



The International Communications Market 2017

Internet and online content

Contents

7.1	Internet and online content: overview and key market developments	132
7.1.1	The UK in context	132
7.1.2	Key market development: proliferation of connectivity and data collection creates new cyber-security concerns	134
7.1.3	Key market development: the internet is becoming the most-used source of news	142
7.2	Connected devices	147
7.2.1	Smartphones were the most popular internet device in the majority of our comparator countries	147
7.2.2	Smart devices are extending internet connectivity into more aspects of people's lives	148
7.3	Online content	150
7.3.1	Browsing	150
7.3.2	Social networking	158
7.3.3	Financial activities and e-commerce	161
7.4	Internet advertising	166
7.4.1	Internet advertising expenditure	166
7.4.2	Consumer attitudes to internet advertising	171

7.1 Internet and online content: overview and key market developments

Figure 92 Key metrics

	UK	FRA	GER	ITA	USA	JPN	AUS	ESP	NED	SWE	POL	NZD	KOR	BRA	RUS	IND	CHN	NGA	POR
Online universe (m) ¹	51	46	60	38	254	81	n/a	32	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Desktop/laptop online universe (m) ²	47	43	57	28	220	60	18	22	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Smartphone online universe (m) ³	31	20	36	28	178	54	n/a	26	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Desktop use (%) ⁴	39	50	51	51	47	38	49	56	n/a	41	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Laptop use (%) ⁴	66	71	72	68	61	66	67	63	n/a	69	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tablet use (%) ⁴	52	45	43	51	45	25	46	55	n/a	44	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Smartphone use (%) ⁴	75	77	78	85	69	58	77	87	n/a	78	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Desktop/laptop internet advertising expenditure (£bn) ⁵	6.0	1.9	5.0	1.3	26.6	5.9	2.8	1.2	1.1	1.1	0.5	0.4	2.2	1.0	1.1	0.4	16.4	0.02	0.1
Mobile internet advertising expenditure (£bn) ⁵	3.7	1.0	0.4	0.2	27.1	2.6	1.3	0.1	0.3	0.2	0.1	0.0	1.4	0.5	0.2	0.2	11.4	0.03	0.03
Weekly or greater access to social networking (%) ⁶	73	71	64	83	80	51	74	86	n/a	77	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Sources:

- 1 comScore MMXMP, August 2017. 'Mobile data' is persons 18+ for all countries and desktop data is persons 2+ (US), 4+ (Spain) and 6+ (rest). Japan and Australia have not been included due to differences in panel availability.
- 2 comScore MMX, home & work panel, August 2017, persons 2+ (US), 4+ (Spain), 6+ (other). ComScore has data available for the countries indicated by n/a but we did not order it.
- 3 comScore MoMX, August 2017, persons 18+. ComScore has data available for the countries indicated by n/a but we did not order it.
- 4 Ofcom research, 2017 All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000. Q4bii: Which of the following services do you personally use either at home or elsewhere?
- 5 2016. PwC Global Entertainment and Media Outlook 2017-2021 @ pwc.com/outlook. Values converted from dollars to UK £ sterling (\$1 = £0.74).
- 6 Ofcom research, 2017 All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000. Q9. How often do you use the internet on any of your devices for each of the following activities?

Desktop/laptop online universe (m) and smartphone online universe (m) includes home use and use at work, whereas desktop use (%), laptop use (%) and tablet use (%) is based on UK households.

7.1.1 The UK in context

Ubiquitous high-speed fixed and mobile networks are enabling consumers around the world to live more of their lives online – communicating, being entertained, buying goods and finding information. Our need to be constantly connected has driven the proliferation of internet-connected devices, and at the forefront is the smartphone. At least three-quarters of internet users in all the countries we surveyed said they personally used a smartphone; 83% in the UK, which was higher than in the US (76%), but lower than in Spain and Italy (each 90%). Smartphones are also the internet devices on

which consumers spend the most time. According to comScore, adults in the UK spent an average of 62 hours on their smartphone in August 2017, but those in the US spent the most time, averaging 75 hours. This compares to an average of 27 hours in the UK, and 25 hours in the US, spent using the internet on a laptop or desktop computer.

Smartphones and tablets (personally used by 52% of UK internet users, higher than in most other comparator countries), enable people to connect while on the move. And online video services are also increasingly available on their television sets. Around a third of internet users in the UK (31%) reported having a smart TV (i.e. a TV that can be connected directly to the internet); take-up was highest in Spain (39%) and Germany (37%). Streaming sticks (such as Roku or Amazon Fire) are also widely used to access online services on the TV set; take-up of these was highest in the UK (18%) along with Sweden (20%) and the US (18%).

A characteristic of the internet-connected world is the prominence of the US-based online giants. According to comScore, Google properties (including Search, YouTube and Gmail) had the highest reach on mobile (smartphone and tablet) and on PC (laptop and desktop) in all of the countries for which we have data, including the UK. On mobile, Facebook was the second most popular comScore property across the comparator countries. It was also the highest-reaching social network on desktop and mobile, across the comparators. And according to App Annie Intelligence, Facebook was prominent in the iOS app and Google Play markets, with the most monthly active users of all our comparator countries apart from Japan, where Asia-native LINE led the market.

The UK stands out as a nation of internet shoppers, with the highest e-commerce turnover per head among comparator countries, at £2,175, more than double the next highest markets, Sweden (£1002) and the Netherlands (£977). Mobile payments are adding a new dimension to online shopping: over half of UK smartphone users checked their bank balances and purchased products online using their mobile device in 2017. Sweden ranked first for checking bank balances online, at three-quarters of smartphone users, while the US and Spain ranked highest for purchasing products online, at 57% and 56% respectively.

The rising prominence of smartphones for online activities is fuelling the growth of internet advertising revenues. Internet ad expenditure accounted for more than half of all advertising expenditure in the UK, along with Sweden and China, for the first time in 2016. The share of mobile ad expenditure among all internet ad spend grew in all comparator countries year on year, accounting for more than half in some markets. It comprised 38% of internet ad spend in the UK in 2016, up from 30% in 2015. The US had the highest proportion of mobile ad spend out of total internet ad spend, at 51% in 2016, up from 35% in 2015.

Online advertising is underpinned by the use of personal data. Our research found that a majority of internet users in the UK (69%), and in most other countries surveyed, are concerned that online personal information is not being stored securely by websites. A similar proportion (68% in the UK, and a majority in most other countries surveyed) also reported that they were concerned about websites / apps sharing their data with third parties.

In the first two sections of this chapter we look at two areas where increased internet connectivity is affecting individuals and society; cyber-security and data privacy, and online news consumption. In the

rest of the chapter we provide overviews comparing the UK to international comparators in: the take-up and use of internet-connected devices; the most popular internet services on PCs and mobile devices; the use of social networking; mobile banking and payments; internet shopping; and internet advertising.

7.1.2 Key market development: proliferation of connectivity and data collection creates new cyber-security concerns

Overview

As more and more devices connect to the internet, everything from IoT household appliances to government networks become potential targets for hacking. Some devices do not need even to be connected to the internet to suffer a security breach; a wireless connection can render devices vulnerable. In order to protect themselves, most companies set up their own secure networks through VPNs and firewalls, but the average citizen and consumer usually rely on passwords and retail anti-virus software.

Businesses and companies with an established online presence have protected themselves from online threats by ensuring that their technology keeps up with the latest security offerings. But as the landscape for cyber-security evolves, so do the threats.

Data breaches and attacks

Data breaches and attacks appear to fall into two categories:

1) Targeting personal data

Global impact: For example, in October 2017, credit monitoring company Equifax announced it had suffered a data breach that resulted in the unlawful access of personal information of US and UK citizens by hackers¹⁴⁰.

Individual impact: For example, in September 2017, researchers found that Fitbit fitness trackers were susceptible to hacking. Personal information could be accessed from the device as it was sent to the company's cloud servers for analysis¹⁴¹.

Hackers can gain access to personal data by targeting the IT systems of businesses, or by targeting individual consumers. Businesses and companies are likely to have sophisticated measures in place, but individual consumers are likely to have only basic protection, if any, making them vulnerable. Monetary loss can be the most obvious consequence, but stolen personal data is often more valuable to hackers when sold on the 'dark web'. In August 2013 Yahoo experienced a data breach compromising the records of up to 1 billion users; three years later the information was discovered on the dark web for sale at up to \$300,000, which is when it came to the attention of Yahoo¹⁴². The WannaCry virus in May 2017 infected businesses and organisations in 150 countries including the UK's NHS systems, Spanish incumbent telecoms provider Telefónica, and American courier and shipping company FedEx.

¹⁴⁰ <http://www.bbc.co.uk/news/technology-41737241>

¹⁴¹ <http://www.telegraph.co.uk/technology/2017/09/14/fitbit-devices-can-hacked-research-shows/>

¹⁴² <https://www.nytimes.com/2016/12/15/technology/hacked-yahoo-data-for-sale-dark-web.html>

2) Hacking to disrupt the running of a service

Global impact: For example, in October 2016, a distributed denial-of-service attack (DDoS)¹⁴³ on Dyn, an internet infrastructure company¹⁴⁴, caused a number of popular websites, including Amazon, Twitter, Spotify, Netflix and Reddit, to crash for a few hours, causing disruption for customers.

Individual impact: For example, in July 2015, Fiat recalled 1.4 million Jeep Cherokee vehicles after researchers remotely accessed and disabled the brakes and steering system by seizing control of a car's Uconnect information and entertainment dashboard while it was in transit¹⁴⁵.

Attacks like that experienced by Dyn are intended to cause inconvenience and disrupt the operation of online sites. The source of most attacks can usually be traced back to a computer, but the Dyn attack was different because it targeted networks largely associated with connected devices such as digital cameras and DVR players. The emergence of connected cars creates potential new threats: in August 2017, the UK Government issued cyber-security guidelines for connected and automated vehicles, to ensure that security is prioritised, in order to prevent a cyber-attack such as accessing personal data or taking control of the vehicle remotely¹⁴⁶. Cyber-attacks can also have more serious effects than inconvenience and disruption: the UK's National Health service was hit by the WannaCry virus in May 2017, resulting in operations being cancelled or delayed.

¹⁴³ <https://www.theguardian.com/technology/2016/oct/26/ddos-attack-dyn-mirai-botnet>

¹⁴⁴ Dyn is best known for providing domain name system services that essentially help websites get from an address like 'ofcom.com' to the web servers that host the pages

¹⁴⁵ https://www.washingtonpost.com/news/the-switch/wp/2015/07/24/fiat-recalls-1-4-million-cars-vulnerable-of-being-hacked/?tid=a_inl&utm_term=.2af90e94c764

¹⁴⁶ <https://www.gov.uk/government/publications/principles-of-cyber-security-for-connected-and-automated-vehicles/the-key-principles-of-vehicle-cyber-security-for-connected-and-automated-vehicles>

Figure 93 Notable data breaches 2016-2017



Online data security concerns

Internet users in our comparator countries were asked about their attitudes toward cyber-security. Overall, the findings show high levels of concern; across all countries, 63% were concerned about

websites failing to store data securely, 62% were worried about their data being passed to third parties, and 67% were concerned that someone might misuse their personal data.

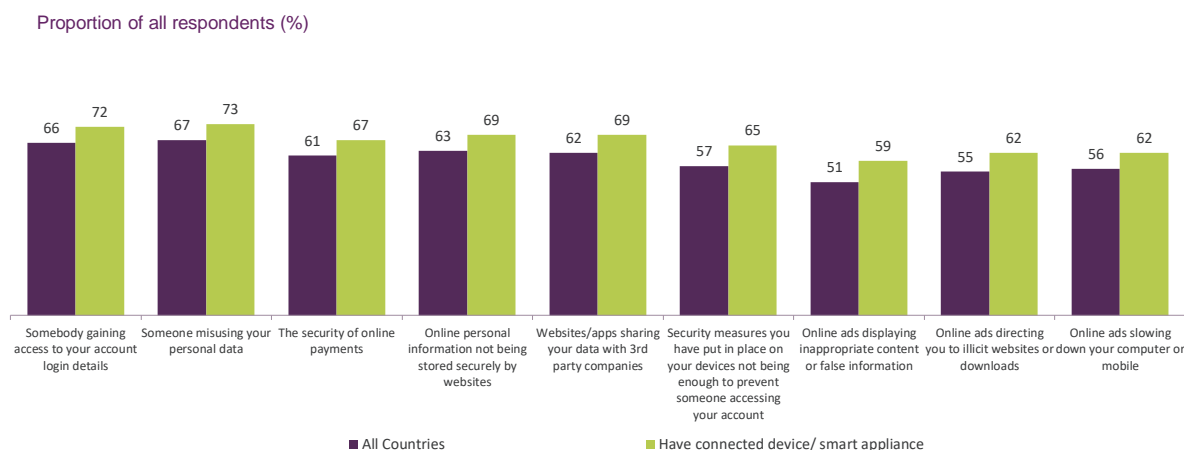
Respondents with connected devices and/or smart appliances in their homes were even more likely to worry about these issues, perhaps indicating that they were aware that these devices may be at risk.

Fifty-seven per cent of consumers across all countries worry about the robustness of security measures on their devices

Despite taking steps to protect their online privacy and security, 57% of consumers across all countries are not sure they have done enough; the figure rises to 65% of respondents who have connected devices or smart appliances. Three-quarters of respondents in Spain (76%) felt that the measures they had put in place were insufficient to stop someone accessing their accounts, followed by respondents in the US (67%) and Italy (64%). Respondents in France were the least concerned, at 32%. In the UK, the level of concern was 57%.

Analysing the findings by country, respondents in Spain were the most concerned about all the listed threats; the highest levels of concerns were about someone gaining access to their account login details (83% compared to the UK's 68%); someone misusing their data (82% compared to the UK's 69%); the security of online payments (79% compared to the UK's 63%); and online personal information not being stored securely by websites (79% compared to the UK's 69%). According to Quocirca's report *The Trouble At Your Door*¹⁴⁷ Spain is one of the EU countries most affected by cyber-attacks. A number of Spanish organisations featured in the top 25 of the top 40 worst cyber-attacks across Europe, with the retail sector being most affected, followed by financial services. This may explain the high levels of concern among respondents in Spain.

Figure 94 Levels of concern associated with data security threats: 2017



Source: Ofcom research 2017

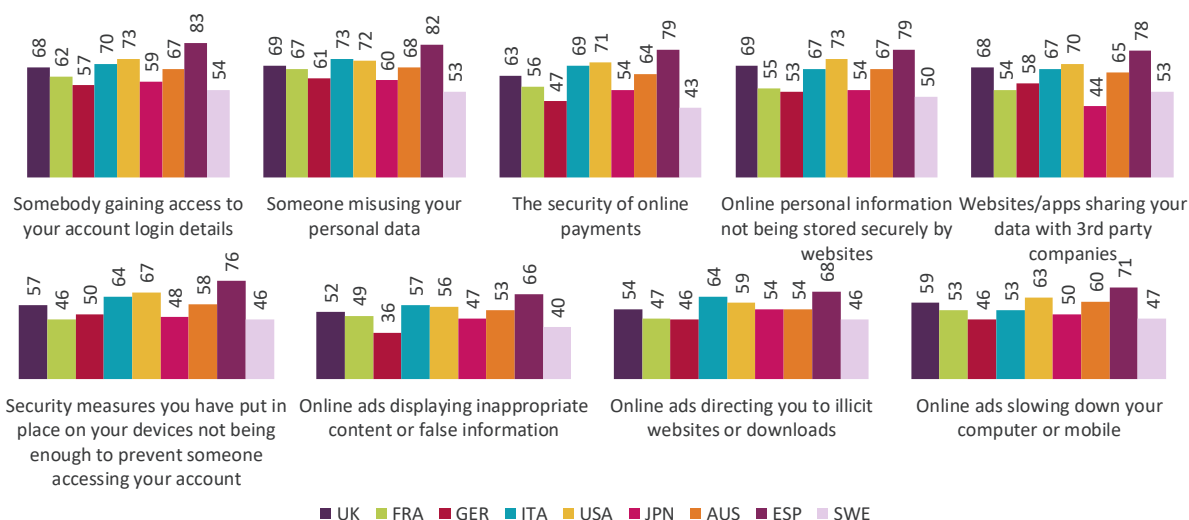
Base: All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000

Q10e. How concerned or unconcerned are you about each of the following when carrying out online activities?

¹⁴⁷ <http://quocirca.com/content/trouble-your-door-targeted-cyber-attacks-uk-and-europe>

Figure 95 Levels of concern associated with data security threats, by country: 2017

Proportion of all respondents (%)



Source: Ofcom research 2017

Base: All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000

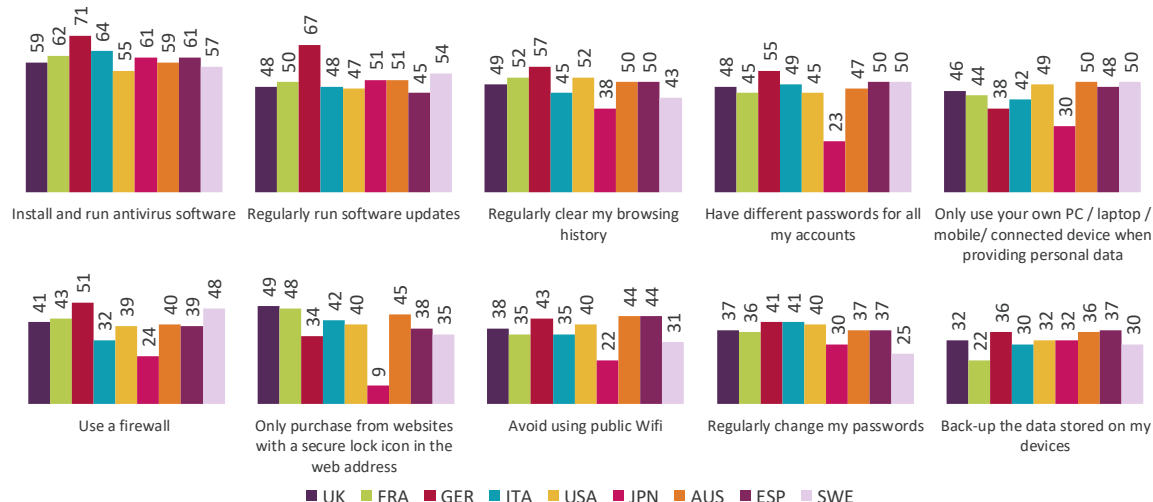
Q10e. How concerned or unconcerned are you about each of the following when carrying out online activities

Prevention

Most people acknowledge that they need some form of protection to protect their personal and financial data when using the internet. Our survey asked internet users what privacy and security measures they had taken when going online, and found that most respondents had taken some action, in the form of installing and running antivirus software, although this varied from 55% of respondents in the US to 71% in Germany. Overall, respondents in Germany were also most likely to have in place each of the listed security protection measures than any of the comparator countries such as: regularly running software updates; regularly clearing their browsing history; having different passwords for different accounts; using a firewall and regularly changing their passwords.

Figure 96 Security protection measures used: 2017

Proportion of all respondents (%)



Source: Ofcom research 2017

Base: All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000

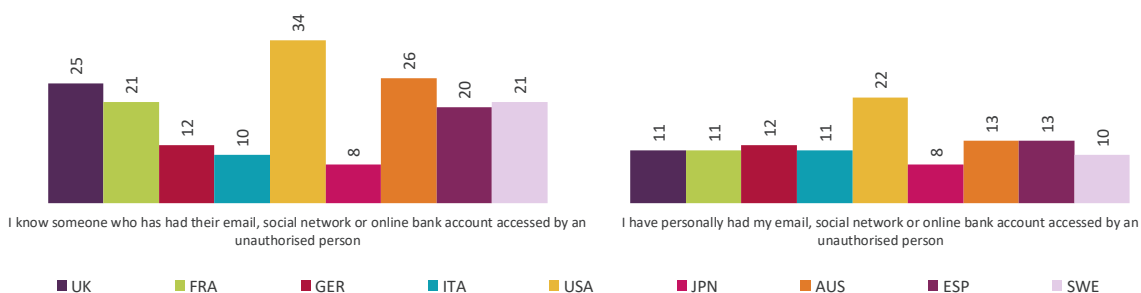
Q10f. Which of the following security measures or checks, if any, do you use when going online?

Account hacking

Respondents in the US were the most likely to say that they knew someone whose account (email, social or bank) had been hacked into (34%) and were also the most likely to have experienced it themselves (22%). A quarter of respondents in the UK personally knew someone who had been a victim of hacking, compared to just over one in ten (11%) who had themselves been a victim.

Figure 97 Security breaches experienced: 2017

Proportion of all respondents (%)



Source: Ofcom research 2017

Base: All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000

Q10g. Have you ever experienced any of the following situations?

Our research showed that, apart from in Japan, a substantial proportion of respondents across all of the comparator countries reported having received a suspicious email or message asking them to divulge

confidential personal or financial information. Forty-four per cent of consumers surveyed in the UK said this had happened to them, as did more than half of respondents in France, Germany and Italy.

Seventeen per cent of consumers across the comparator countries reported having been prompted to be careful online, either by reviewing their security settings or verifying a login from a different location, by one of their service providers (bank, social network or e-commerce company). Consumers in Sweden (22%), France (23%) and the US (20%) were most likely to report this, but only 14% of consumers in the UK, Japan and Australia said they had been alerted in this way.

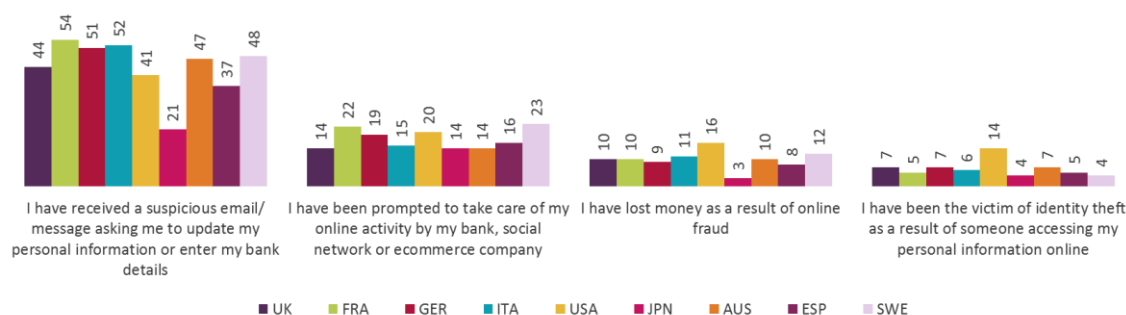
Internet users in the US are the most likely to have lost money through online theft and to have been a victim of identity theft

Sixteen per cent of internet users in the US said they had lost money due to online fraud, compared to 10% in the UK. Seven per cent of consumers in the UK said they had been a victim of online identity theft as a result of people accessing their personal information online, while the equivalent figure in the US was 14% - at least double the figure for all the other comparator countries.

Respondents in Japan were less likely to have experienced any of the security breaches featured in the questionnaire: 59% of respondents said they had never experienced any of the concerns listed.

Figure 98 Security breaches experienced: 2017

Proportion of all respondents (%)



Source: Ofcom research 2017

Base: All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000

Q10g. Have you ever experienced any of the following situations?

Collecting and storing of personal data

When consumers are connected to the internet via a website or an app, the devices they use to access content online are ‘smartly’ collecting and storing information about them: their whereabouts, their preferences, their habits. Consumers may be unaware of how this information is used by third-party companies for targeted advertising. Many companies use algorithms which use data gathered online, such as consumption and location history, and use the data to optimise website/app features, in order to improve users’ experience and to recommend products and services for sale. Online properties and third-party providers collect and aggregate data about consumers’ online activity such as first party sign-in data (e.g. data gathered after logging into Facebook and ITV Hub), traditional demographic data (e.g. age, gender), behavioural data (e.g. affiliation with car websites) and cookie-acquired data (e.g. browsing history).

Ofcom research shows that respondents feel quite protective of how their personal information is used. Almost seven in ten (69%) consumers in the UK expressed concern that their online personal information was not being stored securely by websites. Respondents in Spain were most concerned, at 79%, whereas those in Sweden were the least concerned, at 50%. Websites and apps that shared user data with third-party companies were flagged as an area of concern, with 78% of respondents in Spain and 68% in the UK feeling troubled by this.

However, of all the concerns expressed around online advertising, respondents were more anxious about how this might slow down their devices than they were about inappropriate content or false information.

Regulation

According to PwC¹⁴⁸, 90% of large and 74% of small UK organisations reported suffering a data breach in 2015, so the incentive to address cybersecurity and privacy is a priority for most organisations. This increasing concern, and the growth in online data breaches, has pushed cyber-security up the agenda for all digital economies.

In Europe, the introduction of the **General Data Protection Regulation**¹⁴⁹ (GDPR), will take effect on 25 May 2018, with the purpose of strengthening and rationalising data protection for all individuals within the EU. It will replace the existing Data Protection Directive at EU level. The GDPR aims to address technological advancements and capture the differing ways in which data is used and shared, from social media platforms to targeted advertising, covering all aspects of the data lifecycle.

Outside Europe, recent laws and regulations to protect online security include:

- The USA's *Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure*, (May 2017) is an overarching cybersecurity law¹⁵⁰ widening the scope laid down by the Obama administration in 2013¹⁵¹.
 - China's Cyber Security Law (June, 2017) introduced a wide range of data controls.
 - Japan's Act on the Protection of Personal Information, amended in 2015 to reflect modern society and international data protection laws, covers spam and third-party data processing but not cookies, and does not restrict the transfer of data outside Japan.
 - The Philippines' Data Privacy Act (2012) adopted elements of the EU GDPR including the data breach notification obligation, special requirements in relation to consents to profiling, and a right to data portability.

¹⁴⁹ http://ec.europa.eu/justice/data-protection/reform/index_en.htm

¹⁵⁰ <https://www.whitehouse.gov/the-press-office/2017/05/11/presidential-executive-order-strengthening-cybersecurity-federal>

¹⁵¹ <https://obamawhitehouse.archives.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity>

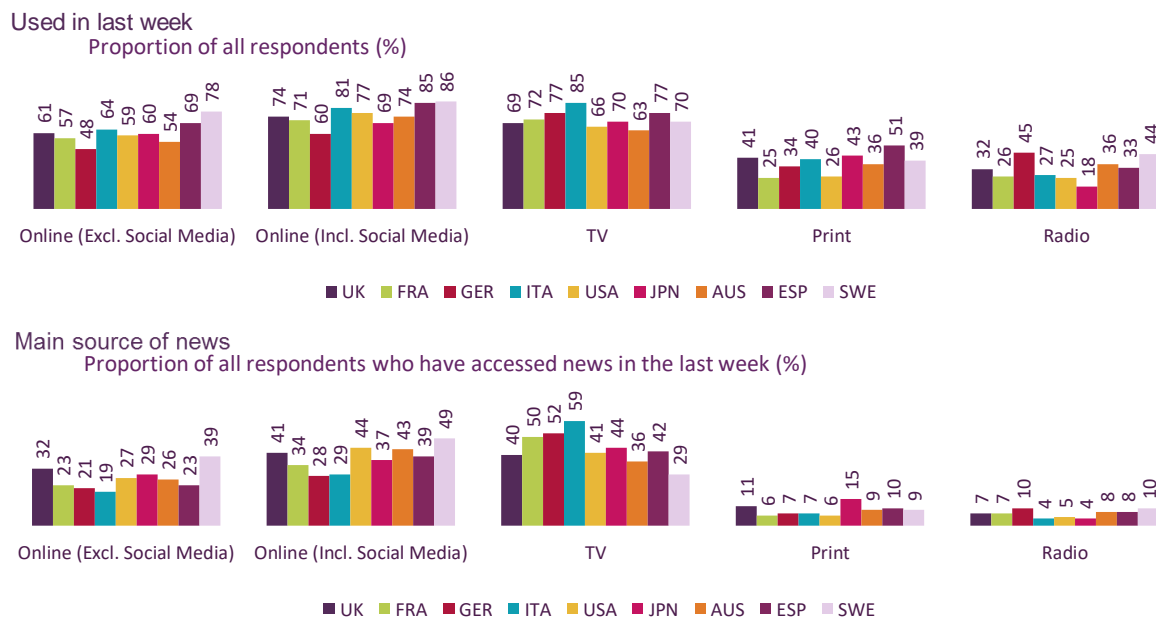
7.1.3 Key market development: the internet is becoming the most-used source of news

In the UK and in most other countries surveyed, more people access news on the internet (including social media) than on television

As in previous years, this section of the report uses survey data from the Reuters Institute’s *Digital News Report*.¹⁵² All interviewing was conducted online, so it must be borne in mind that all respondents were internet users, and therefore not representative of the total population of each country.

With the exception of Sweden, the survey data in all our comparator countries showed that TV is the most-used source for news, followed by online (excluding social media). When use of social media is added to the online sources, online becomes the main source of news in five of our countries (UK, US, Australia, Spain and Sweden). In the UK, 74% of respondents used online sources including social media for news, and 41% said this was their main news source. Use of online as the main news source was highest in Sweden, where 49% of respondents nominated online as their main source of news compared to 29% for TV.

Figure 99 Sources used for news: 2017



Source: Reuters Institute / YouGov research Jan/Feb 2017

Base: Q3 All respondents: UK=2112, FRA=2000, GER=2062, ITA=2011, USA=2269, JPN=2000, AUS=2004, ESP=2006, SWE=2021

Q4 All who have accessed news in the last week: UK=2026, FRA=1898, GER=1950, ITA=1997, USA=2193, JPN=1902, AUS=1914, ESP=1964, SWE=1969

Q3 Which, if any, of the following have you used in the last week as a source of news? Q4. You say you’ve used these sources of news in the last week, which would you say is your main source of news?

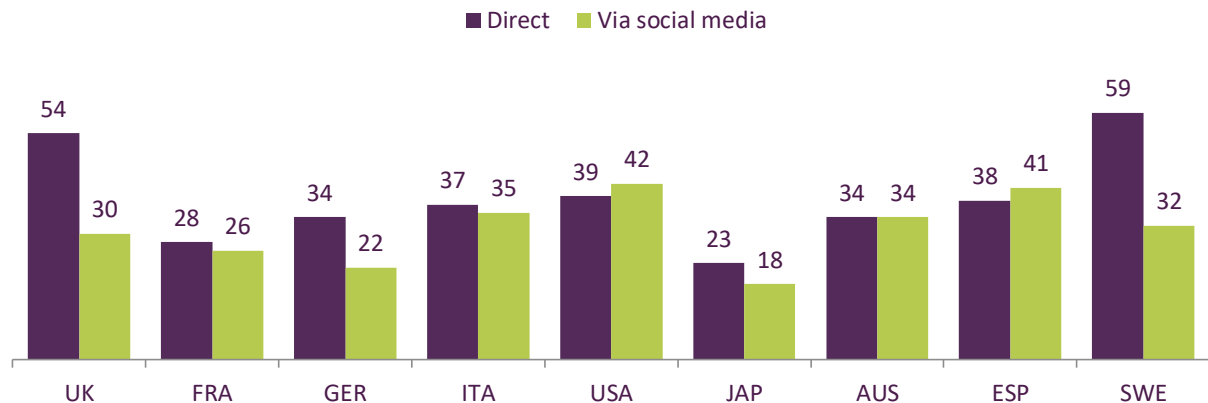
¹⁵² Research was conducted online by YouGov on behalf of the Reuters Institute at the end of January and beginning of February 2017. Results were published online and can be found here: digitalnewsreport.org

People in the UK and Sweden are more likely to access news websites direct rather than via social media

Respondents in the UK and in Sweden, and to a lesser extent in Germany and Japan, were more likely to access online news by going directly to a news website or app (e.g. BBC News, Guardian, Mail online, Huffington Post), whereas those in the other comparator countries were equally likely to access online news via social media as by going direct to a news website.

Figure 100 Sources used for news: 2017

Proportion of respondents who used each method (%)



Source: Reuters Institute / YouGov research Jan/Feb 2017

Base: Total sample (around 2000 in each country)

Q10: Thinking about how you got news online (via computer, mobile or any device) in the last week, which were the ways in which you came across news stories?

Social media is widely used for news in the UK and other countries – but only 9% in the UK considered it their main source of news, compared to 18% in the US

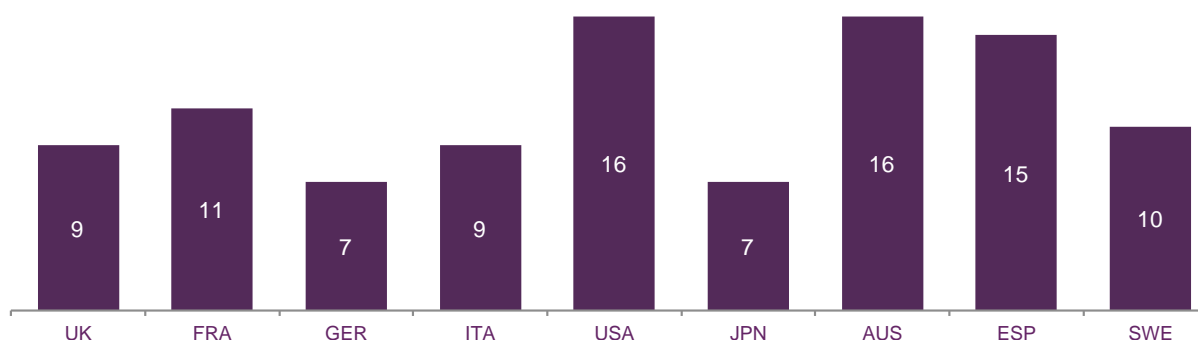
Spain, Sweden and the US lead in the use of social media for news; more than half of those who had accessed any news in the past week, in each of these countries, had done so via social media. But social media is less likely to be their main source of news; less than a fifth in each of these countries say it is their main source.

In the UK, 41% of respondents had used social media for news in the last week, with 9% citing it as their main source. Respondents in Australia the US (both 16%) and Spain (15%) were the most likely to cite social media as their main source of news.

Figure 101 Use of social media as a main source for news: 2017

Proportion of respondents who have accessed news in the last week (%)

Social media as main source for news



Any use of social media for news (Proportion of all respondents) (%)

UK	FRA	GER	ITA	USA	JPN	AUS	ESP	SWE
41	38	29	49	51	29	46	58	51

Source: Reuters Institute / YouGov research Jan/Feb 2017

Base: Q3 total sample (around 2000 in each country), Q4. All in each country who used a source of news in the last week (around 2000 in each country). Q3: Which, if any, of the following have you used in the last week as a source of news? Please select all that apply; Q4: You say you've used these sources of news in the last week. Which would you say is your main source of news?

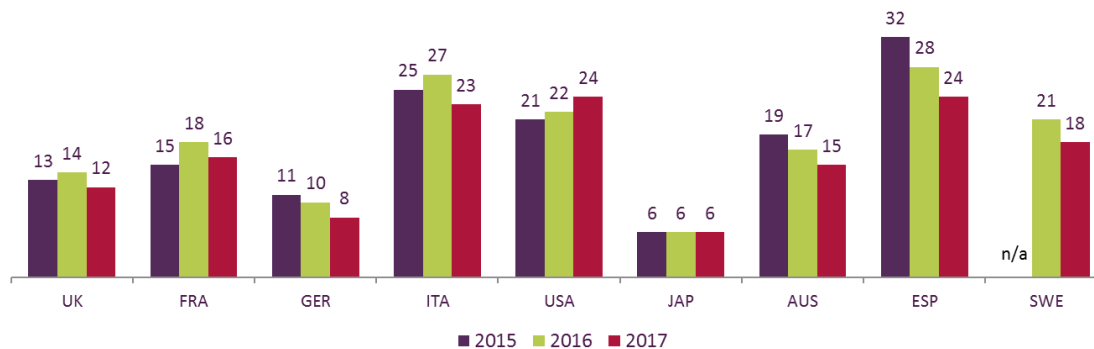
Internet users in the US, Italy and Spain are twice as likely as those in the UK to comment on news in social media

While respondents in Spain were the most likely to use social media for news (see Figure 101), they were also the most likely, along with those in Italy and the US, to comment on news on social media. This trend has decreased year on year since 2015, when it peaked at 32%. In Italy and Spain in 2017 there was a four percentage point decrease in the proportion of respondents using social media to comment on news (to 23% in Italy and 24% in Spain).

In the UK, only 12% of respondents reported that they had commented on news using social media in 2017. Those in Japan and Germany are the least likely to do this.

Figure 102 Commenting on news on social media: 2015-2017

Proportion of news users who comment on news on social media (%)



Source: Reuters Institute / YouGov research Jan/Feb 2017

Q13: During an average week, in which, if any, of the following ways do you share or participate in news coverage?

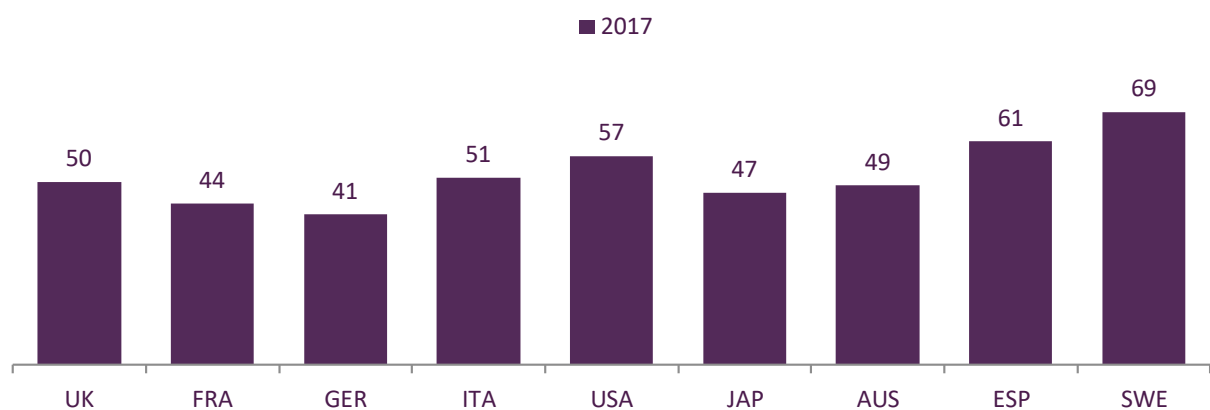
Base: Total sample (around 2000 in each country)

Mobile phones are widely used for accessing news in all countries surveyed

Use of mobile phones for news was highest in Sweden (69% in the last week), Spain (61%) and the US (57%). Half of those in the UK had used their mobile for news in the past week. When ownership of smartphones is taken in to account [see Figure 105), smartphone users in Japan were the most likely to use their smartphone for news (just 58% of Japanese respondents used a smartphone but 88% of these accessed news on their mobile). The lowest level of use of a smartphone for news among smartphone owners was in Germany, where 78% used a smartphone and 53% of these used a mobile to access news.

Figure 103 Use of mobile phones for news: 2017

Proportion of all respondents (%)



Source: Reuters Institute / YouGov research Jan/Feb 2017

Base: Total sample (around 2000 in each country)

Q8b: Which, if any, of the following devices have you used to access news in the last week?

Trust in social media as a news source is lowest in the UK

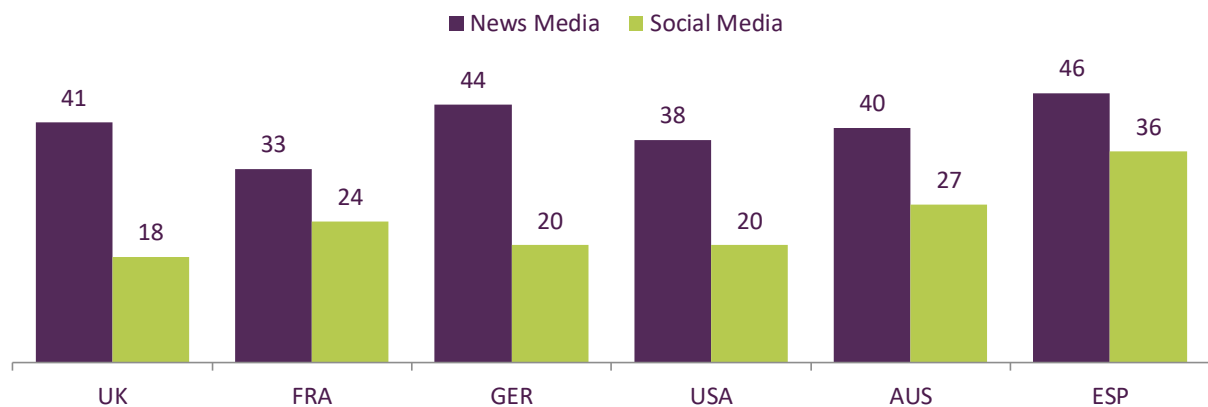
There has been much in the media recently about ‘fake news’ and the extent to which various sources of news can be trusted. Respondents were asked to what extent they felt that traditional news sources and social media sources did a good job of separating fact from fiction.

In all six comparator countries where this question was asked, only a minority of consumers agreed that news media did a good job of helping me to separate fact from fiction. Forty-one per cent of UK respondents agreed with this, higher than in the US and France, but lower than in Spain and Germany.

However, in all countries traditional news media was felt to do a better job than social media in this respect. Trust in social media as a news source was lowest in the UK, where 18% felt that social media sources succeed in separating fact from fiction.

Figure 104 Whether news and social media sources do a good job of separating fact from fiction: 2017

Proportion of respondents who agree (%)



Source: Reuters Institute / YouGov research Jan/Feb 2017

Base: Total sample (around 2,000 per country)

Q6_2017_1/2 The news media / social media does a good job in helping me distinguish fact from fiction.

7.2 Connected devices

7.2.1 Smartphones were the most popular internet device in the majority of our comparator countries

In 2017, smartphones were the most popular internet device, in all the comparator countries except Japan. Three-quarters of consumers in the UK used smartphones, broadly in line with France (77%), Germany (78%), Australia (77%) and Sweden (78%). Reported smartphone use was lowest in Japan¹⁵³ (58%) and the US (69%), and highest in Spain (87%) and Italy (85%).

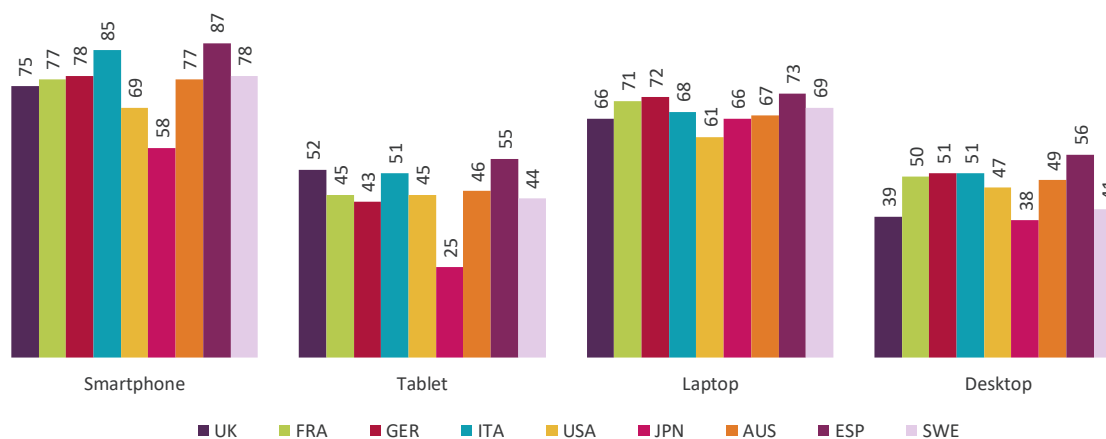
Laptops were the second most popular device among consumers in all comparator countries except Japan, where they were the most popular device. In the UK, use of laptops was 66%, broadly in line with Japan (66%), Australia (67%), and Italy (68%), higher than in the US (61%), and lower than in the four remaining comparator countries.

Tablet use was highest in Spain (55%), the UK (52%) and Italy (51%). Tablet use in Japan was significantly lower than in the other comparator countries, at 25%.

Desktops were considerably less popular than laptops across the comparator countries. Desktop use was 39% in the UK in 2017, in line with Japan (38%) and Spain (41%), and lower than in the seven remaining comparator countries.

Figure 105 Personal use of devices: 2017

Proportion of all respondents (%)



Source: Ofcom research 2017

Base: All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000

Q4a. Which of the following devices do you personally use either at home or elsewhere?

¹⁵³ Use of connected devices in general was lowest in Japan and is believed to be due to language and translation issues. The term 'smartphone', used when conducting the research, is not widely used in Japan; these phones are referred to as 'feature phones'.

7.2.2 Smart devices are extending internet connectivity into more aspects of people's lives

Smartphones allow individuals to connect with the world around them in myriad ways; they are often the one device relied on most for accessing the internet.¹⁵⁴ They are also increasingly used as an interface to manage other connected devices, using an internet, wifi or Bluetooth connection. There are numerous apps that allow users to connect to appliances in their homes via a smartphone, including:

Ring - a video doorbell that lets users answer the door from anywhere;

Nest Thermostat - allows users to programme their heating and hot water remotely;

Nest Protect - a smoke and carbon monoxide detector that alerts the user when something is wrong when they are away from home;

Samsung Connect - allows users to remotely control Samsung devices; e.g. TV, washing machine, fridge/freezer; and

Abode Connected Home Security – which has sensors to detect open door/ open window, motion detector with camera, key fobs and keypads.

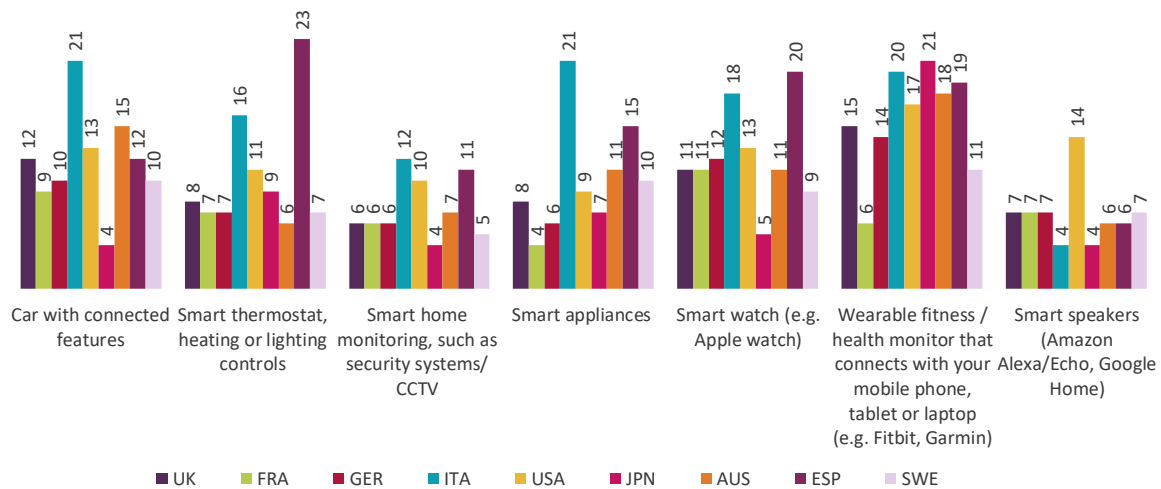
We asked internet users in seven countries about their use of smart devices. Take-up was generally low: apart from wearable fitness/ health monitors, use of smart devices was generally less than 10% across the surveyed countries. For respondents in the UK, of the seven smart devices asked about, the consumers' most-used smart device was a wearable fitness/ health monitor such as a Fitbit or Garmin (but take-up was still relatively low, at 12%). Consumers in Australia had the highest use, at 14%, whereas consumers in France had the lowest use, at 6%. Among the comparator countries, of the seven smart devices asked about, smart fitness monitors were the most-used smart devices overall whereas smart speakers (such as Amazon Alexa/ Echo or Google Home) were generally the least used. Use of smart speakers was highest in the US at 10%, which may be because these devices were released in the US first.

Overall, respondents in Spain and Italy had the highest level of use of the seven smart devices that we asked about; 36% of respondents in each country claimed to use at least one of the seven smart devices that we asked about (compared to 28% of respondents in the UK).

¹⁵⁴ Figure 5.1, https://www.ofcom.org.uk/_data/assets/pdf_file/0017/105074/cmr-2017-uk.pdf, p.165

Figure 106 Smart devices personally used: 2017

Proportion of all respondents (%)



Source: Ofcom research 2017

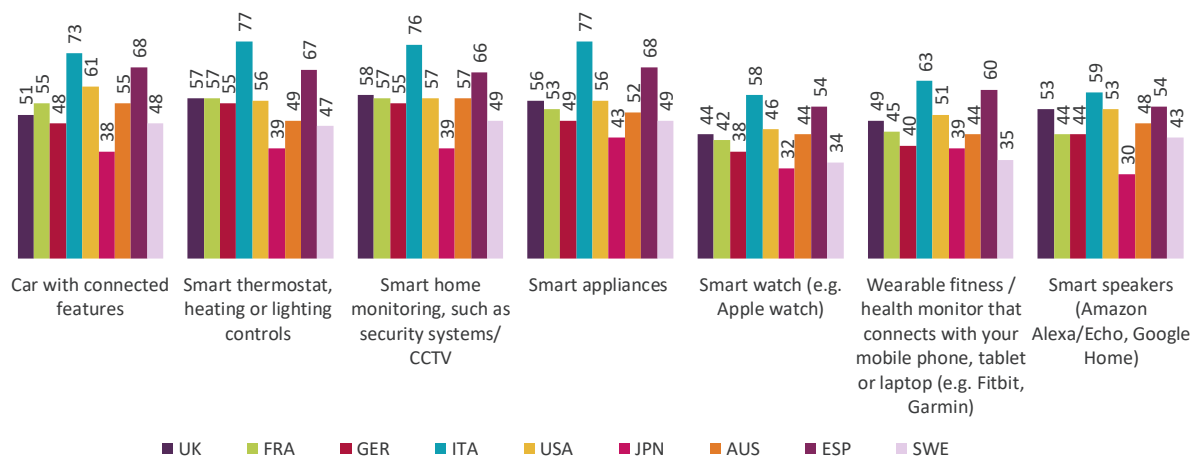
Base: All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000

Q4a. Which of the following devices do you personally use, either at home or elsewhere?

Although use of these devices is currently low, our research found that among those who did not own any of the seven listed smart devices, a large proportion were highly interested in acquiring them. Overall, consumers in the US and Italy showed the most interest in owning each of the devices. In the UK, among those who did not own a smart device, about one in five said they would be interested in doing so. Consumers in Japan without these devices were the least interested in acquiring them, reflecting the fact that they had the lowest usage levels (see Figure 107)

Figure 107 Interest in ownership of smart devices: 2017

Proportion of respondents without the named product/service (% who rated interest as 8-10)



Source: Ofcom research 2017

Base: All those without the specified device (varies by type) - UK=865-954, FRA=933-1001, GER=877-960, ITA=821-907, USA=832-915, JPN=814-983, AUS=829-956, ESP=791-906, SWE=896-943

Q4. How interested are you in owning the following types of products yourself?

7.3 Online content

7.3.1 Browsing

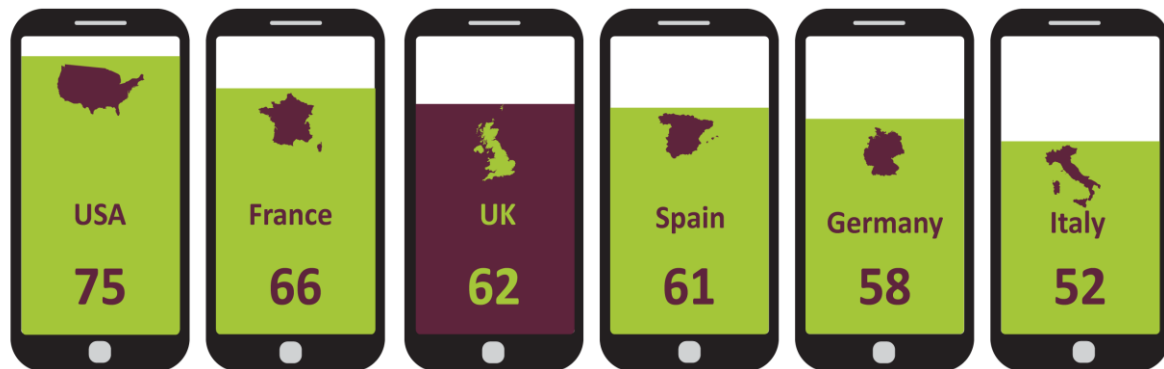
UK ranked third for the amount of time spent browsing on laptops or desktop computers

In the UK, smartphone owners spent 62 hours on average using the internet on their device in August 2017, ranking third among the comparator countries. Smartphone users in the US spent the most time online, at 75 hours. Among the comparator countries for which figures were available, average time spent on the internet was considerably higher on a smartphone than on a laptop or desktop computer. This is despite the fact that laptop and desktop internet browsing may include internet use at work. In the US, the average time spent browsing on a smartphone is three times higher than for a laptop or desktop.

Among the comparator countries, internet users in Japan spent the longest on a laptop or desktop computer in August 2017, averaging 29 hours. The UK and the US were second and third, at 27 and 25 hours respectively.

Figure 108 Average time spent browsing on a smartphone: August 2017

Hours per month

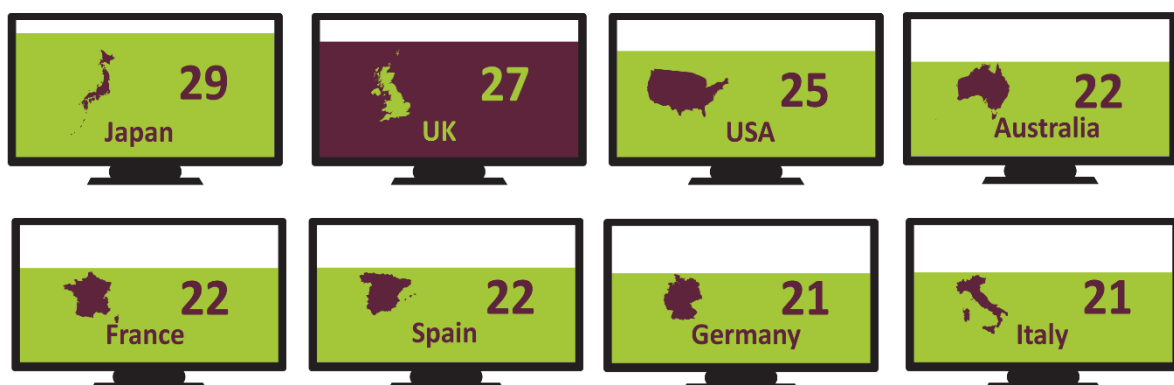


Source: comScore MoMX, August 2017, adults 18+, browsing and application combined.

Note: The UK, the US, Italy, France, Germany and Spain have not been compared with the remaining comparator countries on mobile, due to differences in panel availability. All figures have been rounded to the nearest whole number.

Figure 109 Average time spent browsing on a laptop or desktop computer: August 2017

Hours per month



Source: comScore MMX, home & work panel, August 2017, persons 2+ (US), 4+ (Spain), 6+ (other)

Note: All figures have been rounded to the nearest whole number.

Google-owned sites had the highest reach on desktop and laptop computers in all but one of our comparator countries in August 2017

Google’s properties (which include Google Search, as well as services such as Gmail and YouTube) had the highest reach in all comparator countries, with the exception of Japan (where Yahoo Japan had the highest reach).¹⁵⁵ Microsoft properties (which include MSN, Bing Search, websites for Microsoft Office,

¹⁵⁵ comScore ‘Properties’ represent all ‘Full Domains’ (e.g. felmont.com), ‘Pages’ (e.g. sports.felmont.com/tennis), ‘Applications’ and ‘Online Services’, under common ownership or majority ownership for a single legal entity. A ‘Property’ may also contain digital media content that is not majority-owned but has been legally signed over for reporting purposes by the majority owner.

Outlook and Windows, and desktop apps such as Skype Instant Messenger and the media player app Zune) were among the top three in all comparator countries.

The high ranking of Microsoft sites may have been boosted by the fact that the data includes work use, for which Outlook and Microsoft Office websites are often used. However, the average time spent per person on Microsoft sites was often less than on those with lower reach, such as Yahoo sites, in all comparators apart from Japan, and Facebook in all comparators apart from Italy and Japan. This could be because MSN and Bing are often used for default home pages and search functions. Facebook ranked third in the majority of countries, with the exceptions of Italy, where it ranked second, the US, where it ranked fourth and Japan where it ranked ninth.

As in August 2016, domestic media and publishing services such as the BBC in the UK, CBS Interactive (US), Hubert Burda Media (Germany) and Vocento (Spain) featured among the top ten properties in their home countries in August 2017. A government property appeared only in the UK (GOV.UK), although the average time spent per person on the site was comparatively low. Its high reach could reflect its use as a central point for government services online, but the low amount of time spent suggests that users are looking for specific queries when visiting.

Wikimedia Foundation sites, which include wikipedia.org, ranked within the top ten in four countries, but average time spent was only around 10 minutes, again suggesting that people are looking quickly for specific pieces of information on these sites. In contrast, in each comparator country apart from Japan, Facebook ranks among the top two properties for average time spent per person, at more than 200 minutes in August 2017, reflecting users' high engagement levels with social media content.

Figure 110 Top ten properties accessed on a laptop/ desktop computer, ranked by reach: August 2017

Average time spent per person per month

● <100 mins ● 100-300mins ● >300 mins

	UK	FRA	GER	ITA	USA	JPN	AUS	ESP
1	Google sites	Google sites	Google sites	Google sites	Google sites	Yahoo sites	Google Sites	Google sites
2	Microsoft sites	Microsoft sites	Microsoft	Facebook	Microsoft sites	Google sites	Microsoft sites	Microsoft sites
3	Facebook	Facebook	Facebook	Microsoft sites	Yahoo sites	Microsoft	Facebook	Facebook
4	Amazon sites	Groupe Figaro CCM Benchmark	Amazon sites	ItaliaOnline	Facebook	Amazon sites	Yahoo sites	RCS MediaGroup – Unidad Medios Digitales
5	Yahoo sites	Amazon sites	eBay	Amazon sites	Amazon sites	LINE Corporation	eBay	Amazon sites
6	BBC sites	Schibsted Media Group	Axel Springer SE	Wikimedia Foundation sites	AOL, Inc.	Rakuten Inc	NY Post Network	Prisa
7	eBay	Webedia sites	Deutsche Telekom	Yahoo sites	Apple Inc.	FC2 inc.	Amazon sites	Yahoo sites
8	GOV.UK	Yahoo sites	Hubert Burda Media	Gruppo Mondadori	CBS Interactive	NTT Group	Wikimedia Foundation sites	Wikimedia Foundation sites
9	Wikimedia Foundation	Solocal Group	United-Internet sites	RCS MediaGroup – Italian Digital Media	Comcast NBCUniversal	Facebook	Telstra Corporation Ltd	Vocento
10	TripAdvisor	Orange sites	Yahoo sites	eBay	eBay	CyberAgent	LinkedIn	Dropbox sites

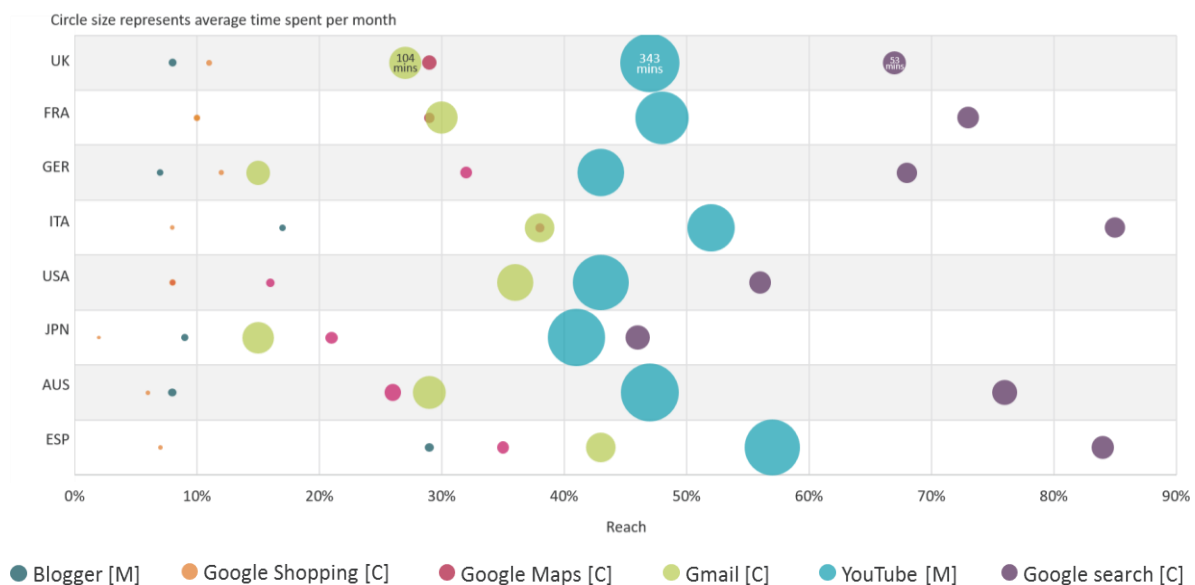
Source: comScore MMX Properties, home and work panel, August 2017, persons 2+ (US), 4+ (Spain), 6+ (other)

In all comparator countries, Google Search had the highest reach among Google-owned sites for desktop / laptop users.

Looking at Google entities individually¹⁵⁶, 67% of all people in the UK browsing on desktops or laptops used Google Search in August 2017. In all comparator countries apart from Japan, Google Search reached more than half of the online population (on desktop / laptop). While Google Search had the widest reach, visitors to YouTube ranked highest for average time spent; people in the UK spent more than six times as long on YouTube as they did on search in August 2017 (343 minutes on average vs. 53 minutes).

There were regional differences in how the Google sites ranked. For instance, in most comparator countries, Blogger, a blog-publishing service, had more desktop / laptop users than Google Shopping, but this was not the case in Germany or the UK. In the UK this may relate to the high level of e-commerce spend per head (Figure 121), although average time spent per person on Blogger was still higher in both countries than on Google Shopping (6.5 minutes on average per person in the UK and 4.1 minutes in Germany, versus 3.4 and 2.7 minutes respectively on Google Shopping).

Figure 111 Top Google sites by unique desktop / laptop visitors, with average time spent per person per month: August 2017



Source: comScore MMX, home & work panel, August 2017, persons 2+ (US), 4+ (Spain), 6+ (other). [M] indicates a Media Title. [C] indicates a Channel

¹⁵⁶ ComScore defines web entities that sit within its 'Properties' as a Media title [M], Channel [C], SubChannel [S] or SubGroup [G]. A Media Title is an editorially and brand-consistent collection of content in the digital landscape that provides the marketplace with a view of online user behaviour. This may represent a domain, a group of domains, online service or application. Within a Media Title there may be grouped URLs of editorially consistent content that make up a Channel. For some of the largest Media Titles, Channels themselves may be broad, and Subchannels, Groups and Subgroups within the larger Channels may prove useful for categorisation within the comScore Dictionary.

US recording companies feature strongly on the highest-reach YouTube networks

Multichannel networks¹⁵⁷ are made up of a range of media brands or independent content creators and rank highly on YouTube channel lists. For example, Broadband TV, a Canadian multichannel network owned by RTL group, has the highest reach of viewers in five of the eight comparator countries. Broadband TV provides services including promotion, ad sales and design for a broad spectrum of clients including NBA and Sony Pictures, as well as for independent creators.

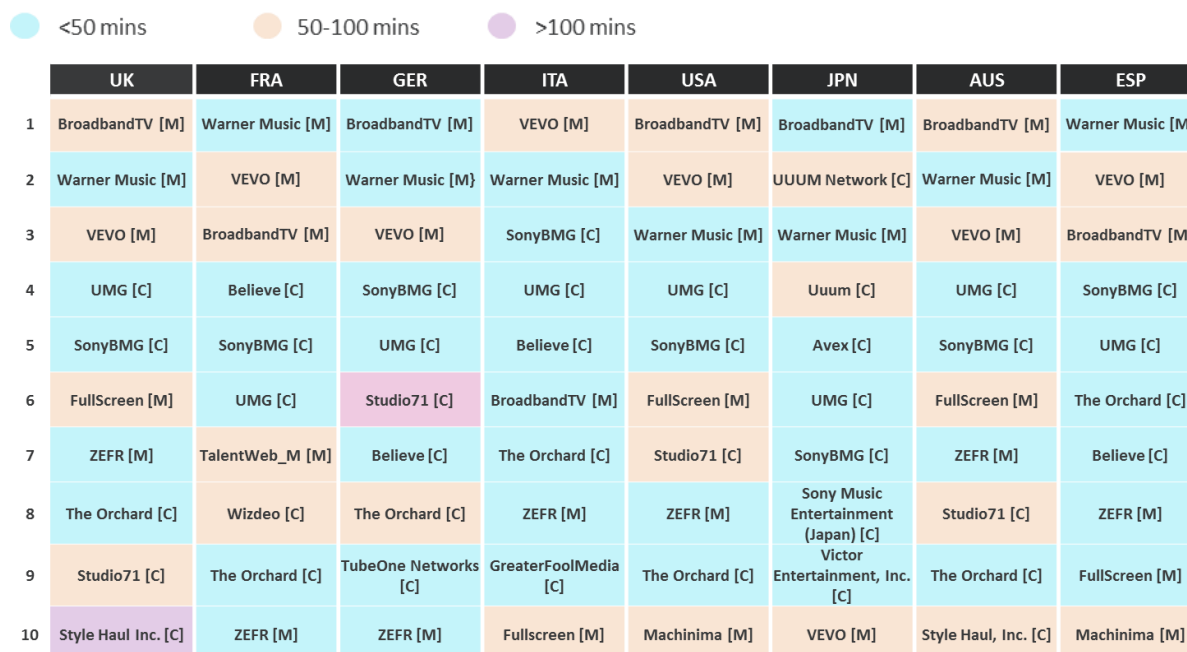
Music channels appear prominently in the top ten highest-reach YouTube networks across all comparator countries. With the exception of France and Japan, the 'big three' American recording companies (Warner Music, Sony BMG and Universal Music Group) are all in the top five highest-reach YouTube networks in each comparator country. They have additional presence through Vevo, a video hosting service that publishes content from all three companies. Sony is also represented through its property The Orchard, a multichannel network with a portfolio of 1,000 music and entertainment channels. Vevo is among the top ten widest-reaching companies in every country. Looking at the music networks in the top ten, Vevo has the highest viewer engagement levels (average minutes spent per person per month) among the comparators. For instance, in the UK, the average time spent per person per month on Vevo was 83.3 minutes in August 2017. Since videos on Vevo tend to be just a few minutes long, this suggests that viewers are watching multiple videos in a given time period. American channels are prevalent across the comparator countries, while no British companies appear in the top ten YouTube networks, even in the UK.

Japan's top ten highest-reach YouTube networks lean more towards local providers, such as music networks avex, Victor and Sony Music Japan. Vlogging network channels UUUM Network and uuum are the second and fourth highest-reach YouTube networks in Japan. uuum has the highest average minutes spent per person, of all the top networks across the comparator countries, at 125.8 minutes per person per month. While music channels tend to make the top five highest-reach YouTube networks, viewers often spend more time watching networks that are not focused on music content. This may reflect the fact that music videos tend to be shorter than other forms of video content. For instance, in the UK, Style Haul, a multichannel network which focuses on fashion and lifestyle, is at the bottom of the list, in tenth position in terms of reach, but has the highest average monthly minutes spent per person. Similarly, Machinima, which has a core focus on video games, is the tenth highest reaching network in both the US and Spain, but ranks third highest for average minutes spent per person in these countries. This suggests that viewers are highly engaged with the content on these channels, which is likely to appeal to advertisers.

¹⁵⁷ Multi-channel networks are third-party service providers that affiliate with multiple YouTube channels to offer services that may include audience development, content programming, creator collaborations, digital rights management, monetisation and/or sales.

Figure 112 Top ten YouTube networks on desktop or laptop, by reach: August 2017

Average time spent per person per month



Source: comScore VMX, August 2017, persons 2+ (US), 4+ (Spain), 6+ (other). [M] indicates a Media Title. [C] indicates a channel.

Google-owned sites and Facebook were the most popular destinations on mobile in all comparator countries in August 2017

As on desktops, Google sites had the most unique visitors on mobiles across all comparator countries.¹⁵⁸ Facebook ranked second on mobile, while on desktop, Microsoft sites ranked second in all comparator countries apart from Japan and Italy. This further supports the suggestion that many Microsoft site users are browsing within default desktop settings. Facebook’s higher prominence on mobile reflects its shift to a mobile-first strategy in 2012; the company now generates 88% of its advertising revenue via mobile.¹⁵⁹ In August 2017 the company rolled out ‘Facebook Watch’, which hosts original video content (in the mobile app only) to users in the US.¹⁶⁰ Mobile users in Germany, Italy and Spain still spent more time on average on Facebook than those in the US.

Certain media groups and multimedia publishing groups were also more prominent on mobile devices than on desktop, notably in the UK. Here, as in Italy and Spain, media sites that did not appear in the top ten on desktop / laptop – such as Trinity Mirror Group, News UK, Sky, Mail Online (all UK); Gruppo Editoriale Espresso, Gruppo Mediaset (Italy); and Grupo Godo and Altresmedia (Spain) – made the list on mobile. Some groups featured on both lists, such as RCS MediaGroup – Italian Digital Media (Italy), RCS MediaGroup – Unidad Medios Digitales (Spain) and Gruppo Mondadori (Italy).

¹⁵⁸ The UK, the US, Italy, France, Germany and Spain have not been compared with the remaining comparator countries on mobile, due to differences in panel availability.

¹⁵⁹ Facebook Q3 earnings report, 2017, https://s21.q4cdn.com/399680738/files/doc_financials/2017/Q3/Q3'17-Earnings-Release.pdf

¹⁶⁰ <https://media.fb.com/2017/08/09/introducing-watch-and-shows-on-facebook/>

Figure 113 Top ten properties by reach accessed on smartphone and tablet, ranked by reach: August 2017

Average time spent per person per month

● <100 mins ● 100-700 mins ● >700 mins

	UK	FRA	GER	ITA	USA	ESP
1	Google sites	Google sites	Google sites	Google sites	Google sites	Google sites
2	Facebook	Facebook	Facebook	Facebook	Facebook	Facebook
3	BBC sites	Groupe Figaro CCM Benchmark	Axel Springer SE	Gruppo Editoriale Espresso	Amazon sites	RCS MediaGroup – Unidad Medios Digitales
4	Amazon sites	Webedia sites	Deutsche Telekom	RCS MediaGroup – Italian Digital Media	Yahoo sites	Prisa
5	Trinity Mirror Group	Axel Springer SE	eBay	Gruppo Mondadori	Comcast NBCUniversal	Grupo Godo
6	News UK Sites	Amazon sites	Amazon sites	Gruppo Mediaset	CBS Interactive	Vocento
7	Sky Sites	Schibsted Media Group	Hubert Burda Media	TripAdvisor Inc.	Turner Digital	CM Nativos
8	Mail Online / Daily Mail	Orange sites	Wikimedia Foundation Sites	Yahoo sites	AOL, Inc.	Altresmedia
9	TripAdvisor Inc.	Wikimedia Foundation sites	AccuWeather Sites	Ciaopeople	Apple Inc.	Zeta Gestión de Medios
10	Apple Inc.	Solocal Group	Samsung Group	Triboo Media	Time Inc. Network	Schibsted Media Group

Source: comScore MoMX, August 2017, persons 18+. France is not strictly comparable as tablet is not measured.

Note: The UK, the US, Italy, France, Germany and Spain have not been compared with the remaining comparator countries on mobile, due to differences in panel availability.

In August 2017, WhatsApp was the most popular app on iOS in the UK, Germany and Italy, with apps owned by Facebook topping the charts globally

According to App Annie data, Facebook topped the iOS app market in August 2017, in terms of both monthly active users and downloads from the App Store, reflecting the success of its mobile-first strategy. At least three Facebook-owned apps (including WhatsApp, Facebook Messenger, Facebook and Instagram) appeared in the top ten apps for monthly active users in all available countries. Across all the comparators with the exception of Japan, Facebook or WhatsApp had the most monthly active users (MAU).

When looking at Japan’s top apps by MAU, the US tech giants such as Facebook, Google and Amazon appear fairly prominently alongside local companies. While data on internet users in China is unavailable, China and Japan’s download charts leaned more towards local developers, with Google Maps appearing only once in their iOS download charts (tenth place in Japan) and Facebook-owned apps not at all. China’s top ten was reasonably evenly distributed between messaging, games, video sites and e-commerce. E-commerce apps, including AliPay, Taobao and Pinduoduo, appear most prominently in the top ten iOS apps in China. Similar apps appeared elsewhere only twice in other markets (Joom, seventh in France, and Amazon, ninth in Italy).

Games dominated Japan’s top ten downloads, accounting for eight apps. In all countries, games were more prevalent in the top ten downloads than top ten apps by MAU, appearing four times in the UK, for instance. While games may experience sudden surges in popularity, underlying MAU data suggests that the appeal of entertainment and utility apps, such as music players, e-commerce and – notably –

messengers, is more enduring. Messenger apps have risen up the ranks for downloads since August 2016, when augmented reality game, Pokémon GO held first or second place in all comparator countries. In seven of the eight markets where download data was available, messenger apps – including Snapchat, QQ and newcomer Sarahah – appeared in at least the top two.

Figure 114 Top 10 iOS apps, by downloads and monthly active users: August 2017

UK		FRA		GER		ITA		
Downloads in iOS app store	Monthly Active Users	Downloads in iOS app store	Monthly Active Users	Downloads in iOS app store	Monthly Active Users	Downloads in iOS app store	Monthly Active Users	
1	WhatsApp Messenger	WhatsApp Messenger	Word Connect: Search the Word	Facebook	WhatsApp Messenger	WhatsApp Messenger	WhatsApp Messenger	WhatsApp Messenger
2	Balls VS Blocks	Facebook	Snapchat	Facebook Messenger	Word Connect: Search the Word	Facebook	Instagram	Facebook
3	Facebook Messenger	Facebook Messenger	Facebook Messenger	WhatsApp Messenger	Flappy Dunk	YouTube	Google Maps	Facebook Messenger
4	Space Frontier	YouTube	WhatsApp Messenger	YouTube	Google Maps	Facebook Messenger	Facebook	YouTube
5	Premier League	Instagram	YouTube	Snapchat	YouTube	Instagram	YouTube	Instagram
6	Bowmasters	Snapchat	Instagram	Instagram	Instagram	Google Maps	Facebook Messenger	Google Maps
7	Facebook	Google Maps	Joom	Google Maps	Facebook Messenger	Amazon	Sarahah	Amazon
8	YouTube	Twitter	Sarahah	Waze	Netflix	Snapchat	Spotify	Shazam
9	Flappy Dunk	Spotify	Facebook	Shazam	Snapchat	eBay Kleinanzeigen	Amazon	Spotify
10	Fight List	eBay	Waze	Twitter	Facebook	Spotify	Parole Guru	Snapchat
USA		JPN		ESP		CHN		
Downloads in iOS app store	Monthly Active Users	Downloads in iOS app store	Monthly Active Users	Downloads in iOS app store	Monthly Active Users	Downloads in iOS app store	Monthly Active Users	
1	Sarahah	Facebook	Lineage 2 Revolution	LINE	HBO Nordic	WhatsApp Messenger	Honour of Kings	UNAVAILABLE
2	Facebook Messenger	Facebook Messenger	1LINE	YouTube	WhatsApp Messenger	Instagram	QQ	
3	Balls VS Blocks	YouTube	Puella Magi Madoka Magica Side Story: Magia Record	Yahoo! Japan Weather	Netflix	Facebook	WeChat	
4	YouTube	Instagram	Yahoo! Japan Weather	Google Maps	Mi Movistar	YouTube	AliPay	
5	Flippy Knife	Snapchat	Escape Game Escape from Ennichi	Instagram	My Lidl Shop	Facebook Messenger	Youku	
6	Instagram	Amazon	Mingol	Twitter	Instagram	Google Maps	Taobao	
7	Facebook	Google Maps	Manga Park	Facebook	YouTube	Spotify	Tencent Video	
8	Remind: Safe Classroom Communication	Pandora Radio	My brother ate my pudding	McDonald's Japan	Google Maps	Twitter	Stupid Again	
9	Google Maps	Pinterest	Despicable Me	Facebook Messenger	Facebook	Amazon	Pinduoduo	
10	Snapchat	Twitter	Google Maps	Amazon	Facebook Messenger	Wallipop	iQIYI	

Source: App Annie Intelligence

Facebook-owned messengers also topped the charts on Google Play in six comparator countries

Facebook-owned messengers also appeared prominently in the Google Play charts, with WhatsApp or Facebook Messenger taking first place in six of seven available countries for MAU and downloads. Because popular Google apps, such as Google Maps and YouTube, often come pre-installed on Android phones, they did not appear at all. Messenger apps and games were popular, as in the iOS market, but e-commerce apps – including Leboncoin, eBay Kleinanzeigen, Amazon, Wish and Wallipop – appeared much more prominently on Android.

Apps for reading and writing – such as Microsoft Word and Adobe Acrobat DC – were also relatively popular in terms of monthly active users, while they did not appear at all in the iOS charts. News and weather apps were also more frequently downloaded on Android, which could be due to iOS utility apps coming pre-installed on iPhone.

Figure 115 Top ten Android apps, by downloads and monthly active users: August 2017

UK		FRA		GER		ITA			
	Downloads in Google Play store	Monthly Active Users	Downloads in Google Play store	Monthly Active Users	Downloads in Google Play store	Monthly Active Users	Downloads in Google Play store	Monthly Active Users	
1	WhatsApp Messenger	WhatsApp Messenger	Facebook Messenger	Facebook	WhatsApp Messenger	WhatsApp Messenger	WhatsApp Messenger	WhatsApp Messenger	
2	Facebook Messenger	Facebook	Snapchat	Facebook Messenger	Word Connect: Search the Word	Facebook	Facebook Messenger	Facebook	
3	Snapchat	Facebook Messenger	Word Connect: Search the Word	WhatsApp Messenger	Facebook Messenger	Facebook Messenger	Instagram	Facebook Messenger	
4	Instagram	Instagram	WhatsApp Messenger	Instagram	Snapchat	Instagram	Facebook	Instagram	
5	CM Launcher	eBay	Instagram	SnapChat	Instagram	Amazon	Parole Guru	Amazon	
6	Word Connect by Zenjoy	Twitter	Waze	Shazam	Amazon	eBay Kleinanzeigen	Amazon	Shazam	
7	Spotify	Snapchat	Wish	Leboncoin	eBay Kleinanzeigen	eBay	Wish	Weather by iLMeteo	
8	Facebook	BBC News	Bitmoji	Skype	Microsoft Word	Wetter.com	AliExpress	TripAdvisor	
9	Microsoft Word	BBC Weather	Facebook	Adobe Acrobat DC	Wish	Adobe Acrobat DC	Spotify	Adobe Acrobat DC	
10	Wish	Microsoft Word	Leboncoin	Twitter	Microsoft Excel	DB Navigator	MyWind	Spotify	
USA		JPN		ESP					
	Downloads in Google Play store	Monthly Active Users	Downloads in Google Play store	Monthly Active Users	Downloads in Google Play store	Monthly Active Users			
1	Facebook Messenger	Facebook	Yahoo! JAPAN	LINE	WhatsApp Messenger	WhatsApp Messenger			
2	Snapchat	Facebook Messenger	TopBuzz	Twitter	Instagram	Facebook			
3	Instagram	Instagram	LINE	Yahoo! Japan Weather	Facebook Messenger	Instagram			
4	Wish	Snapchat	Yahoo! Japan Weather	Yahoo! JAPAN	Facebook	Facebook Messenger			
5	Facebook	Amazon	Lineage 2 Revolution	Facebook	My Lidl Shop	Twitter			
6	Pandora Radio	Pinterest	1LINE	Instagram	Wish	Wallapop			
7	Bitmoji	Pandora Radio	My brother ate my pudding	Yahoo! Japan Transit	Wallapop	Spotify			
8	Amazon	Amazon	Instagram	McDonald's Japan	Amazon	Shazam			
9	Netflix	Twitter	Despicable Me	Amazon	Snapchat	Adobe Acrobat DC			
10	WhatsApp Messenger	Netflix	d POINT	Rakuten Ichiba	Spotify	Amazon			

Source: App Annie Intelligence

7.3.2 Social networking

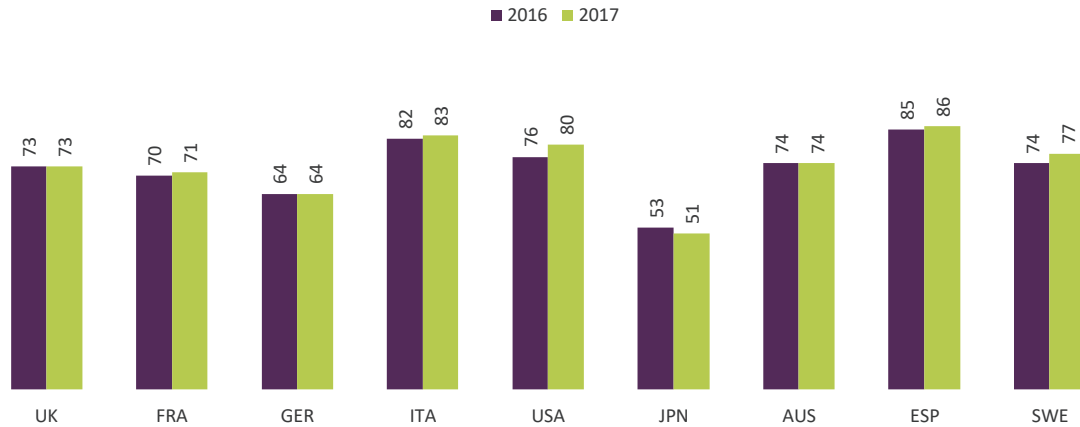
Respondents in Spain and Italy led in weekly access to social networks, with around three-quarters of internet users in the UK using social networks at least once a week

The majority of internet users said they accessed social networks at least once a week in all of our comparator countries. Weekly access was highest in Spain (86%) and Italy (83%), compared to 73% in the UK. Japan had the fewest active social networkers of all the comparator countries, with half of respondents (51%) using social media sites at least once a week. In the majority of the comparator

countries the proportion of weekly social networkers remained broadly stable between 2016 and 2017. The largest increase was in the US, up from 76% to 80%.

Figure 116 Weekly access to social networks: 2016-2017

Proportion of all respondents (%)



Source: Ofcom research 2017

Base: All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000

Q9. How often do you use the internet on any of your devices for each of the following activities?

In all comparator countries, Facebook reached the majority of the online population on both mobile, desktop and laptop

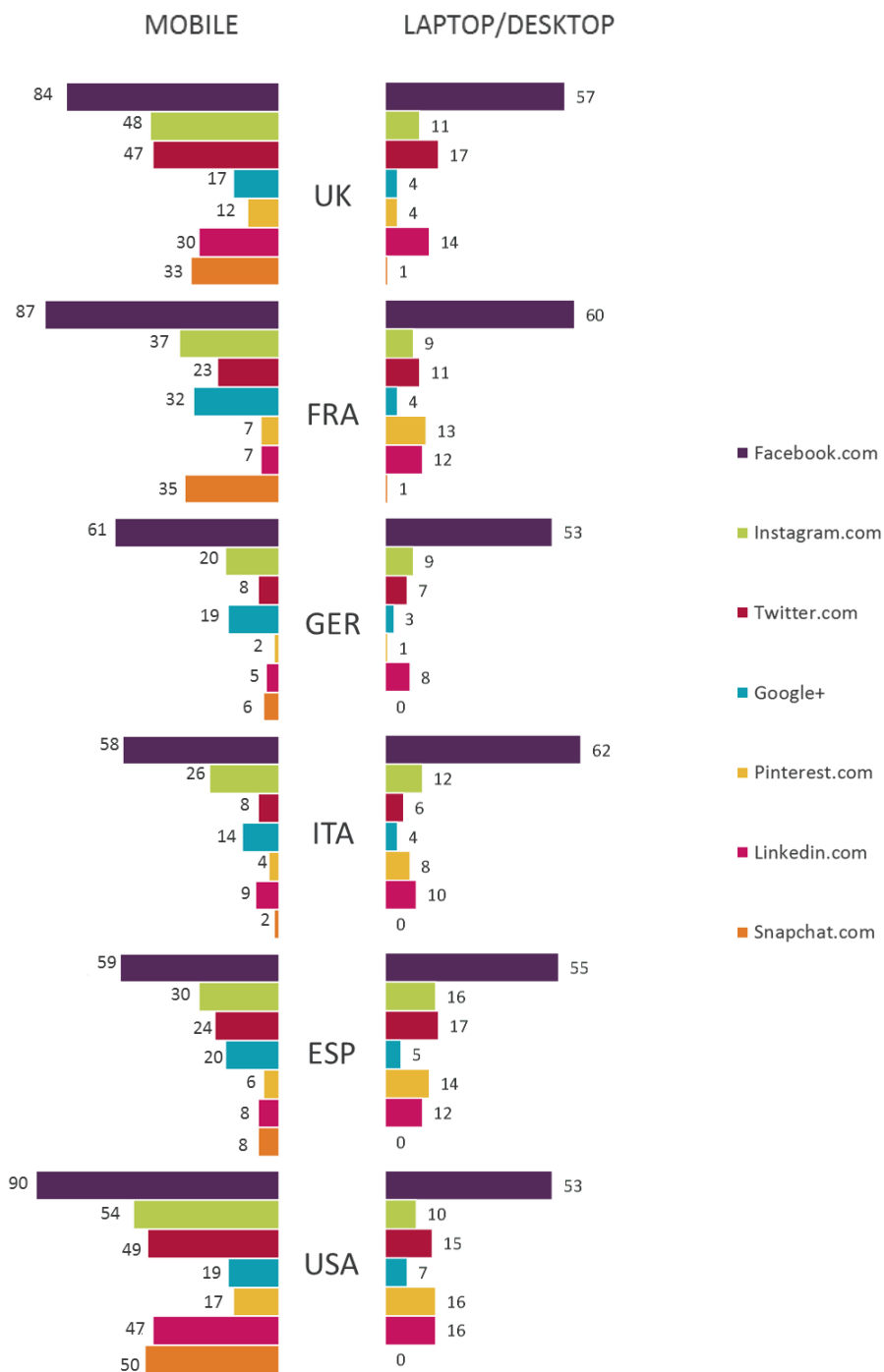
Facebook.com was the widest-reaching social network among the online population on mobile (including tablet and smartphone), desktop and laptop across the comparators in August 2017, reaching 90% of the online and mobile population in the US.¹⁶¹ The reach of Facebook was considerably higher on mobile than on desktop and laptop across the comparators, apart from in Italy and Spain, where it was broadly similar. The reach of Instagram and Snapchat was considerably higher on mobile across the comparators, reflecting Facebook’s ‘mobile-first’ company strategy. Instagram was popular across the comparators, ranking second in terms of reach on both mobile and desktop/laptop in Germany and Italy. When considering mobile alone, it ranked second in all comparator countries.

Twitter maintained a relatively high reach, and was the second most far-reaching social network in the UK and Japan among the online population on desktop and laptop. In the UK and the US, it reached almost half of all online and mobile users. Snapchat’s reach on mobile varied across the comparator countries: in the US it reached half of the online and mobile population, and it reached about a third of online and mobile users in the UK and France. In the remaining countries it reached less than 10% of users. Pinterest was the least popular social network across the comparators, apart from in France,

¹⁶¹ Facebook.com [C] has the highest reach compared to Instagram.com [M], Twitter.com [M], Google+ [C], Pinterest.com [M], LinkedIn.com [M] and Snapchat.com [P]. [M] indicates a Media Title, [C] indicates a channel. Source: comScore MMXMP, August 2017

where it ranked joint second lowest, but performed better among online and desktop and laptop users, ranking second in France and joint second in the US.

Figure 117 Desktop and mobile social network reach: August 2017



Source: comScore MMXMP, August 2017. Mobile data is persons 18+ for all countries and desktop data is persons 2+ (US), 4+ (Spain) and 6+ (rest). Japan and Australia have not been included due to differences in panel availability. The entities included are Facebook.com [C], Instagram.com [M], Twitter.com [M], Google+ [C], Pinterest.com [M], LinkedIn.com [M] and Snapchat.com [P]. [M] indicates a Media Title, [C] indicates a channel.

7.3.3 Financial activities and e-commerce

More than half of UK mobile phone owners check their bank balance on their mobile; Sweden ranks highest, at three-quarters of mobile phone owners

In the majority of countries surveyed, more than half of mobile phone users claimed to check their bank balances using their device. This reflects the increasing importance of mobile devices to consumers, as well as the greater availability of apps offering the ability to send money to friends or businesses via handset. Nevertheless, 'real-world' transactions, such as paying for public transport or making purchases in a store, were still only done by a minority of mobile phone users. With the exception of Sweden and the US, less than a quarter of mobile phone owners use their devices for these purposes.

Sweden's central bank, Sveriges Riksbank, has released data indicating that cash withdrawals have decreased by around a third in the country (which is often touted as the most advanced 'cashless society'¹⁶²) over the last five years.¹⁶³ Many forms of public transport in Sweden are cash-free, which could help explain the relatively high proportion (44%) of mobile phone users claiming to pay for public transport on their mobile – 22pp higher than the next comparator, the US.¹⁶⁴ Similarly, the proportion of Swedish users who use their mobile to pay in-store was significantly higher than the proportion in other European comparator countries. In 2015, Sveriges Riksbank indicated that 52% of Swedish citizens had used popular mobile payment app 'Swish' within the past month.¹⁶⁵

The proportion of respondents who claimed to use their mobile for financial activities in Germany and Japan was relatively low. This was despite the fact that payment features were available in Japan before other countries; for instance, DoCoMo's DCMX-mini mobile credit card service launched in 2004.¹⁶⁶ This service was initially available only on feature phones and was very popular among its users. When smartphones launched, it became available on Android phones, but not on iPhones. Since iPhones are more widely used than Android handsets in Japan,¹⁶⁷ this may have driven the low use of mobile payments. But despite this, the use of pre-paid electronic smartcards¹⁶⁸ for payments are popular. The electronic transport card, Suica, is particularly widespread, with 64.0 million issued by the end of March 2017.¹⁶⁹ Japan's demographic characteristics may also play a role in its low take-up of mobile financial activities; the older population may be slower to start using their smartphones for these purposes.

Germany is often recognised as a largely cash-based society, lagging in e-payments compared to its European counterparts. In May 2017, a study by Frankfurt-based bank ING DiBa found that among the comparator countries, consumers in Germany had the joint highest discrepancy (percentage point difference), together with Belgium, between those who felt they had a high or very high level of security paying with cash (77%) compared to those paying without cash (48%). Germany also had the greatest

¹⁶² For example, see: <http://www.bbc.co.uk/news/business-41095004>

¹⁶³ <http://www.riksbank.se/en/statistics/payment-statistics/>

¹⁶⁴ This will also be affected by the share of people who use public transport in each country

¹⁶⁵ Sveriges Riksbank, Payment Statistics, October 2016. <http://www.riksbank.se/en/Statistics/Payment-statistics/>

¹⁶⁶ https://www.nttdocomo.co.jp/english/info/media_center/pr/2004/001182.html

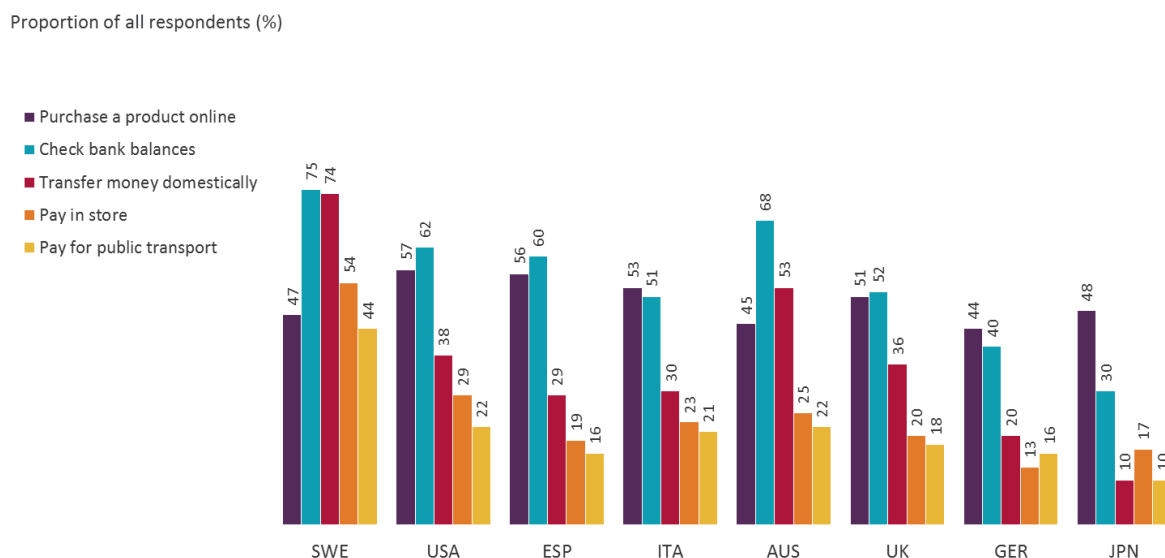
¹⁶⁷ In October 2017, iOS had a 67.01% market share, while Android had a 32.29% market share, see: <http://gs.statcounter.com/os-market-share/mobile/japan>

¹⁶⁸ A smartcard is a rechargeable prepaid card used in Japan including to pay for public transport, to pay at convenience and other stores, at vending machines and parking lots.

¹⁶⁹ See JR East, 2017 Annual report, https://www.jreast.co.jp/e/investor/ar/2017/pdf/ar_2017-06.pdf

discrepancy between the proportion of those who felt they had a high or very high level of privacy paying with cash (86%) compared to paying without cash (28%).¹⁷⁰

Figure 118 Use of mobile phone for selected financial activities: 2017



Source: Deloitte Global Mobile Consumer Survey 2017.

Base: All adults 18-75 who have a phone or smartphone, UK=3794, GER=1894, ITA=1913, AUS=1899, SWE=1897, JPN=1642, ESP=1906, USA=1826.

Questions - Activities use for mobile phone for: Q50_1 – check bank balances, Q50_3 – transfer money to another individual in your country, Q50_8 - make an online purchase of a product, Q50_12 – pay for a product/service in-store, Q50_13 – pay for public transport. % of adults who ‘ever use’.

Mobile is the preferred device for checking bank balances in Sweden, while desktop and laptop combined are preferred in the UK

In the UK, almost a third of mobile phone owners prefer to check their bank balance on their mobile, perhaps due to the convenience of doing this while on the move. The proportion of mobile phone users who prefer to use their mobile device for making purchases online is much smaller (13%), a trend which is reflected across our comparator countries.

In all countries surveyed, except Sweden, desktop and laptop combined are still equally or more preferred for both checking bank balances and making online purchases. The preference for checking bank balances on desktop / laptop could be because some banking features are not available on mobile banking apps: for instance, HSBC customers must add new payees to the website version of their online banking. For online purchases, desktop / laptop may be preferred as it is more difficult to fill out payment information on a small mobile screen. However, with the recent introduction of biometric payments, which use identifications such as fingerprint scanning to reduce the difficulty of inputting payment information, it is possible that mobile purchases will become more widespread.¹⁷¹

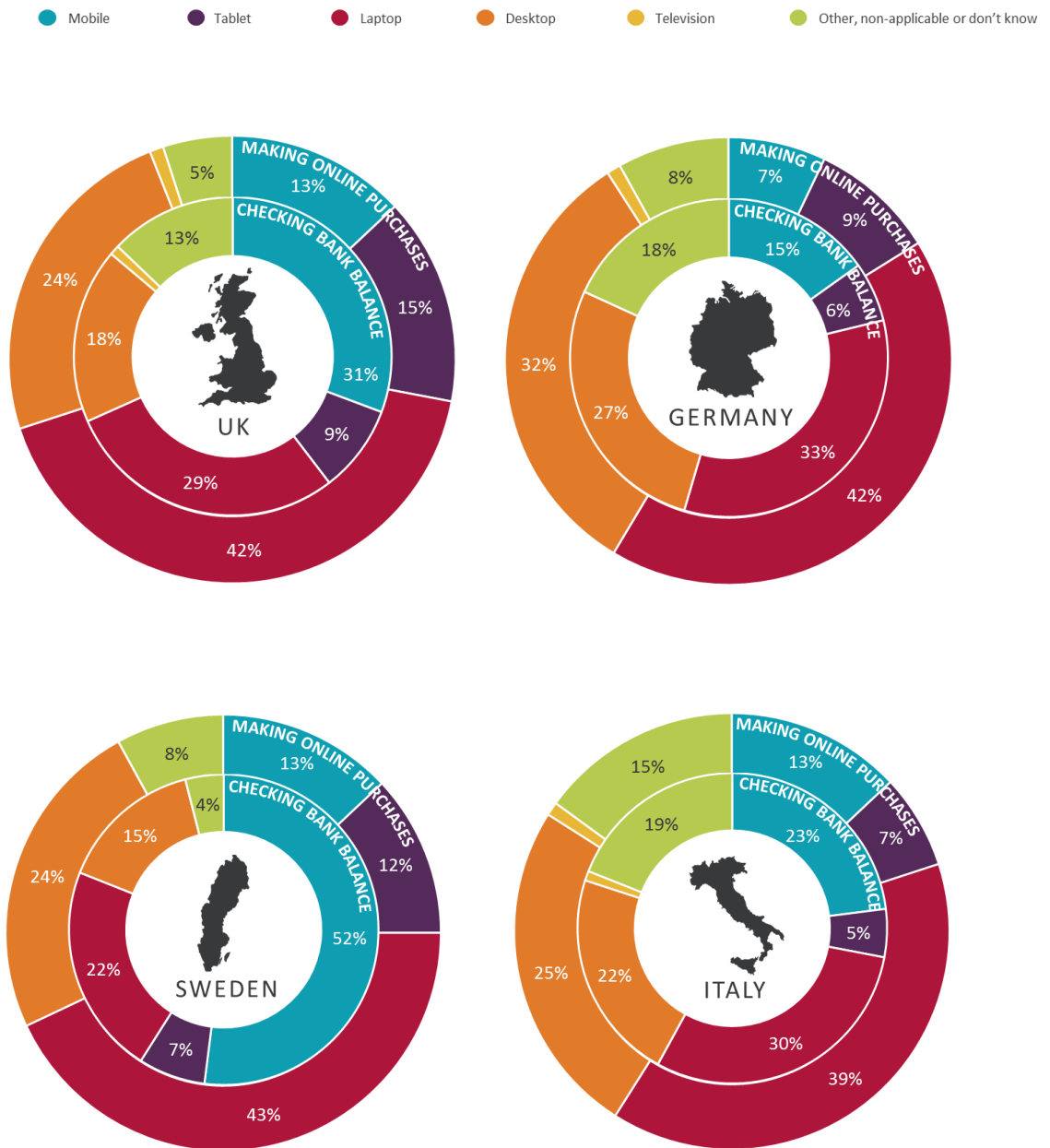
¹⁷⁰ Ing International Survey Mobile Banking 2017 Cashless Society, May 2017. <https://www.ing.com/Newsroom/All-news/ING-survey-a-cashless-society-is-coming.htm>

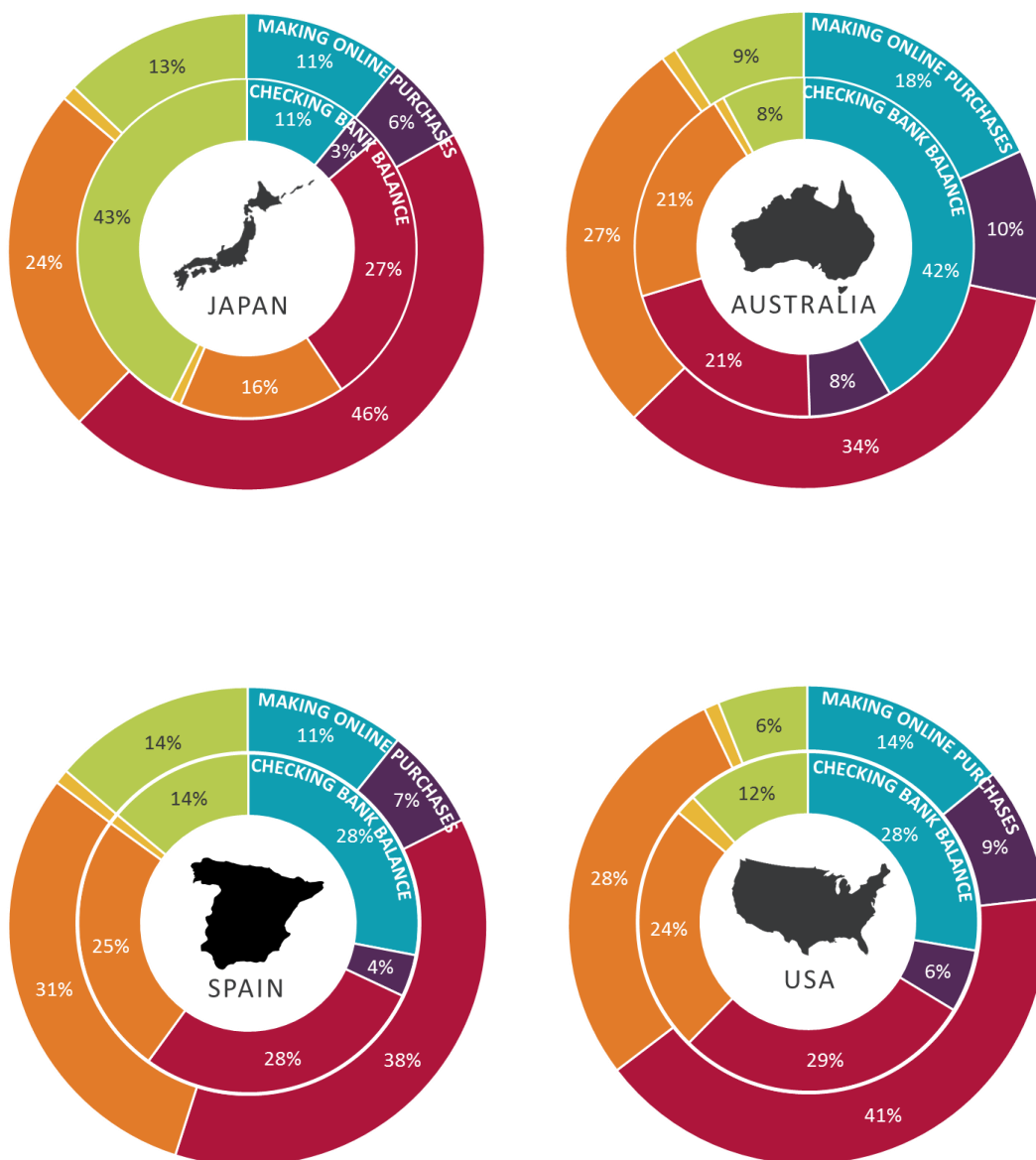
¹⁷¹ Research from Visa in July 2016 showed that over two-thirds (68%) of consumers across Europe want to use biometrics as a method of payment authentication. See <https://www.visaeurope.com/newsroom/news/european-consumers-ready-for-biometrics>

In Sweden the majority of mobile phone users prefer to check their bank balance on their phones, though online purchases are still more likely to be conducted on desktop or laptop. This is unsurprising, given the greater use of mobile in Sweden for the selected financial activities above.

Figure 119 Preferred devices for checking bank balances and making online purchases: 2017

Proportion of all respondents (%)





Source: Deloitte Global Mobile Consumer Survey 2017.

Base: All adults 18-75 who have a phone or smartphone, UK=3794, GER=1894, ITA=1913, AUS=1899, SWE=1897, JPN=1642, ESP=1906, USA=1826.

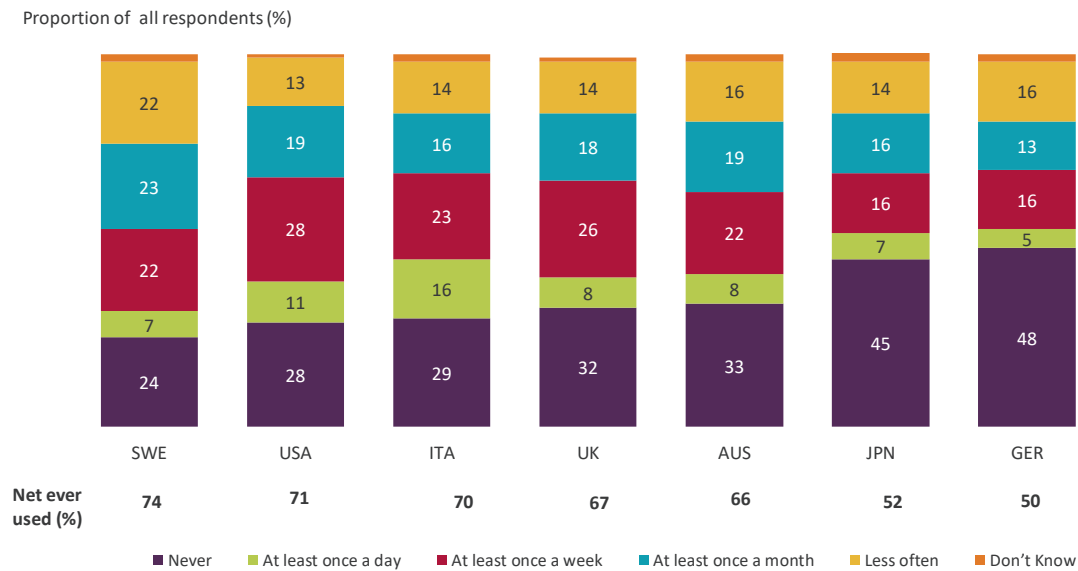
Questions – Which, if any, is your preferred device for each of the following activities? – Q60_2: make online purchases, Q60_3: Check bank balances

Three-quarters of mobile phone users in Sweden use their mobile to browse shopping websites and apps, the highest among comparator countries

Among the countries available for comparison, Sweden had the highest proportion of mobile phone users (74%) who claimed to ever use their device to browse shopping websites or apps. The UK ranked fifth at 67%, behind Sweden, Spain (71%), the US (71%) and Italy (70%).

In line with use of mobile to make purchases online or check bank balances, mobile phone users in Germany and Japan were the least likely among our comparator countries to use their mobile to browse shopping websites and apps.

Figure 120 Use of mobile phone to browse shopping websites and apps: 2017



Source: Deloitte Global Mobile Consumer Survey 2017

Base: All adults 18-75 who have a phone or smartphone, UK=3794, GER=1894, ITA=1913, AUS=1899, SWE=1897, JPN=1642, ESP=1906, USA=1826.

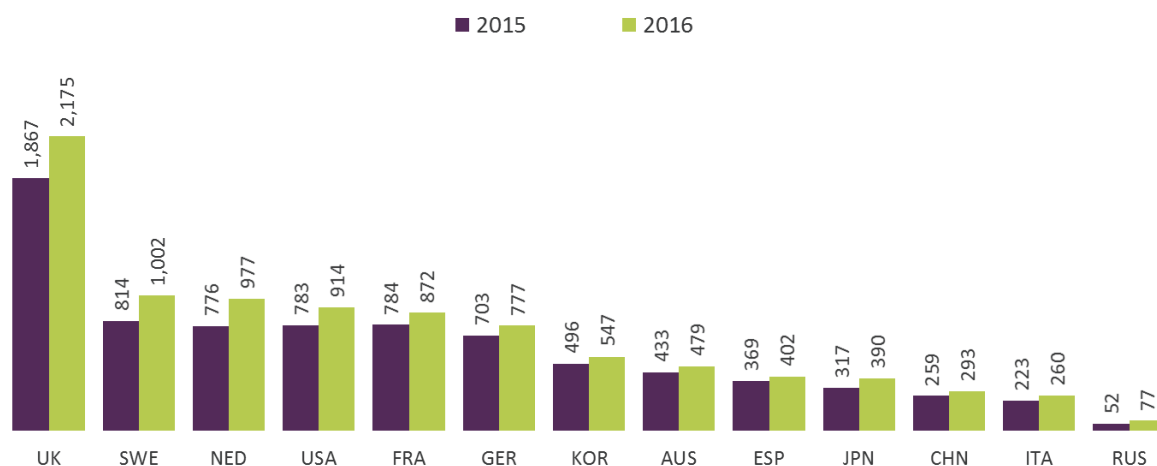
Q50_5 Activities use mobile phone for – Browse shopping websites/apps

The UK had the highest per-capita turnover for e-commerce

As in 2015, among our comparator countries, annual B2C e-commerce turnover on a per-capita basis was highest in the UK, at £2,175 per person in 2016. This is markedly larger than the next highest markets: Sweden (£1002 per head per year), and the Netherlands (£977 per head per year).

The UK's high per-capita annual turnover on e-commerce may be due to a combination of factors, including a traditionally strong history of catalogue shopping, overall satisfaction with postal services and high availability of debit and credit cards. The e-commerce market is supported by consumers who increasingly expect to do their shopping online anywhere and at any time.

Figure 121 Annual B2C e-commerce turnover, per head (£): 2015-2016



Source: *European B2C e-commerce report 2017 and Global B2C e-commerce report 2017*, Ecommerce Foundation & Ecommerce Europe (<https://www.ecommerce-europe.eu/research/ecommerce-europe-reports/>). Population figures from IHS Markit.

Notes: Ofcom has used exchange rates of €1.22 to the GBP and \$1.35 to the GBP. Interpretation and manipulation of data are solely Ofcom's responsibility. Figures include goods and services with the exception of Australia which include goods only. All figures are expressed in nominal terms. All figures have been rounded to the nearest whole number.

7.4 Internet advertising

7.4.1 Internet advertising expenditure

Internet advertising accounted for over 50% of all advertising expenditure in the UK, Sweden and China for the first time in 2016

2016 was the first year in which internet advertising accounted for more than half of advertising spend in any country.¹⁷² It made up 54% of total internet advertising expenditure in Sweden, 53% in China and 52% in the UK. China's internet advertising share grew particularly rapidly year on year, while the UK's advertising spend is growing more slowly, perhaps indicating that it is a more mature market. The average share across all 16 comparator countries was 37%, while India had the lowest share at 12%; considerably lower than Brazil which had the second-lowest share at 24%. Considering the maturity of the US advertising market, the share of internet advertising among all advertising expenditure was not particularly high in 2016, at 40%. TV makes up the second highest share of US ad spend, at 37% of all internet ad spend. This is higher than China (30%) and the UK (26%).¹⁷³

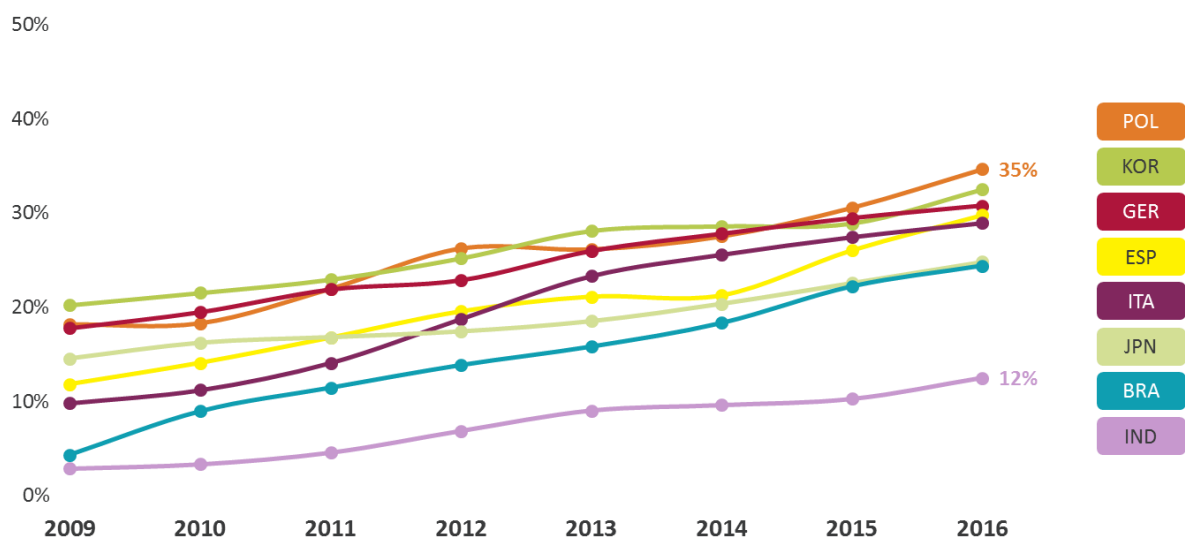
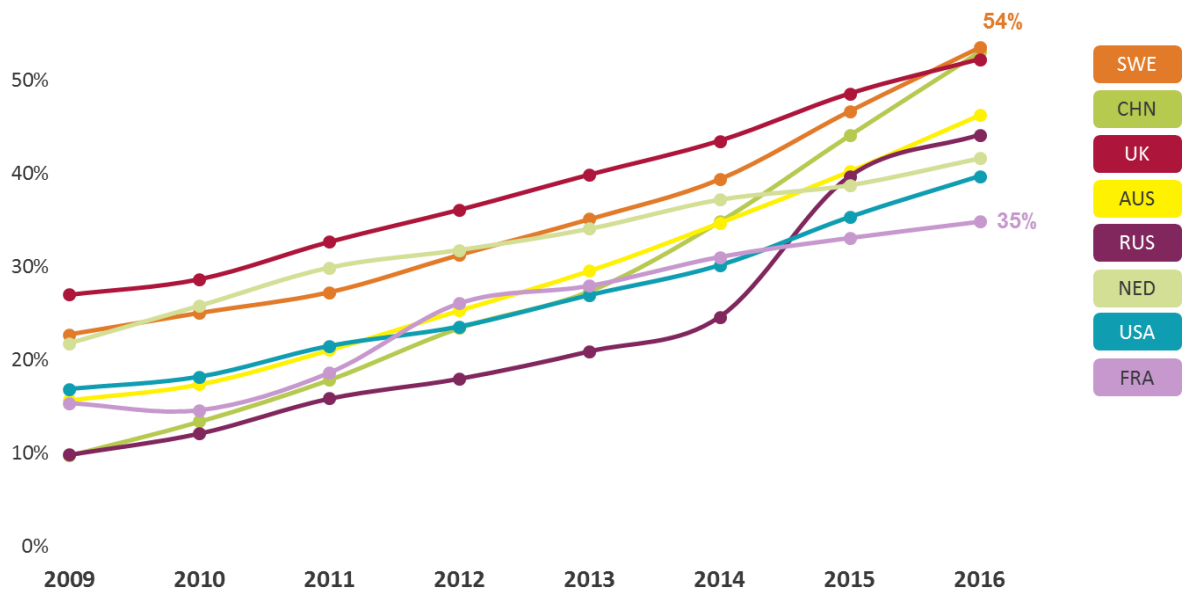
Year-on-year growth in nominal terms has been relatively slow in the UK's internet ad market when compared with previous years. France had one of the lowest growth rates, although this was in line with its lower growth rate in overall advertising expenditure. For instance, while the UK had advertising

¹⁷² Internet advertising is spending by advertisers on paid search, banner/display, classified, video and other online formats such as email and sponsorship (including mobile advertising).

¹⁷³ WARC data (www.warc.com/data), 2017. Please refer to notes on adspend data for further detail and source information. <http://www.warc.com/NotesOnAdspendData>.

expenditure growth of 5% in nominal terms in 2016, the French advertising market grew by only 1% in nominal terms year on year.¹⁷⁴

Figure 122 Internet share of total advertising spend (%): 2009-2016



Source: WARC data (www.warc.com/data), 2017. Please refer to notes on ad spend data for further detail and source information. <http://www.warc.com/NotesOnAdspendData>.

Notes: Market totals exclude direct mail. All figures are expressed nominal terms.

¹⁷⁴ WARC data (www.warc.com/data), 2017. Please refer to notes on adspend data for further detail and source information. <http://www.warc.com/NotesOnAdspendData>.

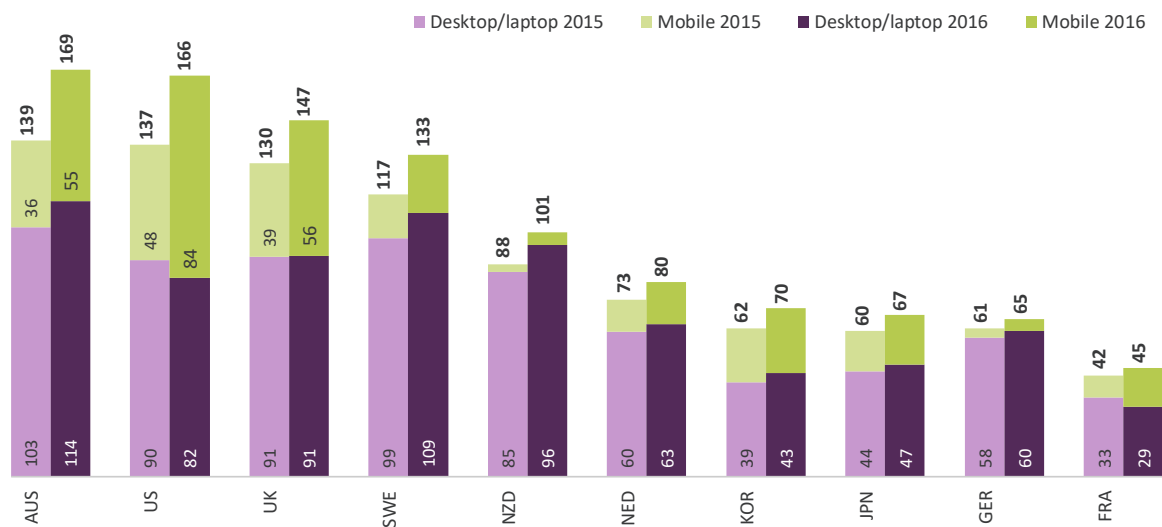
Mobile accounted for over half of all digital ad spend in the US, followed by China, South Korea and the UK, all at around 40%

Mobile internet advertising made up more than half of all internet ad spend in the US in 2016, at 51%.¹⁷⁵ The next highest shares of mobile ad spend were found in China at 41%, South Korea at 39% and the UK at 38%.

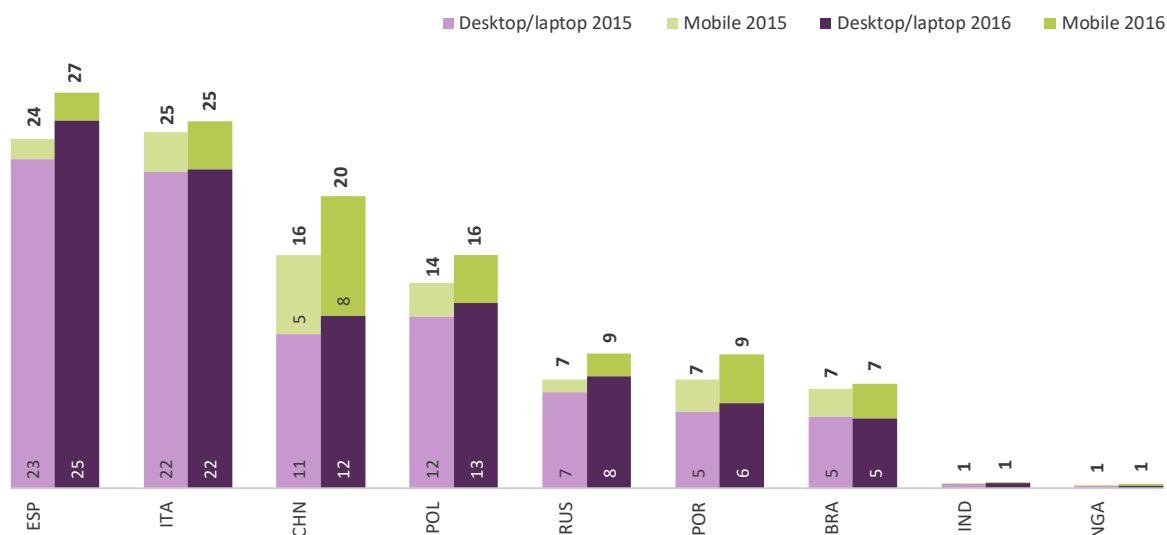
New Zealand had the lowest proportion of mobile internet advertising as a proportion of all internet ad spend, across the comparators, at only 5%, followed by Spain at 7% and Germany at 8%. However, across all the comparators, the share of mobile internet ad spend has increased year on year in nominal terms. The US had the biggest year-on-year growth in nominal terms, at 16 pp, while the UK also had very high growth in nominal terms, at 8pp. As more people transact through the smartphone, the easier it is to map the efficacy of mobile ads and the more likely advertisers are to invest in this medium.

This rapid growth in mobile ad share has been driven by changing consumer behaviour, as users spend increasing amounts of their time browsing on mobiles, rather than laptops or desktops, as shown in Figure 108 and Figure 109. However, the mobile ad market is predominantly comprised of Google and Facebook, so the market may be more indicative of their performance, rather than reflecting other online and mobile properties.

Figure 123 Annual internet advertising expenditure per head, by laptop/desktop and mobile (£): 2015-16



¹⁷⁵ Mobile internet advertising is delivered via formats designed for the mobile devices. Desktop and laptop advertising spend comprises to adverts viewed through a wired connection, referred to as 'wired internet advertising' by PwC.



Source: Ofcom analysis based on data from PwC Global entertainment and media outlook 2017-2021 @ pwc.com/outlook. Interpretation and manipulation of data are solely Ofcom's responsibility. Population figures from Ofcom/IHS Markit.

Notes: Ofcom has used an exchange rate of \$1.35 to the GBP. Mobile and desktop splits may not add to total due to rounding. All figures are expressed in nominal terms.

Paid search continued to have the largest share of expenditure in desktop and laptop ad markets, and grew on mobile

Search advertising accounted for the largest individual share of desktop and laptop advertising expenditure in the majority (14 of 19) of our comparator countries. As shown in previous charts, search advertising is becoming increasingly prominent on mobile. In the UK, it accounted for just under half of all desktop and laptop internet advertising revenue, at 49%, with its share even higher on mobile at 51%. Tellingly, the countries where search advertising's share on desktop and laptop fell notably in nominal terms (by three percentage points or more) between 2015 and 2016 (the US, France and Spain) had an increase in search's share of advertising expenditure on mobile. In all three countries, and in the UK, Google is the market leader, with shares in search advertising well above 80%.¹⁷⁶ The shift of ad revenues to mobile search may well reflect Google's repositioning around mobile.¹⁷⁷

Russia, where local search engine Yandex battles with Google for market prominence, stands out here.¹⁷⁸ Search advertising made up the highest share of desktop and laptop ad expenditure among any comparator country at 79%, whereas on mobile it accounted for only 23% of the Russian market. Research in April 2016 showed that the reach on desktop and mobile of the two search engines, in cities

¹⁷⁶ StatCounter Global Stats, Search Engine Market Share Worldwide. <http://gs.statcounter.com/search-engine-market-share>

¹⁷⁷ For example, see: <https://searchengineland.com/googles-shift-mobile-first-mobile-moments-matter-263971>

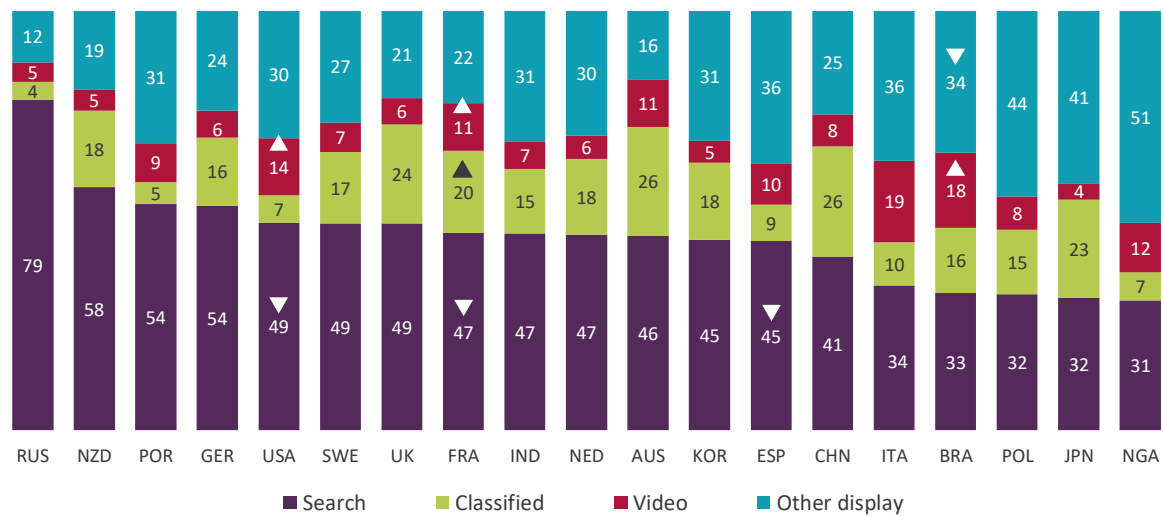
¹⁷⁸ According to Yandex's Fourth Quarter and Full-Year 2016 Financial Results (<http://ir.yandex.com/releasedetail.cfm?ReleaseID=1012130>), it held a 55.4% share of the Russian search market in Q4 2016.

with a population of 700,000 or more, was roughly similar, but Yandex had a higher reach on desktop, and Google on mobile.¹⁷⁹

Video surged in 2016, increasing its share on mobile in nominal terms by 8pp in Italy, 5pp in the UK, 4pp in Germany and 3pp in Spain, the US and Sweden. This growth was driven by out-of-stream video advertising¹⁸⁰, which is increasingly prominent on news, entertainment and social media sites. While mobile video advertising revenue grew strongly in France (41% year on year in nominal terms), its share of mobile ad revenues fell overall as the share of search advertising grew quickly.

Figure 124 Desktop/laptop and mobile internet advertising expenditure, by category: 2016

Proportion of all desktop advertising revenue (%)

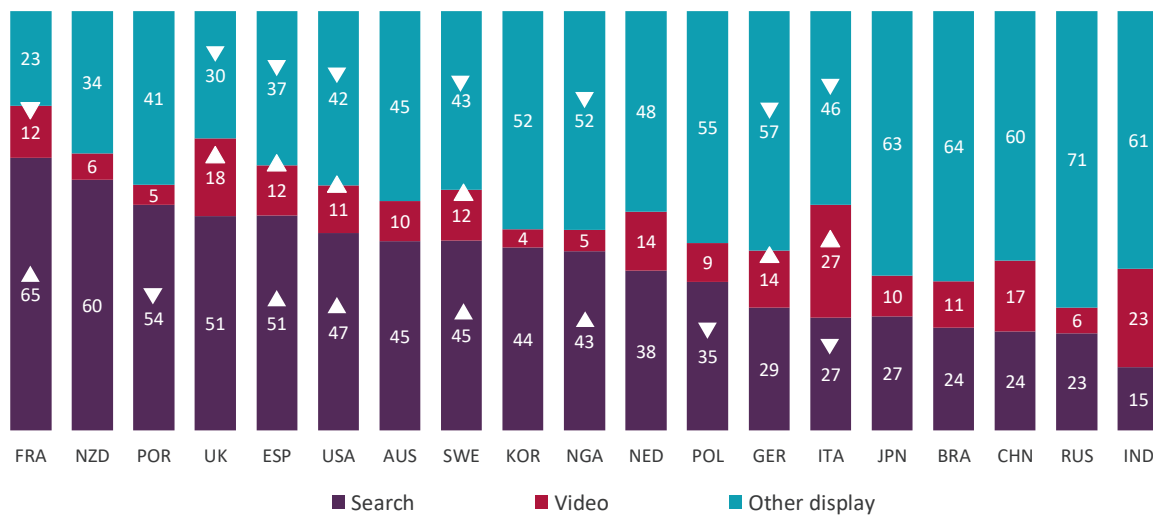


¹⁷⁹ TNS Web-Index research data from Mediascope powered by TNS, 'Апрель этого года стал новым важным этапом в развитии интернет- исследований TNS Россия', 31 May 2016.

http://mediascope.net/press/news/684285/?sphrase_id=164736

¹⁸⁰ A kind of video advertising in which video ads are placed outside of video environments, including in text articles and social media sites

Proportion of all mobile advertising revenue (%)



Source: Ofcom analysis based on data from PwC Global entertainment and media outlook 2017-2021.

Interpretation and manipulation of data are solely Ofcom's responsibility.

Notes: Arrows indicate an increase/decrease of 3pp or more since 2015. Figures may not add to 100% due to rounding. All figures are expressed in nominal terms. Ofcom has used an exchange rate of \$1.35 to the GBP

7.4.2 Consumer attitudes to internet advertising

Adblocking was low on mobile devices across all markets apart from India and China

The level of ad blocking on mobile is higher in fast-growing mobile-led markets, such as China and India. In its 2016 report, PageFair suggested that high levels of ad blocking in these countries could relate to how ad-blocking browsers reduce bandwidth consumption on mobile, and so are most rapidly adopted in markets where mobile data infrastructure is less developed and therefore more expensive, relative to income.¹⁸¹ As outlined above, consumers are spending more time on their phones, and yet an accompanying shift to mobile ad blocking has not been realised in more mature markets, despite the shift of ad revenues towards mobile. This may reflect the relative simplicity of downloading a desktop ad blocker compared to on a mobile, which is more technically challenging and usually requires the use of a VPN. It may become particularly difficult on iOS since Apple is reportedly no longer accepting updates of ad-blocker apps, apart from the iOS Safari content blocker app (which is only for use in the Safari web browser).¹⁸² The discrepancy in ad-blocker penetration between desktop and mobile can also be linked to desktop ad-blockers constituting security packages which are often downloaded to protect PCs, but are rarely provided on mobile.

In Germany, the country with the highest level of ad-blocking among our comparators, a November 2016 report by Bundesverband Digitale Wirtschaft suggested that the proportion of online display advertising blocked on desktops had fallen by around 2pp year on year in the third quarter of 2016.¹⁸³

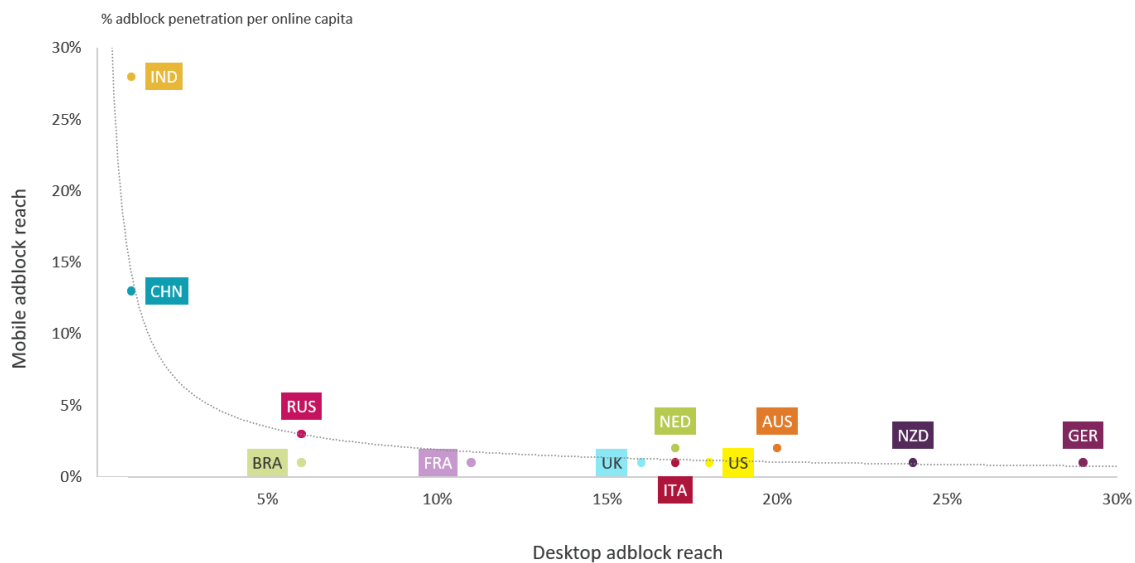
¹⁸¹ PageFair 2016 Adblock Report, https://pagefair.com/wp-content/uploads/2016/11/PageFair-2016_Adblocking-Goes-Mobile_Original.pdf

¹⁸² See, <http://www.techradar.com/news/apple-is-purging-ios-ad-blocking-apps-and-vpns-from-the-app-store>

¹⁸³ BVDW, 'OVK-Messung: Adblocker-rate sinkt weiter', 16 November 2016. <https://www.bvdw.org/presse/detail/artikel/ovk-messung-adblocker-rate-sinkt-weiter/>

This may be a consequence of publishers' efforts to minimise the disruption caused by ads and encourage users to uninstall their blockers (by denying access to content, for instance).

Figure 125 Ad-blocking on desktop and mobile in selected countries, December 2016



Source: PageFair 2017 Adblock Report¹⁸⁴: <https://pagefair.com/downloads/2017/01/PageFair-2017-Adblock-Report.pdf>

Consumers in the UK are more concerned about online ads slowing down their computer or mobile than showing inappropriate content or directing them to illicit websites or downloads.

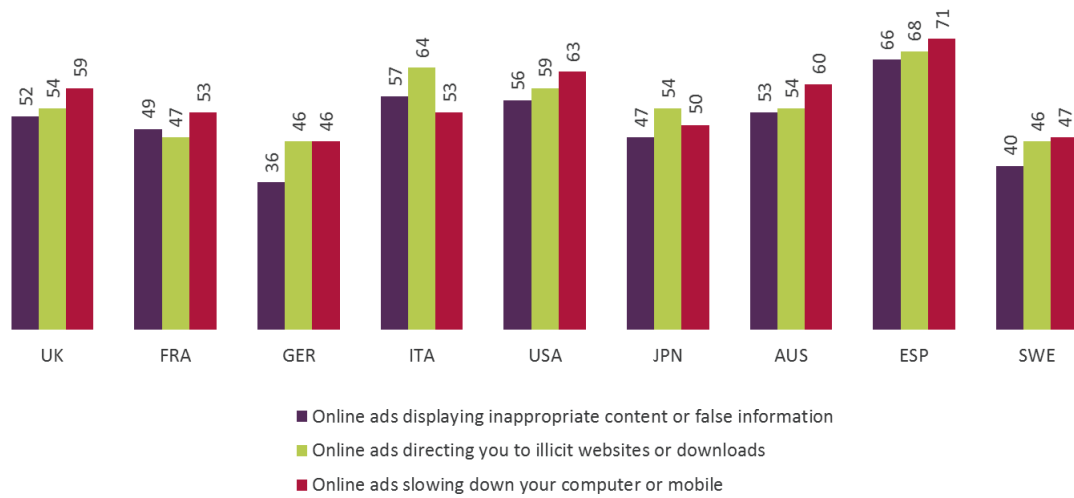
When carrying out activities online in 2017, 52% of respondents in the UK claimed they were concerned about ads displaying inappropriate content or false information and when asked specifically about online ads directing them to illicit websites or downloads, 54% were concerned. Of the issues we asked about, the biggest concern among respondents in the UK was about online ads slowing down their computer or mobile (59%).

Respondents in Spain were the most concerned about the online advertising issues that we asked about. Overall, consumers in Germany were the least concerned about the online issues we asked about, in spite of (or perhaps because of) the high levels of desktop ad-blocking in the country (see Figure 125).

¹⁸⁴ See: <https://pagefair.com/downloads/2017/01/PageFair-2017-Adblock-Report.pdf>

Figure 126 Concerns around online advertising, 2017

Proportion of all respondents – NET: concerned (%)



Source: Ofcom research 2017

Base: All respondents UK=1006, FRA=1038, GER=1012, ITA=1020, USA=1000, JPN=1019, AUS=1008, ESP=1010, SWE=1000

Q10e. How concerned or unconcerned are you about each of the following when carrying out online activities?