globalwebindex

Devices

GlobalWebIndex's **flagship report** on device ownership & usage

Flagship Report 2018

www.globalwebindex.com

Contents

Introduction

GlobalWebIndex Devices places the spotlight on the latest ownership and usage trends across all major device categories, including smartphones, PCs/laptops, tablets, smartwatches and smart TVs. Among others, this report covers the following topics in detail:

- Which devices are the most widely owned and used.
- How ownership of different devices varies across different groups.
- How much time is being spent on mobiles and PCs/laptops and how this varies by age and region.
- Which devices consumers consider to be their most important access point, and the behaviors that are most likely to be taking place on mobile or PC/laptop.
- Current engagement with smart home devices and how this is set to grow.
- Which brands are winning in the smartphone marketplace.

Key Insights

Smart home devices & voice tech are seeing moderate growth

Smart home entertainment products have made inroads among a large and growing share of internet users. More than half own some kind of entertainment product, e.g. a wireless speaker or smart TV. We're far from saturation, though. Other device types that have been extensively covered in the press still have more limited uptakes: around 1 in 5 internet users report using devices like smart utility products (e.g. Nest), security or assistants (like Amazon echo.)

Voice search usage has been static for the past three quarters, stalling at 28% of consumers, though with greater adoption among younger consumers and consumers in the APAC region. We haven't yet reached a breakthrough point for voice search.

Mobile adoption has reached its saturation point in North America & Europe

Value addition will have to come from premiumization at this point, persuading consumers to move up the scale. Shortening mobile replacement cycles, as we're seeing, should help this. Beneath the surface, the **importance** of mobile units in consumers' lives is growing much faster than **ownership**, and it's being matched by a decline in reported importance for PCs, and increasing share of usage in areas like gaming.

The race between Samsung and Apple is very close, but Chinese brands are the ones to watch. With ownership at 29 and 26% of the market, Samsung and Apple are in a close fight over dominance of the mid/high range phone market. They're also sharing the position for most desired phones, 42 to 39%. The real brands to watch though are Chinese Huawei and Xiaomi, who are building considerable momentum.

Device preference is key to understanding device usage

They don't choose one device over another; the average digital consumer has 3.4 different devices and uses each for different purposes at different times. Even though smartphones are becoming more important, for example, internet users still spend longer on their PCs and laptops than they do on mobile on a global level. Though the gap is narrowing, the main picture is that new devices have been added into the mix.

Tablets have lost their bid for large scale adoption as productivity devices

Tablet ownership has been slowly declining since 2015, and have just dropped below 40% adoption, and e-readers have lost a third of their owners. Remaining tablets are used for TV consumption, especially subscription services.

Growth in gaming adoption on mobile devices

Gaming consoles have declined both in absolute terms and relative to other gaming devices since 2016, but they have stabilized with around 22% of the online population using them. Meanwhile, mobile phones are being boosted by the popularity of casual gaming, which is bringing in wider demographics than the traditionally male-dominated console and PC gaming market.

Virtual and augmented reality remain niche

There's little movement in the adoption of virtual and augmented reality technologies, either on the app or device side. There's a youthful, affluent and tech-hobbyist bias among headset owners, as well as gaps among audiences that VR will need to attract in order to achieve mass coverage. As of yet, virtual reality remains tech of the future.

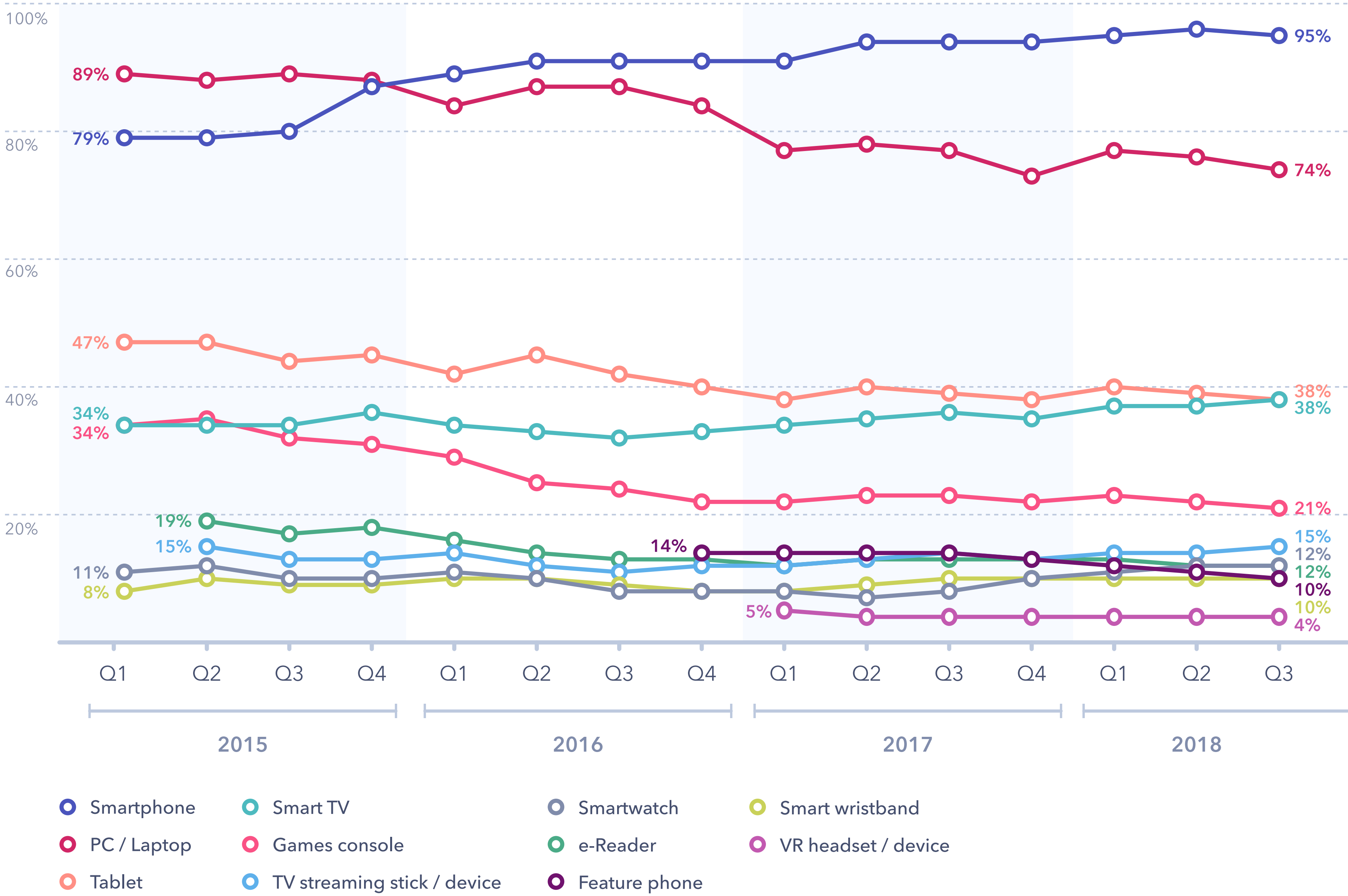
Devices

Device Ownership

What devices are internet users most likely to own and how does this vary by region and age?

Global device ownership

THREE YEARS OF DEVICE OWNERSHIP MOVEMENTS | 33 COUNTRIES



Question: Which of the following devices do you personally own?
Note: Since Q3 2014 (e-Reader and TV streaming stick added Q2 2015; Feature phone added Q4 2016; VR headset added Q1 2017). This question is asked to all respondents. In Q1 2018, the appearance of this question was modified to improve the survey experience for respondents completing the mobile version of the survey. In addition, the definition of "Feature phone" was updated to "a mobile / cellphone that is not a smartphone e.g. Nokia 105, Nokia 3310"; previously, the description had not included named models
Source: GlobalWebIndex Q1 2015 - Q3 2018
Base: 1,114,420 internet users Aged 16-64

Global device ownership

Smartphones have transformed online behaviors. **95% of internet users have a smartphone, up 17 percentage points since the start of 2015**. Over the same time period, PCs/laptop ownership has declined 14 percentage points. We're not in a post-PC era yet, though. Almost 75% of global internet users own one, ranging from 87% in Poland to 14% in Kenya.

Tablets have lost the momentum they'd enjoyed in the years after their launch. Adoption peaked in 2015 and have since inched lower year by year. Movement is slow, but the percentages have decreased in 10 out of 14 quarters since.

Games console ownership also declined, dropping by 13 points since the start of 2015, to 22% overall (21% in the 33 countries tracked since 2015). The rising popularity of mobile gaming, the increasing cost of consoles and a longer upgrade cycle are all having an impact here. Despite some decline in recent years, consoles remain popular in North America, where 35% of respondents reported using them.

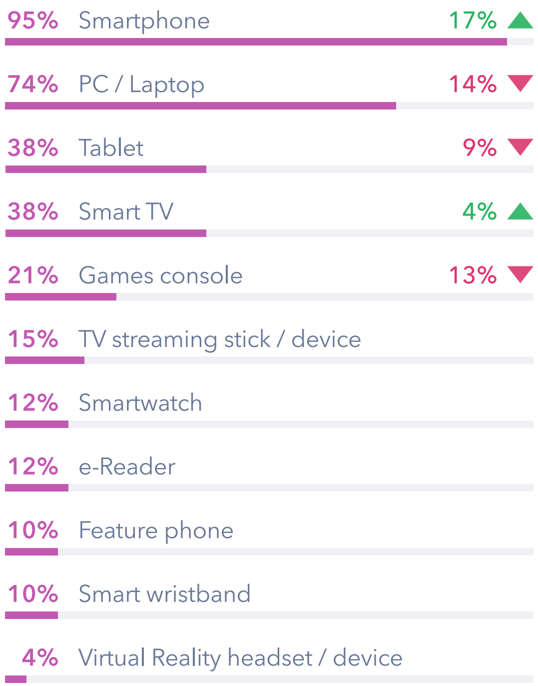
All this said, digital consumers don't necessarily choose one device over another. Rather, **they are multi-device owners and have an average of 3.2 of the devices tracked in the chart**. And this remains broadly steady by age (25-34s post the highest figure of 3.4, while 45-64s record the lowest of 3.1).

If you're interested in how the ownership of PCs, smartphones and tablets varies by market, see our Market Insights infographic at the end of this chapter.

DEVICE OWNERSHIP

% who personally own the following devices

change since Q1 2015



RESPONDENTS SEE THE FOLLOWING DEFINITIONS / ILLUSTRATIVE EXAMPLES:

e-Reader: a digital reading device, e.g. *Amazon Kindle, Kobo, Nook etc*

Smart TV: a television that can connect to the internet

Smart Wristband: a digital wristband which typically tracks your health and fitness levels, e.g. *Nike Fuelband, Jawbone Up, Adidas miCoach*

Smartphone: a smartphone allows you to connect to the internet and download apps, e.g. *an iPhone or Android phone such as the Samsung Galaxy S8*

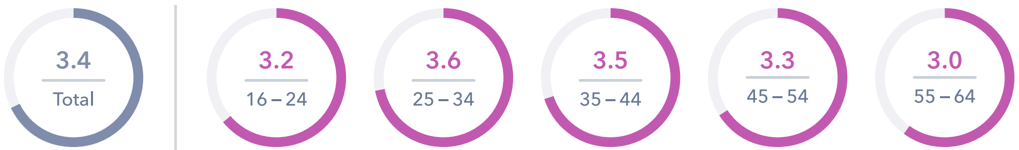
Smartwatch: a watch which allows you to connect to the internet and use apps, e.g. *Pebble, Samsung Galaxy Gear and the Apple Watch*

Tablet: Popular examples include *an Apple iPad, Samsung Galaxy Tab, Microsoft Surface, Google Pixel C*

TV streaming stick / device: a digital media device which streams web content to your TV set, e.g. *Apple TV, Amazon Fire TV Stick, Google Chromecast, Roku Streaming Player*

Virtual Reality Headset / Device: A device that immerses users into simulated environments, e.g. *PlayStation VR, Samsung Gear VR, Google Cardboard and Deepoon VR.*

AVERAGE NUMBER OF DEVICES OWNED | BY AGE



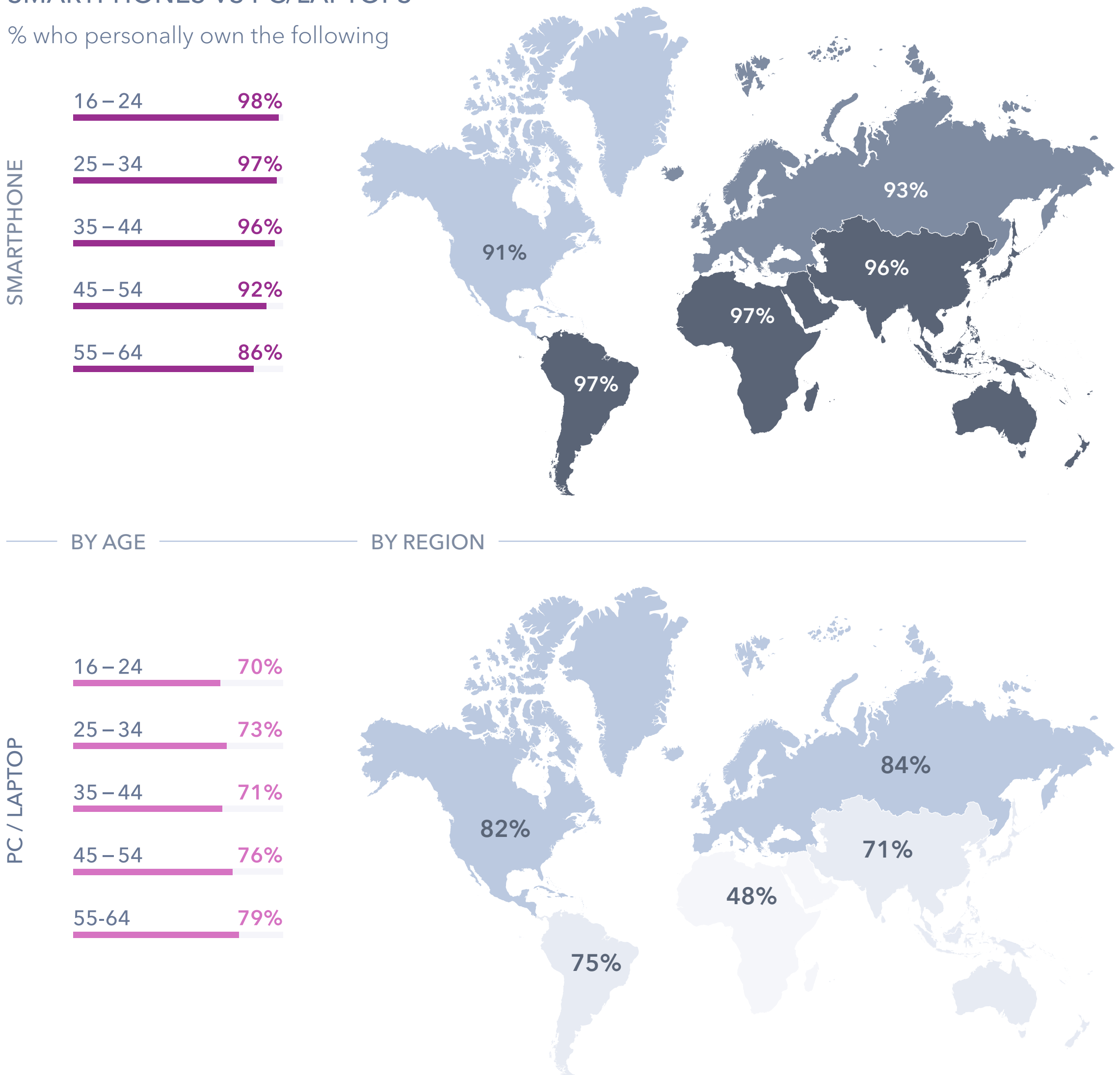
CONSUMERS DON'T CHOOSE ONE DEVICE OVER ANOTHER – THEY'RE MULTI-DEVICE OWNERS, HAVING AN AVERAGE OF 3 *DIFFERENT* DEVICES

Questions: Which of the following devices do you personally own?
Source: GlobalWebIndex Q3 2018
Base: 113,932 Internet Users Aged 16-64

Smartphones vs laptops

SMARTPHONES VS PC/LAPTOPS

% who personally own the following



Regionally, there are big differences in levels of ownership of smartphones and PC/laptops. **Smartphone's lead is particularly exaggerated in the Middle East and Africa where virtually everyone has a smartphone and less than half have a computer.** Smartphones have played an essential role in the development of the internet landscape in this region, especially in Ghana, Kenya, Morocco and Nigeria – here, 30-40% of internet users own a computer.

Meanwhile, PC ownership is ingrained in Europe and North America, where internet users likely first came online via computers and where online populations tend to be older.

Importantly, there are now no regions where PCs/laptops retain a lead over smartphones. On a market level, Germany is now the sole market where smartphone owners don't yet outnumber PC/laptop owners.

Question: Which of the following devices do you personally own?
Source: GlobalWebIndex Q3 2018
Base: 113,932 Internet Users Aged 16-64

Tablets and e-readers

When Apple entered the tablet market in 2010, demand took off and commentators began to discuss the prospect of a post-PC world where desktops and laptops would be replaced by tablets, especially connected to larger screens or docked in specialized docking stations. Brands like ASUS and Fujitsu launched phablet devices, like the PadFone and Lifebook, to capitalize on this trend.

Ownership of tablet devices **has been declining since 2014**. Interest waned, a regular upgrade cycle failed to take hold and mobile screens expanded – meaning less need for a slightly larger device that did the same thing as a smartphone. Today, combination devices are certainly present, the movement has rather gone the other way, with 2-in-1s emerging and tablets overall becoming more laptop-like.

We're seeing the primary use case of tablet as in-house entertainment devices, used especially by parents (45% own one, vs. 32% of non-parents), with TV as the main use case. Tablets have become multi-user entertainment tools more than a day-to-day device necessity.

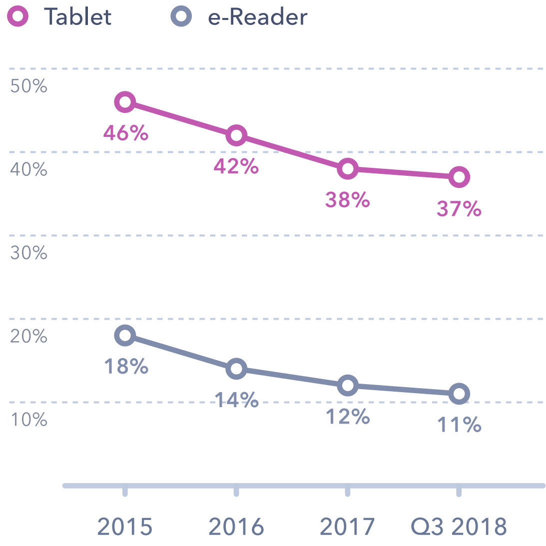
Tablets haven't gone global in the same way smartphones did, and they're much more prevalent in Europe (48%) and North America (52%) than elsewhere. The enduring popularity of iPads and the Apple brand keep figures high. Meanwhile, there's been less need for tablets in the mobile-centric regions of APAC and the Middle East & Africa, where higher price points hold back adoption too. The tablet often isn't the first or second device people buy – they're rather fourth or fifth.

It's a similar story for e-readers. Many expected them to outpace print books but **e-reader ownership has dipped over the past three years**. A slow upgrade cycle is partially to blame, as is the possibility of reading e-books on mobiles. But above all, readers seem to continue to take pleasure in a physical book that does not translate as well on digital.

We see similar peaks for e-reader ownership as tablets. People with higher incomes – who can better afford a wider range of devices – are more likely to own them. Like tablets, they're marginally more popular with people 25+.

TABLET AND E-READER OWNERSHIP OVER TIME

% who personally own a tablet or e-reader



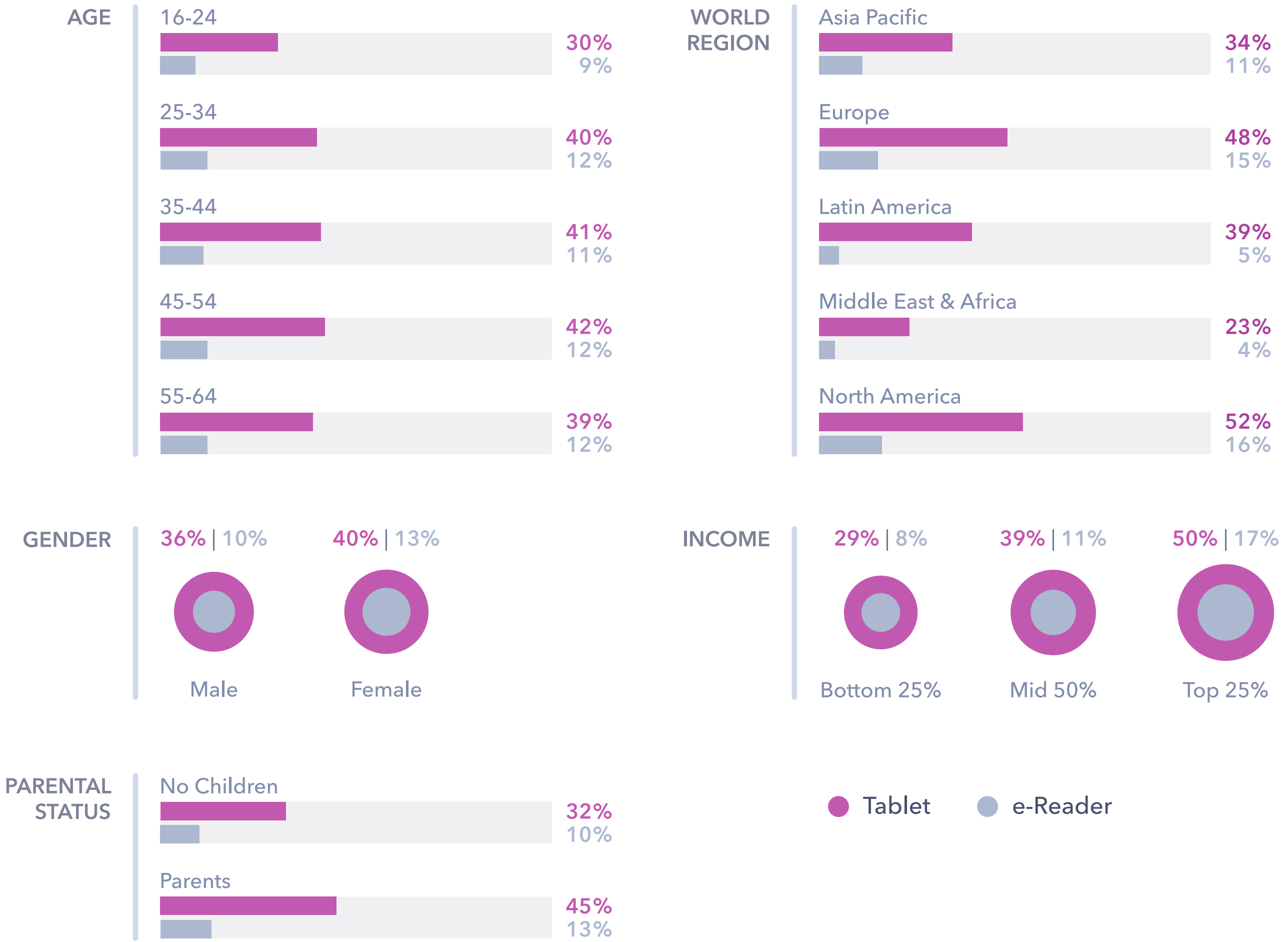
TABLETS AND E-READERS HAVE STABILIZED FROM THEIR HISTORIC DECLINE

Question: Which of the following devices do you personally own?
Source: GlobalWebIndex 2015 - H2 2018
Base: 113,932 Internet Users Aged 16-64

Tablets and e-readers

TABLET AND E-READER OWNERSHIP ACROSS DEMOGRAPHICS

% who personally own a tablet or e-reader



TREND IN ACTION

iPhone: New phones, for everyone

In September 2018, Apple released three new models of iPhones. The high-end range includes the iPhone XS, their newest flagship phone with improved processor and camera functionality, and the iPhone XS Max, which has a bigger screen and an ever heftier price tag. They've also released the iPhone XR, a colorful, lower-cost model that still includes some features of the iPhone X like the edge-to-edge screen and face ID.

While the advancements to the iPhone were largely modest, Apple has instead opted for a clever pricing strategy, and various options for colors, sizes and storage. This strategy aims to take the iPhone to more segments of the market and increase unit sales and average selling prices.

Question: Which of the following devices do you personally own?
Source: GlobalWebIndex Q3 2018 | **Base:** 113,932 Internet Users Aged 16-64

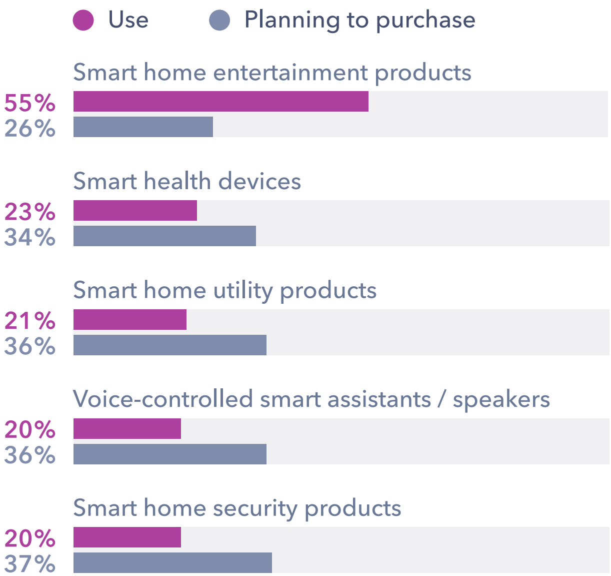
Smart home devices

Few devices are more discussed than voice assistants. With their promise of *Star Trek*-style "computer, tell me–" functionalities, immediacy and ease, they're heralded as the future of everything from search to shopping. So far, they've seen most rapid adoption in APAC, driven by China, where the most popular smart speakers (like Tmall Genie) can be had for as little as $15-30 USD, but adoption has been much slower elsewhere.

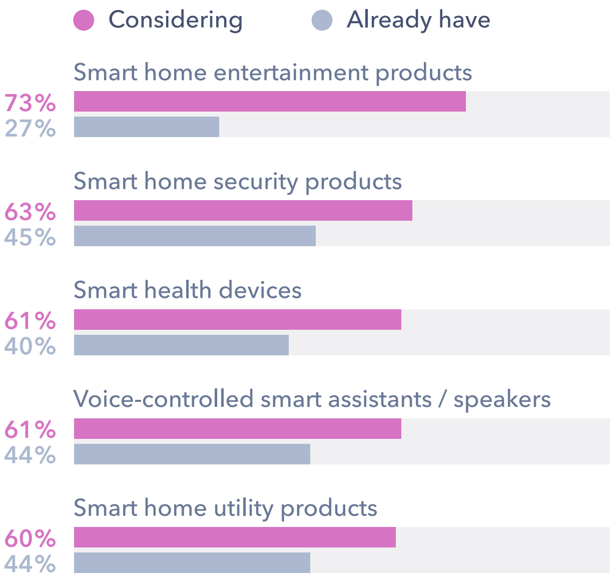
In India, where our sample is proportionately more urban and middle class because of the relatively lower internet penetration in that market, adoption has crept up to 26%, while the at-home use among consumers in the U.S. stands at 23%. 87% of those smart assistant owners live with others (partner, parents, roommates) and almost half have children at home.

Brands still face a value-exchange communication challenge with these devices. The need to convince consumers that they're essential 'must-have' devices that add value to their lives, especially at higher price points. As of Q3 2018, around 36% of consumers were considering acquiring a smart assistant, so there's both great potential for growth – and **a very large audience that are yet to be persuaded**.

SMART HOME DEVICE OWNERSHIP



FIRST AND FURTHER ACQUISITIONS



TREND IN ACTION

Transitional devices and integration

TV and entertainment are the main routes for smart-tech adoption today. Smart TVs and wireless speakers are the most popular tools, but they're matched by a growing range of devices – like Chromecast and Amazon Fire Stick – that expand the functionality of existing technology. These are short-term bridges, but it is not obvious that the dedicated-device approach will win out. US-based smart speaker brand Sonos, which serves the higher end of the market, has announced that Google Assistant will be made available to its systems by the end of 2018. Long-awaited, this would constitute a major step integration of smart assistant and voice capacities into existing home products. Rather than speaking into a particular pod or device, users could interact with their voice assistant anywhere in the house or on the go. In this model, smart capabilities become pervasive and integrated into existing technologies and routines.

Question: Which of the following devices do you personally own?
Source: GlobalWebIndex Q3 2018
Base: 113,932 Internet Users Aged 16-64

Voice tech

Voice-enabled search is a keystone habit that consumers will have to embrace if assistant devices are to achieve mass adoption. As of Q3 2018, 40% of the global online population say they have conducted a voice-search within the past month, which roughly represents a 19% increase versus Q2 2017.

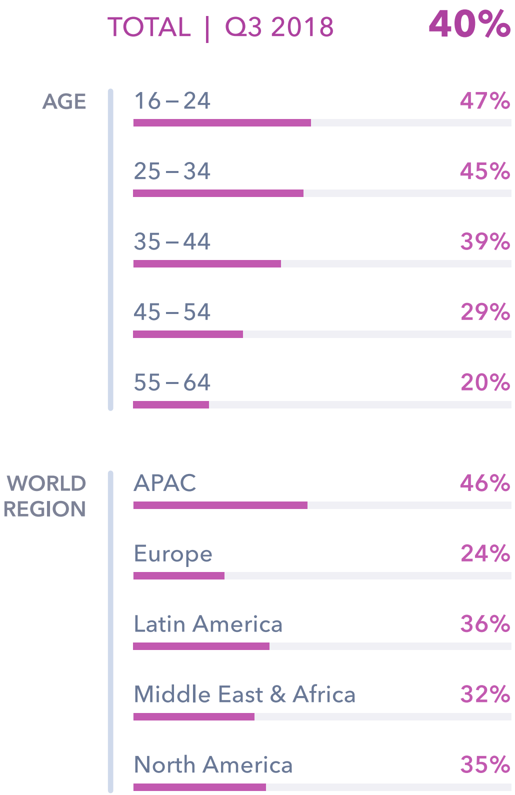
The younger the internet user, the more likely they are to be engaging with voice search – nearly half of 16-24s are. But across each age group, there's been an increase in the numbers searching via voice commands. Almost all mid-to-premium-end mobiles now have integrated voice assistants and their capabilities continue to become more sophisticated with each new generation of handset.

We see large regional disparities in the adoption of voice technology – use of search, for instance, ranges from 24% in Europe to 46% in APAC. Most importantly, there's a wider openness to technology in the APAC region, where 58% say having the latest technology is important to them, versus just 30% in Europe and 34% in North America.

Language and cultural languages have an impact too, with voice often being quicker than typing in Chinese and Japanese. Consumers in these markets have been exposed to a wider range of input methods, from *romaji* to hiragana input in Japan, to swipe-typing, *bopomofo* and pinyin in Chinese-speaking markets. In China, voice adoption has been eased by the fact that consumers are less concerned by using voice chat and functions publicly than people in other markets.

MOBILE VOICE SEARCH

% who have used voice search on their mobile in the last month



NORTH AMERICA & EUROPE ARE BEHIND THE CURVE ON VOICE TECHNOLOGIES, BUT ADOPTION IS STILL GROWING

TREND IN ACTION

An Alexa for everything

In September 2018, Amazon announced the introduction of a series of new devices with its Alexa assistant built-in. Some of the new devices included an Echo Auto (basically an Alexa for your car), and, more randomly, an Amazon's Basics microwave.

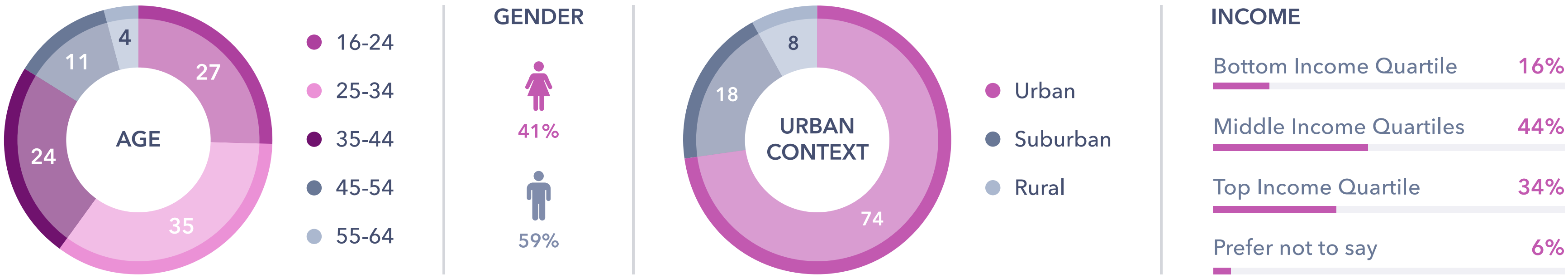
Amazon's strategy is clear: the company wants to make their voice assistant ubiquitous in people's lives and is making efforts to create a connected ecosystem. This is reinforced by the fact that Amazon are creating more Alexa-integrated devices for the home and car and implementing the assistant into an array of business settings. We know that voice technology shows no signs of slowing down anytime soon, and has the potential to disrupt many industries. But a big question remains, how do brands commercialize this new interface properly?

Question: In the past month, which of the following things have you done on the internet via any device?
Source: GlobalWebIndex Q3 2018
Base: 113,932 Internet Users Aged 16-64

Smartwatches

PROFILING SMARTWATCH OWNERS

% who are…



The smartwatch market is still yet to fully take off. **Just 11% of online adults say they have a smartwatch**, with an overrepresentation of men (59%), businessmen, people in their late 20s-early 30s and higher income brackets. Besides price, there've been reports that smartwatches have been too limited in features and apps. As saw with home entertainment products, more general-purpose tools seem to enjoy faster uptake.

Regional differences are important to note, though. The headline figure is driven by Asia Pacific (13%), particularly by high uptake in China and India. Not all these people have an Apple Watch; in Asia the term 'smartwatch' encompasses a range of devices, some of which retail for as little as $20.

Elsewhere, in the U.S. and UK, higher end models prevail. By far the largest share of **smartwatch owners in the UK/U.S. have an Apple watch** – twice as many as those owning a Samsung. Apple's launch of its Apple Watch Series 4 could lure more consumers towards buying its watches, especially as screen sizes have increased. UBS expects shipments to go from 18 to 33 million per year in 2019.

SMARTWATCH OWNERS ARE...

38% more likely
to say they are brand conscious

46% more likely
to say they like to keep up with the latest fashions

171% more likely
to regularly fly business or first class

Source: GlobalWebIndex Q3 2018
Base: 12,580 Smartwatch Owners aged 16-64

Device ownership market insights

Country	Smartphone, %	PC / Laptop, %	Tablet, %	Games console, %
Argentina	97	75	40	28
Australia	93	83	49	33
Austria	95	88	51	34
Belgium	90	86	50	29
Brazil	97	73	34	28
Canada	89	82	50	40
China	98	66	37	14
Colombia	97	81	39	30
Denmark	92	77	54	34
Egypt	95	63	22	8
France	91	88	46	36
Germany	91	91	48	34
Ghana	98	35	17	7
Hong Kong	97	73	52	29
India	95	78	27	16
Indonesia	98	69	23	14
Ireland	95	80	49	34
Italy	96	78	49	32
Japan	85	77	26	24
Kenya	96	33	14	7
Malaysia	99	72	33	15
Mexico	97	77	47	43
Morocco	98	29	19	11
Netherlands	92	87	54	28
New Zealand	94	83	45	32
Nigeria	98	31	15	14
Philippines	99	77	44	18
Poland	94	87	43	30
Portugal	93	85	50	26
Russia	89	87	40	10
Saudi Arabia	97	48	26	17
Singapore	96	77	46	17
South Africa	97	77	45	25
South Korea	97	83	30	12
Spain	96	86	56	43
Sweden	95	80	53	36
Switzerland	94	83	49	28
Taiwan	98	78	41	17
Thailand	98	52	35	11
Turkey	98	70	49	22
UAE	97	61	37	19
UK	92	82	54	38
USA	91	82	52	39
Vietnam	99	73	39	11

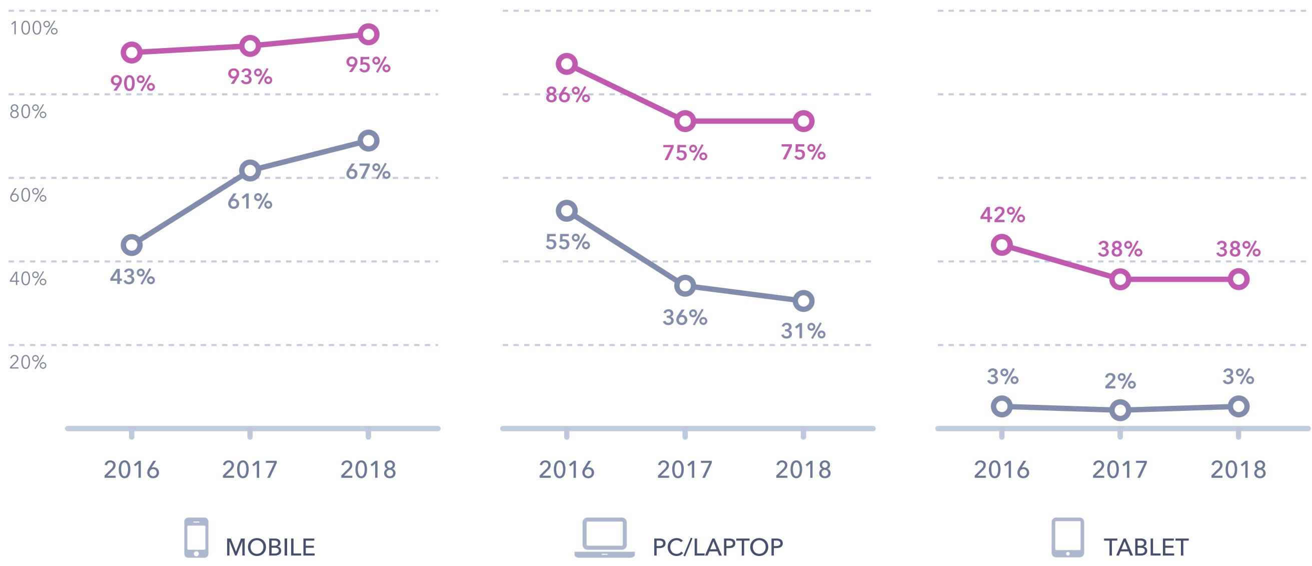
Devices

Device Usage Trends

To what extent and for what reasons are digital consumers using their devices?

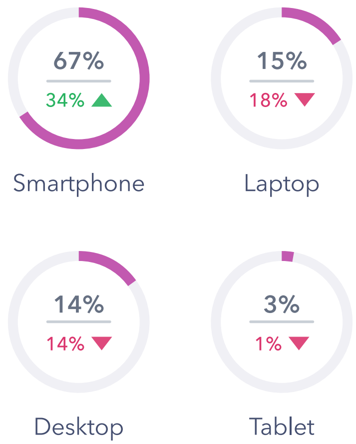
Device importance

DEVICE IMPORTANCE/OWNERSHIP | 2016-2018



DEVICE IMPORTANCE

% who say the following is their most important device



When we ask digital consumers to select their most important device for getting online, **two-thirds select their smartphone – up 34 percentage points since Q1 2016**. Over the same period, laptops and desktops have become less important: just 15% of consumers identified them as their most important devices.

'MOBILE-FIRST' ISN'T A MILLENNIAL-ONLY TRAIT

Device importance has shifted considerably more quickly than ownership rates, as indicated in the chart. In the same period that mobiles went from trailing laptops and PCs by 12 percentage points to leading by 36 point percentage points, smartphone ownership crept up just 5 percentage points, from 90 to 95%.

The figure for tablets is quite striking – with 3% identifying them as their most important device – furthering their long-standing position as an add-on to other devices. Even people who own tablets are considerably more likely to identify their smartphone as their main device. It isn't necessarily a failing of tablets, but it cements the fact that they've settled into a role as supplementary entertainment devices for most consumers.

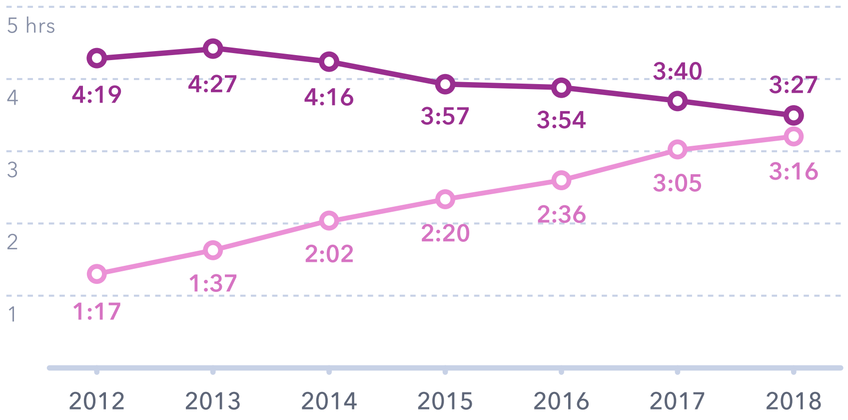
While all the regions now attach more value to their smartphones than their laptops, the difference is narrow for North America and Europe. We see some limited variation by age: Among older audiences, there are relatively more people who prefer PCs and laptops, but people who prefer PCs only make up the majority among those aged 55-64.

Question: Which would you say is the most important device you use to access the internet, whether at home or elsewhere?
Source: 2016 - H2 2018
Base: 113,932 Internet Users Aged 16-64

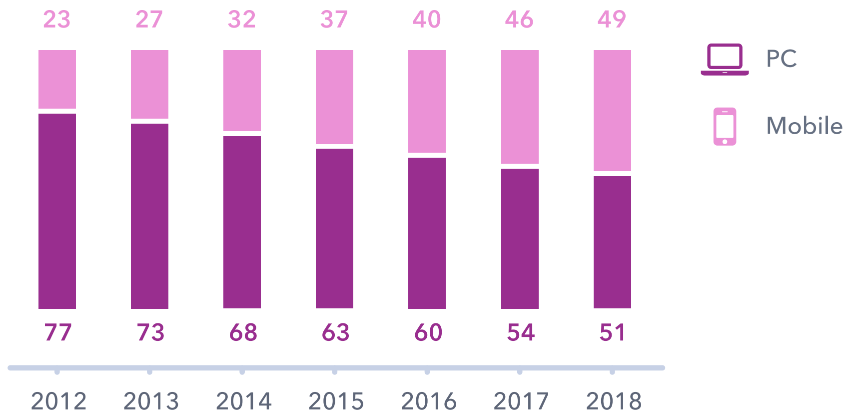
PCs vs smartphones

TIME SPENT ONLINE | PC VS MOBILE

Average daily hours and minutes spent online via



SHARE OF TIME SPENT ON PC VS MOBILE



Self-reported device importance in part reflects personal preference, rather than just sheer practicality (device satisfaction is also consistently higher for mobiles than PCs, for instance). Looking at time spent, the gap between mobile and bigger-screen devices isn't as wide as you'd presume.

DEVICE CHOICE IS DICTATED BY NEEDS & CONTEXT OF USAGE

Considering the amount of time that's being devoted to PCs/laptops/tablets each day – 3 hours 28 minutes – mobile-only strategies shouldn't yet be the default.

A likely scenario is that PC/laptop usage will fall to a stable level that's sustained by productivity and demanding hobby use, like gaming or picture editing, the same way tablets seem to have stabilized in their role as at-home second screens.

55-64s are still spending nearly 2 hours longer on devices other than their smartphones, though their overall usage isn't remarkable. It isn't so much that they are PC fanatics - rather, mobile phone usage is lower, so PCs command a relatively larger share of their device usage.

It's important to recall what this change is and isn't. Speaking of a ***shift*** to mobile or mobile ***transition*** can be misleading. Rather, people are spending more and more time online as they've added mobiles as another part of their life. Mobiles, tablets, e-readers have come in as second screens, much as TV supplemented cinemas, and cinemas supplemented radio and theatre. Relative importance shifts, but all in all media consumption continues to rise – especially among higher income groups.

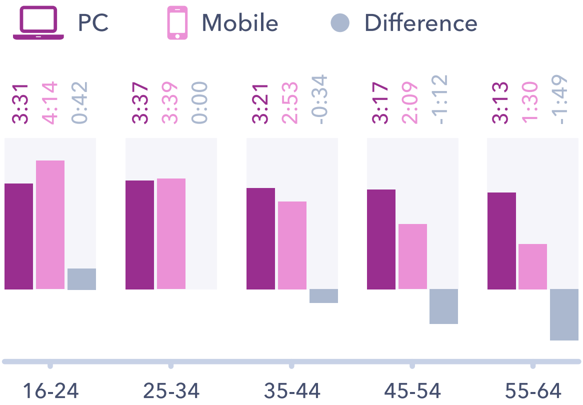
But as smartphones have risen in importance, more and more behaviors have become mobile-first, as mobiles are present in a wider range of contexts than stationary and big-screen units.

Question: Roughly how many hours do you spend online on a PC/Tablet/Laptop or a mobile during a typical day?
Source: GlobalWebIndex 2012-2018 (averages across each wave of research conducted in each year)
Base: 113,932 Internet Users Aged 16-64

PCs vs smartphones

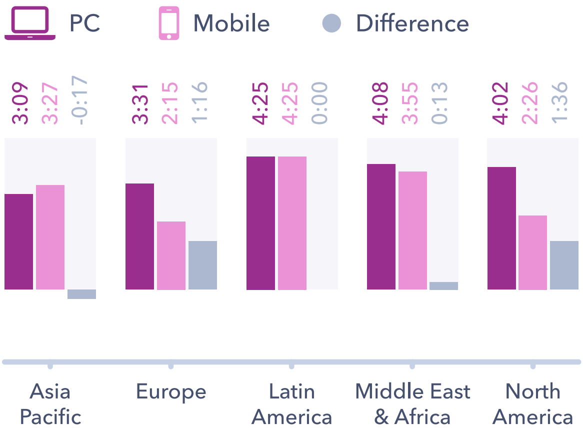
TIME SPENT ONLINE | BY AGE

Average hh:mm per day



TIME SPENT ONLINE | BY REGION

Average hh:mm per day



TOP MOBILE-FIRST BEHAVIORS

% who have done the following on…

	Mobile	PC	Diff.
Visited/used a social network	90%	75%	15%
Used a chat or instant messaging service/app	86%	37%	49%
Watched a video clip or visited a video-sharing site	85%	62%	23%
Visited/ used a search engine	84%	81%	3%
Visited an online retail site or store such as Amazon	73%	63%	10%
Used a map or directions service/app	73%	27%	46%
Visited a news website/app/service	68%	49%	19%
Searched for a product or service you want to buy	68%	51%	17%
Checked the weather online	60%	32%	29%
Uploaded/shared a photo	60%	28%	32%
Used an online encyclopedia such as Wikipedia	41%	42%	-1%

Out of 35 online activities surveyed, **34** are more commonly undertaken on mobile devices. **Social media related behaviors are firmly mobile-first**; there's a 49-point difference in chat-app usage on mobiles (86%) and PCs (37%). This is down to consumers dipping in and out of different messaging apps whenever and wherever they please.

Mobile figures are also strong for behaviors like using maps, music-streaming services, and news apps – with many clearly doing these things when they're on the move. Meanwhile, there is only one online behavior that are more likely to be done on a computer than a mobile – using online encyclopedias, such as Wikipedia – showing again that **productivity is underpinning PC usage**. Among younger mobile-first audiences, for instance, PC usage is higher among students, who are using PCs for daily learning and assignments.

Question: Roughly how many hours do you spend online on a PC/Tablet/Laptop or a mobile during a typical day? **Source:** GlobalWebIndex 2012-2018 (averages across each wave of research conducted in each year) **Base:** 113,932 Internet Users Aged 16-64

Question: In the past month, which of the following things have you done on the internet via any device? **Source:** GlobalWebIndex Q3 2018 **Base:** 113,932 Internet Users aged 16-64

The future of tablets | A second-screen and entertainment device

There are now no online behaviors where tablet users are more likely turn to their tablets than their mobiles.

It's only for TV/entertainment-related behaviors that tablets pose any sort of competition to mobiles. **Tablet users are almost as likely to be watching TV on their tablet (46%) as their mobile (54%).** Similarly, the difference is just 6 percentage-points for watching TV on demand (TVOD), continuing a negative tendency over time.

Tablets will never challenge smartphones, so it's important to note where they can offer something extra. Being larger and often Wi-Fi-dependent, they're often not used as on-the-go devices. But their larger screens make them suited for purposes like watching TV and browsing the web while at home – notably even while watching TV.

ALMOST HALF OF TABLET USERS USE THEIR TABLET TO SECOND-SCREEN

46% of tablet users use their tablet while watching TV. They're still more likely to be using a mobile, but consumers don't necessarily use just one second-screen device. They might be shopping on their tablet and scrolling through social networks on their mobile in the course of one TV show.

Interestingly, **tablet second-screeners are more likely than mobile second-screeners to be searching for products to buy (41% vs 29%)**, and they're also ahead for searching for information related to what's on the main screen. Their larger screens presumably make tablets easier to use for browsing.

TV BEHAVIORS: MOBILES VS TABLETS

% of tablet users who do the following on each device

	Mobile	Tablet
Watch TV in any form	54%	46%
Watch television live as it is broadcast on a TV channel	25%	18%
Watch a TV channel's catch-up/on-demand service	25%	19%
Watch subscription services such as Netflix	30%	23%

Question: In the past month, which devices have you used to do the following?
Source: GlobalWebIndex Q3 2018
Base: 42,285 Tablet Users aged 16-64

TABLET VS MOBILE SECOND-SCREENERS

% who say they do the following as they watch TV

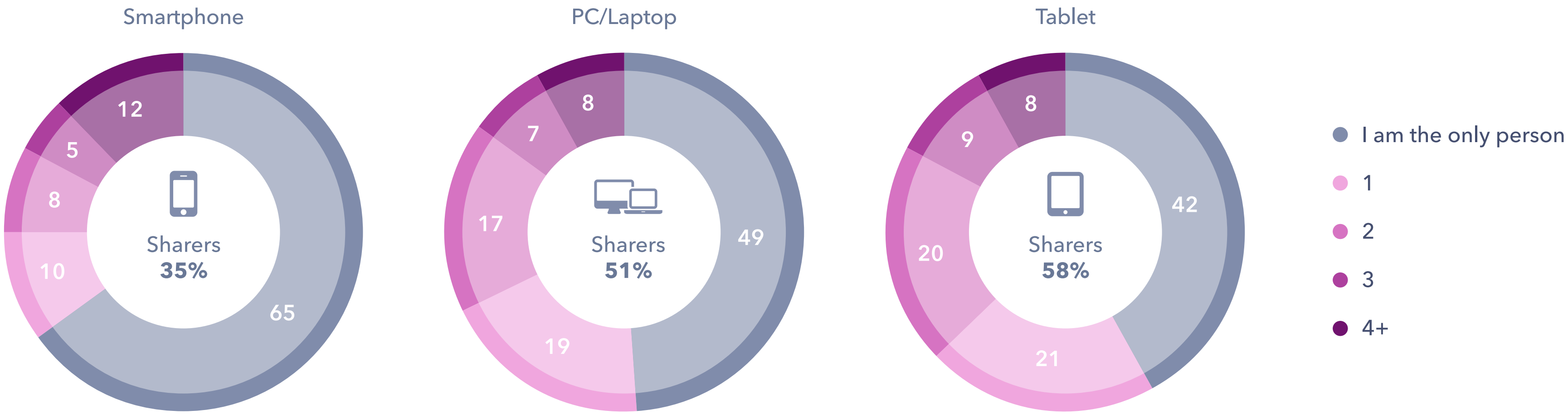
	Tablet	Mobile
Chat to/message friends	57%	55%
Interact with the online content of the TV show	22%	13%
Play games	46%	37%
Read my emails	49%	38%
Read the news	42%	32%
Search for information related to what I'm watching	35%	25%
Search for products to buy	41%	29%
Share my opinion of a TV show	23%	15%
Use social media	57%	53%

Question: When watching TV, which of these things do you often do on another device at the same time?
Source: GlobalWebIndex Q4 2017
Base: 84,577 Mobile and 25,433 Tablet Second-Screeners aged 16-64

Device sharing

DEVICE SHARING

% of users who share their device with the following number of people



As seen with the statistics around ownership versus importance of devices, real-life usage – and hence the meaningful user base – can deviate strongly from what ownership rates alone. Some devices have a reach that extends beyond their owners; others, like work PCs, are only used by one person for limited parts of their weeks.

This is particularly the case for tablets, which are often shared. So despite lower ownership rates, one device does not necessarily equate to just one user. In fact, across all device types, our data shows that large numbers of owners are sharing them with others.

It's well known that devices such as PCs, laptops and games consoles are often shared between multiple members of a household. But 58% of tablet users are sharing their devices, as are 35% of mobile users. **This brings major implications for the accuracy of passive tracking techniques and their ability to understand who is using a device at any given moment.**

The higher rate for tablets is largely down to the role that tablets have as entertainment tools used by families. Although most have their own smartphone, there's little need for each member of a family to have their own tablet. With those who are married with children being the biggest sharers of all, this is especially apparent.

Question: Thinking about the devices you use to access the internet, can you please tell us how many, if any, other people use each device?
Source: GlobalWebIndex Q3 2018
Base: 88,318 PC Users, 100.914 Smartphone Users, 41,484 Tablet Users aged 16-64

Device usage trends | Market insights

TIME SPENT ONLINE

● Mobile ● PC / Laptop / Tablet

Mobile	Country	PC / Laptop / Tablet
4:26	Argentina	3:52
2:02	Australia	3:10
2:02	Austria	3:02
1:51	Belgium	3:15
4:46	Brazil	4:40
2:23	Canada	3:23
3:27	China	2:46
4:21	Colombia	4:05
1:58	Denmark	3:16
3:37	Egypt	4:05
1:43	France	3:04
1:33	Germany	2:59
4:04	Ghana	–
3:04	Hong Kong	3:12
3:40	India	3:40
4:21	Indonesia	3:44
2:41	Ireland	3:34
2:24	Italy	3:22
1:28	Japan	2:29
4:10	Kenya	–
4:11	Malaysia	3:39
4:01	Mexico	3:54
3:15	Morocco	–
2:01	Netherlands	2:32
2:13	New Zealand	3:28
4:33	Nigeria	–
5:18	Philippines	4:55
2:15	Poland	3:42
2:41	Portugal	3:56
2:42	Russia	4:18
3:45	Saudi Arabia	2:57
3:03	Singapore	4:00
3:54	South Africa	4:52
2:30	South Korea	2:50
2:15	Spain	2:51
2:33	Sweden	3:07
1:57	Switzerland	3:00
3:26	Taiwan	4:07
5:21	Thailand	3:44
3:49	Turkey	3:06
3:58	UAE	3:58
2:18	UK	3:26
2:34	USA	4:01
3:23	Vietnam	3:39

MOBILE IMPORTANCE

69%	48%	46%	43%	70%	48%	82%	70%	46%	68%	40%
Argentina	Australia	Austria	Belgium	Brazil	Canada	China	Colombia	Denmark	Egypt	France
32%	83%	68%	67%	84%	54%	56%	53%	85%	81%	68%
Germany	Ghana	Hong Kong	India	Indonesia	Ireland	Italy	Japan	Kenya	Malaysia	Mexico
81%	44%	50%	88%	77%	48%	56%	49%	79%	68%	62%
Morocco	Netherlands	New Zealand	Nigeria	Philippines	Poland	Portugal	Russia	Saudi Arabia	Singapore	South Africa
72%	48%	46%	43%	73%	87%	75%	76%	44%	44%	52%
South Korea	Spain	Sweden	Switzerland	Taiwan	Thailand	Turkey	UAE	UK	U.S.A.	Vietnam

Devices

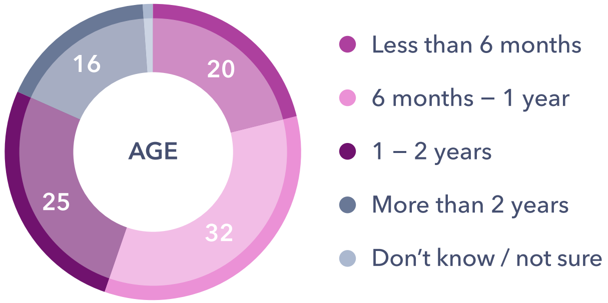
The Mobile Marketplace

Which handset brands are dominating
the mobile market?

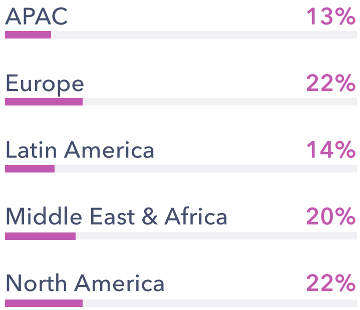
Length of mobile ownership & purchase timeframe

LENGTH OF MOBILE OWNERSHIP

% who say they have had their current mobile phone

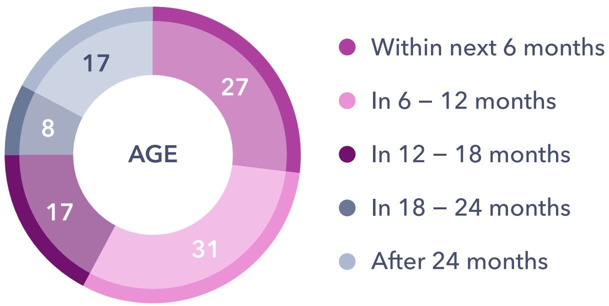


% who have had their current mobile phone for > 2 years

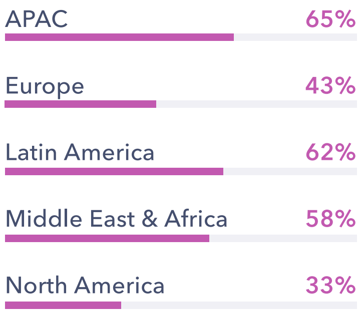


MOBILE PURCHASE TIMEFRAME

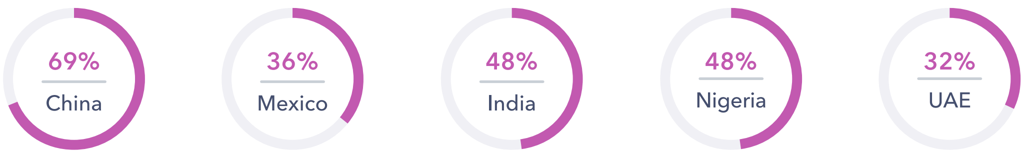
% who say they plan to buy a new mobile phone or upgrade their existing phone…



% who plan to buy a new mobile phone or upgrade within the next 12 months



% who plan to buy a new mobile phone or upgrade within the next 12 months



There are few remaining first-time phone buyers in Europe and North America. By now most consumers are upgrading at a relatively leisurely pace, despite the constant release of new models. **22% of mobile owners in Europe have had their mobile longer than 2 years, for example, vs. just 13% in APAC.**

Fast-growing markets and regions hold the key to renewed smartphone sales for phone manufacturers. Economic growth, population growth and growing internet penetration have increased the urgency of reaching mobile consumers in India and China, where global flagships are having to fight it out with local providers. Internet users in these markets are among the most likely to be in the market for a new phone in the next year (48% and 69% respectively).

At any given time, around 30% of smartphone users are planning **to upgrade or buy a new phone within the next 6 months**. Men seem to have slightly faster replacement cycles, as do 25-44s and the top income quartile.

The regional data confirms the slow upgrade cycles in North America and Europe. Only about 33% of users in North America plan to purchase a new phone in the next year, down from 46% in 2016. **In markets with high internet penetration and smartphone adoption rates, efforts need to focus on giving upgraders good enough reasons to trade in their existing handsets.**

Question: How long have you had your current mobile phone for?
Source: GlobalWebIndex Q3 2018
Base: 113,932 Internet Users Aged 16-64

Question: When do you plan to buy a new mobile phone or upgrade your existing phone?
Source: GlobalWebIndex Q3 2018
Base: 113,932 Internet Users Aged 16-64

Handset brands

Samsung's position as the most popular handset brand globally has weakened. As recently as Q1 2015, Samsung had a relatively firm hold on the market, with 33% of consumers in the then 33 surveyed markets owning a Samsung vs. 19% who had an iPhone. **Apple and Huawei have raced ahead, taking second and third place respectively among owners.**

So far, just 1 in 10 of the extant iPhone owners have adopted the X models. The iPhone 7 and 6S remain the most popular. The X model has managed to outpace the 8, showing the amount of excitement that Apple created around its 10-year anniversary model.

The mid-range P10, currently priced around $500 as of November 2018, is Huawei's most popular model, followed by the Alexa-enabled, Leica-co-branded Mate 9 and P9 models.

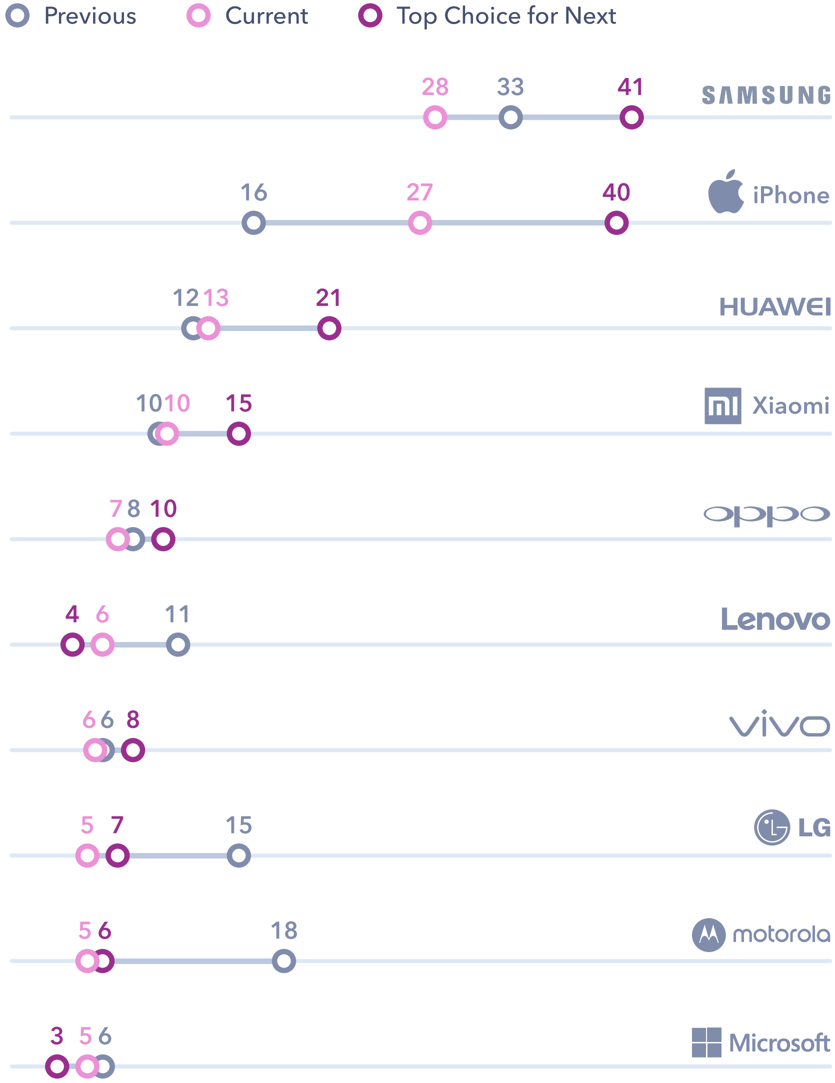
For purchase intention, Apple and Samsung score almost equal and around 40% say each brand is a top choice for an upgrade or purchase. **Apple can boast having the most loyal customer-base; 82% of iPhone owners say they would get another iPhone vs. 75% who say the same about Samsung.** Samsung Owners are also more likely to consider an iPhone than vice versa.

CHINESE BRANDS HUAWEI & XIAOMI CONTINUE TO INCREASE THEIR MARKET SHARE

Chinese brands like Huawei and Xiaomi have increased their market share recently, and not just in their home market. As of Q2 2018, a full 29% of global internet users own Huawei phones, with an additional 18% considering buying one. Huawei has been bolstered by Chinese government efforts to support domestic brands, but expansion hasn't only been limited to the Mainland.

MOBILE HANDSET BRANDS

% who have owned, own and want to own the following handset brands

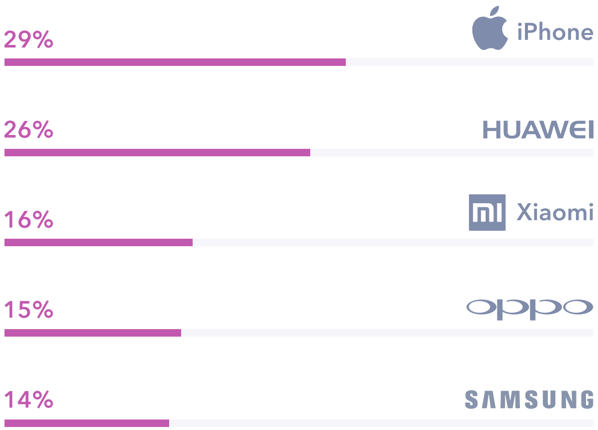


Question: Which of the following mobile brands do you currently own? // Which brand(s) would be your top choice when you next upgrade or buy a new mobile phone?
Source: GlobalWebIndex Q3 2018
Base: 113,932 Internet Users aged 16-64

Handset brands

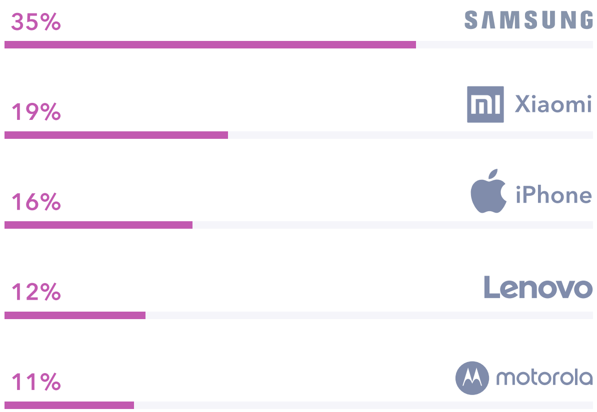
THE MOBILE MARKET IN CHINA

% who currently own the following mobile brands



THE MOBILE MARKET IN INDIA

% who currently own the following mobile brands



Huawei have now managed to match Apple in its home market, neck and neck at 28% of the market. Apple has had big ambitions for the Chinese market – where a mobile-first, affluent middle-class internet population has become a key target.

Another market Apple has its eyes set on is India. Apple's strategy is focused on sustaining profitability with premium products, while pursuing efforts to make its products more affordable – including an initiative to sell remanufactured phones in the country.

It's been somewhat successful so far: profits in India have grown by 44% and our data shows that the brand has increased its market share from 10% at the start of 2016 up to 16%.

But **Indian internet users are still over 2x as likely to have a Samsung as an iPhone**. In a market dominated by cheaper handsets, the iPhone is very much limited in India by its high price point. As a projection by Counterpoint Research projects, Apple's unit sales are expected to decline markedly in 2018 versus 2017. We have yet to see that effect, but will continue to track handset brands adoption in India.

TREND IN ACTION

China's rise as a device innovator, not just producer

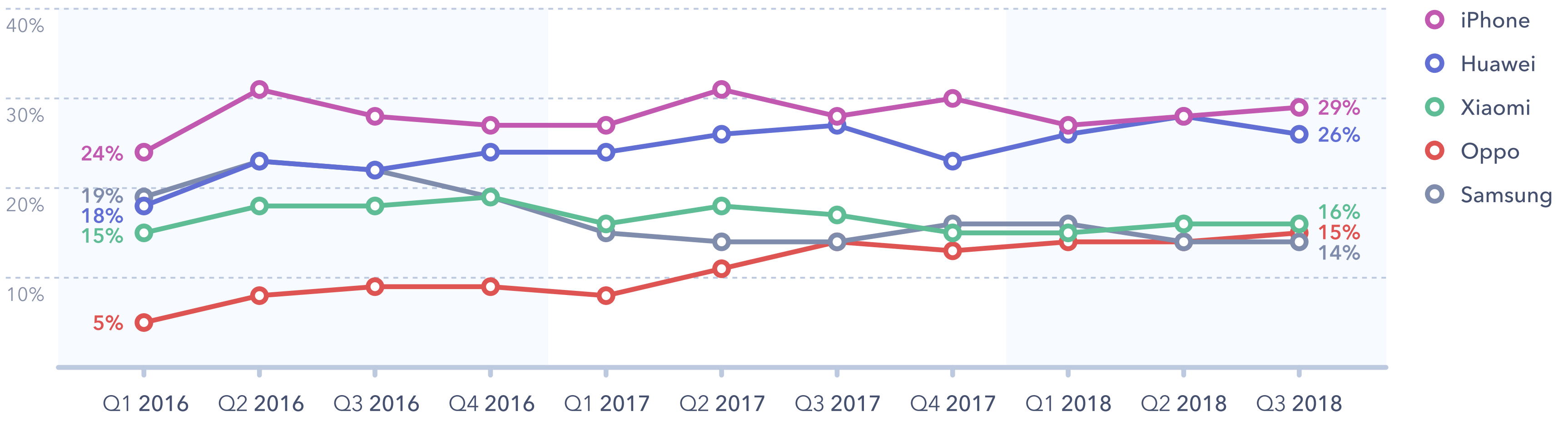
Chinese mobile phone producer Royole Corp has made a splash with the launch of its foldable phone. Long a feature of tech conferences, they've now entered the market ahead of global competitors like Samsung, Huawei and LG, which had been expected to unveil models of their own in the autumn of 2018. Should foldable screens become mainstream, we'd expect them to constitute another strong challenge to tablets – adding to the list of tenders, which has only grown since their mainstream launch ten years ago.

While it's yet unknown whether the Flexpai or other folding handsets will catch on, it's symbolically important that not just a Chinese firm, but a Chinese startup was able to beat established global players to the finish line

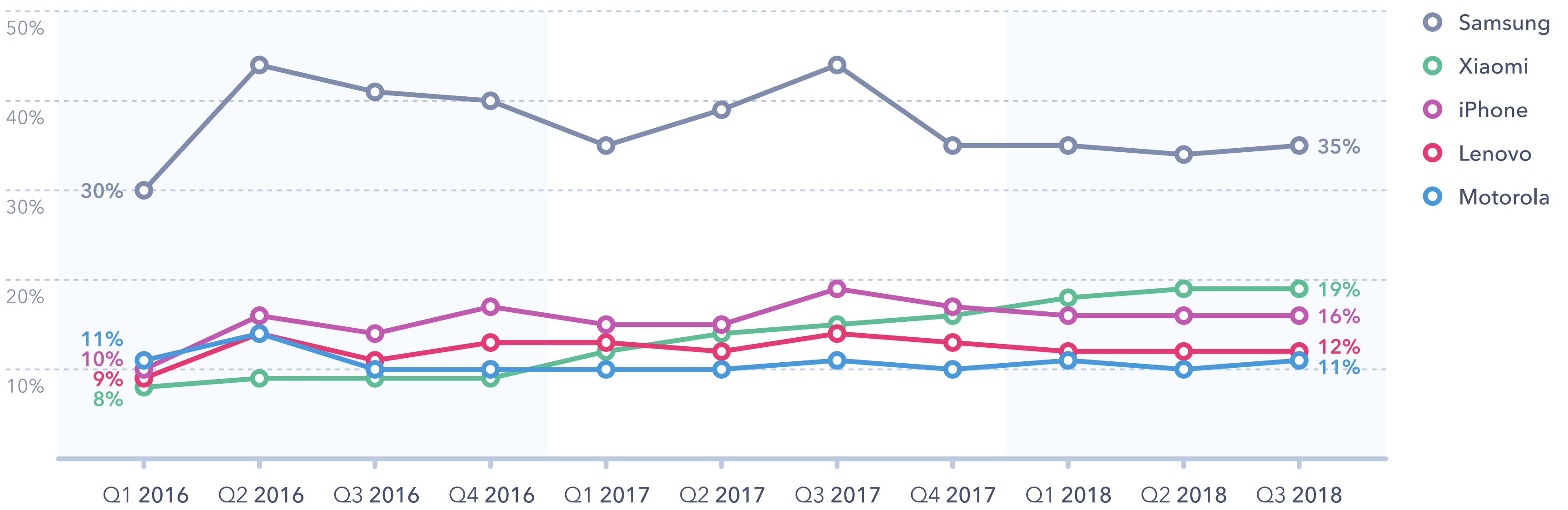
Question: Which of the following mobile brands do you currently own?
Source: GlobalWebIndex Q3 2018
Base: 113,932 Internet Users Aged 16-64

Handset brands

HANDSET BRANDS IN CHINA



HANDSET BRANDS IN INDIA



Question: Which of the following mobile brands do you currently own?
Source: GlobalWebIndex Q2 2018
Base: 172,908 internet users in China aged 16-64 (26,525 in Q3 2018)

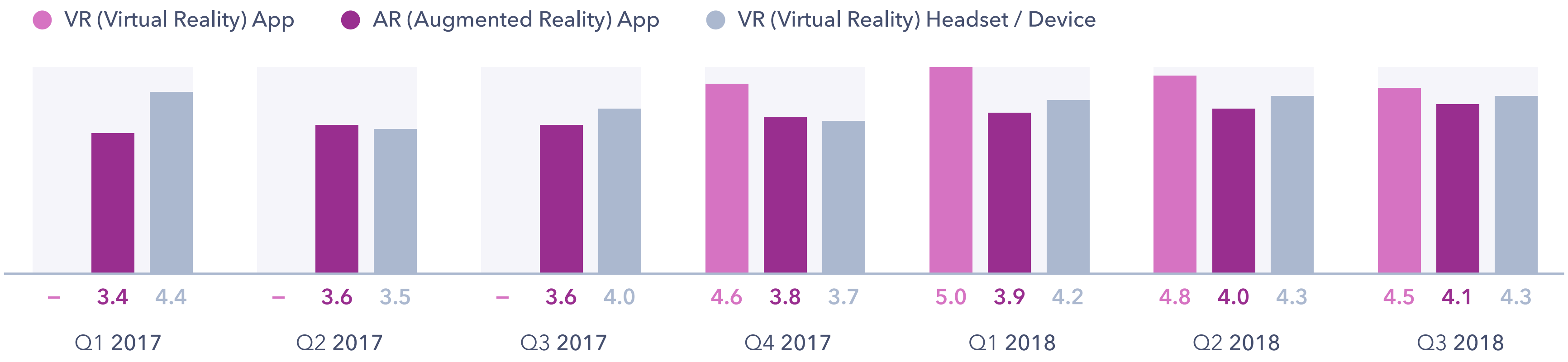
Question: Which of the following mobile brands do you currently own?
Source: GlobalWebIndex Q2 2018
Base: 57811 Internet Users in India aged 16-64

Devices

Personal & Entertainment Devices

Virtual and augmented reality

VR AND GAMING



Virtual and augmented reality remain niche phenomena, with outsized popularity among gamers, and younger high-income audiences. VR device ownership is also associated with interest in pop culture, gambling, startups, and business.

The highest prevalence of VR headset ownership is among the 25-34 year old age group, where just under 6% report owning one. Owners are 61% male (1.14 times more likely than the average online consumer). Asia is the largest VR headset market, with 63% of owners, but penetration is highest in North America, where penetration is 1.35 times higher than the global average.

Interest in gaming is also strongly associated with VR ownership (1.69 more likely to own a VR headset if you're interested in gaming), as is gambling – which we often see turn up as an interest among people interested in tech and innovation. Entrepreneurship, gadgetry, cars and automobiles are all popular – but really there's a wide variety of interests in this group. Urban and modern art are niche hobbies, but much more popular with VR owners.

The distinctive attitude profile of VR owners is a challenge for further adoption: this is an audience who're willing to buy a product just for the experience, just to be part of it or as an experiment, and are already inclined to consider innovative tech. This means for one, that the use case isn't clear to wider audiences; second, that VR is vulnerable to being upstaged by the next new thing.

Question: Thinking about mobile / tablet apps, which of the following categories have you used in the past month? Which of the following devices do you own?
Source: GlobalWebIndex Q2 2018
Base: 111,899 Internet Users aged 16-64

Standalone VR headsets set to make their mark

Prices are lowering and wires are disappearing – VR standalone headsets are set to grow and there's more companies getting in on the action. Oculus Go and Lenovo Mirage Solo are just two examples. These kinds of headsets can store and play VR content directly through the headsets, without the need to be connected to a computer.

These devices are expected to make up a large part of the AR and VR market over the next few years. With the increase in standalone options at lower price points and more gaming options, we can expect increased adoption of virtual reality devices.

TREND IN ACTION

Health, AR and sports converging

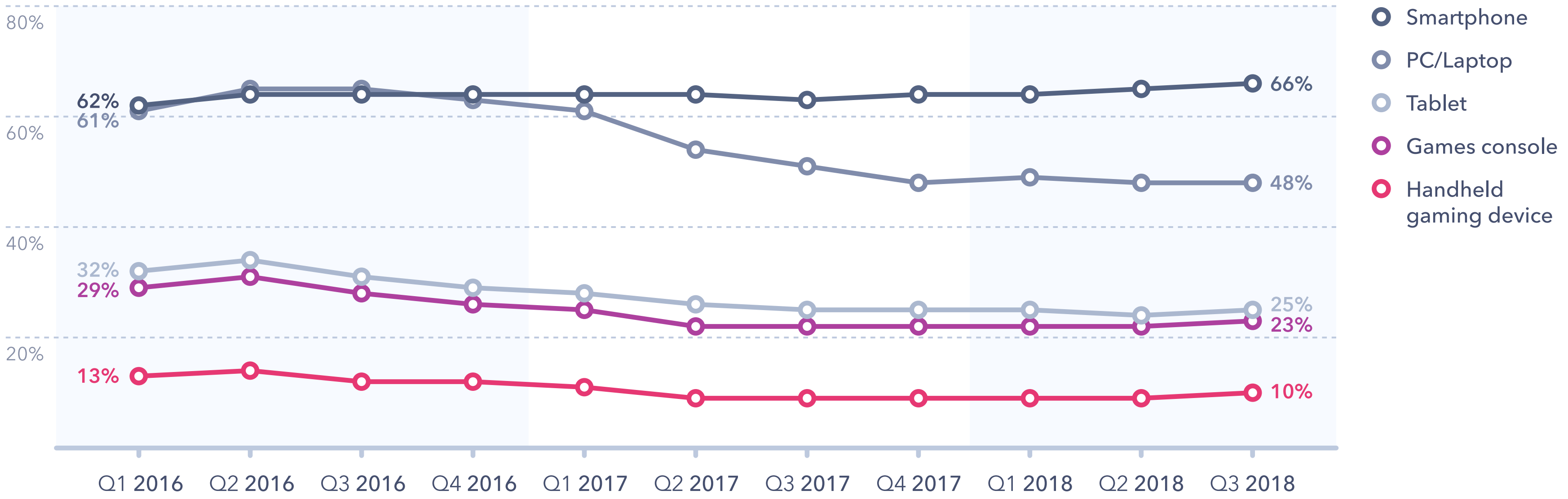
On the Augmented Reality side, Israeli Razor have introduced a new higher-end augmented reality device. Taking the opposite approach to the general, or even undefined-purpose Google Glass of 2013, it's a product with a very clear use-case and target audience: high-performance bicyclists.

The Everysight Raptor seeks to offer a combination of Satnav, Fitbit and GoPro – adopting the same multi-purpose, but-clearly articulated approach that helped smartphones prevail. It's for many things, not for nothing in particular, it's the kind of device we could imagine breaking outside the core group of techno-enthusiasts currently buying AR and VR devices.

Gaming

GAMING DEVICES

% who use the following devices to play games



Mobiles have outstripped all other devices as the preferred device for gaming. This is matched by a wider industry trend for both value and user figures to be shifting into smartphone (and to some extent, tablet) games.

This shift has progressed particularly in particular in the key Asian markets, where console and handheld device gaming were never as established. Three years ago, there were 40% as many console as PC gamers in the APAC region, vs. 79% as many in North America. Even as both PC and console gaming have declined since, the relative percentage is unchanged.

Question: Which of the following devices do you personally own?
Source: GlobalWebIndex Q4 2017
Base: 97,316 Internet Users aged 16-64

Gaming

Specialized gaming devices, whether consoles or handheld, **have a user-base that is more limited, higher-income and more hobby-focused than the average internet user**. We're seeing a male bias, though with 38% female users, gaming consoles certainly aren't even nearly exclusively used by men.

Consoles are most popular with those 25-34 year old (27% penetration), male (26% vs. 18% of women), and with the top 10% of the income segment (34%, vs. 19% of the bottom 25%). Handheld gaming devices show the same pattern, albeit less extremely.

PlayStation 4 remains the strongest console brand, though only 23% said they would be interested in purchasing one, and only 9 percent currently own one. Xbox lags behind both in terms of ownership and interest.

GAMING CONSOLES

% who use the following gaming consoles

Question: Thinking about these gaming devices, can you tell us which of them you currently use, are interested in purchasing, and would recommend to others?
Source: GlobalWebIndex Q3 2018
Base: 113,932 Internet Users aged 16-64

Notes on Methodology

All figures in this report are drawn from **GlobalWebIndex's online research among internet users aged 16-64.** Please note that we only interview respondents aged 16-64 and our figures are representative of the **online** populations of each market, not its total population.

OUR RESEARCH

Each year, GlobalWebIndex interviews over 400,000 internet users aged 16-64. Respondents complete an **online questionnaire** that asks them a wide range of questions about their lives, lifestyles and digital behaviors. **We source these respondents in partnership with a number of industry-leading panel providers.** Each respondent who takes a GlobalWebIndex survey is assigned a unique and persistent identifier regardless of the site/panel to which they belong and **no respondent can participate in our survey more than once a year** (with the exception of internet users in Egypt, Saudi Arabia and the UAE, where respondents are allowed to complete the survey at 6-month intervals).

OUR QUOTAS

To ensure that **our research is reflective of the online population in each market, we set appropriate quotas on age, gender and education –** meaning that we interview representative numbers of men vs women, of 16-24s, 25-34s, 35-44s, 45-54s and 55-64s, and of people with secondary vs tertiary education. To do this, we conduct research across a range of international and national sources, including the World Bank, the ITU, the International Labour Organization, the CIA Factbook, Eurostat, the US Bureau of Labor Statistics as well as a range of national statistics sources, government departments and other credible and robust third-party sources.

This research is also used to calculate the "weight" of each respondent; that is, approximately how many people (of the same gender, age and educational attainment) are represented by their responses.

MOBILE SURVEY RESPONDENTS

From Q1 2017 on, GlobalWebIndex has offered our Core survey on mobile. This allows us to survey internet users who prefer using a mobile or are mobile-only (who use a mobile to get online but do not use or own any other device). Mobile respondents complete a shorter version of our Core survey, answering 50 questions, all carefully adapted to be compatible with mobile screens.

Please note that the sample sizes presented in the charts throughout this report may differ as some will include both mobile and PC/laptop/tablet respondents and others will include only respondents who completed GlobalWebIndex's Core survey via PC/laptop/tablet. For more details on our methodology for mobile surveys and the questions asked to mobile respondents, please download this document.

GLOBALWEBINDEX SAMPLE SIZE BY MARKET

This report draws insights from GlobalWebIndex's Q3 2018 wave of research across 44 countries, which had a global sample size of 113,932.

Argentina	1,573	Morocco	1,000
Australia	2,346	Netherlands	1,276
Austria	1,303	New Zealand	1,287
Belgium	1,276	Nigeria	1,000
Brazil	2,381	Philippines	1,581
Canada	2,321	Poland	1,856
China	15,921	Portugal	1,297
Colombia	1,323	Russia	2,287
Denmark	1,293	Saudi Arabia	1,505
Egypt	1,754	Singapore	2,563
France	3,292	South Africa	1,547
Germany	2,889	South Korea	1,289
Ghana	1,000	Spain	2,881
Hong Kong	1,889	Sweden	1,287
India	4,157	Switzerland	1,286
Indonesia	1,773	Taiwan	1,830
Ireland	1,264	Thailand	1,562
Italy	2,870	Turkey	1,610
Japan	1,731	UAE	1,784
Kenya	1,000	UK	7,869
Malaysia	1,575	USA	16,125
Mexico	2,667	Vietnam	1,612

Notes on Methodology

ACROSS GLOBALWEBINDEX'S MARKETS

GlobalWebIndex's research focuses exclusively on the internet population and because internet penetration rates can vary significantly between countries (from a high of 90%+ in parts of Europe to lows of c.20% in parts of APAC), the nature of our samples is impacted accordingly.

Where a market has a high internet penetration rate, its online population will be relatively similar to its total population and hence we will see good representation across all age, gender and education breaks. This is typically the case across North America, Western Europe and parts of Asia Pacific such as Japan, Australia and New Zealand. Where a market has a medium to low internet penetration, its online population can be very different to its total population; broadly speaking, the **lower the country's overall internet penetration rate, the more likely it is that its internet users will be young, urban, affluent and educated.** This is the case throughout much of LatAm, MEA and Asia Pacific.

This table provides GlobalWebIndex forecasts on internet penetration (defined as the number of internet users per 100 people) in 2018. This forecasted data is based upon the latest internet penetration estimates from the International Telecommunication Union (ITU) for each market that GlobalWebIndex conducts online research in.

GLOBALWEBINDEX VERSUS ITU FIGURES

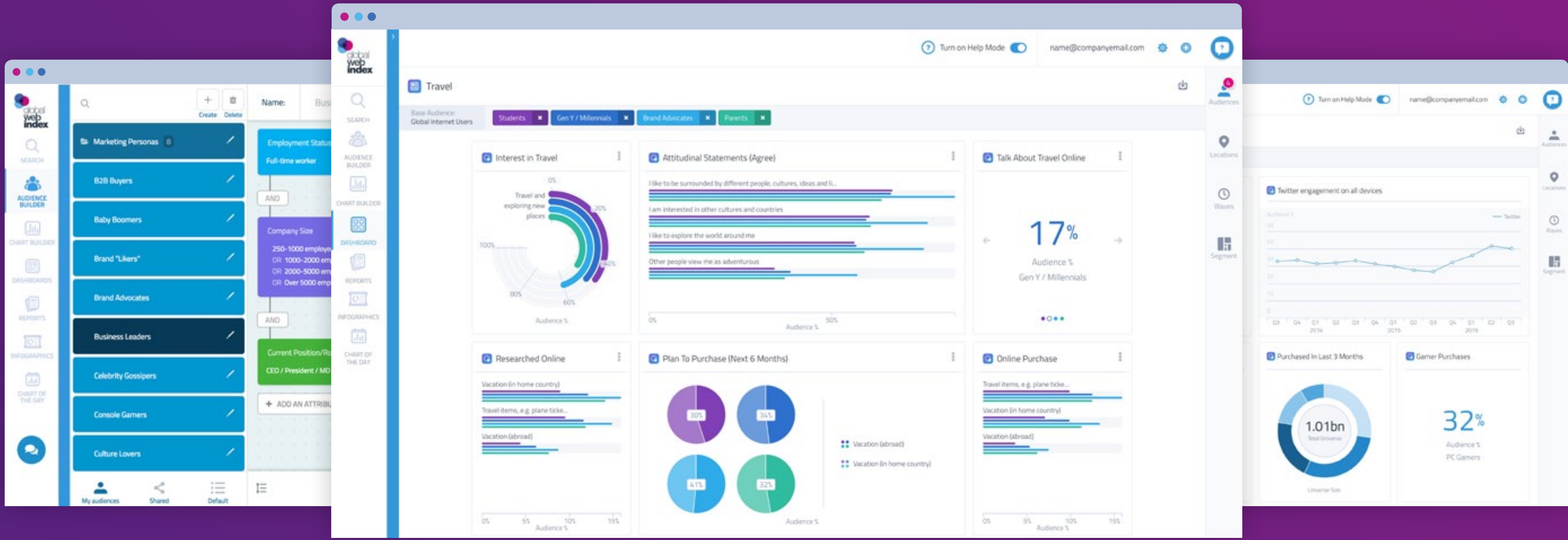
As GlobalWebIndex's Core Research is conducted among 16-64 year-olds, we supplement the internet penetration forecasts for a country's total population (reproduced above) with internet penetration forecasts for 16-64s specifically.

Forecasts for 16-64s will be higher than our forecasts for total population, since 16-64s are the most likely age groups to be using the internet.

INTERNET PENETRATION RATES

GlobalWebIndex's forecasts for 2018 based on 2016 ITU data

Argentina	77.1%
Australia	90.4%
Austria	86.3%
Belgium	89.0%
Brazil	65.9%
Canada	92.3%
China	58.4%
Egypt	45.2%
France	87.5%
Germany	91.9%
Ghana	45.6%
Hong Kong	91.8%
India	40.1%
Indonesia	32.7%
Ireland	84.0%
Italy	62.1%
Japan	95.8%
Kenya	37.9%
Malaysia	81.2%
Mexico	69.5%
Morocco	59.4%
Netherlands	90.4%
New Zealand	91.6%
Nigeria	32.5%
Philippines	60.8%
Poland	76.6%
Portugal	75.1%
Russia	81.3%
Saudi Arabia	81.3%
Singapore	84.2%
South Africa	60.9%
South Korea	94.5%
Spain	85.2%
Sweden	89.0%
Switzerland	90.6%
Taiwan	81.1%
Thailand	57.8%
Turkey	64.2%
UAE	93.4%
UK	96.1%
USA	79.0%
Vietnam	51.2%



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