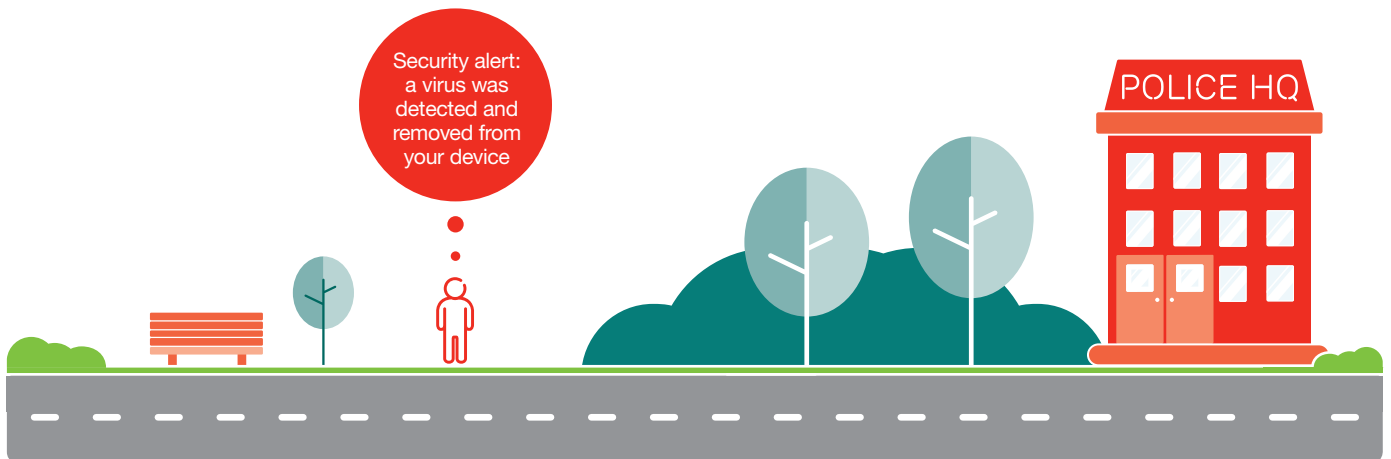
Hacking potentially also has some positive effects. Knowing an organization has been attacked and then managed to solve the issue can increase consumer trust. As many as 21 percent say their trust goes up after an organization has successfully resolved a problem after being hacked or infected.

Although these issues remain problematic, consumers will continue to use online services, which will need to constantly improve as a result.

Figure 7: Consumers prediction of devices, services and organizations likely to get hacked



Source: Ericsson ConsumerLab, 10 Hot Consumer Trends 2016, 2015
 Base: 6,649 iOS/Android smartphone users aged 15–69 in Istanbul, Johannesburg, London, Mexico City, Moscow, New York, Paris, San Francisco, São Paulo, Shanghai, Singapore, Sydney and Tokyo



10. NETIZEN JOURNALISTS

By sharing observations, opinions and ideas and actively commenting on what others post online, smartphone owners are increasingly acting like journalists.

Citizens have been involved in such journalistic activity before, but the value on an individual level is increasing as more people participate as netizens online.

Two thirds of smartphone owners say they share more information online now than ever before. For example, over 70 percent say they share personal photos regularly, and have an audience who see what's been shared.

Companies feel this impact. 34 percent of smartphone owners who have had a bad experience with a company due to a faulty product or service share that experience, all or most of the time it happens. When sharing such experiences, others take notice. On a weekly basis, 29 percent say they read about bad experiences that others have had, and 27 percent share or repost complaints about companies or authorities that others have posted.

People believe this will have a big effect on society and they expect their contribution to be heard. 37 percent say sharing information about a corrupt company online has a greater impact than going to the police. Furthermore, as many as 54 percent of smartphone owners also believe the internet has increased the possibility for whistleblowers to expose corrupt and illicit behavior.

In these and other ways, consumers are increasingly important as influencers on the future of societal evolution.



Two thirds share more information online than ever before



Source: Ericsson ConsumerLab, Information Sharing, 2015
Base: 5,025 iOS/Android smartphone users aged 15-69 in Berlin, Chicago, Johannesburg, London, Mexico City, Moscow, New York, São Paulo, Sydney and Tokyo

Ericsson is the driving force behind the Networked Society – a world leader in communications technology and services. Our long-term relationships with every major telecom operator in the world allow people, business and society to fulfill their potential and create a more sustainable future.

Our services, software and infrastructure – especially in mobility, broadband and the cloud – are enabling the telecom industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities.

With approximately 115,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Forty percent of the world's mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions – and our customers – stay in front.