

App Download and Usage Statistics Guide

App Download Statistics

Game Download Statistics

App Download Statistics: App Categories

Key App Markets

App Store Statistics

App Usage Statistics

App Retention and Churn Rate Statistics

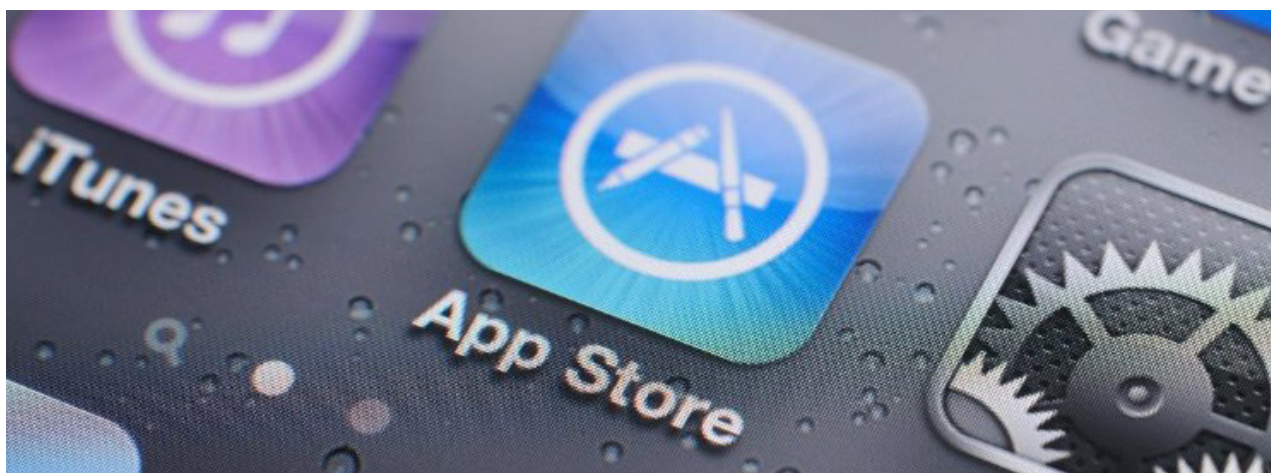
Mobile Game Usage Statistics

App Usage Stats: App Categories

App Download Statistics: Future Predictions



App Download and Usage Statistics



In 2018, the app as we know it turned 10.

There were 500 apps on the first iteration of Apple's App Store in 2008. We've come a long way since then. In 2018, Tim Cook announced that there were [20 million registered iOS developers](#) catering for the 500 million weekly visitors to the App Store alone. We don't have equivalent figures for Android, but previous [unofficial estimates have put it above iOS in terms of developer volume](#).

That's a lot of developer talent; but they're catering to one of the world's biggest consumer bases: app users. There are over [five billion mobile users in the world](#), with global internet penetration standing at 57%.

As of the first quarter of 2019, these app users could choose to download between 2.6 million Android, and 2.2 million iOS apps. And they certainly are choosing: App Annie [sets the total number of app downloads in 2018 at 194 billion](#); up from 178 billion in 2017.

The Apple App Store and the Google Play Store dominate this landscape: as such, they are two of the most importance marketplaces in the world, truly global in scope (bar a few complications...).

In the below report, we're going to take a look at most-popular apps, the most-downloaded apps, the top mobile games, Android vs. iOS, and a range of other app download statistics.

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Key app download statistics

- 194 billion app downloads in 2018, up from 178 billion in 2017
- 105 billion app downloads made through Google Play Store and iOS App Store
- Google Play downloads of 76 billion, 30 billion iOS App Store downloads
- Sensor Tower identifies WhatsApp as the most-downloaded app of 2018 (over 900 million), while App Annie gives the accolade to Facebook Messenger
- Helo is the most-downloaded app released in 2018, with over 60 million Google Play/iOS App Store downloads
- TikTok saw the greatest increase in downloads in the US, with 16 million more 2018 downloads than 2017 downloads
- Games were the most downloaded app type on iOS and on Android in 2018
- Personal finance apps saw the greatest increase in reach across key markets, with an average increase of 27.8%
- The global mobile gaming audience is estimated at 2.2 billion
- 50% of surveyed app users in the US, UK, France, and Germany had played a mobile game in the past week
- 38.3 billion game downloads made through Google Play Store and iOS App Store in 2018
- 29.4 billion game downloads made through Google Play Store, 8.9 billion through iOS App Store
- 33% of app downloads were mobile games in 2018
- 5 billion game downloads were made in India in 2018, 4.5 billion in the US

- Helix Jump was the most downloaded game of 2018
- Downloads of top-five food delivery apps doubled between 2016 and 2018
- 30% of global internet users used a ride-hailing app at least once a month in 2018
- China is the biggest iOS download market in the world
- India is the biggest Google Play download market in the world (nb. Google Play, not Android)
- China accounts for nearly 50% of global app downloads
- 64% of app downloads come from the APAC region, 19% from EMEA, and 17% from AMER
- India leads the way in app download growth, with 165% more app downloads in 2018 than 2016, making it the second-biggest app download market in the world
- Number of apps in iOS App Store: 2.2 million in May 2019
- Number of apps in Google Play Store: 2.6m in May 2019 (down from a peak of 3.6m)
- Between March and May 2019, 35,000-42,000 apps were added to the iOS App Store per month; while 132,000-142,000 were added to the Google Play Store
- 90% of iOS App Store apps are free, as are 95% of Google Play Store apps
- Total app usage increased by 50% between 2016 and 2018 globally, taking the total to around 1350 billion hours
- Social apps account for 50% of app usage time
- US users spent 77% of app usage time using their three top apps on average
- US users use an estimated 20.1 apps per month in 2019 – down from 21 in 2016
- On average US users use apps for 2 hours 57 minutes per day, out of 3 hours 43 minutes mobile time
- Estimates vary on average app retention rate after 90 days: from a generous 32% to an unforgiving 4%
- 120 billion hours are spent with mobile games annually
- US adult spend an average of 23 minutes a day playing mobile games
- Global average daily social media app usage stands at 2 hours 16 minutes
- The average user has nine social media accounts
- Media & entertainment apps are launched an average of 16.2 times per month, with an average session length of 7 minutes 14 minutes
- App downloads are predicted to reach 260 million by 2022
- Chinese app downloads predicted to increase by 51%, and Indian app downloads by 208%, while US app downloads will decrease by 9%
- Games predicted to dip to 33.9% of downloads, from 36.1% in 2017



App Download Statistics

Most-popular apps

Social media apps are the most-popular apps in the world. Facebook dominates, owning four of the top-five most-popular apps, including the entire top-three. Facebook itself takes first place, followed by WhatsApp and Facebook Messenger, with Instagram coming in fifth.

Facebook enjoys a considerable advantage in its global reach, with the app penetrating practically every corner of the globe. On the other hand, the only other company to be represented in the top-five, Tencent, has a different advantage: that Facebook is banned in China. WeChat has moved to fill this gap (and several others), and the fact that it ranks fourth here solely on the basis of domestic performance underscores the app's centrality to contemporary Chinese life.

China, as we will discuss further later, is the world's biggest app market. It is unique in being closed off to many international apps, therefore creating a captive market for domestic apps. We might note that five of world's top-10 apps are focused on the Chinese market. Aside from WeChat, we have Twitter-competitor QQ, mobile payments app Alipay, online marketplace Taobao, and search engine Baidu.

The top-10 is rounded out by WiFi Master Key – an app that allows users to connect to a global network of safe Wi-Fi networks.

Most-popular apps globally, MAU

Rank	App	Company
1	 Facebook	Facebook
2	 WhatsApp Messenger	Facebook
3	 Facebook Messenger	Facebook
4	 WeChat	Tencent
5	 Instagram	Facebook
6	 QQ	Tencent
7	 Alipay	Ant Financial Services Group
8	 Taobao	Alibaba Group
9	 WiFi Master Key	LINKSURE
10	 Baidu	Baidu

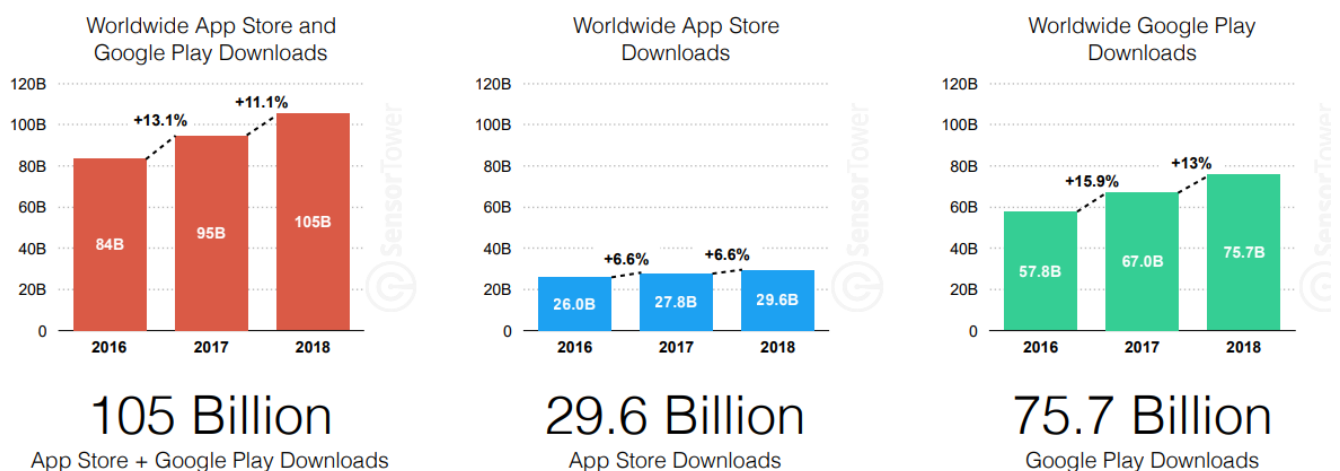
Source: App Annie

App download statistics

Sensor Tower's app download statistics cover only first-time downloads made through the two biggest channels: the Google Play Store and the iOS App Store. Total app downloads in 2018 came to 105.3 billion according to this set of mobile app data. Google Play dominates, with nearly three quarters of downloads being made through this channel.

In 2018, 76 billion downloads were made through Google Play – an increase of 13% over 2017. The App Store also grew, but at a slightly slower rate of 7%, to reach 30 billion downloads in 2018.

Google Play vs. App Store app downloads, 2017-18



Source: [Sensor Tower](#)

It's worth reiterating that while these might be the two biggest marketplaces, there are notable omissions – with apps like the Android-version of Fortnite bypassing the Play Store. Google Play is also unavailable in China – the world's biggest app market.

App Annie app download statistics includes third-party Android downloads, thus accounting for the huge number of app downloads made in China. Thus the total number of app downloads across 2018 comes to a 194 billion. This compares to 178 billion in 2017. While this represents a relatively modest increase, the figure is a 35% increase over 2016's total.

Most-downloaded apps

The most-downloaded app globally in 2018 was Facebook Messenger, according to App Annie app download statistics – with downloads exceeding that of even the main Facebook app and stablemate WhatsApp. This may be because the main app has already been installed so many times that there is (slightly!) less demand for it.

The Messenger app is required to use Messenger on mobile devices, with even messages sent through the browser blocked. Hence we see high download levels out of necessity;

Facebook Messenger remains more popular than WhatsApp in the US, among others, making it a central part of day-to-day communication. While these three have switched order, Instagram remains in fifth. The status quo shows no sign of being disrupted any time soon.

Well, nearly no sign – aside from the presence of Tik Tok in fourth place; a relative new-comer in this often staid ranking, having only been released outside of China in 2017 (where it had been released as Douyin only one year before). Tik Tok's rise has been meteoric, despite being baffling to most people over the age of 25; there could be few more potent demonstrations of the power of the youth market than this.

The previous incumbent of the making-you-feel-old slot, Snapchat, occupies eighth position here. While the prevalent narrative is that Snapchat has had a difficult couple of years, app download statistics show people are still downloading Snap in huge numbers.

Interestingly, UC Browser is the sole China-focused entrant here, at sixth. Perhaps we can assume that the most-popular apps in the China (WeChat, QQ, Alipay, etc) are already such an essential part of the fabric of Chinese life that far fewer punters will need to download them anew.

SHAREit's presence in seventh seems a paean to practicality, allowing users to do exactly what the name suggests. With several big names engaged in the business of fire-sharing – Google Drive and DropBox, for example – SHAREit shows that there is still value in an app doing a single job well.

The last two places in the top-10 most-downloaded apps of 2018 go to those two iconic streaming platforms which have changed the way we watch television and listen to music: Netflix and Spotify.

Rank	App	Company
1	 Facebook Messenger	Facebook
2	 Facebook	Facebook
3	 WhatsApp Messenger	Facebook
4	 Tik Tok	Toutiao
5	 Instagram	Facebook
6	 UC Browser	Alibaba Group
7	 SHAREit	SHAREit
8	 Snapchat	Snap
9	 Netflix	Netflix
10	 Spotify	Spotify

Source: [App Annie](#)

Sensor Tower's app download statistics only cover those made through the 'official channels' of the Google Play Store and the Apple App Store – thus cutting out the non-iOS Chinese marketplace and any Android apps like Fortnite which circumvent the Play Store where they can (there is, of course, no subverting the App Store for iOS apps).

At the top of the pile, using these app download statistics, is WhatsApp, with over 900 million downloads. In second place is Facebook Messenger, with somewhere in the region of 850 million downloads, and a little way behind we find Facebook itself, at around the 700 million download mark. Instagram completes the stable in fifth place, with overall 400 million downloads.

It seems, no matter what set of app download statistics we call upon, Facebook remains dominant – for now, at least...

As we see above, App Store downloads account for a significantly smaller proportion of overall downloads than Google Play, the ratio being not too far off 1:4.

In the highest echelons of this listing, this seems to be even more pronounced. We might posit that this is connected with the predominance of Android in emerging markets – where we are more likely to see first-time downloads of Facebook apps, which have reached high levels of saturation in mature markets.

TikTok – a relatively new name in the market – in fourth place is the first example where we see app download statistics more reflective of the overall global ratio. This presumably is a consequence of the app's freshness in the market, meaning it has yet to reach the same saturation point.

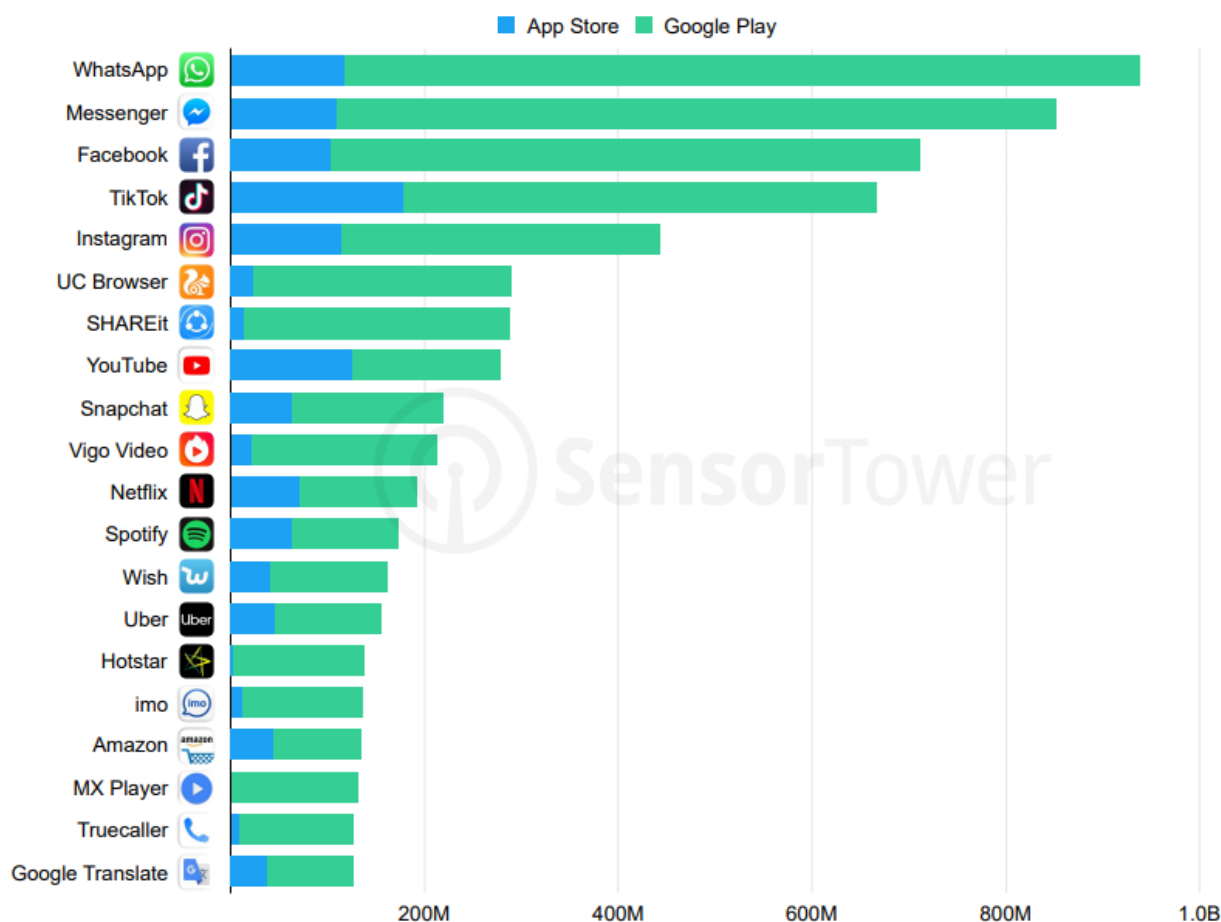
The download ratio for Instagram in fifth position seem to even be in favour of iOS (relative to the global ratio). iOS users are more likely to come from more mature, relatively more affluent markets.

Therefore, we might draw certain conclusions about the user base of the app from this mobile app data – as we might of Netflix and Spotify, for which iOS downloads also constitute an above average proportion of the total.

We also see this for YouTube, though this is perhaps complicated by Google's ownership of the app meaning that it comes preloaded on many Android devices.

Lower down the table we see a host of less heralded apps: TikTok owner ByteDance's video player Vigo Player, for instance (big in Brazil), discount online shopping platform Wish, and Indian OTT video players Hotstar and MX Player. We also more prosaic names in the mix: SHAREit (the seventh most-popular app in the world!), as well as caller ID/spam blocker Truecaller, and boundary-breaking Google Translate.

Most-downloaded mobile apps in 2018, App Store/Google Play only



Source: [Sensor Tower](#)

Most-popular apps by country

Sensor Tower, quite understandably, picks TikTok as its app of the year.

TikTok features in the top-10 most-downloaded apps of 2018 in all three of the world's biggest app markets – which together account for over 50% of global app downloads. It is the only app to do so, transcending the various cultural and political differences between the US, China, and India.

Broadly speaking, the US and India have much more in common than either do with China – though there are only three apps common to both in this listing: TikTok, Facebook Messenger, and Facebook. Even more credit should go, therefore, to TikTok for breaking the international hegemony of Facebook-owned apps.

The US top-10 is composed of names which will more than familiar to a Western audience. Bitmoji and Wish perhaps represent the less-talked about names in the list (relative-ly-speaking), though both have lost rank since 2017. Snapchat holds on to a top-five spot, despite losing three spots.

TikTok was the most-downloaded app in its native china over 2018. The rest of the list is dominated by the two biggest tech titans: Tencent, with video player Tencent Video, messenger (and more) app WeChat and social QQ; and Alibaba, with shopping platform Taobao, video player Youku, and digital payments app Alipay.

The dominance of the big-two is broken by video player iQiYi, e-commerce platform Pinduoduo, and social/e-commerce platform Xiaohongshu – as well as ByteDance's TikTok. Interestingly, all apps not owned by Tencent or Alibaba featured in the top-10 most-downloaded apps in China in 2018 have climbed up the table. Xiaohongshu climbed an amazing 45 positions to reach 10th place, and TikTok climbed 25 positions – though this can be explained somewhat by its newness on the market. While iQiYi and Pinduoduo have climbed less drastically, they were already in the top-10; their small improvements in rank see a top-three in which neither Tencent or Alibaba feature (though it's hardly time to begin the tolling of bells – saturation certainly will have played its part).

India seems to represent something of a battleground between East and West. The most-popular apps might be Facebook properties, but we also see two apps from ByteDance (Vigo Video as well as TikTok) and Alibaba's UC Browser in the top-10. Aside from the intrusion of the two ByteDance apps, the top-10 remains largely the same as 2017. Domestic video players (Hotstar and MX Player) and the practical SHAREit (which incorporates video sharing) and Truecaller round out the top-10.

Most-downloaded mobile apps in 2018 by country, App Store/Google Play only

Top Apps in 2018 by Downloads

U.S.			China			India		
		vs. 2017			vs. 2017			vs. 2017
1	Messenger	-	1	TikTok	+25	1	WhatsApp	-
2	Facebook	+2	2	iQiyi	+3	2	Messenger	-
3	Netflix	+3	3	Pinduoduo	+5	3	TikTok	+102
4	Instagram	+1	4	Tencent Video	-3	4	UC Browser	-
5	Snapchat	-3	5	WeChat	-3	5	Facebook	-2
6	TikTok	+18	6	Taobao	-1	6	Vigo Video	+209
7	Bitmoji	-4	7	QQ	-4	7	SHAREit	-1
8	Spotify	-	8	Youku	-1	8	Hotstar	-3
9	Wish	-2	9	Alipay	-3	9	MX Player	-2
10	YouTube	+1	10	Xiaohongshu	+45	10	Truecaller	-

Source: [Sensor Tower](#)

App download statistics in Comscore's 'Global Digital in Future 2018' point to a general upward trend in the proportion of apps/websites reaching 10% of the population in selected markets.

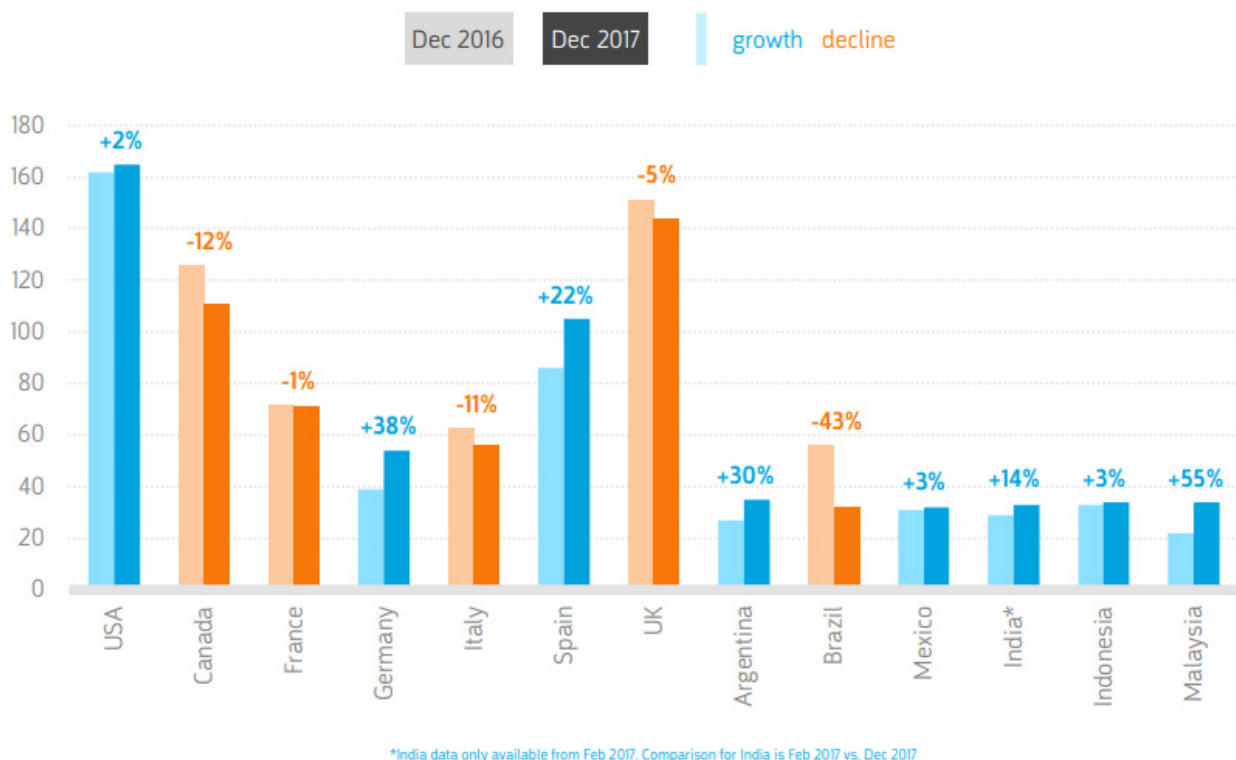
The trend is not quite neat, however, with several nations seeing a decline in apps/websites meeting that impressive reach threshold. The worst-affected (relatively) is Brazil – with a 43% decline, with Canada and Italy both posting a decline in double figures.

Spain (22%), Malaysia (55% – but from a much smaller base), and Argentina (30%) saw the greatest increase in the number of sites reaching one in 10 people.

There are many possible reasons for this: people growing tired of previously popular apps, a consolidation of the most-popular apps at the expense of nearly-rans, or simply a spreading out of the mobile audience as more apps become available.

Comscore note that the time spent using the top-100 apps not owned by Facebook or Google increased in both Brazil and Canada – by 17% and 4%. Thus there may be more to this set of stats that initially meets the eye.

Apps reaching 10% of population



Source: [Comscore](#)

Most-downloaded new apps

Incumbent titles predominate the upper end of app-download statistics, meaning that it can be hard sometimes to judge which newly-released titles have made an impact. To provide some balance here; and also so we can get the scale of the sort of download-figures newly-released apps can pull, Sensor Tower has published separate stats looking at the top apps released in 2018.

Discounting games, the most-downloaded app released in 2018 was Indian social media app Helo, which was downloaded a little over 60 million times in 2018. Mini-game app HAGO comes in second, also with a little over 60 million downloads, and third place goes to anti-virus and cleanup app MAX Cleaner.

MAX Security, Antivirus Free 2019 and Super Speed Cleaner also feature in the top-20 most-downloaded new apps. We see a number of photo & video-orientated apps also: Ulike, Air Camera, and Video Maker – as well as All Video Download, at over 40 million downloads, and Video Downloader at around 25 million.

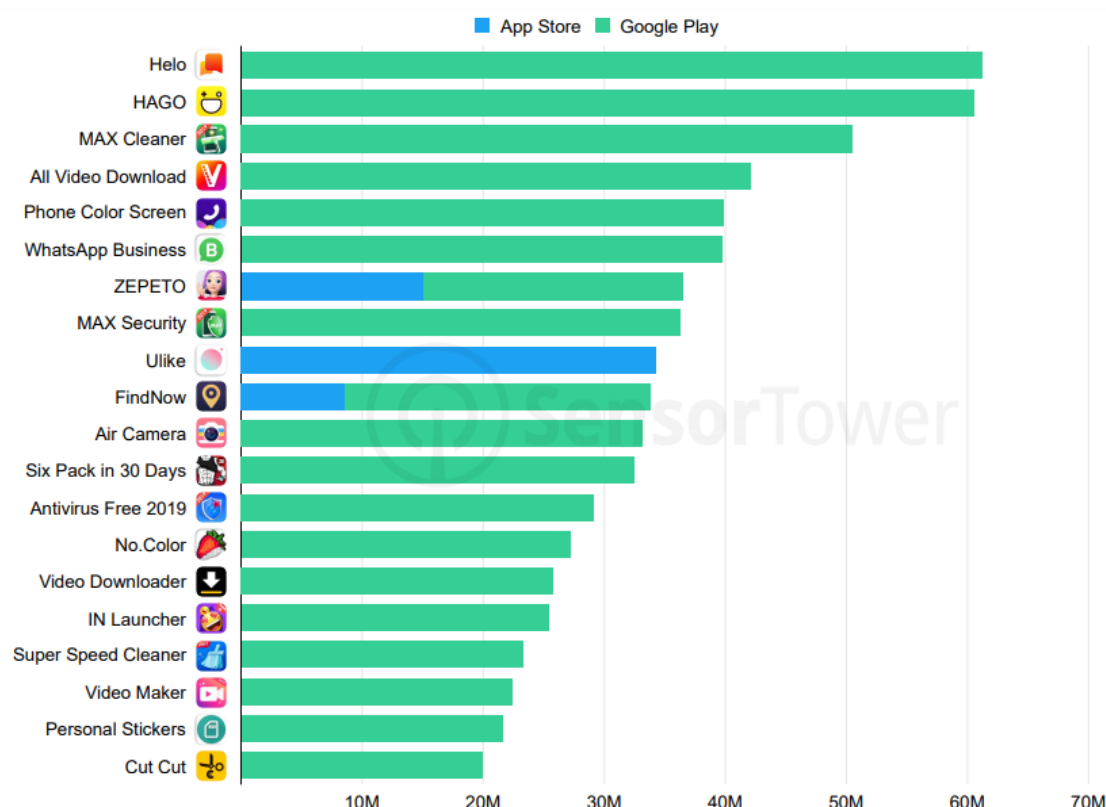
Other themes we see are apps that allow you to customise your phone (Phone Color Screen and IN Launcher) and those which allow you to create personalised stickers, avatars, and emojis (ZEPETO, Personal Stickers, and Cut Cut).

We might note that new app download statistics are completely dominated by Google Play downloads. For a new app developer operating internationally, it might be more effective to target Android than iOS devices (in terms of growth, not perhaps revenue).

We have to get down to seventh-place ZEPETO (a bit more than 35 million downloads) before we see any App Store downloads at all. Location-sharing app FindNow is the only other app to register a mix of App Store and Google Play downloads. Chinese photo-retoucher Ulike is App Store only, though remember, these figures do not include third-party Android downloads in China. The app is has now been released through the Play Store also.

WhatsApp Business, in sixth-place at a shade under 40 million downloads in 2018, perhaps commands the greatest name recognition of all the new apps.

Most-downloaded new apps in 2018, App Store/Google Play only



Source: [Sensor Tower](#)

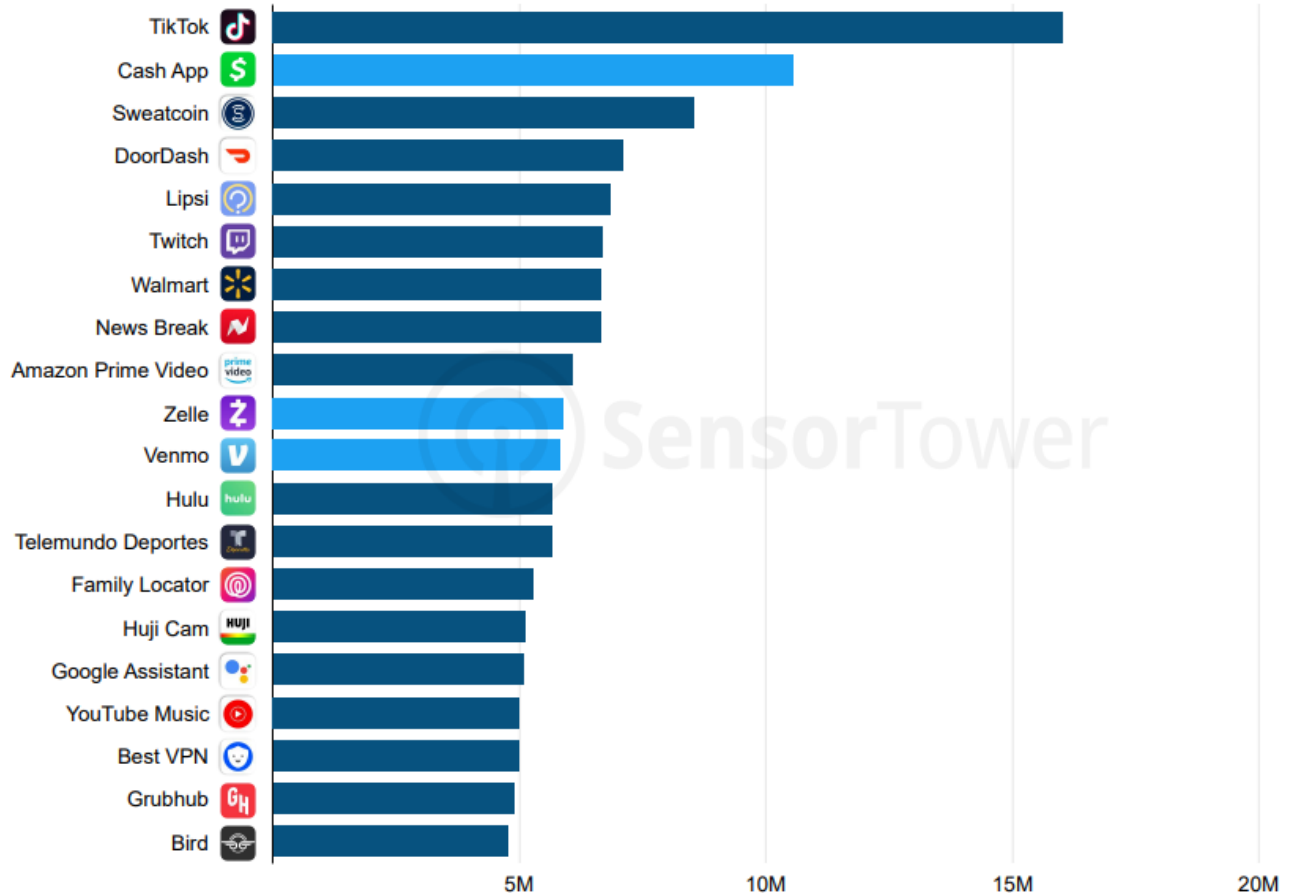
Biggest app download growth

TikTok was the app that saw the greatest growth in US downloads over 2018 (in absolute terms), with around 16 million more downloads in 2018 than in 2017 – the year of its release. In second place by this measure we see money transfer app Cash App, which saw an increase of 11 million downloads in the US, to reach a total of 23 million downloads in total. In third place, with an increase in the region of eight million is health & fitness app Sweatcoin.

Sensor Tower notes that money transfer apps as a category saw a significant increase in downloads in the US over 2018.

Biggest US download growth (absolute) 2018

Download growth between 2017 and 2018, App Store and Google Play



Source: [Sensor Tower](#)

Top app categories

In App Annie's ranking of the most-downloaded app categories on iOS over 2018, games come out on top, followed by photo & video, which overtakes entertainment. Productivity apps enter the top-10 in 2018. Social networking ranks at a relatively humble fifth – though it's worth noting that this ranking applies to first-time app download statistics only.

These categories are also ranked by revenue. Here we see games also hold the top spot, followed by entertainment and social networking. The significance that games have come to play in the app market is clear to see here.

Top app categories by download, iOS, 2018

2018 Worldwide Top Categories
by iOS Downloads

Rank	Category	Rank Change vs. 2017
1	Games	-
2	Photo and Video	▲ 1
3	Entertainment	▼ -1
4	Utilities	-
5	Social Networking	-
6	Shopping	-
7	Lifestyle	▲ 1
8	Finance	▼ -1
9	Productivity	▲ 2
10	Education	-

2018 Worldwide Top Categories
by iOS Consumer Spend

Rank	Category	Rank Change vs. 2017
1	Games	-
2	Entertainment	-
3	Social Networking	-
4	Music	-
5	Photo and Video	▲ 2
6	Lifestyle	▼ -1
7	Health and Fitness	▲ 1
8	Productivity	▲ 2
9	Books	▼ -3
10	Education	▼ -1

Source: [App Annie](#)

Google Play app download statistics also reflect the preeminence of games; in terms of revenue also. Entertainment also ranks third, though the second most-popular apps are tools (the categories used differ slightly to iOS, so there are limitations preventing a full like-for-like comparison).

Productivity apps also feature here, climbing two places to eighth. Music apps, which don't feature in among the most-downloaded apps on iOS occupy fourth place, while photo & video app downloads have increased on Google Play as they have on iOS.

In terms of revenue the list contains broadly the same categories, with a couple of differences (photo & video and books on iOS appear in place of dating and communication apps on Google Play)

Most-popular app categories by download, Google Play, 2018

2018 Worldwide Top Categories
by Google Play Downloads

Rank	Category	Rank Change vs. 2017
1	Games	-
2	Tools	-
3	Entertainment	-
4	Communication	-
5	Photography	-
6	Social	-
7	Music & Audio	▲ 1
8	Video Players & Editors	▲ 3
9	Productivity	▼ -2
10	Shopping	▼ -1

2018 Worldwide Top Categories
by Google Play Consumer Spend

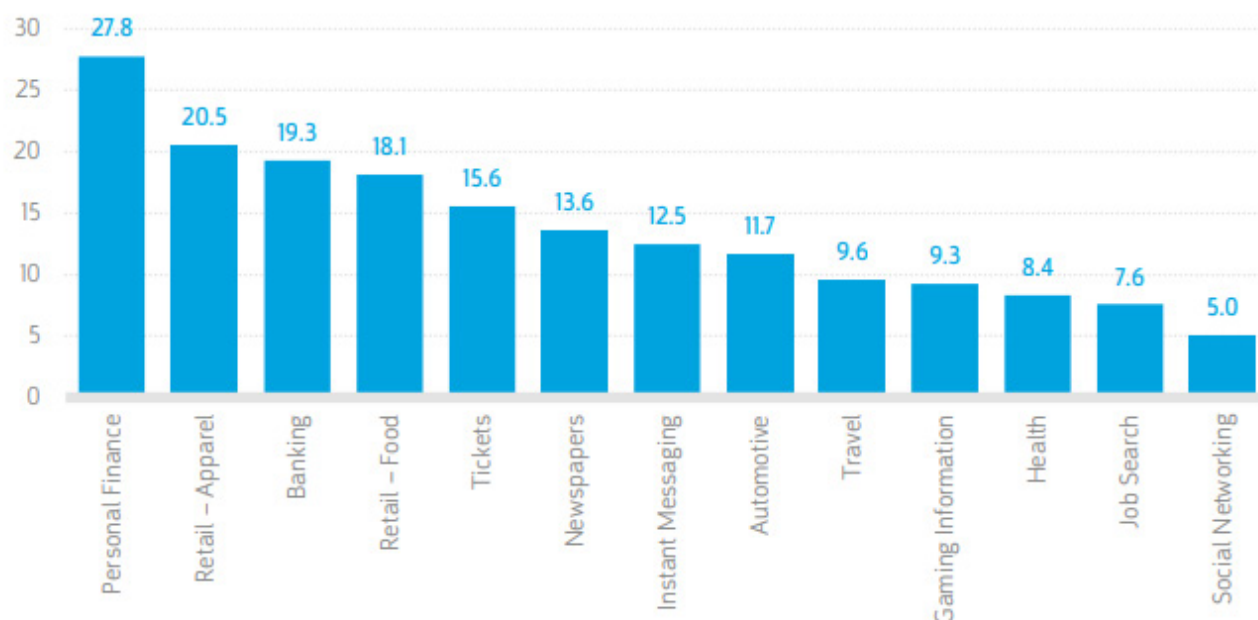
Rank	Category	Rank Change vs. 2017
1	Games	-
2	Social	-
3	Entertainment	-
4	Lifestyle	▲ 1
5	Music & Audio	▲ 2
6	Productivity	-
7	Communication	▼ -3
8	Health & Fitness	▲ 1
9	Dating	▲ 1
10	Education	▼ -2

Source: [App Annie](#)

Comscore stats, published in 2018, look at the average growth (across eight markets) in reach for selected app categories. This mobile app data show that personal finance grew the most by this measure, by some distance. We might note that banking comes in third here – reflecting the digital banking revolution through which we seem to be going.

Sandwiched between these two is retail-apparel, with retail-food in fourth. Social networking shows the lowest increase in reach, reflective of the all-conquering reach of which it is already in possession.

Average increase in reach for selected app categories



Source: [Comscore](#)

Mobile Game Download Statistics

Top mobile games

It is estimated that, as of 2018, there were [2.2 billion mobile gamers in the world. 203 million mobile gamers were based in the US](#), and 459 million in China.

It is predicted that the US figure will rise to 213 million by 2020, with the global total of mobile gamers to come to 2.7 billion.

In a study conducted by Newzoo alongside Activision and Blizzard, games were the third most-popular category when users from the US, UK, France, and Germany were asked which app types they'd used in the past seven days. 50% of respondents had used mobile games.

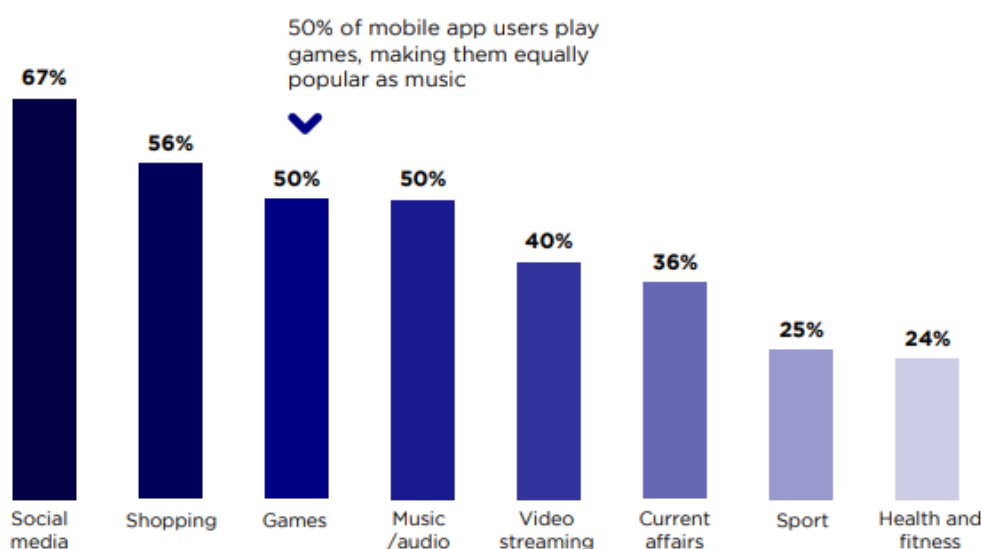
Among users aged 18-20, the proportion rises to 66% – making it the second-most used category.

Games vs. other app categories used in last week

GAMES IN THE TOP 3 MOST-USED APP TYPES

AMONG YOUNGER USERS, IT'S THE SECOND-MOST-POPULAR CATEGORY

TOP APP CATEGORIES USED IN THE LAST 7 DAYS



k

Source: [Newzoo](#)

Accordingly, this market is catered for by a huge number of developers. [38% of games developers work on mobile titles](#) – more than any other platform bar PC.

The top mobile game of 2018 in terms of MAU may come as a surprise to many. In fact, unless you're familiar with the Chinese gaming market, there's a fair chance you won't know animal-faced block based puzzle game Anipop at all.

Nonetheless, this app was the most-popular mobile game over 2018 by MAU – once again showing the incredible power of the Chinese market. If we needed further evidence, we have it in second-place, with Tencent's Honour of Kings (known as Arena of Valor outside of China), which is played by [55 million Chinese mobile gamers every day](#).

Indeed, this domestic audience is so large that Tencent is happily pulling the plug on the international version – and its 250,000 users, an audience for which many apps would be glad – in order to focus on a mobile version of League of Legends with Riot Games. We can certainly expect to see the latter in future iterations of this table...

We might also note the China-focused version of PUBG in fifth-place, ahead of the global PUBG Mobile (also highly downloaded in China, by the way).

Other interesting titles in the top mobile games worldwide include Candy Crush Saga in third – interesting not least for being the first non-China orientated title in the top-10, an up-and-coming ‘hyper-casual’ title Helix Jump. More on these titles below. The presence of Pokémon GO in the list also might catch the eye – showing that it is indeed possible for apps to have a second life.

Most-played mobile games globally

Rank	App	Company
1	 Anipop	Happy Elements
2	 Honour of Kings	Tencent
3	 Candy Crush Saga	Activision Blizzard
4	 Clash of Clans	Supercell
5	 PUBG: Exciting Battlefield	Tencent
6	 PUBG MOBILE	Tencent
7	 Clash Royale	Supercell
8	 Pokémon GO	Niantic
9	 Subway Surfers	Kiloo
10	 Helix Jump	Voodoo

Source: [App Annie](#)

App Annie also reports lists the five top mobile games in selected key markets across the world. There is certainly a fair degree of divergence in the most-popular mobile games across the 10 featured countries.

Many of the top mobile games featured are particular to a domestic market. In some cases, these were the most-popular titles in terms of monthly-active users in 2018: Anipop in China for instance, Disney Tsum Tsum in Japan, and Ludo King in India. Indeed, in China, such titles dominate most-played lists – perhaps unsurprising giving governmentally-imposed restrictions on the gaming industry, which particularly affect international titles.

There are, however, certain titles whose popularity transcends borders. Pokémon GO – a title many considered to be dead in the water in 2017, is among the most-used mobile games in six of the 10 featured markets. In the US, it was the single-most popular mobile game of 2018.

Even Pokémon GO, however, cannot compete with the might of...Candy Crush Saga. Developer King deserves credit for creating one of the most-popular mobile games in history – if not one of the most popular games. Candy Crush Saga is the most-popular mobile game in three different countries (Canada, France, and the UK), and the second-most played mobile game in four more (Brazil, Germany, India, and the US). Its popularity extends to both Americas, Asia, and Europe – with only Northeast Asian markets seemingly inured to its charms.

We see Clash Royale and various PUBG titles crop up in several markets, with PUBG Mobile topping the South Korean MAU charts over 2018 (reflecting the nation's passionate history with multiplayer titles).

As in the global top-10, Fortnite is unrepresented in any of the top mobile games lists featured here. While this doesn't necessarily reflect the whole picture (for instance, the considerable revenue it brings in), it shows that despite the huge hype surrounding the title, it's not the only battle royale title in town...

Most-played games in selected-markets

2018 | Top Games by Smartphone MAU

	Brazil	Canada	China	France	Germany	India	Japan	South Korea	US	UK
1	Free Fire	Candy Crush Saga	Anipop	Candy Crush Saga	QuizClash	Ludo King	Disney Tsum Tsum	PUBG MOBILE	Pokémon GO	Candy Crush Saga
2	Candy Crush Saga	Pokémon GO	Honour of Kings	Clash Royale	Candy Crush Saga	Candy Crush Saga	Monster Strike	Clash Royale	Candy Crush Saga	Helix Jump
3	Helix Jump	HQ - Live Trivia Game Show	PUBG: Exciting Battlefield	Pokémon GO	Pokémon GO	PUBG MOBILE	Pokémon GO	Rider	New Words With Friends	Pokémon GO
4	Cartola FC Oficial	Helix Jump	Landlord Poker	FDJ	Helix Jump	Clash of Clans	Puzzle & Dragons	Pmang New Matgo	HQ - Live Trivia Game Show	8 Ball Pool
5	Clash Royale	Wordscapes	Mini World Block Art	Clash of Clans	Clash Royale	Doodle Army 2 : Mini Militia	Knives Out	Everybody's Marble	Helix Jump	MobilityWare Solitaire

Incumbents
(published prior to 2018)

Source: [App Annie](#)

The top mobile games by MAU charts are dominated by incumbent (i.e. released before 2018) titles. We do, however, see some new mobile games sneaking into various national top-fives. Chief among these is Helix Jump, which features among the top-five most-used titles in no fewer than five separate markets. Its strongest showing is in the UK, where it finishes second behind the seeming untouchable Candy Crush Saga in terms of monthly users.

Candy Crush may stand out, but it also reflects the ongoing global popularity global for block-based puzzle games. Indeed, excepting the idiosyncratic South Korea, in markets where Candy Crush doesn't feature, local equivalents top the charts: Anipop in China (the most-popular mobile game in the world, remember) or Disney Tsum Tsum in Japan. While battle royale games may get a lot of the press, it's these simpler titles to which the average mobile user across the world is turning.

That is not to deny the popularity of battle royale titles, which as discussed above, are also a global trend and are the most consistently-represented non-puzzle titles around the world. It might be noted that Helix Jump isn't the only newly released title that made waves in 2018. PUBG Mobile was only released in February 2018, its popularity reflecting the high level of anticipation around the mobile-specific release of this much-loved title.

Staying with decidedly modern knockout formats, we also see a couple of examples of real-time mass quiz apps: HQ Trivia in the US and Canada and Cartola FC in Brazil (which is, of course, a football/soccer-based quiz).

It's not just about these modern mass-gameshows, however: gaming quietly with friends certainly seems to have retained its charms, with titles like QuizClash, Words with Friends, and Ludo King featuring in the top mobile games lists. Indeed, the first of these was the most-popular mobile game in Germany, and the last the most-played mobile game in India across 2018. MobilityWare Solitaire in the UK and (the rather sinister-sounding) Landlord Poker in China also show that the classic appeal of card games has also yet to wane.

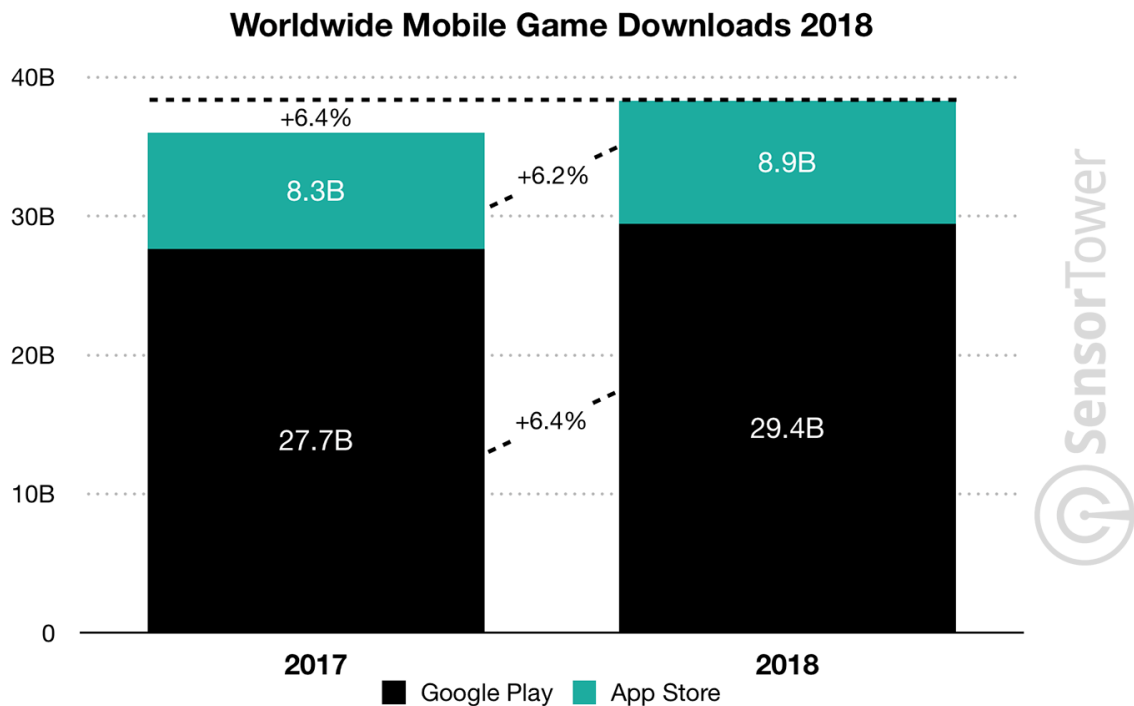
Most-downloaded games


Games loom increasingly largely over the app landscape, with huge growth in mobile gaming over recent years. Games accounted for 29.4 billion Google Play downloads (39% of total downloads), and 8.9 billion iOS App Store downloads (30% of the total) in 2018. Both saw increases of a little over 6% – roughly in-line with overall growth in app downloads on the Apple App Store, though a little slower on Google Play.

Total mobile game iOS App Store and Google Play downloads came to 38.3 billion.



Google Play vs. App Store game downloads, 2017-18



 SensorTower Data That Drives App Growth

sensortower.com

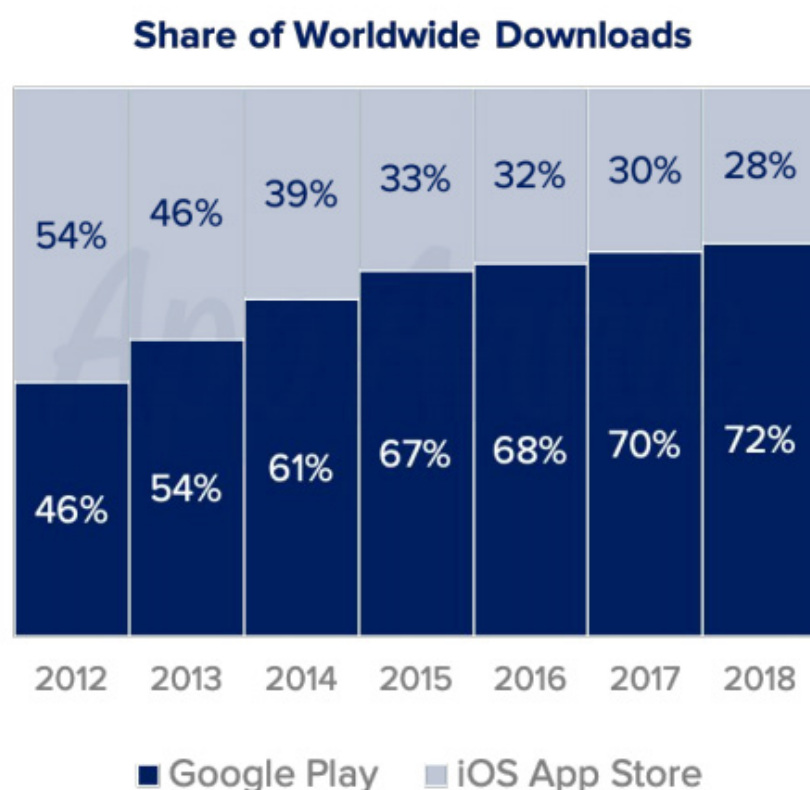
Source: [Sensor Tower](#)

We'll cover app revenue statistics elsewhere, but it's worth noting that game revenue accounted for 77% of total app revenue in 2018 – which is actually a decline on the 82% reported in 2017. We might also note that games revenue coming through the App Store was worth \$33.2 billion, compared to \$21.5 billion for Google Play.

Mobile game statistics from App Annie find that Google Play has come to account for an increasingly large share of game downloads – from less than half in 2012, to nearly three quarters as of 2018.

We might ascribe this, once again, to deeper Android penetration in emerging markets.

Google Play vs. App Store, 2012-2018



Source: [App Annie](#)

Despite this, App Annie's analysis finds that iOS accounts for around two-thirds of mobile gaming revenue.

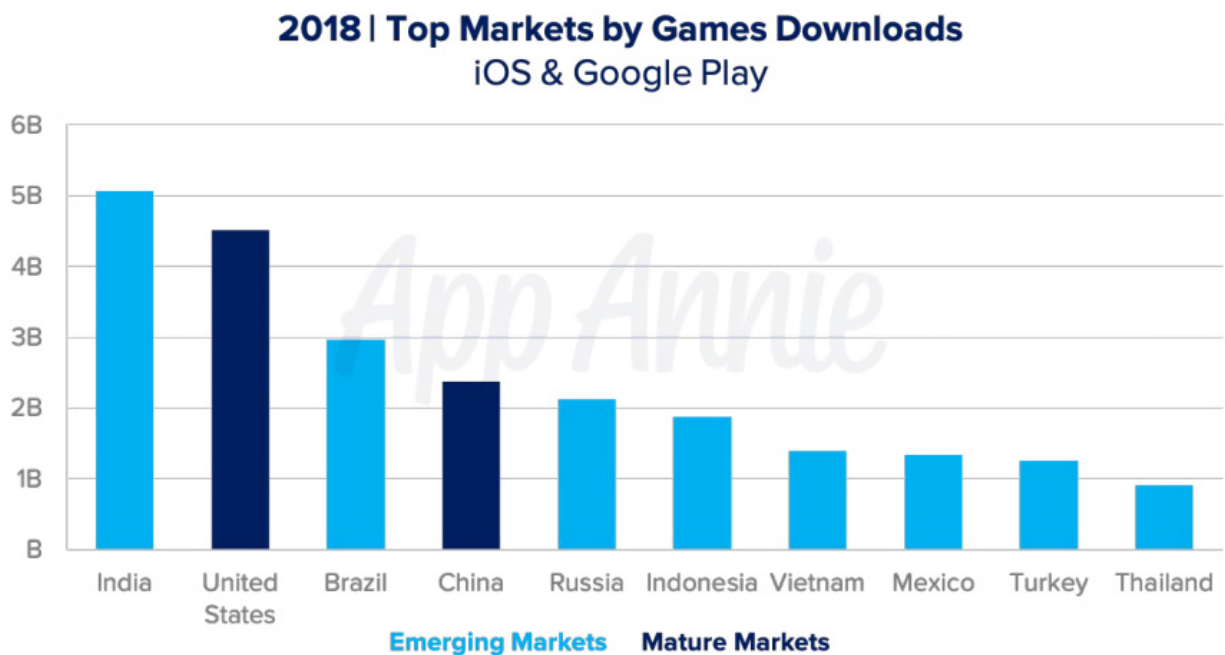
[Games accounted for 33% of global app downloads in 2018](#) according to the same source.

Looking only at iOS and Google Play app store statistics, India was the leading market for game downloads in 2018, registering over 5 billion. The US, at around 4.5 billion mobile game downloads in the only other market to get anywhere near this figure.

Remember, though, without listing third-party downloads, we can't get a true picture of the number of games downloaded in China, which is likely to be in a class of its own. Indeed, as it is, on iOS downloads alone it comes in at fourth.

Aside from the US and China, the biggest markets for mobile game downloads are predominantly relatively immature (indeed, this tends to be a marker of immaturity).

Total game downloads in selected markets



Source: [App Annie](#)

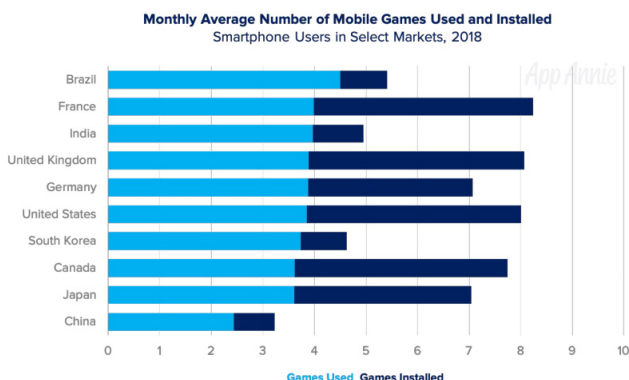
Gamers in France, the UK, and Germany tend to have the greatest number of games installed (of the selection of key markets selected by App Annie), at around eight.

Gamers in Brazil, however, tend to use the greatest number of games on a monthly basis, at 4.5.

China comes in last in terms of both games installed and used. We might note, however, that the figure would perhaps be higher if we only took into consideration highly-developed 'tier-one' cities.

India and South Korea also average fewer than five games installed.

Games used vs. games installed in selected markets



Source: [App Annie](#)

Most-downloaded games

The most-downloaded games chart of 2018, as we might expect, has much in common with the most-popular mobile games by MAU. Helix Jump takes the top-spot here. Released in February 2018, it is a newcomer in this list. It has certainly captured the imagination, however, as reflected in the presence in the top-10 most-played list.











Subway Surfers, on the other hand, has been around since 2012, yet has enjoyed an incredible 2018, as the second-most downloaded and the ninth-most popular mobile game in the world. It is particularly popular in Brazil and India, in download terms at the very least.

PUBG Mobile, in third, represents the highest-ranking battle royale game, with Free Fire the other representative in the top mobile games by downloads of 2018. As demonstrated by Helix Jump's status as most-downloaded game, however, simple, often single-activity games dominate the most-downloaded list. Rise Up, Love Balls, and Happy Glass are other examples of this among the most-downloaded games – as is Sniper 3D Assassin, albeit with less puzzling, more shooting people in the head. The list is rounded out by ragdoll torture (a genre of one) title Kick the Buddy.

The aforementioned mixture of old and new is evident throughout the most downloaded-games list. Kick the Buddy has been around since 2012; Sniper 3D Assassin since 2014. On the other hand, Happy Glass, Rise Up, and Love Balls are all 2018 releases. More precisely, we might say we have a mixture of cult 'classics' which are continuing to build a strong following, alongside innovative new titles – usually those based around more simple game-play premises.

Certainly there are benefits in both approaches for app designers. It might be noted that there's much more variety – in this respect, at least – among the most-downloaded games than the most-downloaded apps overall, which is dominated by established names.

Most-downloaded mobile games globally

Rank	App	Company
1	 Helix Jump	Voodoo
2	 Subway Surfers	Kiloo
3	 PUBG MOBILE	Tencent
4	 Free Fire	SEA
5	 Rise Up	Serkan Ozylmaz
6	 Love Balls	SuperTapx
7	 Candy Crush Saga	Activision Blizzard
8	 Happy Glass	AppLovin
9	 Sniper 3D Assassin	TFG Co
10	 Kick the Buddy	Playgendary

Source: [App Annie](#)

We also see variance in the top mobile games by downloads across key global markets. The one clear trend, however, is the dominance of what App Annie calls ‘hyper-casual’ games, which feature heavily among the most-downloaded games in each of the featured markets. Indeed, India is the only nation in which hyper-casual games do not feature in the top-five most-downloaded games.

India is also one of only two nations (the other being France) in which a battle royale game – the next-most popular mobile game format – does not feature in the top-five most-popular mobile games. In 50% of the markets represented here, battle royale games are represented twice in the top-five most-downloaded games.

Generally speaking, hyper-casual titles perform strongly in Europe in terms of downloads, while battle-royale titles are well represented in Asia and Latin America (well, Brazil at least). North American markets seem to enjoy both of these popular mobile game variants.

Most-downloaded mobile games in selected-markets

2018 | Top Games by Downloads

	Brazil	Canada	China	France	Germany	India	Japan	South Korea	US	UK
1	Free Fire	Helix Jump	PUBG: Exciting Battlefield	Helix Jump	Helix Jump	Ludo King	Knives Out	PUBG MOBILE	Helix Jump	Helix Jump
2	Helix Jump	Hole.io	Honour of Kings	Love Balls	Happy Glass	Subway Surfers	Happy Glass	Black Desert	PUBG MOBILE	Happy Glass
3	Subway Surfers	PUBG MOBILE	PUBG: Full Ahead	Pixel Art	Love Balls	Temple Run 2	Identity V	Helix Jump	Fortnite	Hole.io
4	PUBG MOBILE	Fortnite	QQ Speed	Knife Hit	Pixel Art	Candy Crush Saga	Disney Tsum Tsum	Free Fire	Happy Glass	Love Balls
5	Pou	Rise Up	Identity V	Rise Up	PUBG MOBILE	Temple Run	Fill	Will Hero	Rise Up	Fortnite

Battle Royale Hyper-Casual

Note: iOS and Google Play Stores

Source: [App Annie](#)

Games like PUBG (of which two variants feature in the Chinese top-five – it should be noted that Fortnite has faced considerable difficulty in getting launched in the country) and Fortnite have certainly served to put battle royale titles on the app map. While the latter isn’t featured in as many top-fives by MAU yet, its presence in the download charts shows that we might expect to see more of it in the former in the near future. We might note that it was only fully released on Android in October 2018...



Such titles receive no shortage of coverage. We would perhaps also do well to pay heed to the prevalence of hyper-casual titles, which draw in non-traditional gamers (due to the low barriers for entry), and can easily be used during commutes, on lunch breaks, or any other situation where users have a few minutes to spare.

Such games are perfectly suited to mobile formats also – not requiring large levels of bandwidth and storage capacity. They can also, it might be noted, easily be monetised through various freemium (free-to-play, but with added paid-functionality available) features. And, while coming up with a winning concept isn't easy, the strain on developers is much lower than something like a battle royale game.

The most-popular mobile game of this type is Helix Jump, which tops the most-popular mobile games charts in five of the 10 markets featured here, coming second and third in two others. This title sees users manoeuvring a ball through a helix structure, avoiding certain marked sections. Helix Jump is ad-supported, with ads showing between turns. Users have the option of paying \$2.99 to turn off these ads.

Love Balls, Rise Up, Hole.io, and Happy Glass are the other big names in the hyper-casual field.

Sensor Tower's App Store/Google Play ranking confirms the huge success of Helix Jump over 2018. Downloads are proportionally split between App Store and Google Play. Like App Annie, Sensor Tower measure apps and games separately; if the two were combined Helix Jump would be the sixth most-downloaded app of 2018, behind Instagram.

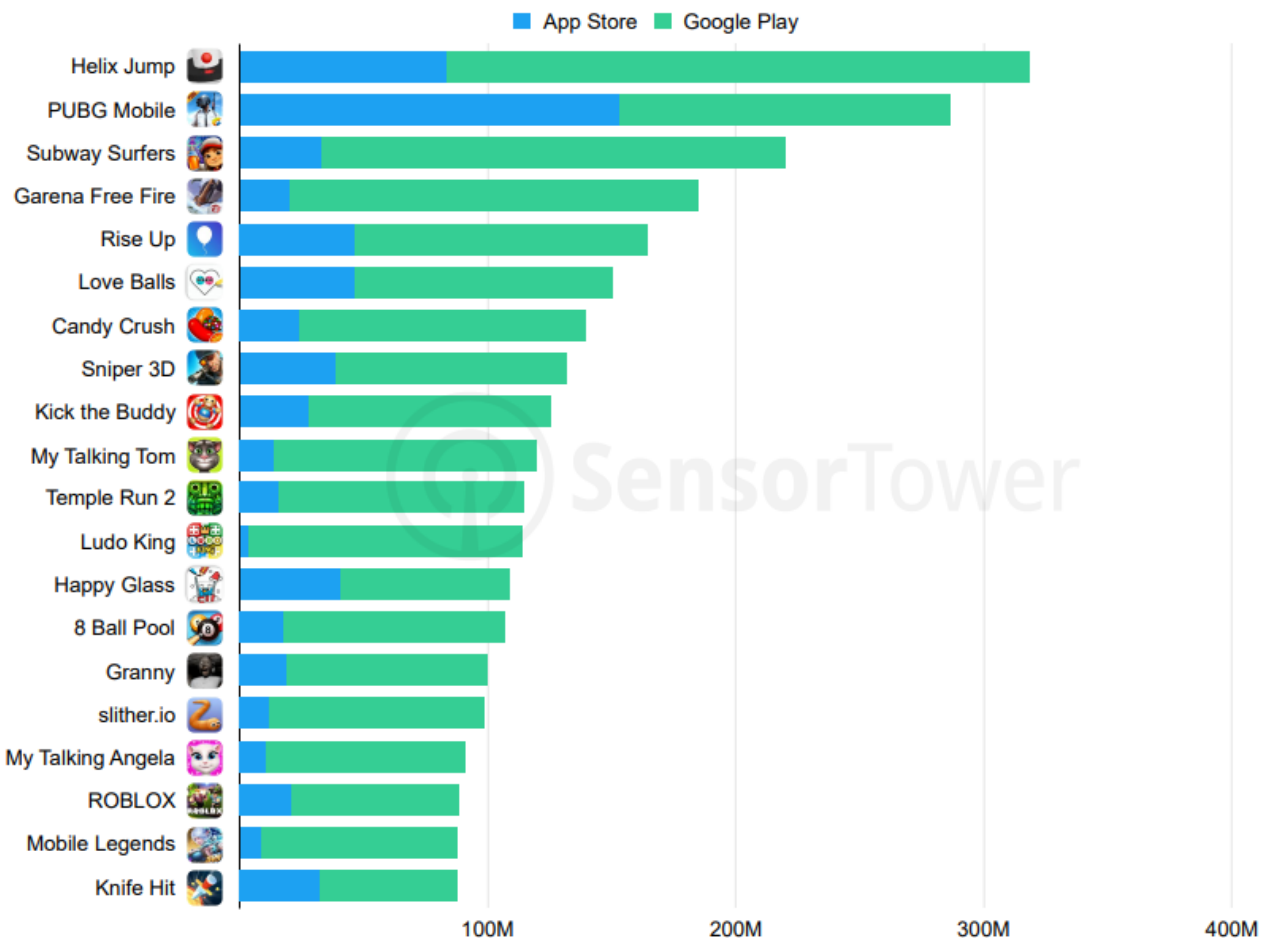
Second-place PUBG Mobile (which would earn a top-10 spot on the overall app download chart, edging out Snapchat) was downloaded more times on iOS than on Android in 2018 – or at least through the Play Store. We might note the Tencent-owned game is also big in China, in which downloads cannot be made through the Play Store. It is also possible to download the Android version of PUBG Mobile through APKPure.

Nonetheless 29% of PUBG Mobile downloads were made in China, with another 10% a piece coming from China and India – suggesting a download base which very much represents the global app download landscape.

We also see titles which seem to be downloaded overwhelmingly through the Play Store rather than App Store: India's most-popular title Ludo King (and the 12th most-popular mobile game worldwide) being the most extreme. Less pronounced but certainly notable Android-heavy app download statistics are similarly reported for titles Subway Surfers and Garena Free Fire, in third and fourth position.

Generally-speaking we see the same titles as in top-10 as in App Annie's most-downloaded games list, though with the inclusion of virtual pet app, My Talking Tom. The longer list also gives us some insight into other titles that are currently popular. These include horror title Granny, parlour-game simulator 8-Ball Pool (big in the UK), and My Talking Tom-spinoff My Talking Angela.

Most-downloaded mobile games globally, App Store/Google Play only



Source: [Sensor Tower](#)

Most-downloaded new games

Incumbent titles are far less dominant in the world of gaming than they are in general app download statistics. Indeed, the novelty of new titles can perhaps be read as an advantage when it comes to app download stats – for highly-anticipated titles such as PUBG Mobile and addictive new concepts like Helix Jump alike – as gamers look to remain au courant. It would be a surprise not see Pokémon GO creator Niantic's Harry Potter: Wizard's Unite on the overall top mobile games list next year...

The top-six titles here all feature in the top-20 most downloaded games, with the top-four all featuring in the top-10. Most strikingly, the top-two most-downloaded games were both released in 2018 (albeit PUBG Mobile is a port of an already much-loved game).

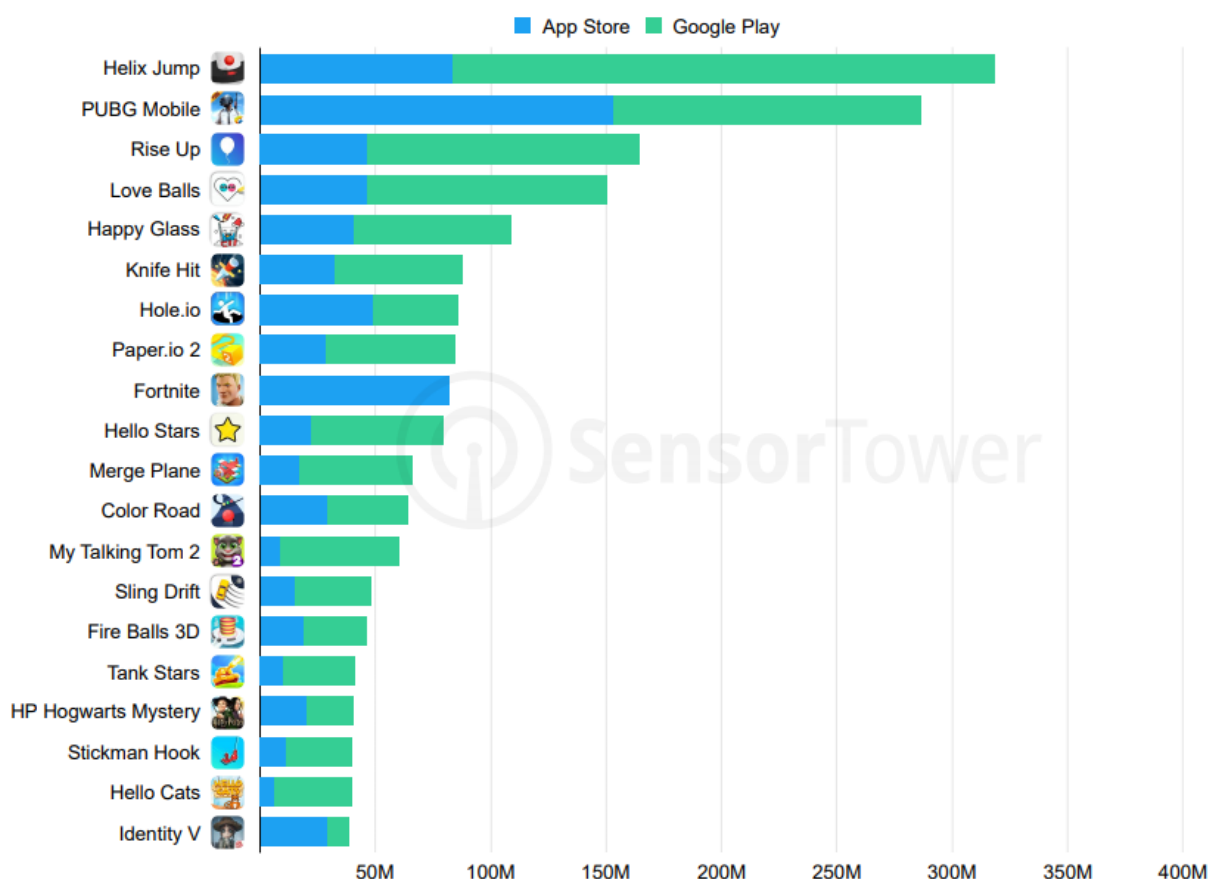
As was the case more widely over 2018, hyper-casual games are the most prominent among the most-popular games released that year. Indeed, outside of PUBG Mobile, the much-hyped battle royale format is only represented by Fortnite.

You might have noticed the Fortnite downloads counted here are App Store only. The game is available on Android devices, but only through a direct download from Epic Games. The developer chose to circumvent the Play Store in order to get around the pesky issue of treating Google to a cut of Fortnite revenue.

Otherwise we see a more-or-less representative split between App Store and Google Play downloads, with a few exceptions. PUBG Mobile sees an unusually high proportion of App Store downloads, though is available on Android without going through the Play Store. Hole.io and Identity V are also dominated by App Store downloads.

Sensor Tower notes that 2018 was a highly-successful year for game developer Voodoo, which accounts for a quarter of the top-20 most-popular new games here – including Helix Jump. Other Voodoo titles are Hole.io, Paper.io 2, Color Road, and Fire Balls 3D.

Most-downloaded new games in 2018, App Store/Google Play only



Source: [Sensor Tower](#)

App Download Statistics: App Categories

Most-popular social apps

According to Hootsuite and We Are Social, [the global penetration of social media is 45%](#), with just shy of 3.5 billion social media users in the world in 2018. In terms of sheer volume, then, these are the most-popular apps in the world – as we saw above in the listing of the world's most-used apps. These social media platforms are accessed by 3.3 billion mobile devices.

As of the end of 2018, Facebook maintained its long-held position as the world's single most-popular app, with 2.3 billion active users. YouTube, which is counted as social platform here (though we might not all agree it qualifies as one), with 1.9 billion users – a figure that we know has climbed since.

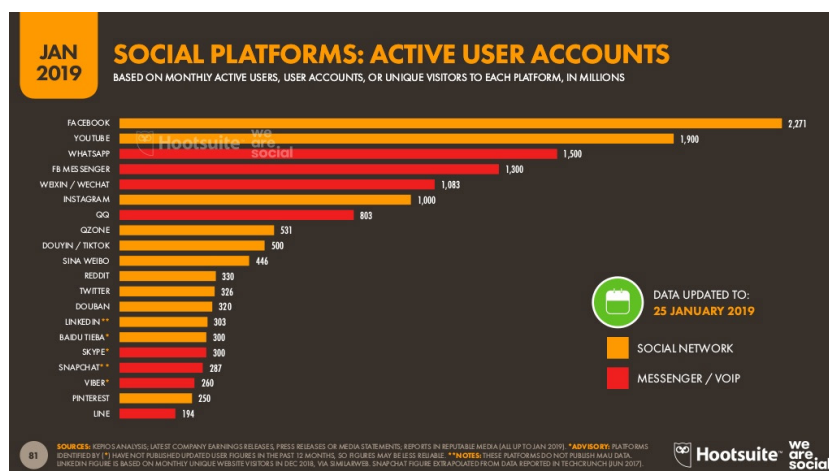
Facebook-owned properties dominate the remainder of the top-six apps, with WhatsApp (1.5 billion), Facebook Messenger (1.3 billion) and Instagram (1 billion) ranking in third, fourth, and sixth respectively.

The hegemony is only broken by Tencent property WeChat, at 1.1 billion users in fifth place. Tencent also owns seventh place QQ (800 million users), and eight-placed QZone (531 million users).

While these apps may not compete with the very biggest globally, it's important to remember that they are essentially operating in a single market. The same applies for the other Chinese apps we see appearing in the top-20, of which there are a fair few (though they do have the advantage of a captive audience of 1.3 billion).

Chinese-based but international TikTok is the freshest name on this list of the most-popular apps, having built up its user base of 500 million users since 2016 in China, and 2017 internationally. While it did take over the popular music.ly, cannibalising its user base, it serves as a demonstration that the incumbents can be challenged.

World's biggest social apps by MAU



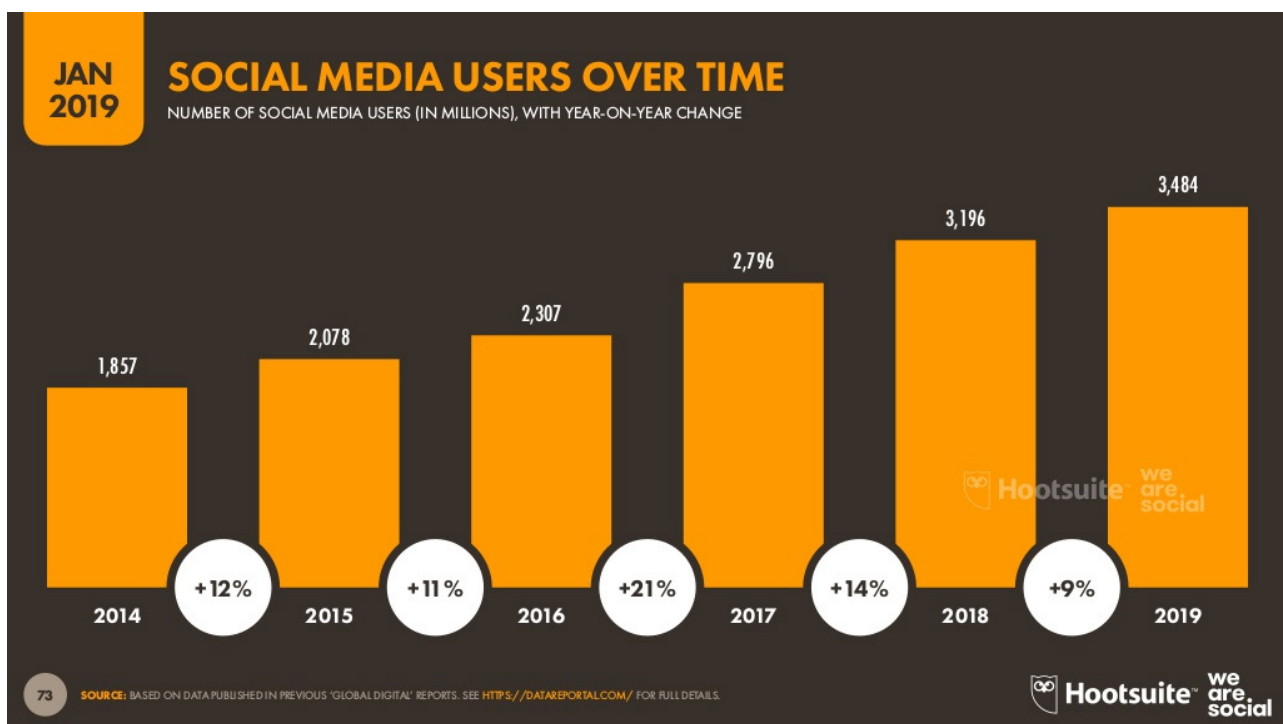
Source: [Hootsuite/We Are Social](#)

Global social media app users

While it may seem that we've been at something approaching saturation for a while, at least in Europe, North America, and Northeast Asia, the global market has been growing apace. Indeed, even the 3.5 billion figure represents a 9% increase on the 3.2 billion the previous year (the 2018 pertains to the year of the Hootsuite/We Are Social report, the data is from 2017).

Though this is relatively low compared to previous years – between the 2016 and 2017 reports growth stood at 21% – it's still notable, especially given the higher base from we started.

Total global number of social media users, 2014-2019



Source: [Hootsuite/We Are Social](#)

Most-popular social media by country

As would be expected, there are differences across markets as to the most-popular apps in the social & communications category. WhatsApp is the most-popular in the most of the selected markets, coming first in five markets and second in one more. Its reach is wide, making at least the top-two in European, North and South American, and Asian markets.

Well, one Asian market (India). If we look to Northeast Asia, domestic products lead the way: LINE in Japan, KakaoTalk in South Korea, and, of course, the juggernaut that is WeChat in China. Indeed, China's top-five apps are all based domestically (Tencent claims the top-two spots, with QQ ranking behind WeChat), while three of five South Korean apps

are. In Japan, while LINE tops the list, the other apps in the top-five are all international (including, interestingly Twitter).

There is a qualification, however: [Japan is very much a nation of iOS users](#). At the time of writing, the split was close to 7:3. Therefore, any measurement that does take into account iOS stats will be somewhat unrepresentative. The app data considered here is Android only.

Snapchat remains the most-popular social & communication app in the US, and the second-most in Canada. It also ranks highly in European markets; particularly France where it was the most-used social & communication app in 2018.

Facebook and Instagram are ever-present outside of China, while Facebook Messenger remains popular in several markets. Pinterest features in the Brazilian and US top five.

Most-popular social & communication apps in selected markets

2018 | Top Social & Communication Apps by Average Monthly Sessions Per User
Among Top 5 Social & Communication Apps by Average MAU

	Brazil	Canada	China	France	Germany	India	Japan	South Korea	UK	US
1	WhatsApp Messenger	WhatsApp Messenger	WeChat	Snapchat	WhatsApp Messenger	WhatsApp Messenger	LINE	KakaoTalk	WhatsApp Messenger	Snapchat
2	Facebook	Snapchat	QQ	WhatsApp Messenger	Snapchat	Instagram	Twitter	Instagram	Snapchat	Facebook
3	Instagram	Instagram	Kwai(快手)	Instagram	Instagram	Facebook	Instagram	Facebook	Instagram	Instagram
4	Facebook Messenger	Facebook	Tik Tok	Facebook	Facebook	Facebook Messenger	Facebook	BAND	Facebook	Facebook Messenger
5	Pinterest	Facebook Messenger	Sina Weibo	Facebook Messenger	Facebook Messenger	imo	Facebook Messenger	KakaoStory	Facebook Messenger	Pinterest

Note: Sessions per user on Android phone; Top Apps by smartphone MAU; if multiple apps on Android phone, average was taken

Source: [App Annie](#)

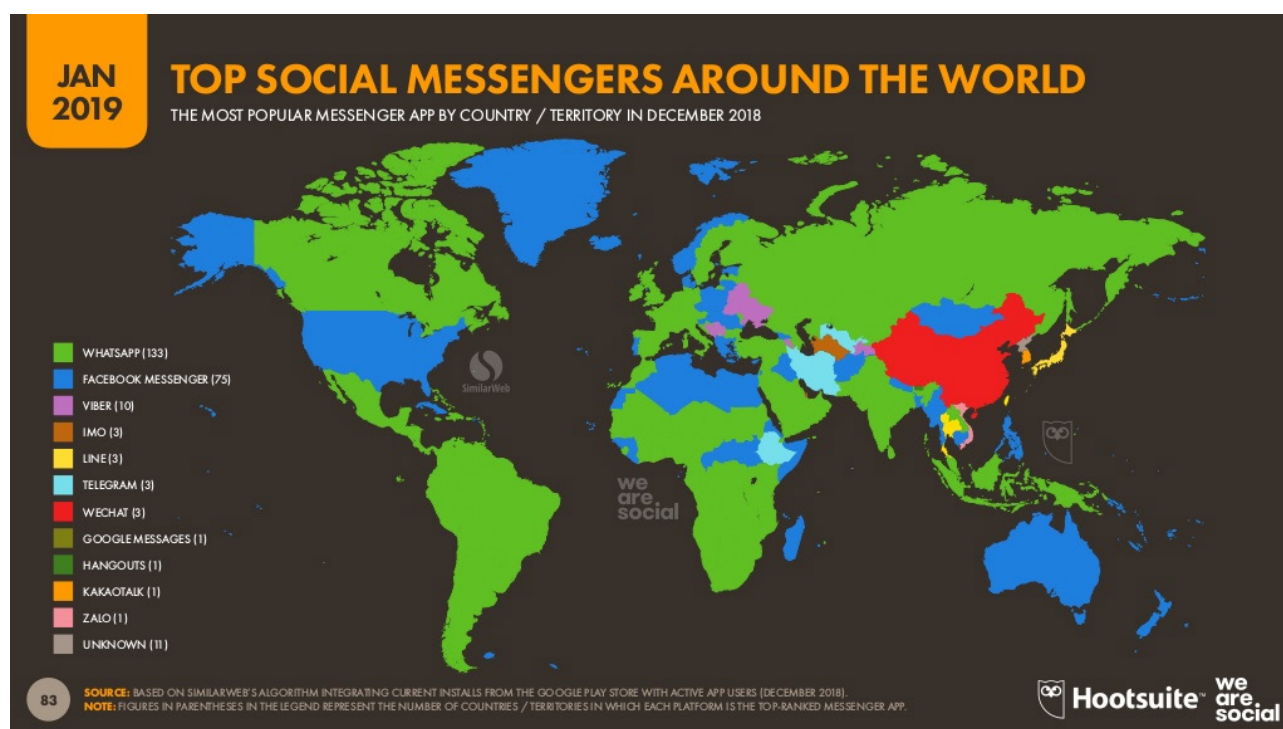
Focussing in on messenger apps, we can see on this map – in which countries are categorised by the top messenger app – that WhatsApp (green) commands the biggest global empire. Facebook Messenger, however, claims primacy in the US, as well as swathes of Eastern Europe and North and East Africa, Australia and New Zealand, and parts of South-east Asia.

We may discuss this as a rivalry, but given that Facebook owns both products, it only serves as a demonstration of its grip over the global messaging app landscape.

Notably, much of East Asia remains something of stronghold against Facebook's global

dominance, with a small selection of local apps (Line, Zaio, and KakaoTalk) proving more popular. We might also note Telegram's predominance in a handful of growing markets, mostly prominently Iran and Ethiopia.

Top messenger app by county



Source: [Hootsuite/We Are Social](#)

Top video apps

YouTube is very much the dominant global name in video streaming (as will be news to precisely nobody from the 21st century). Indeed, while below we may see the top-five video apps by viewing time in a selection of countries, App Annie app data shows that nine out of every 10 minutes of streaming happen on YouTube.

Well, we say global, but the situation is somewhat more complex when we take into account the world's biggest app market, in which YouTube is blocked: China. Here we see local platforms dominate, with Tencent Video taking top spot.

Looking beyond YouTube, there are some other truly international players: Netflix, which comes in second place in each of the six non-Asian markets; Amazon Prime Video – featuring in six nations' top-five, but never higher than third; and Twitch, which appears four times, as high as third in South Korea and Canada. YouTube Kids even makes a couple of appearances.

Beyond that, however, we see a proliferation of domestic names. Two BBC apps in the UK, AfreecaTV in South Korea, myCANAL in France, Hotstar in India, BILD in Germany, and niconico in Japan.

Top video apps in selected markets

2018 | Top 5 Video Streaming Apps by Time Spent

	China	India	Brazil	US	South Korea	Japan	Germany	France	UK	Canada
1	Tencent Video	YouTube	YouTube	YouTube	YouTube	YouTube	YouTube	YouTube	YouTube	YouTube
2	iQIYI	Hotstar	Netflix	Netflix	AfreecaTV	niconico	Netflix	Netflix	Netflix	Netflix
3	Youku	JioTV	YouTube Kids	Hulu	Twitch	Amazon Prime Video	Amazon Prime Video	myCANAL	BBC iPlayer	Twitch
4	bilibili	Amazon Prime Video	Twitch	Amazon Prime Video	pooq	AbemaTV	Twitch	Twitch	BBC Sport	YouTube Kids
5	ImgoTV	Voot	Globo Play	Twitch	oksusu	dTV	BILD	Molotov	Amazon Prime Video	Amazon Prime Video

Source: [App Annie](#)

We might note that, while YouTube is the top app in viewing hours, it is certainly does not top the chart when it comes to consumer spend (being more of an advertising orientated organisation).

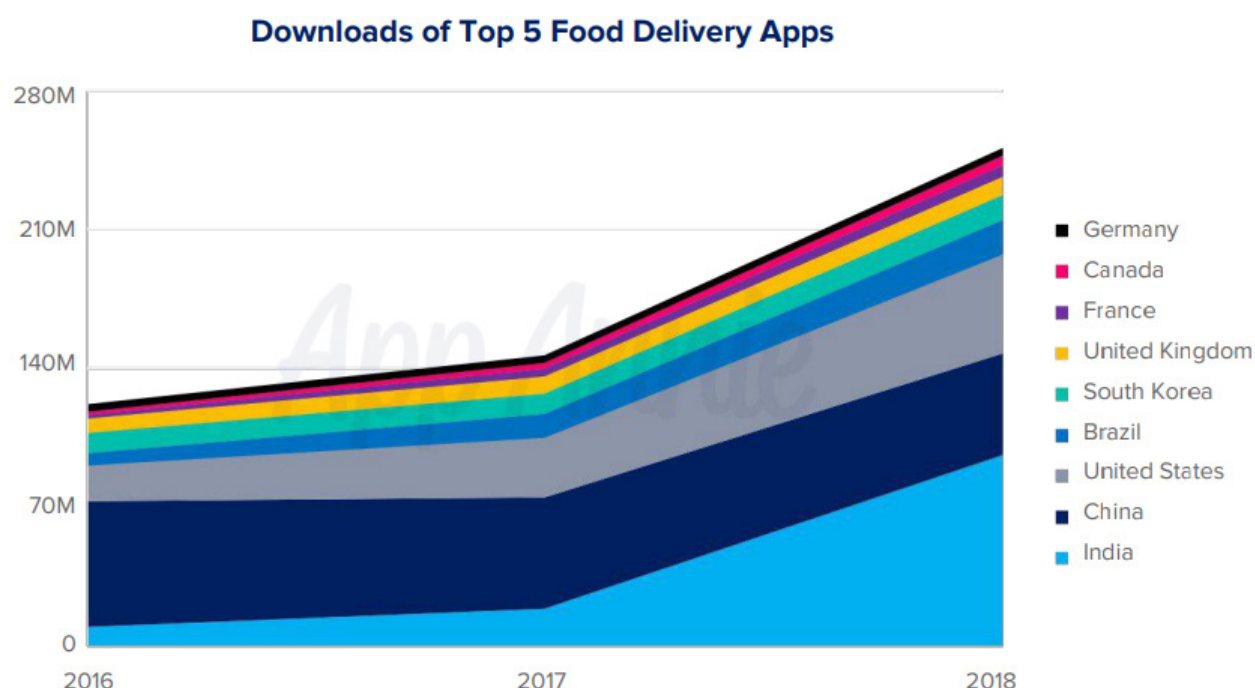
App download statistics: Other app categories

Gaming may be the most lucrative, social and video apps the most-used, but other types of apps are growing too. Let's take food delivery apps, for instance. Downloads of the top-five apps in each country in this category have more than doubled between 2016 and 2018 globally, according to App Annie app download statistics.

With staggering growth of 900% over this period, India very much seems to the engine room of growth in the food delivery app market. The US has also seen strong growth over this period – of 175%.

There is one slight anomaly to be noted here; and that is while in most of the top-markets analysed by App Annie we've seen amazing growth in downloads of food-delivery apps, there seems to have been a decline in downloads of such apps in China. We might note, however, that third-party Google downloads are not included in this reckoning – were we to have recourse to these app download statistics we might see a very different story.

Food delivery app downloads 2016-2018



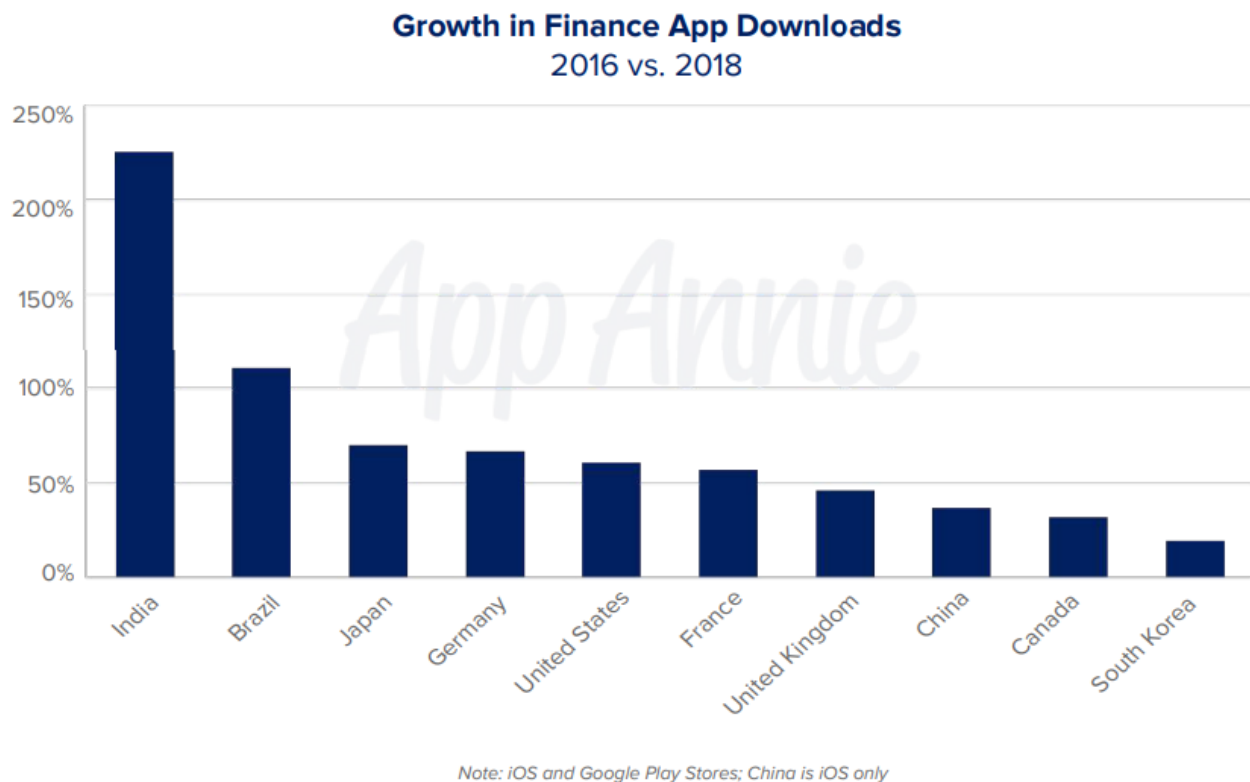
Source: [App Annie](#)

Finance apps are a growth category around the world. Once again, we see India leading the way in terms of growth, with around 225% more downloads in 2018 than in 2016; Brazil follows at a little over 100%.

It is unsurprising, perhaps, to see app data showing that developing economies are at the forefront of growth in this area. Innovative finance apps are helping to bring people into the formal banking sector where informal economies have traditionally been prevalent, such as India.

That said, we also see around 45-70% growth in highly-developed nations such as Japan, Germany, and the US. Popular new fintech apps in these nations are disrupting the traditional banking system, threatening the long-established dominance of incumbent players.

Not listed here, Indonesia saw 400% growth in finance app downloads. Again, third-party Google downloads do not feature here, so the figure we see for China is iOS only – and therefore likely not to reflect the whole picture.

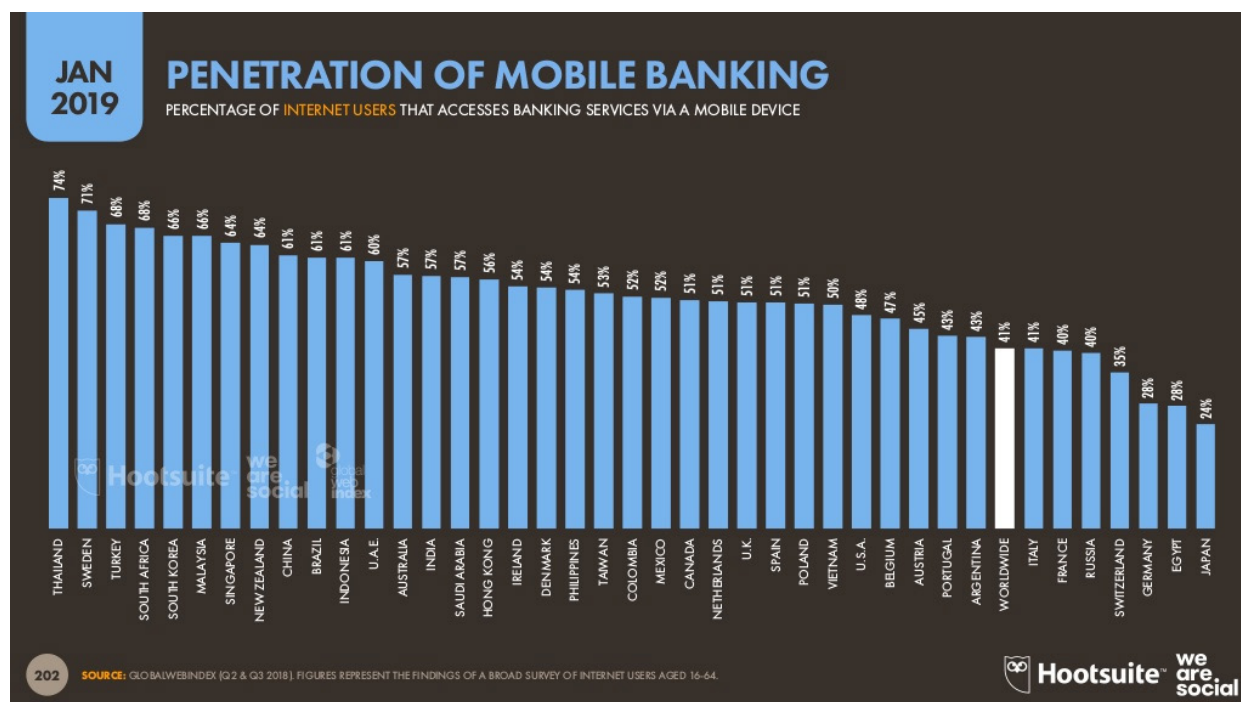
Finance app download growth, 2016-2018

Source: [App Annie](#)

Globally speaking, 41% of internet users were found to access banking service via a mobile device. A diverse selection of nations can be found at the top end of this scale: Thailand, Sweden, and Turkey.

India (57%) can be found at the higher end of the scale. South Africa is the only featured African nation, with 68% penetration. The developing world is a key market for mobile banking, which is set to bring millions, if not billions, of unbanked people into the formal banking system.

Banking app penetration

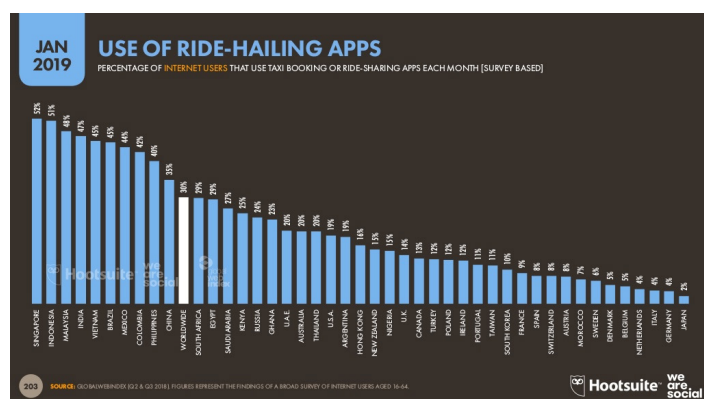


Source: [Hootsuite/We Are Social](#)

Ride-hailing has very much become an entrenched part of the app landscape over the course of the 2010s. According to Hootsuite/We Are Social app usage statistics, on average, 30% of internet users across the world utilised a ride-hailing app each month. The highest penetration of such apps can be found in Asian and a small selection of Latin American markets.

In European markets, where there are often restrictions on ride-hailing apps and public transit networks, penetration is lower. It will perhaps be of interest that the US – the home of ride-hailing – also reports relatively low penetration.

Ride-hailing app penetration



Source: [Hootsuite/We Are Social](#)

Key app markets

In terms of iOS downloads, China led the way in 2018, followed by the US and Japan. Precise figures were not made available by App Annie. The top-10 here is dominated by mature markets, with the exception of Brazil – which climbs past Canada – and Vietnam, which enters the top-10 for the first time.

We discuss app revenue in more depth elsewhere, but here we can see a little of the relationship between downloads and revenue. While there are many similarities between the two, we see the more mature markets of Taiwan, South Korea, and Australia edge out the younger Russia, Brazil, and Vietnam. The latter three app markets are at a more immature stage at present (see below).

Biggest iOS app markets, downloads 2018

2018 Worldwide Top Markets
by iOS Downloads

Rank	Country	Rank Change vs. 2017
1	China	-
2	United States	-
3	Japan	-
4	United Kingdom	-
5	Russia	-
6	France	-
7	Germany	-
8	Brazil	▲ 1
9	Canada	▼ -1
10	Vietnam	▲ 1

2018 Worldwide Top Markets
by iOS Consumer Spend

Rank	Country	Rank Change vs. 2017
1	China	-
2	United States	-
3	Japan	-
4	United Kingdom	-
5	Taiwan	▲ 1
6	South Korea	▼ -1
7	Australia	-
8	Canada	-
9	Germany	-
10	France	-

Source: App Annie

The Google Play ranking must be read as such, not as an Android ranking. For this reason, you might notice China, in which Google is blocked, is absent from the list. Android downloads in China – the world's biggest Android market – are third-party, therefore Google Play app downloads can only occur by taking circuitous measures.

Therefore we see the world's second-biggest app market, India take the top-spot. The presence of this relatively immature market at the top of the download charts is a reflection of the deeper penetration of Android devices in such markets. The US and South Korea are the only mature markets to make it into the top-10 by this measure.

Once again, however, downloads do not equal revenue, and the top countries by revenue chart features exactly the same names (in a different order) to the iOS revenue table. The only difference is the absence of China, which allows Russia to sneak into the top-10.

One name perhaps may catch the eye: Japan, which has been nudged off the top-spot this year by the US. Its presence here is interesting, given that aforementioned 7:3 split in favour of Android devices. Not losing sight of the fact that Japan is a populous nation with very high mobile penetration, this perhaps is something that developers with their eyes on the short and medium-term bottom line might want to take into consideration.

Biggest Google Play markets, downloads 2018

2018 Worldwide Top Markets
by Google Play Downloads

Rank	Country	Rank Change vs. 2017
1	India	-
2	Brazil	-
3	United States	-
4	Indonesia	-
5	Russia	-
6	Mexico	-
7	Turkey	-
8	Vietnam	-
9	Thailand	▲ 1
10	South Korea	▼ -1

2018 Worldwide Top Markets
by Google Play Consumer Spend

Rank	Country	Rank Change vs. 2017
1	United States	▲ 1
2	Japan	▼ -1
3	South Korea	-
4	Germany	-
5	Taiwan	-
6	United Kingdom	-
7	France	-
8	Canada	▲ 1
9	Australia	▼ -1
10	Russia	-

Source: [App Annie](#)

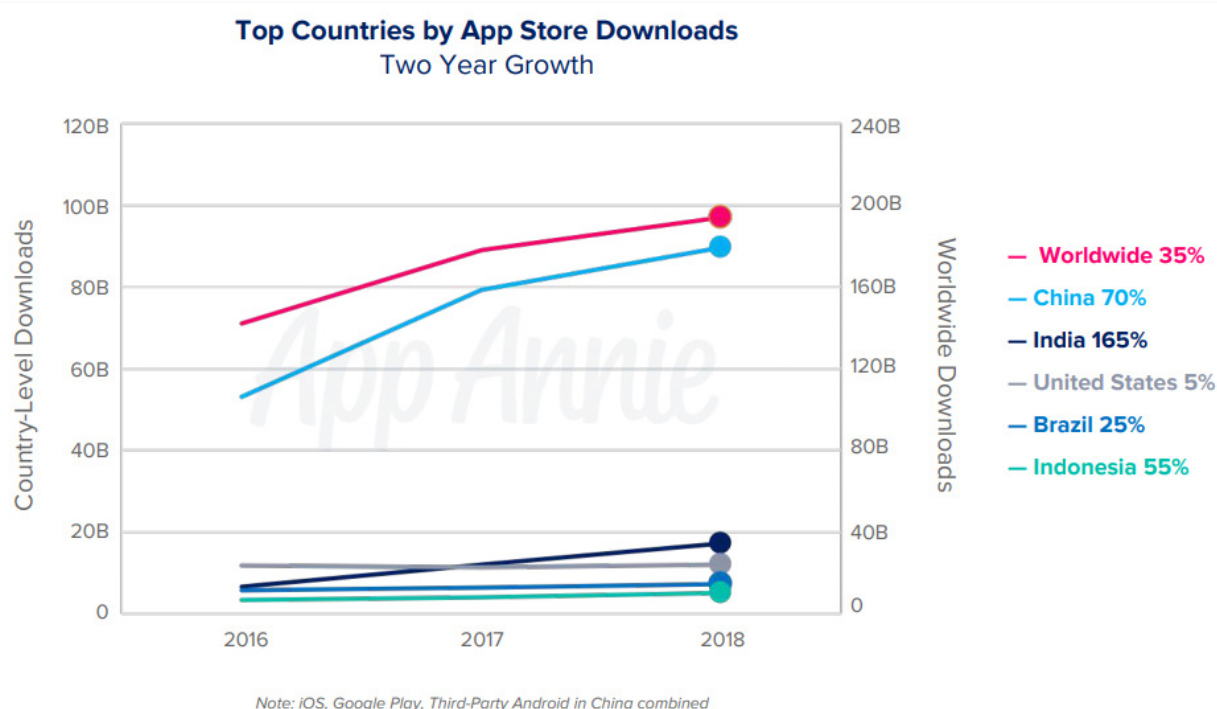
In 2017, 64% of global app downloads were made in the APAC region, 19% in the EMEA region, and the remaining 17% in AMER, [according to App Annie](#) mobile app statistics.

App data included in the same agency's 'The State of Mobile 2019' shows emerging markets have seen the biggest growth in app downloads over the past two years. India leads the way, with 165% growth – albeit from a lower base and with a larger population than any other nation, bar China. China incidentally ranks second by this measure, with 70% growth since 2016, while Indonesia – another young market with a huge population – posted growth of 55%.

Growth seems to have stabilised in Brazil according to this mobile app data, with 25% growth putting it some way below the global level of 35%. The last of the top-five nations (in growth rather than absolute terms) is the US, with a mere 5% growth reflecting the maturity and saturation of the market. Notably, India overtook the US in terms of total app downloads in 2017.

No nation, however, comes anywhere near China – which accounts for close to 50% of total global downloads. This is despite, notes the report, a crackdown on games.

Growth in key app markets 2016-2018



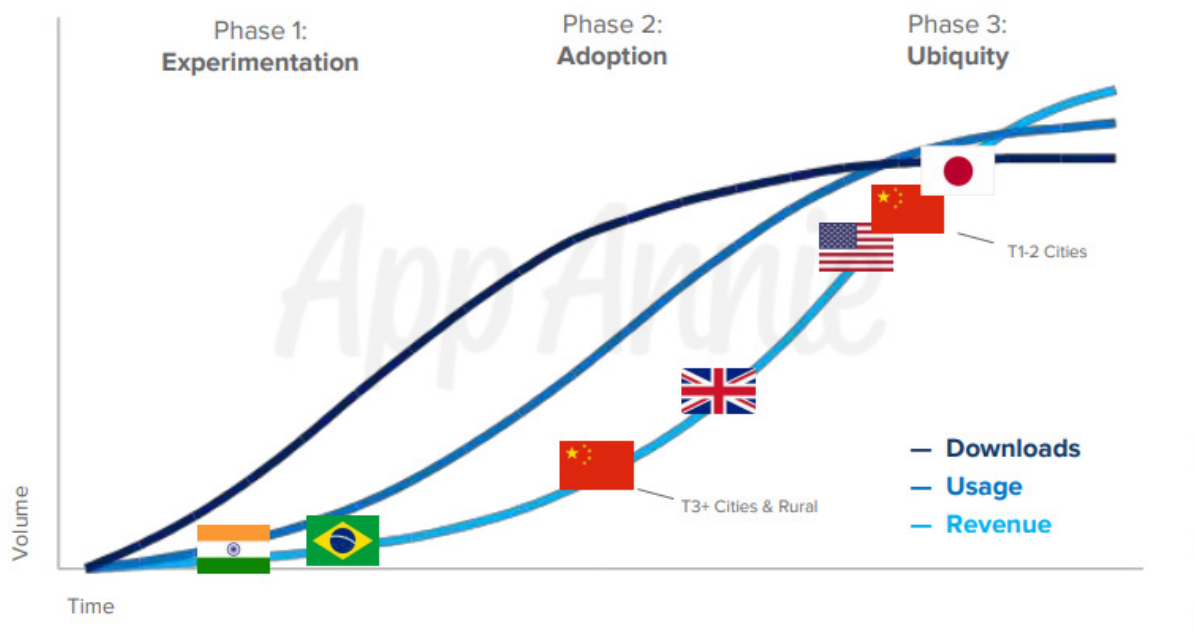
Source: [App Annie](#)

The aforementioned State of Mobile 2019 report finds that the most-lucrative app market in the world by some way is China (unsurprisingly given its dominance of the market), which accounts for no less than [40% of total app spending](#) (perhaps connected with the nation's mega-app WeChat, through which users can practically conduct their entire lives).

App Annie maps the development according to three stages: experimentation, adoption, and ubiquity ([elsewhere the stages are named experimentation, expansion, and maturation](#)). Any given market will move through these stages, the first of which drives app downloads, the second app usage, and the last app revenue.

As we reach the point where app revenue is being generated, downloads begin to tail off. It's interesting note that here, China is separated into two separate markets: the hyper-modern 'top-tier' cities at the phase of ubiquity, with the smaller (by Chinese standards!), more provincial cities at the earlier stages of adoption.

App markets: development



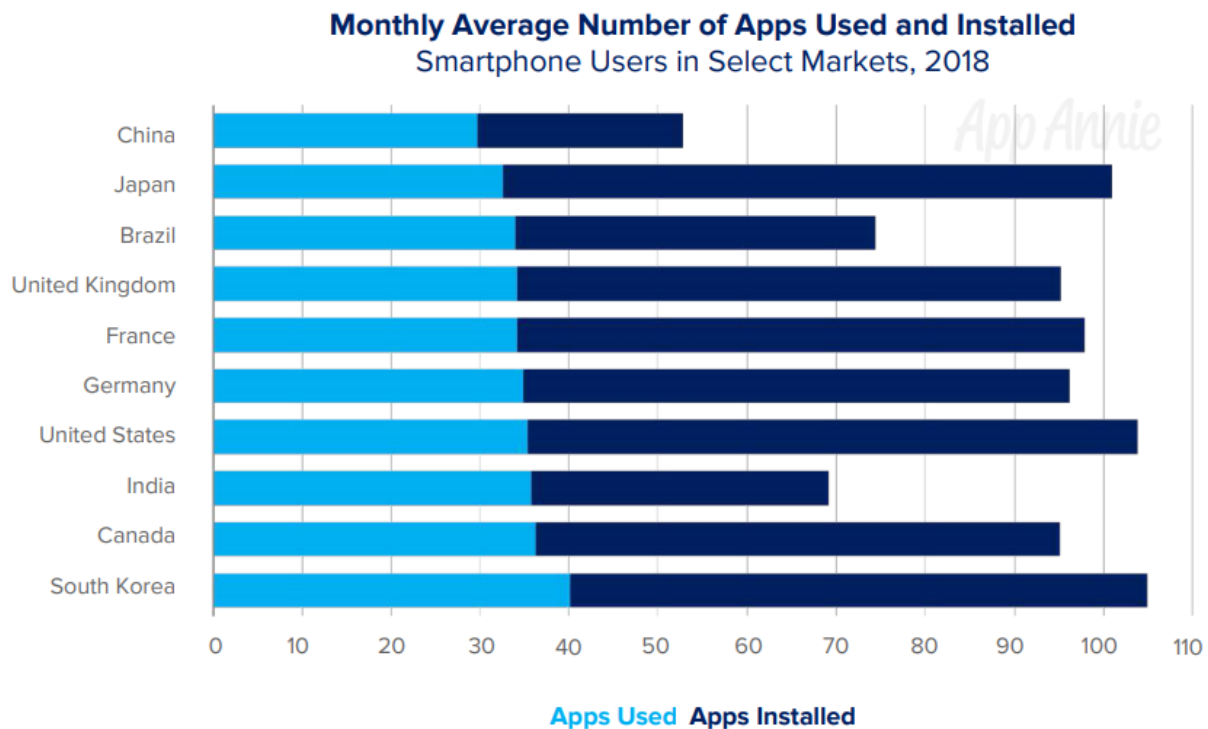
Source: [App Annie](#)

App installed vs. apps used by country

South Koreans install and use the greatest number of apps (of the selected countries assessed by App Annie).

Interestingly, of the included countries in this measure, China comes last. The report authors posit that this is due to the prevalence of Android devices with limited storage.

This mobile app data reveals an interesting disparity between the number of apps installed and the number of apps used in both the US and Japan. Clearly users in these nations will happily install an app that they are not really interested in using regularly. On the other hand, Chinese and Indian users seem to be most careful as to what apps they install (though as with every other nation in this indicator, a good deal more apps are installed than used).

Number of apps installed and used by country monthly

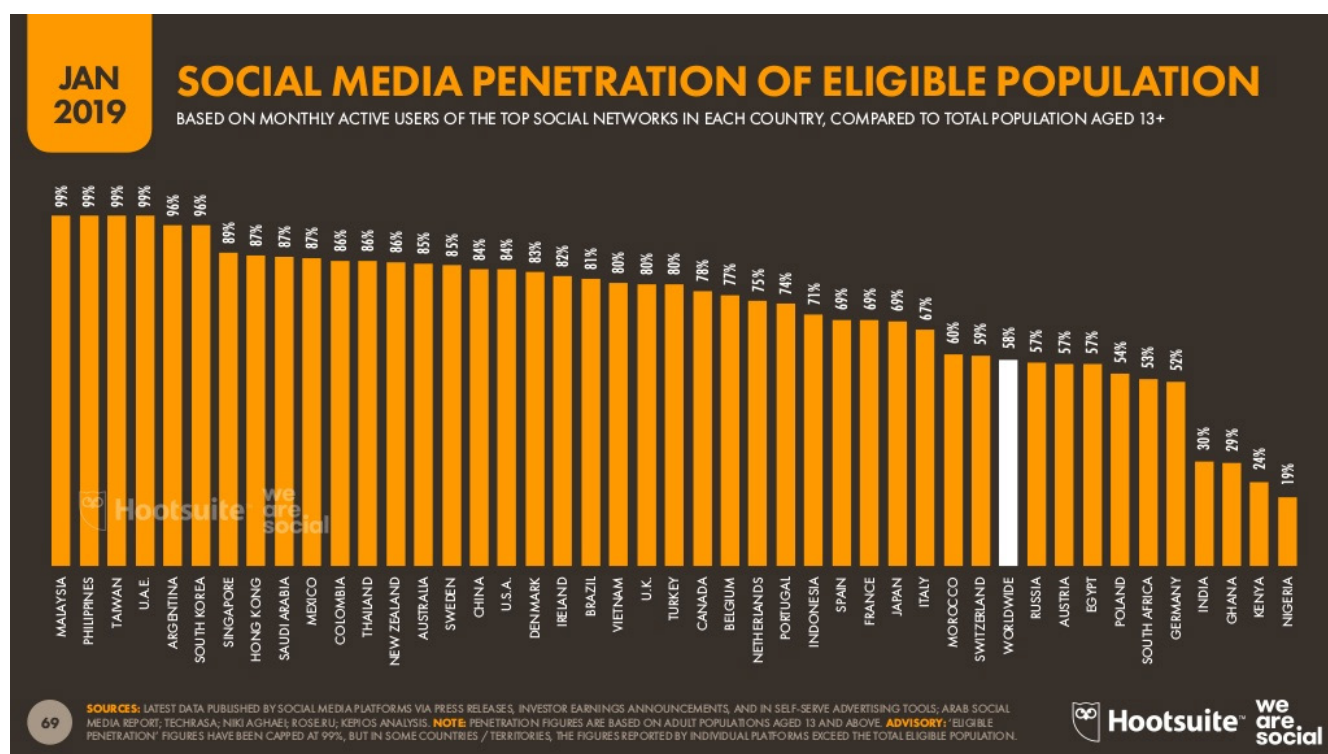
Source: [App Annie](#)

Social apps: key growth markets

Hootsuite/We Are Social's Digital 2019 looks at the 'eligible population' of monthly active social media users aged 13+, the global average comes to 58%.

At the top end of the scale, we find Malaysia, the Philippines, Taiwan, and the UAE – all of which log 99% social media penetration by this measure. At the bottom end of the scale, we find a host of nations with huge potential for growth, nations like South Africa, India, and Nigeria. Compared to the saturated global north, there's clearly still much to play for in these nations.

Social media penetration by country



Source: [Hootsuite/We Are Social](#)

The highest absolute growth in social media users was to be found where we might expect it to be: China, India, Indonesia, Brazil, and the Philippines, etc – countries with large populations at various stages of rapid development.

Social media user growth: absolute

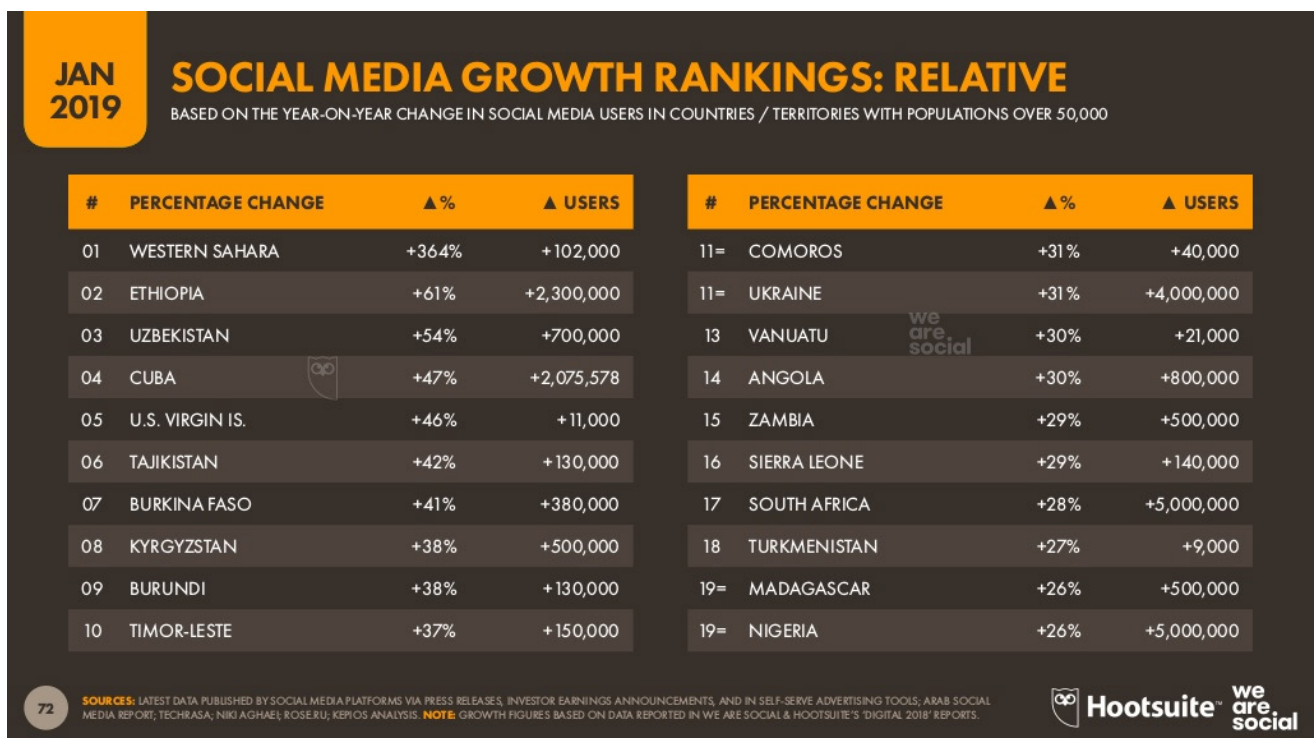


While these countries will provide the big numbers, it's also edifying to look at some of the nations with the highest percentage growth in social media users – as well as where the two overlap.

This list is dominated by African and Central Asian nations (and Cuba!). This app data may serve as a useful indication of the future: second-place Ethiopia – one of the world's most-populous nations – is earmarked as a key mobile battleground of the future. The 61% increase in social media penetration is a reflection of this.

Ethiopia, you may have noticed, also features in the top-20 nations by absolute growth. Ukraine also appears in both the absolute (4 million) and relative (31% growth), as does Nigeria (26% growth, equal to 5 million new users).

Social media user growth: percentage



Source: [Hootsuite/We Are Social](https://wearesocial.com/insights/digital-2018)

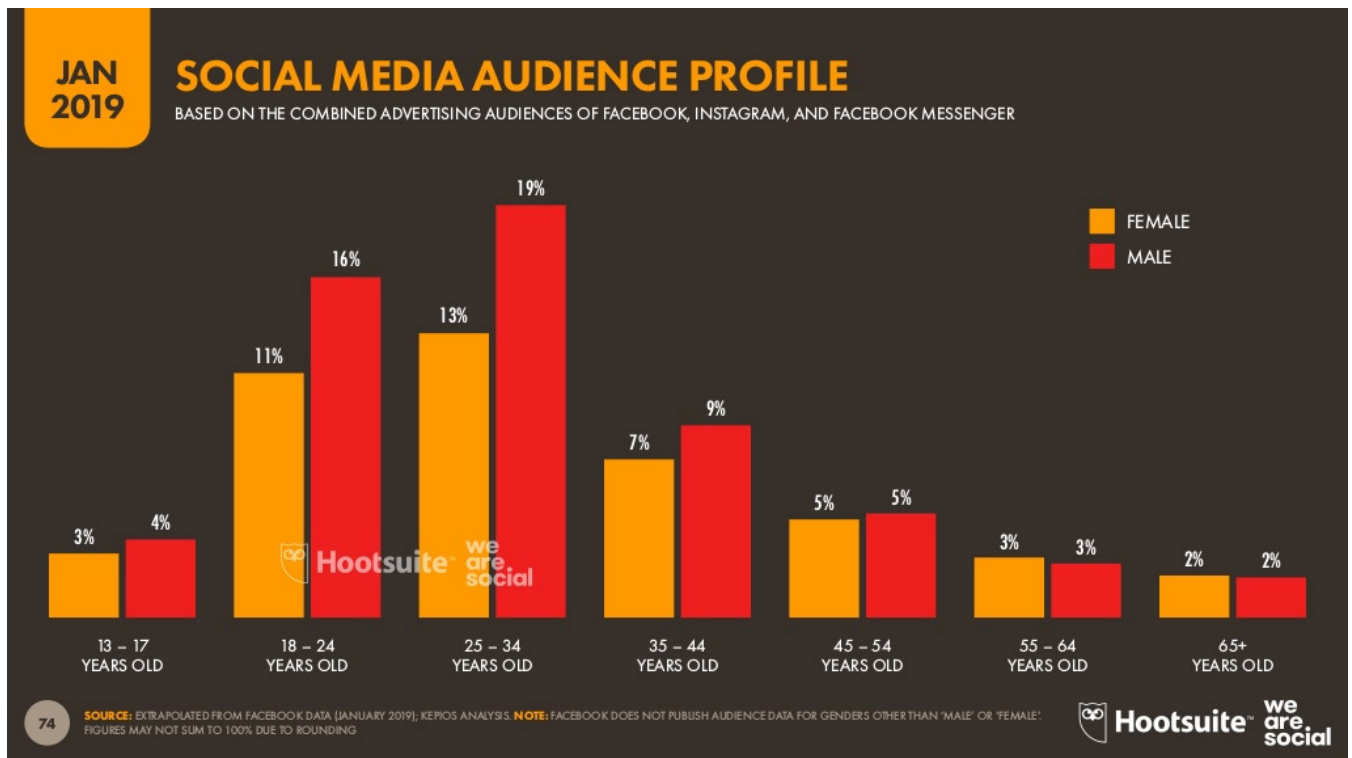
App user demographics

Hootsuite and We Are Social app statistics break down social media users (using Facebook data for Facebook, Facebook Messenger, and Instagram) specifically by age and gender. The largest share of social media users fall into the 18-24 and 25-34 year old brackets; 27% and 32% of the total user base.

In both of these age groups, we find a greater share of male than female users, something that is the case in all age categories up to age 44. After this point, we see parity between the men and women. It seems that while the social media revolution has spread across the

world, access to the platforms is more readily available to some than others.

Social media users by age and gender



Source: [Hootsuite/We Are Social](#)

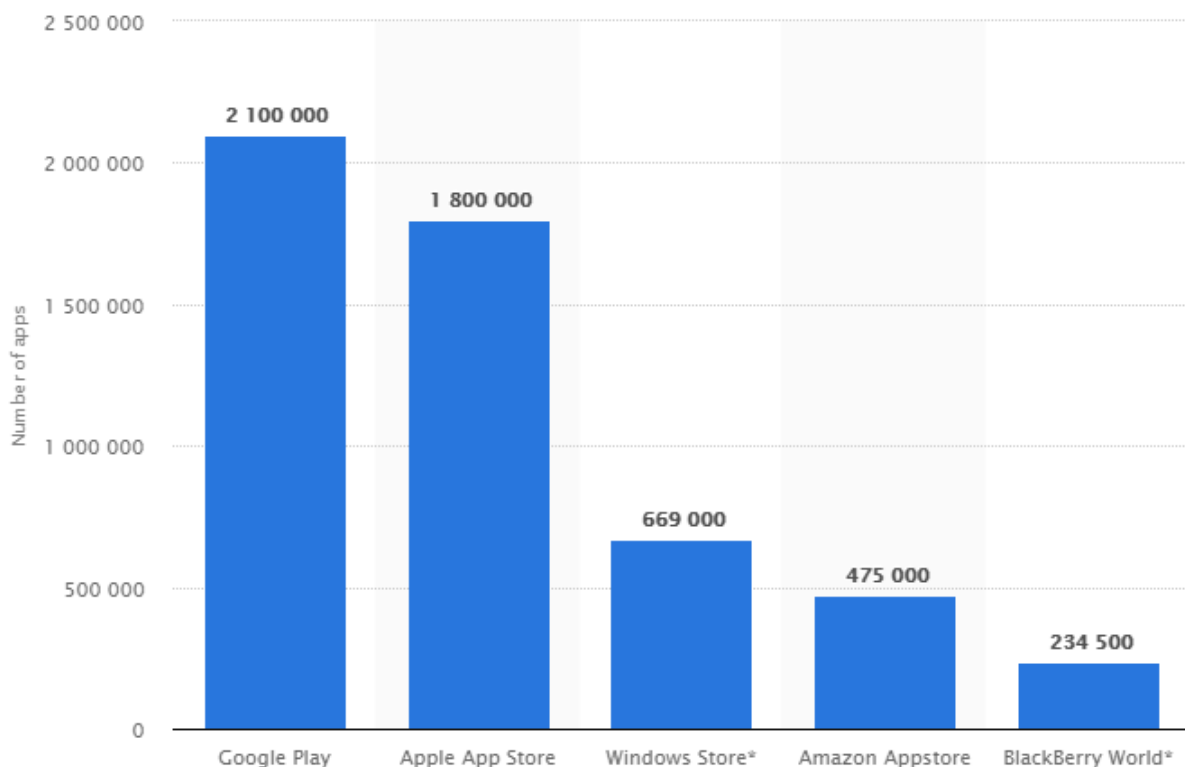
App Store Statistics

The first app store of real significance was Apple's App Store, which launched in 2008. Back then, it offered up a selection of 500 apps. Early iPhone advertising tagline, "There's an app for that," played on the amazing range of things one could achieve with this selection of apps.

That number seems almost farcically small in comparison with contemporary app store statistics. Indeed, in the first quarter of 2019, one could choose from 1.8 million apps on the App Store, according to one set of app store statistics, published on Statista – an increase of 1,799,500. The App Store is not even the biggest of its kind – the Google Play Store offered 2.1 million in the same quarter.

Even the 'smaller' app stores, offerings from Microsoft, Amazon, and BlackBerry offer hundreds of thousands of mobile apps.

Number of apps available in leading app stores, Q1 2019



© Statista 2019

Source: [Statista](#)

Apple App Store statistics

The figures quoted above seem to be a conservative estimate of the number of apps in the App Store.

[Lifewire peg the volume of iOS apps available in the App Store at 2.2 million](#) as of February 2019. This number has been relatively consistent over the past couple of years according to these iOS App Store statistics – with a slight dip occurring between 2017 and 2018. Apart from that, it's been a story of consistent growth since that first 500 apps, which had increased to 800 by the end of the month, and to 65,000 within a year.

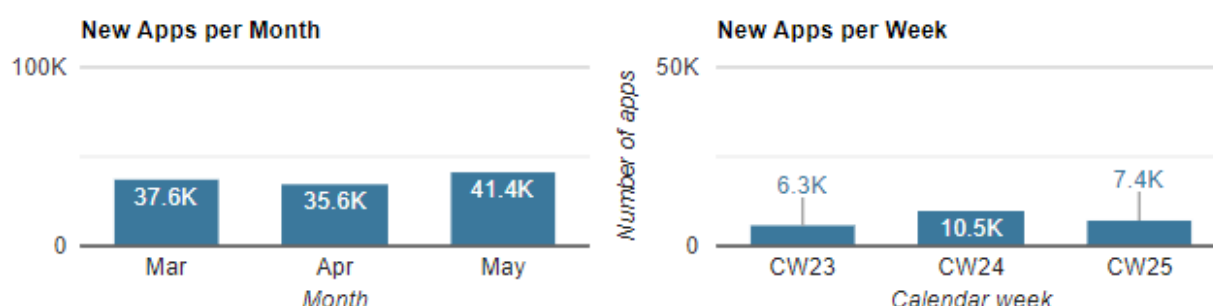
In the early years, it was not uncommon for the number of apps in the iOS App Store available to double over the course of 12 months. The 1 million app mark was reached in October 2013, and 2 million app threshold was crossed in June 2016.

Between June 2015 and June 2016 we saw an increase of 500,000 apps – though by this stage, this represents a stabilisation, as the increase from 1.5 to 2 million represents a percentage increase of only 33%.

The process of getting listed on the iOS App Store is noted for being more arduous (and costly) than getting a Play Store listing. We see a lower number of apps added as a consequence (see below). Between March and May 2019, we saw between 35,000 and 42,000 apps per month added to the App Store.

On a weekly basis, this works out at between 6,000 and 11,000. The average daily figure comes in at 1,162.

New App Store apps by week/month, March-May 2019/CW23-25

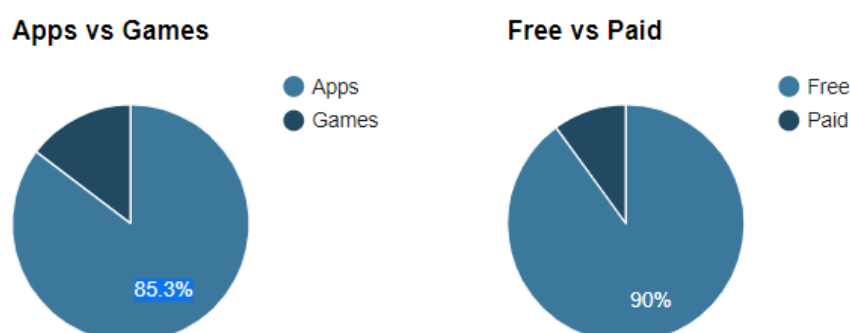


Source: [42matters](#)

Breaking available apps on the iOS App Store down, we find 85% of App Store apps are general apps, with the remaining 15% games.

Collectively 90% of these are free, with the remaining 10% paid. While it is widely understood that iOS users are more willing to pay for apps that Android users, we might note here that an overwhelming majority of apps are available for free. Perhaps this also reflects a wider shift toward a freemium model, with revenue generated through in-app purchases, rather than initial outlay on the app itself.

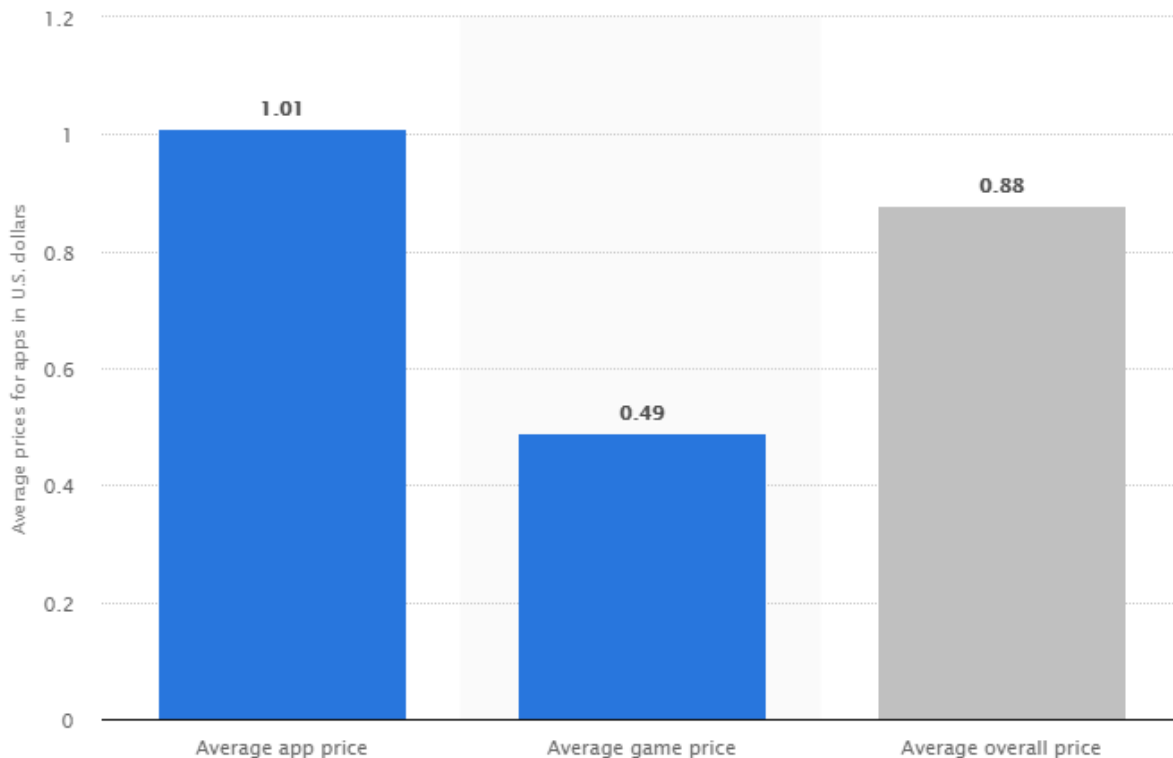
iOS App Store: Free vs. paid, games vs. apps



Source: [42matters](#)

In May 2019, the average cost of apps on the Apple App Store came to a \$1.01. Games (in which the freemium revenue model is particularly prevalent) average \$0.49. Collectively the average price for all apps is \$0.88.

Average cost of iOS App Store apps, May 2019



© Statista 2019

Source: [Statista](#)

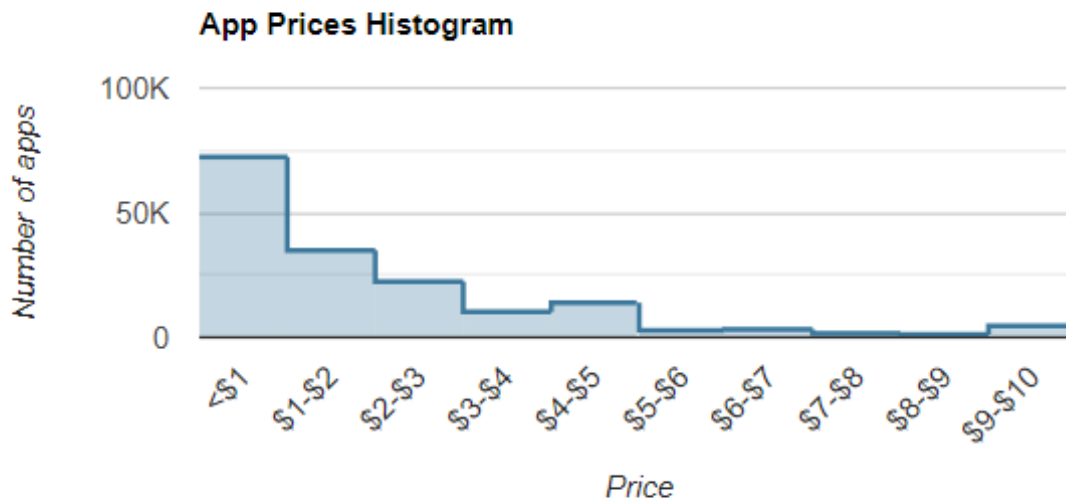
If we style these app store statistics as a histogram, we can see that the greatest proportion of priced apps cost under \$1 on the App Store. There a rough downward trend as we go up in price, with a couple of spikes – in the \$4-5 bracket, and the \$9-10. We might presume a fair share of these goes to the reassuringly-traditional \$4.99 and \$9.99-price points.

There are, in fact, more apps priced at \$9-10 than there are in any bracket above \$4-5

There's another relative blip in the \$6-7 bracket, though this is small enough to be insignificant.

This analysis stops at the \$10 mark, so we are not able to reflect on trends after this point.

App pricing brackets, App Store



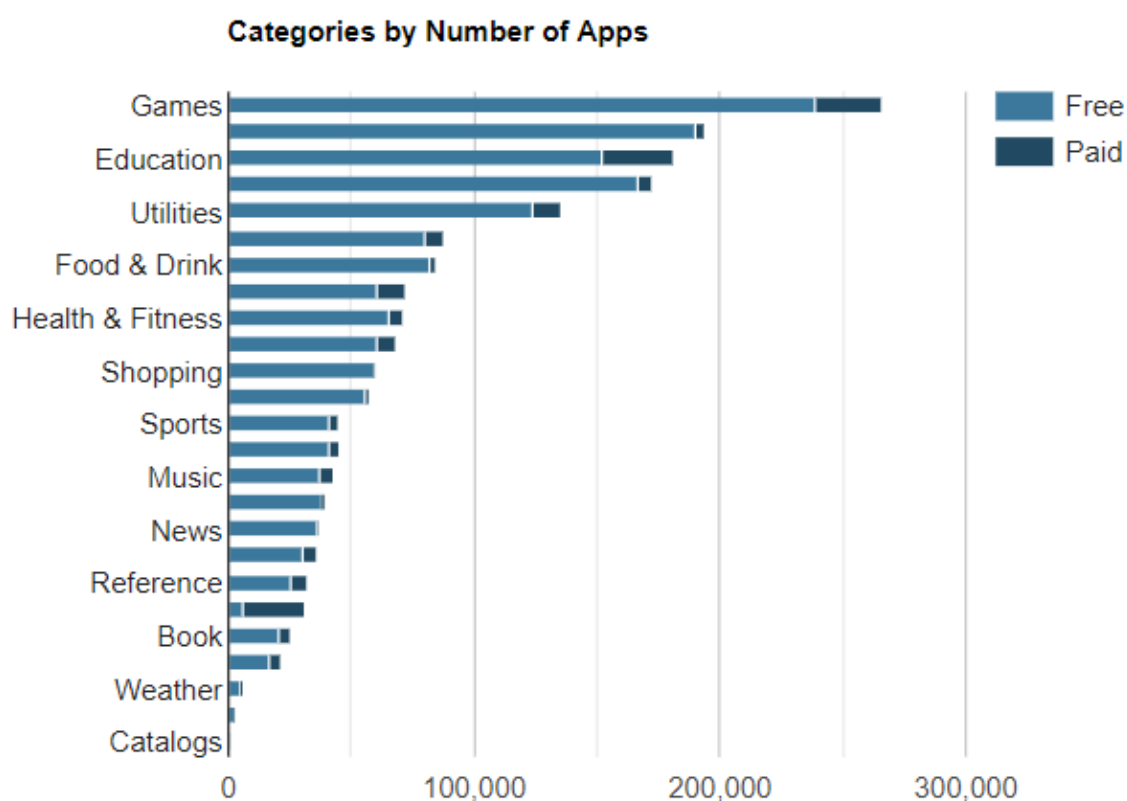
Source: [42matters](#)

While games may account for only 15% of total apps on the App Store according to these app store statistics, they form the biggest single category of app in the App Store. Unlabelled in second-place we find business apps, followed by education. Notably in education apps we find a slightly higher preponderance of paid apps – a little under one in six.

Indeed, we find more paid apps in absolute terms among education apps than in any other category. It seems that the revenue model of educational apps is still geared towards (relatively speaking) an initial user outlay – reflective somewhat of educational establishments in the real world...

Lifestyle apps are unlabelled as the fourth-most common app type available in the App Store, followed by utilities.

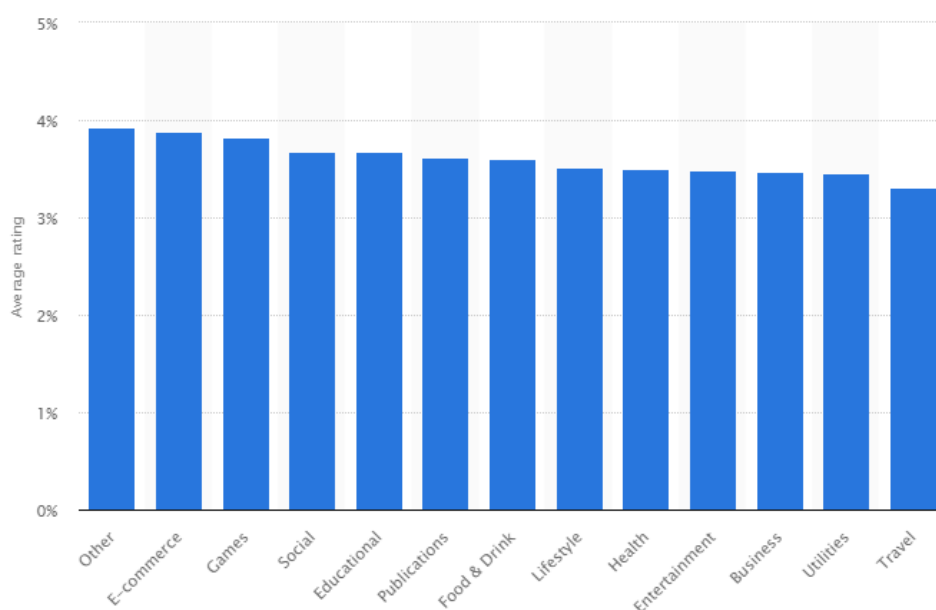
App Store app categories



Source: [42matters](#)

Breaking down apps available on the iOS App Store by category, outside of 'other' apps (3.93 on average), e-commerce apps were the highest rated, logging an average score of 3.88. Interestingly, two of the biggest categories, games at 3.82 and social at 3.68 are the next highest-rated. Travel (3.31), utilities (3.46), and business (3.47) are the lowest rated on average.

(The y-axis here is mislabelled on the source graph, and should refer to stars rather than a percentage).

Average rating of App Store apps, by category, June 2018

© Statista 2019

Source: [Statista](#)

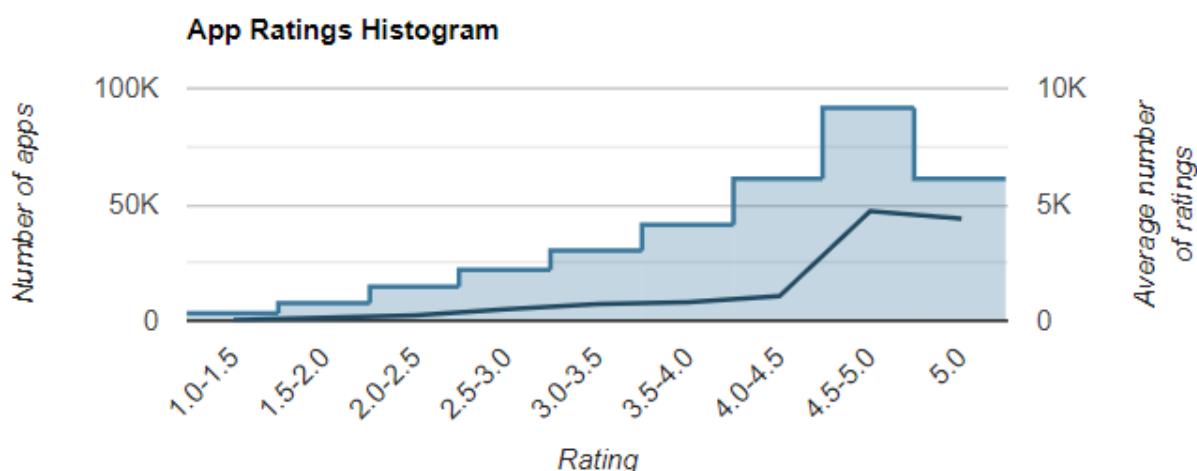
According to a different source, the greatest proportion of rated apps in the App Store fall into the 4.5-5 star bracket it seems, with considerably more apps than any other. We see nearly exactly the same number of apps in the 4-4.5 and the 5 star brackets, which are the next biggest.

Outside of this podium, the lower we go, the fewer apps we find. Interestingly, we see the greatest average number of reviews for apps in the upper echelons in rankings terms, with apps rated 4.5-5 attracting the highest number of reviews, closely followed by 5-star reviews. Both of these ratings brackets see at least four times as many average times as the next closest contender, at 4-4.5.

The more reviews, the higher the rating it seems. These App Store statistics certainly point to an interesting phenomenon – that the apps users are rating tend to be those they are enjoying using.

It's worth noting here that the vast majority of apps are unrated. 42matters peg the figure at 82%. These figures, then, represent only 18% of App Store apps.

App ratings distribution vs. number of reviews, App Store



Source: [42matters](#)

The comparative ease of listing in the Google Play Store certainly does not outweigh the many benefits of listing one's app on the App Store (especially if revenue is your goal). Indeed, in June 2018, Tim Cook announced that the [App Store counted 20 million registered developers](#).

He also gave us a traffic figure: 500 million weekly-active App Store users. The message for developers seems to be: you're competing for attention with in one of the world's most-visited marketplaces, but also one of its most competitive.

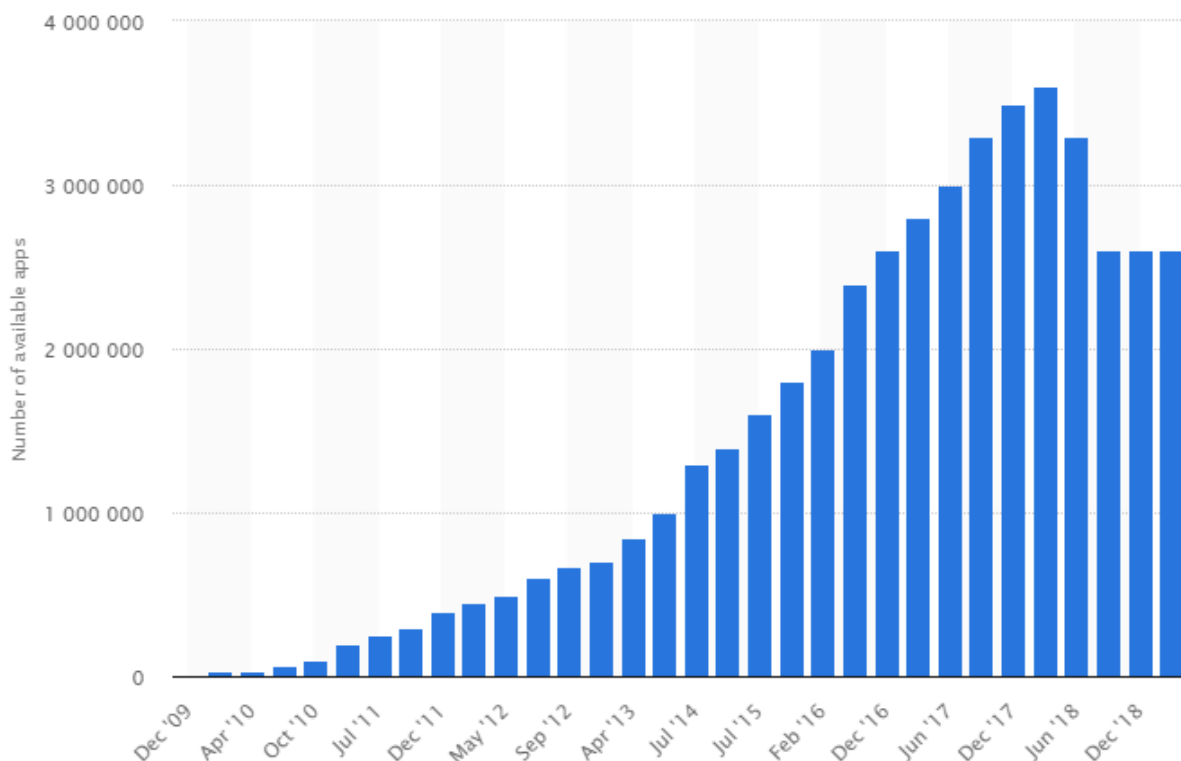
Google Play statistics

We also find stats that suggest the Play Store might have more options than acknowledged in first set of data. Another analysis, also published on Statista, sets the total number of apps in the Google Play Store at 2.6 million. Unlike the App Store, this by no means represents a high point. Indeed, the total was a high as 3.6 million in March 2017.

The total number of apps in the Google Play Store fell after that point, taking a nosedive in the second half of 2018 to the current level. This is the consequence of Google removing apps from the Play Store that have not registered certain compulsory information – including suitability for children.

Early years saw a simpler upward trajectory. Back in December 2009, the Google Play Store offered 16,000 apps. By March 2010, this had almost doubled to 30,000. The 100,000 mark was reached in October of that year. It took until July 2013 to reach 1 million, doubling to 2 million by February 2016, and reaching 3 million in June 2017.

Number of apps in Google Play Store, December 09-March 2019



© Statista 2019

Source: [Statista](#)

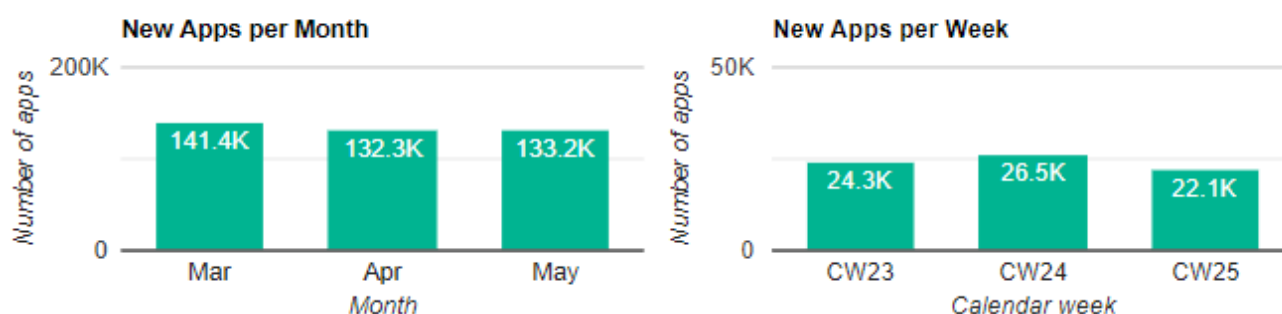
The process of getting an [app listed on the Google Play Store](#) is considered to be much easier and cheaper than getting it into the App Store.

We might note, however, that this could potentially have an impact on quality control. Indeed, App Brain currently sets the current level of low-quality apps at 13% (based on its own proprietary low-quality app detection filter).

In the period between March and May 2019, we saw between 132,000-142,000 apps added to the App Store per month. On a weekly basis, during June 2019, the figure was between 22,000 and 27,000. The daily average number of apps added to the App Store stands at 3,602.

As the weekly figure in particular reveals, there is certainly some fluctuation then – though it seems that a healthy number of new apps are being added to the store on a regular basis. Competition, then, is certainly stiff.

New Google Play Store apps by week/month, March-May 2019/CW23-25



Source: [42matters](#)

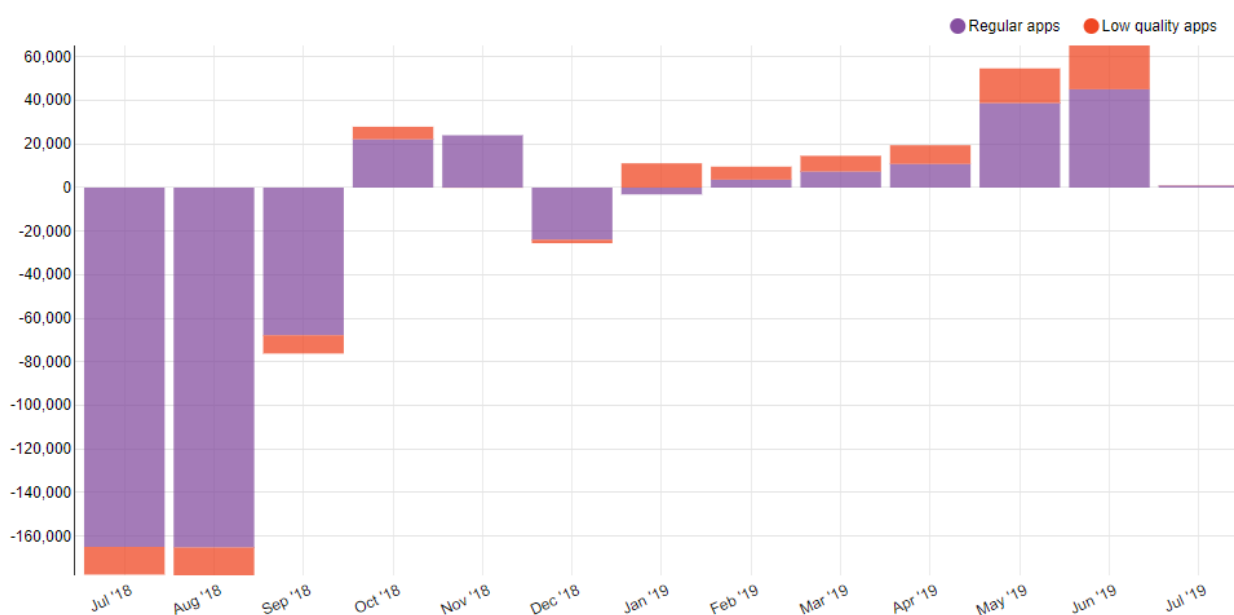
Below, we can see the net figure of apps added/removed from the Google Play Store in the period between June 2018 and June 2019. The blood-letting period was its most intense between June and September 2018. The most extreme month, June 2018, also saw a large number of low-quality apps removed from the Google Play Store.

With the exception of December 2018, there is a steady upward trajectory up until the end of this period. Worryingly, however, it seems a disproportionate quantity of the new apps are low-quality. Indeed, in January 2019 we saw a net gain in low-quality apps offsetting a net loss in regular apps.

(nb. the July figure is partial)

New Android apps added to Play Store: June 2018-June 2019

New Android apps per month



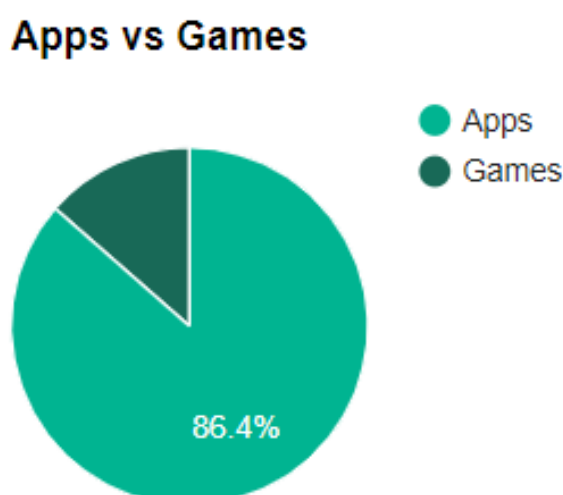
Source: [App Brain](#)



Low-quality apps are unlikely to be downloaded by discerning consumers. While there may be over 2.5 million apps listed on the Google Play Store, [a little under 1.5 million have been rated \(55%, as of May 2019\)](#). It seems safe to assume unrated apps will also be un-downloaded apps – indeed the chart which verifies this can be found a few paragraphs below.

We see a similar ratio of games to apps in the Play Store as we do in the App Store, 86% to 14% respectively.

Play Store: Games vs. apps



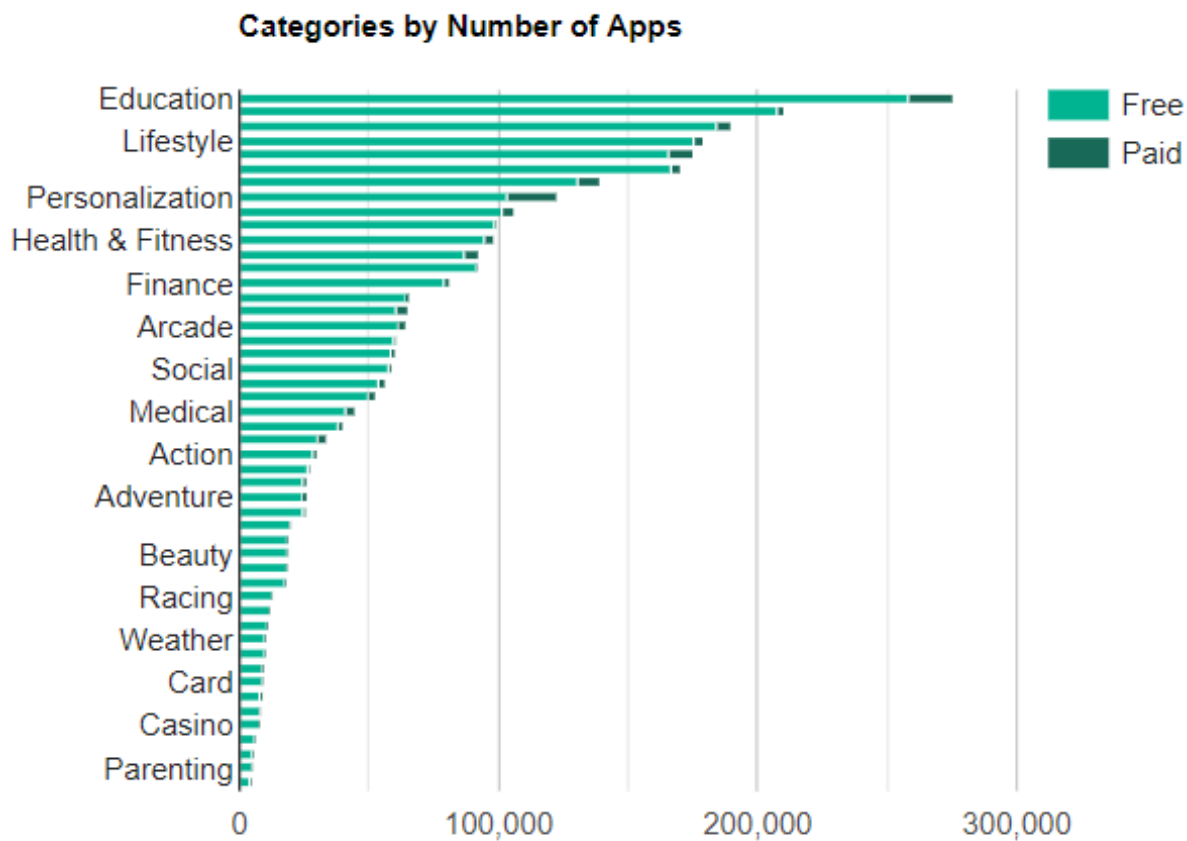
Source: [42matters](#)

As we see elsewhere, the Play Store is broken into different categories than the App Store, making a direct comparison difficult without some creative thinking. For one thing, games are broken down into genres – which means that in these app store statistics the biggest category in terms of app volume is education. As with the iOS App Store, we see a relatively high proportion of paid apps in this category, compared to the average (42matters report the percentage of paid apps at 4%).

In this case, however, it is outdone by personalisation – which, in fact, has a higher number of paid apps in absolute as well as relative terms.

After education, business, entertainment, lifestyle, and tools were the next biggest categories.

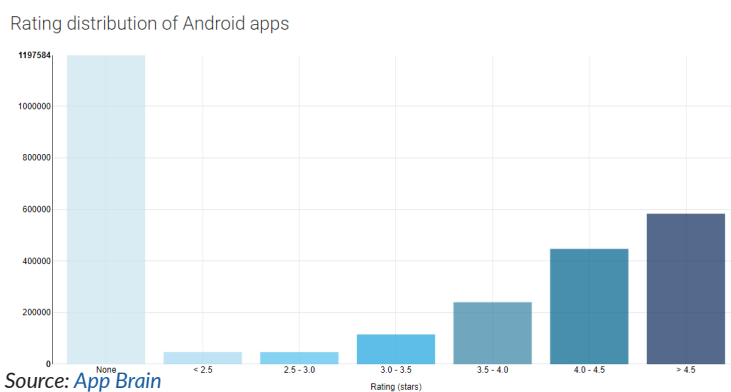
Play Store app categories



Source: [42matters](#)

The average rating for apps in the Google Play Store is 4.2 (using a five-star system). We might note that these app store statistics reveal that the largest numbers of apps that are actually rated in the higher rating brackets. Whether this is a sign of quality, or an indication that users tend to rate apps they enjoy using is up to you to decide...

Rating distribution, Google Play Store, June 2019



Source: [App Brain](#)

The histogram below (from a different source) shows the distribution of ratings across apps in the Play Store. Though it is not a totally smooth line, we can see clearly that the largest share of apps are rated in the upper echelons, with 5-star apps comfortably the biggest grouping.

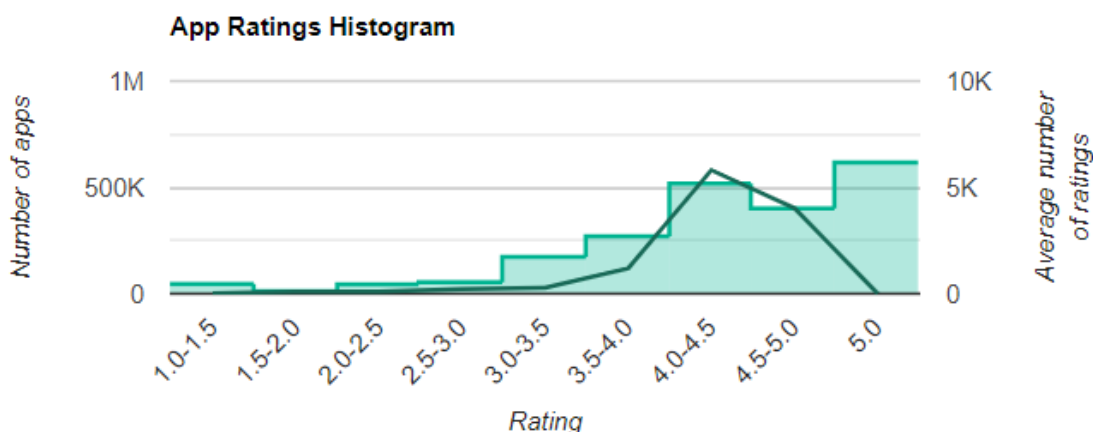
We might note, however, that apps scoring in the 5-star bracket tend to be rated by fewer users; which certainly makes it easier for an app to reach a higher rating than one that has been rated by thousands of users.

Indeed, we might expect early adopters to be champions of apps, for one reason or another...

The highest preponderance of reviews comes for apps in the 4.0-4.5 rating bracket, followed by the 4.5-5.0 – which can be read as positive enough, certainly.

Interestingly, it seems that Android users are far keener app reviewers. According to these app store statistics, the majority of apps available through the Play Store have been rated: 72% to be precise. This data then is more comprehensive than the App Store rating detailed above.

App ratings distribution vs. number of ratings, Play Store



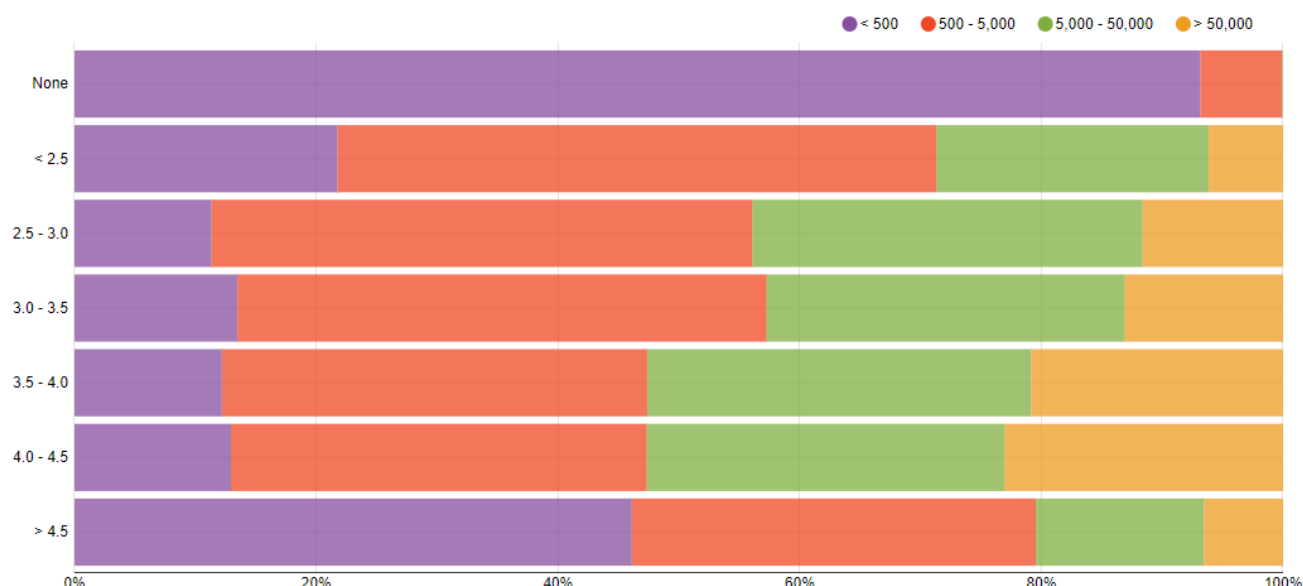
Source: [42matters](#)

We see here that the overwhelming majority of apps which are unrated have been downloaded fewer than 500 times, with a small minority reaching the 500-5,000 bracket. There's a steady upward correlation of higher ratings with higher download volume. That is, until we reach the most-highly-rated apps, among which we find a high preponderance of those downloaded under 500 times.

As above, we're dealing with mean averages here, making it easier for apps with low download volumes to move between bands. Here we see that a high number of apps with low download volumes have been rated above 4.5 – perhaps as the downloads come in, the average will start to edge naturally downwards for many of these apps.

Google Play download volume by rating

Download distribution of Android apps by average rating



Source: [App Brain](#)

The overwhelmingly majority of apps listed on Google Play are free, according to App Brain: 95% in all. A paltry 125,000 apps are paid.

Of paid apps, unsurprisingly, most are priced at lower points, with fewer apps the higher up we go through the price brackets.

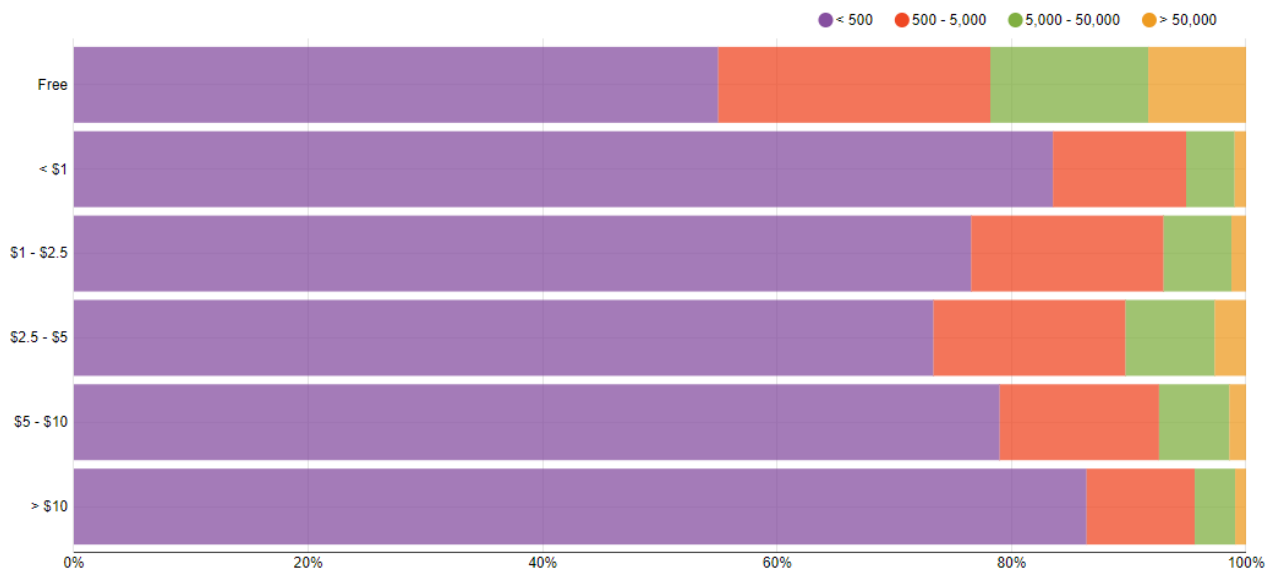
Unlike App Store apps we don't see an outlying figure in the \$4-5 bracket among these app store statistics. We do see the same increase in the number of apps priced at \$9-10 – of which there are more than any other price bracket \$5-6.

As we might expect, the greatest proportion of free apps (8% – a little over 210,000 app in total) have been downloaded more than 50,000 times. A further 13% of these free apps have been downloaded 500-5000 times.

Going up the price brackets, it does not quite follow that smaller and smaller percentages of apps reach the higher download thresholds. Indeed, it seems the \$2.50-\$5 is a relative sweet spot, with 3% of apps at this price point being downloaded over 50,000 times, and a further 8% in the 500-5,000 download bracket.

It's worth noting, of course, that the sample sizes get smaller the higher the price.

Google Play download volume by app cost



Source: [App Brain](#)

App Usage Statistics

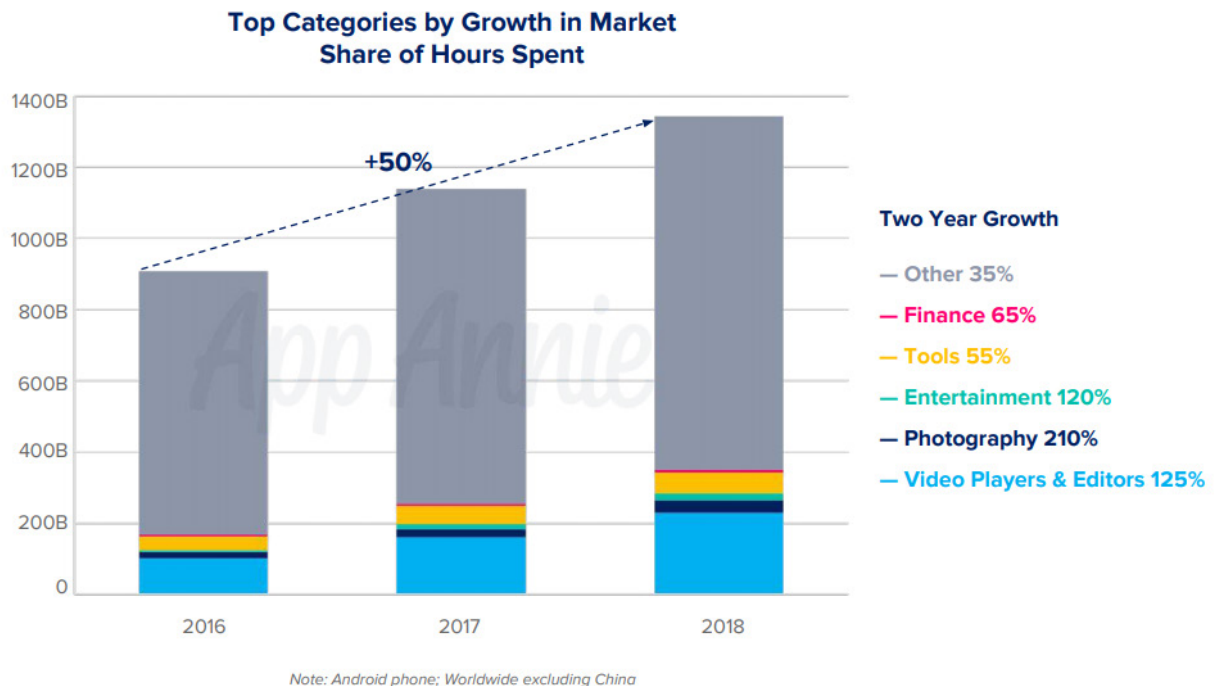
App usage statistics in App Annie's The State of Mobile 2019 report show that, in terms of usage time, the most used apps in 2018 were social & communication apps, which accounted for 50% of time spent in apps globally. This was followed by video players & editors (15%) and games (10%).

Video players & editors were also among the fastest growing categories by this measure, with the time spent using such apps growing by 125% between 2016 and 2018. Photography saw the greatest increase in time spent in-app over this period, more than tripling (210% growth). The other fastest growing categories are entertainment (120%), finance (65%), and tools (55%).

Time spent using these five fastest-growing app categories increased by 110% collectively, reports App Annie.

These app usage statistics relate to Android phones and exclude China. Total global app usage time increased by 50% over this period – from around 900 billion to 1350 billion hours.

Fastest growing app types by time spent, 2016-2018

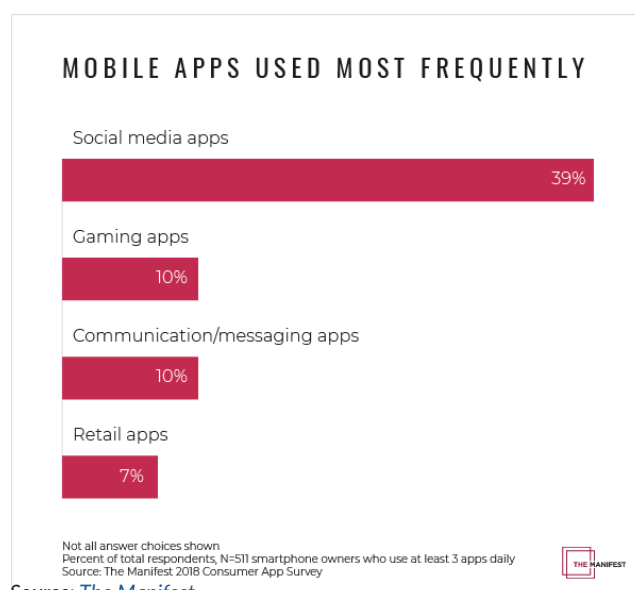


Source: [App Annie](#)

The Manifest also found social media apps came out on top, in a survey which asked which type of apps users used most. In joint-second place we find gaming and communication/messaging apps, with retail coming-in in fourth.

The status quo remains roundly unchallenged.

Most-used app categories

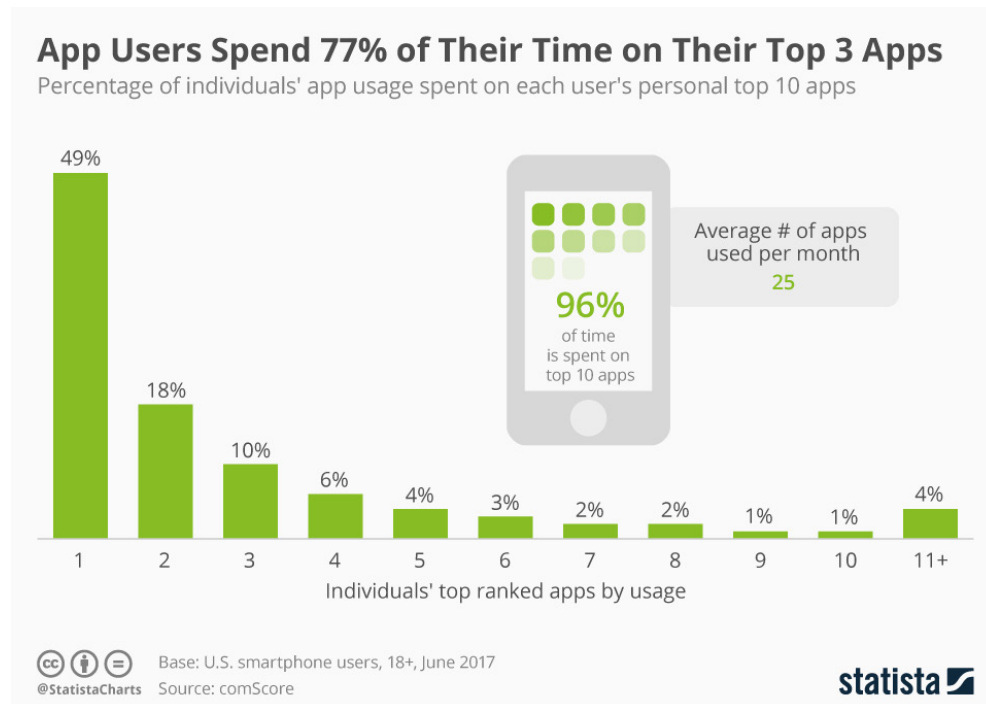


Source: [The Manifest](#)

Indeed, app users can be rather conservative in terms of the apps they are willing to use.

Having users download an app is challenge enough; getting them to actually use it is another thing altogether. In the US, app users typically spend 96% of their time using their 10 favourite apps. A stunning 77% of mobile time is spent using three favourite apps; very close to half using a single favourite app.

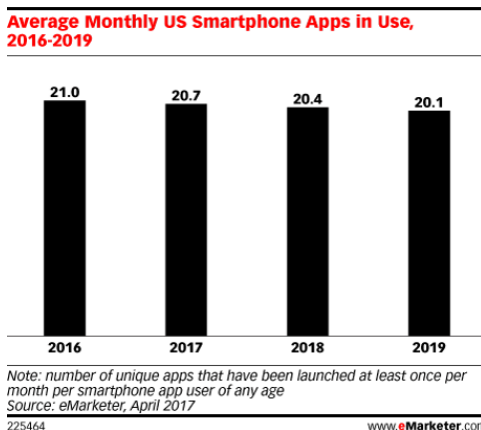
Time spent using top-10 apps



Source: [Statista](#)

The market is getting tougher, it seems. According to eMarketer, we are set to see a downward trend in the number of apps used on a monthly basis. In the US, they predict that in 2019, the figure will be as low as 20.1 – this is down from 21.0 in 2016.

Average number of apps used monthly, US users



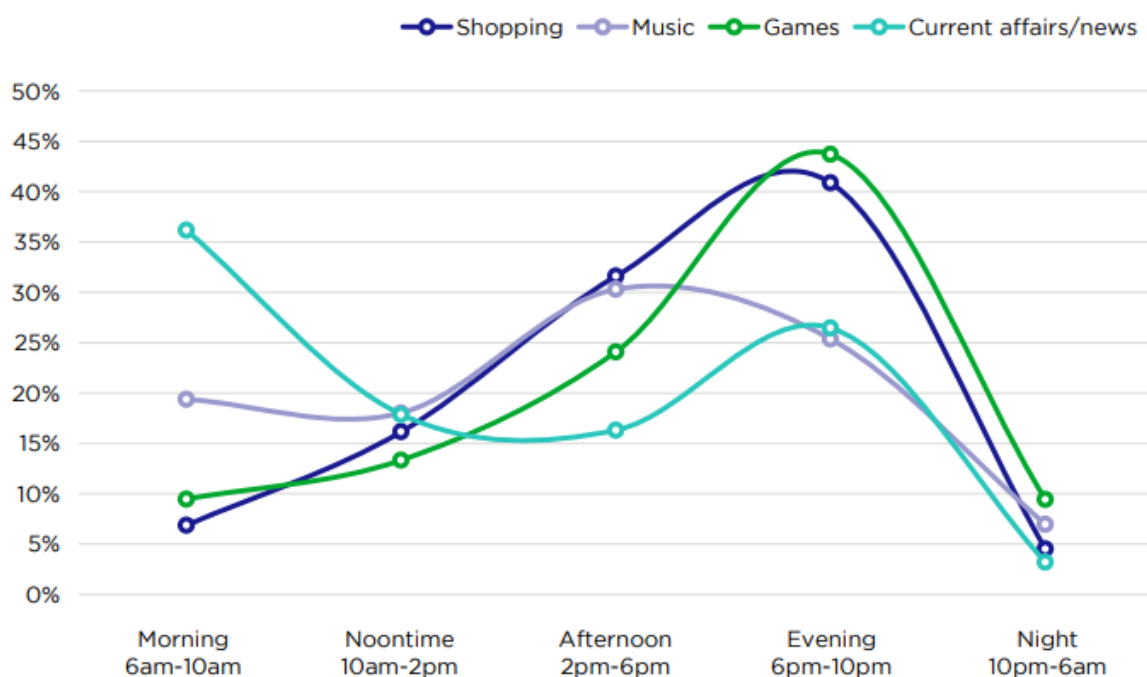
Source: [eMarketer](#)

Peak usage times for app usage differ according to app category. App usage statistics from Newzoo, pertaining to users in the US, UK, Germany, and France, finds that games and shopping app usage peaks in the evening – during leisure time as we might expect.

On the other hand, news apps are most-used in the morning, as users want to catch up on the latest news before beginning their day. There is a second smaller peak in the evening. Music apps, on the other hand, see peak usage in the afternoon. Perhaps logical for the app category that most lends itself to multitasking.

Peak usage times by app category

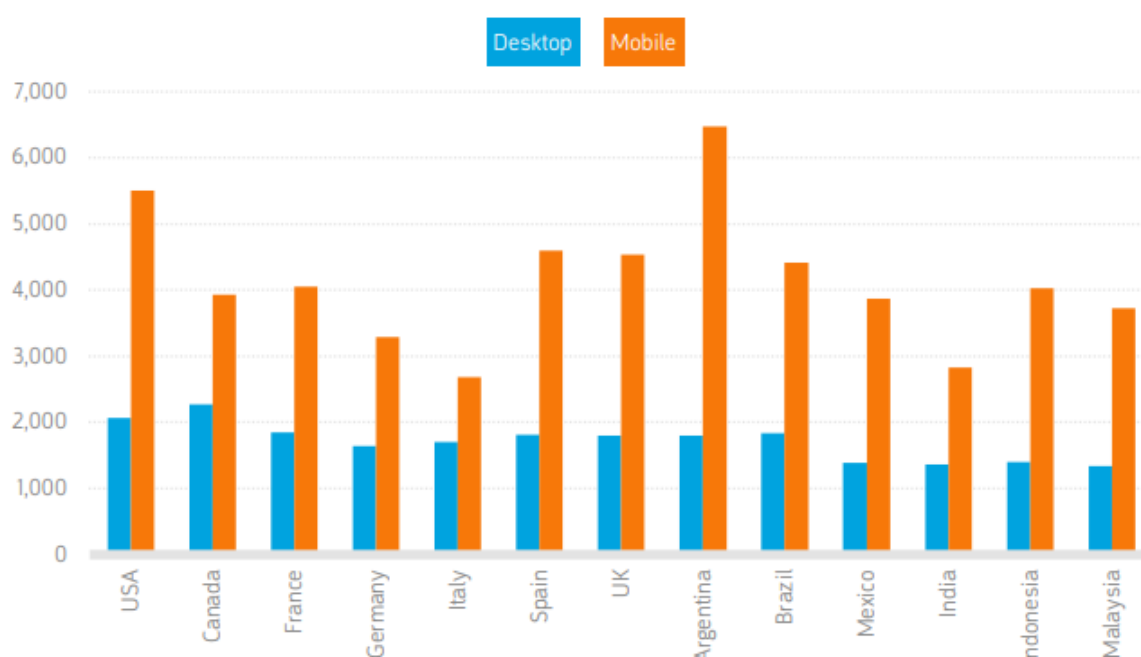
TIME OF DAY THAT APPS ARE MOSTLY USED | PER CATEGORY



Source: [Newzoo](#)

Time using apps

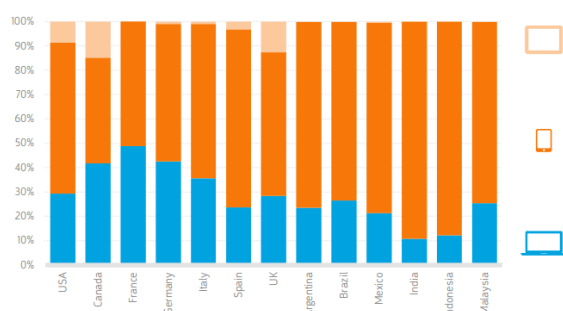
Comscore's Digital Future in Focus 2018 looks at time spent on mobile in selected global markets. According to these mobile app statistics (average minutes per user per month), the highest amount of mobile time is reported in Argentina, followed by the US, and then Spain.

Average monthly mobile time by country vs. desktop.

Source: [Comscore](#)

Breaking this app data to look at the proportion of time spent using smartphones, tablets, and desktop computers, we can see – if we needed further evidence – the utter dominance of the smartphone. Canada is the only nation in this analysis where smartphones don't account for over 50% of device time.

In France, desktop computers still seem to be popular – and, to a lesser extent, in Germany, Canada, and Italy. Tablets are most popular in the Canada, the UK, and the US. India, Indonesia, and Mexico are particularly mobile dominated. This is perhaps to be expected in nations where mass online connectivity very much came courtesy of the smartphone revolution.

Device time by country

Source: [Comscore](#)

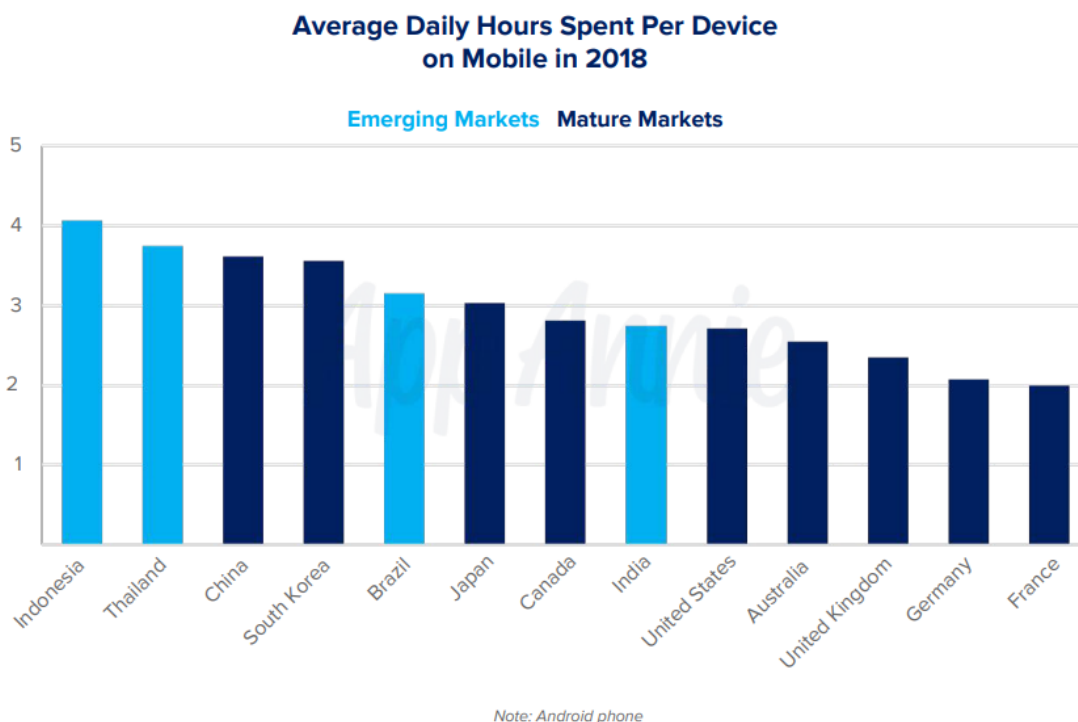
According to App Annie app usage statistics, Asian nations lead the way in the terms of the daily time spent using apps specifically, with Indonesia in first place. Users in the Southeast Asian island nation use apps for over four hours per day. Thailand and China take second and third place, with China the leading mature mobile market in terms of screen time.

Brazilians are the highest non-Asian nation by this measure, logging over three hours of daily app usage. Canadians spend more time using apps than anyone else in the global north, with average daily usage coming in at a little under three hours daily (must be the cold weather); the US is not too far behind.

Europeans, on average, do not use their mobile devices for as long, according to these mobile app statistics. The British post the highest level of average daily app usage in continent, coming up to two and half hours.

These are Android stats only.

Mobile time by country



Source: [App Annie](#)

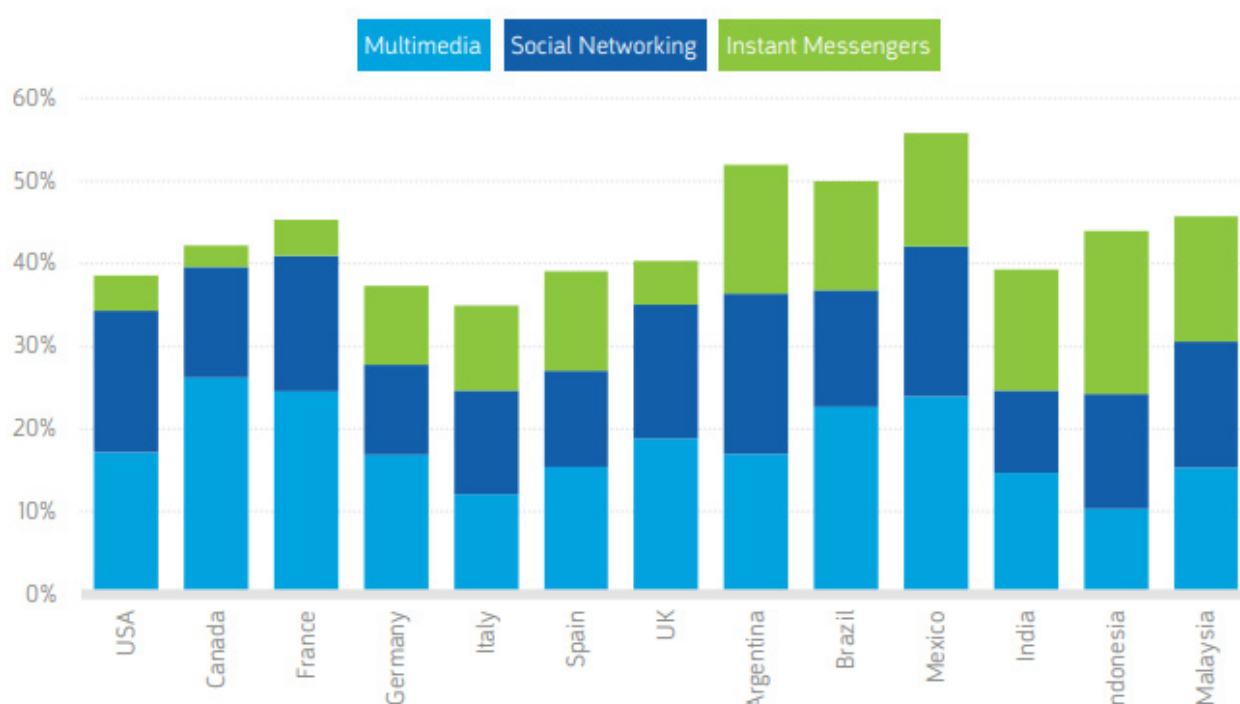
Comscore data on gives us a window into how much digital time is spent using the most-popular types of apps in selected markets. These categories are multimedia (video streaming is presumably the dominant subcategory here), social networks, and instant messengers.

These three app categories are most dominant in Latin America; most strikingly in Mexico,

where they account for over 50% of digital time. They also account for more than half of digital time in Argentina, and around half in Brazil.

Of course, these three most-popular app categories are used in differing proportions in the markets covered. In Canada, France, and Mexico, multimedia sites are particularly prominent; in Argentina, Mexico, and the US, social networking – while in Indonesia, instant messaging accounts for more time than either multimedia or social networks.

Proportion of digital time spent using multimedia, social, and instant messengers, by country

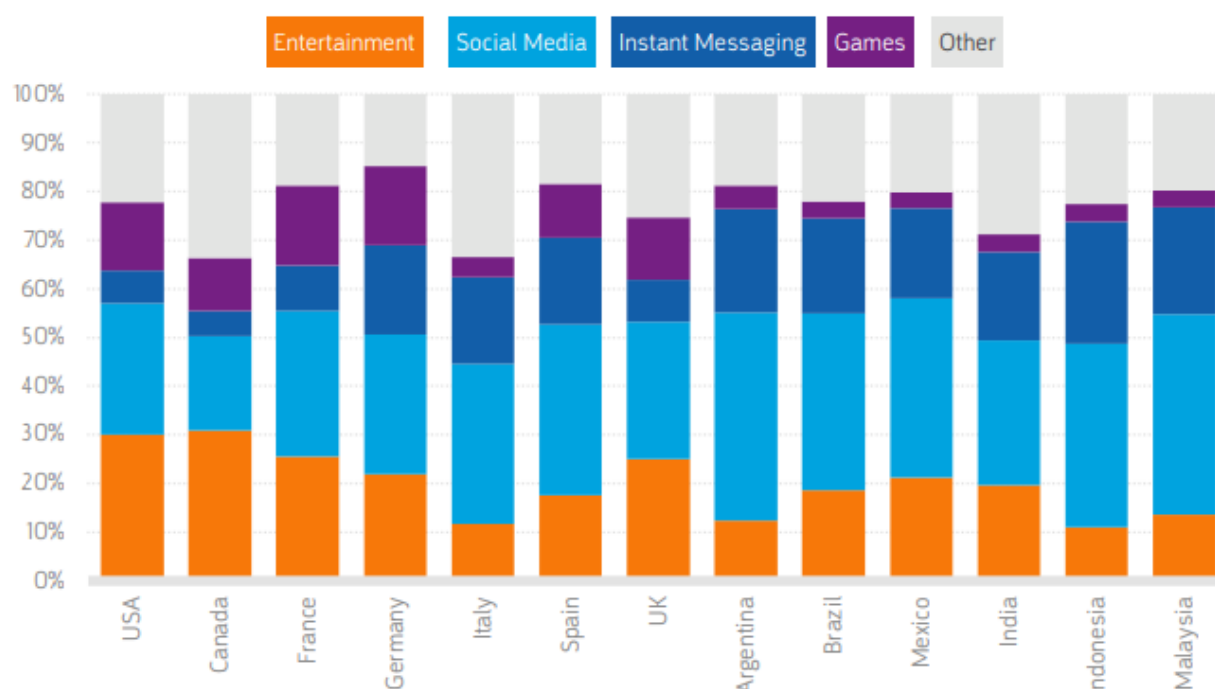


Source: Comscore

If we fill in the gaps in this set of app usage statistics, we can see the next most-popular app category in terms of digital time spent is games; indeed in the markets where it is most prominent, more time is spent playing games (the US, Canada, France, Germany, and the UK) than using messenger apps.

If we include games with the previous three most-popular categories, the four collectively account for 80% or more of digital time in Germany, France, Spain, Argentina, and Argentina.

Digital time spent using different app categories



Source: [Comscore](https://www.comscore.com)

Apps vs. browsers

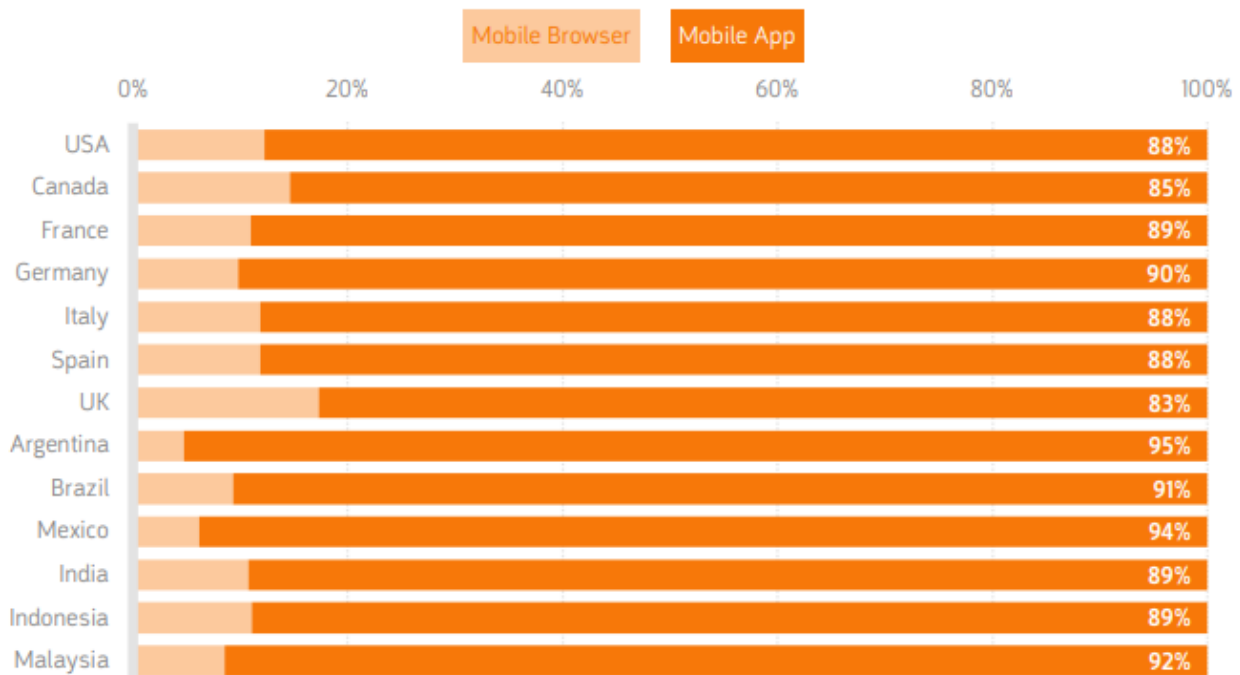
In the US, average daily mobile time is set to reach 3 hours 43 minutes over 2019, according to eMarketer app usage statistics. Of this, smartphones claim the greatest share, at [2 hours 55 minutes](#) while tablets account for the remaining 1 hour 8 minutes. The latter is in decline, with mobile time continuing to unabatedly increase.

Most of this time spent using mobile devices is in apps – 2 hours 57 minutes to be precise. Another 26 minutes is spent using browsers (essentially another type of app).

Comscore break down app vs. browser time by country. We can see by this that apps dominate mobile time. The lowest share of mobile screen time given to apps comes in the UK, where it accounts for 83% – clearly, the British are still attached to using mobile browsers to skip between websites. Canada follows (85%), then the US, Italy and Spain (88%).

We find the greatest share of app usage in Argentina (95%), followed by Mexico (94%), and Malaysia (92%).

Mobile time spent using apps



Source: [Comscore](#)

Mobile apps vs. traditional media

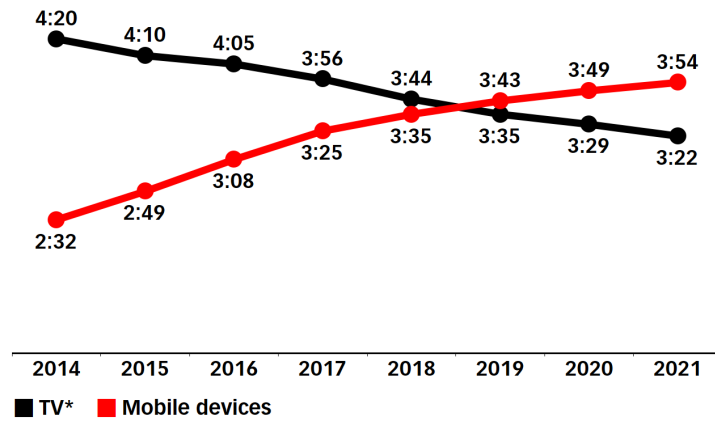
We are reaching a historical shift in the way we consume media. In the US, eMarketer report, 2019 will see average daily time spent actively using mobile devices overtake average time spent watching television. The former has been gradually climbing, while the latter has declined. In 2019, television is down to 3 hours and 35 minutes, while mobile time is up to 3 hours 43 minutes, as above. This gap, predicts eMarketer, will continue to widen.

Is the long-anticipated death knell for traditional television finally being sounded?

TV vs. mobile devices: average time spent, US users

TV and Mobile Devices: Average Time Spent in the US, 2014-2021

hrs:mins per day among population



Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of multitasking; for example, 1 hour of multitasking on desktop/laptop while watching TV is counted as 1 hour for TV and 1 hour for desktop/laptop; *excludes digital
Source: eMarketer, April 2019

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www.eMarketer.com

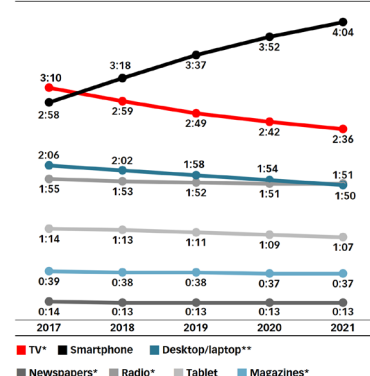
Source: [eMarketer](#)

The US is not alone in this – in the UK the line has already been crossed, with average daily smartphone use overtaking television in 2018. This gap is anticipated to widen this year, with average daily UK smartphone time increasing to 3 hours 37 minutes, compared to 2 hours 49 average television time.

TV vs. mobile devices: average time spent, UK users

Average Time Spent with Media by Users in the UK, 2017-2021

hrs:mins per day



Note: ages 18+ who use each medium mentioned at least once per month; time spent with each medium includes all time spent with that medium, regardless of multitasking; for example, 1 hour of multitasking on desktop/laptop while watching TV is counted as 1 hour for TV and 1 hour for desktop/laptop; *excludes digital; **includes all internet activities on desktop and laptop computers
Source: eMarketer, April 2019

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www.eMarketer.com

Source: [eMarketer](#)



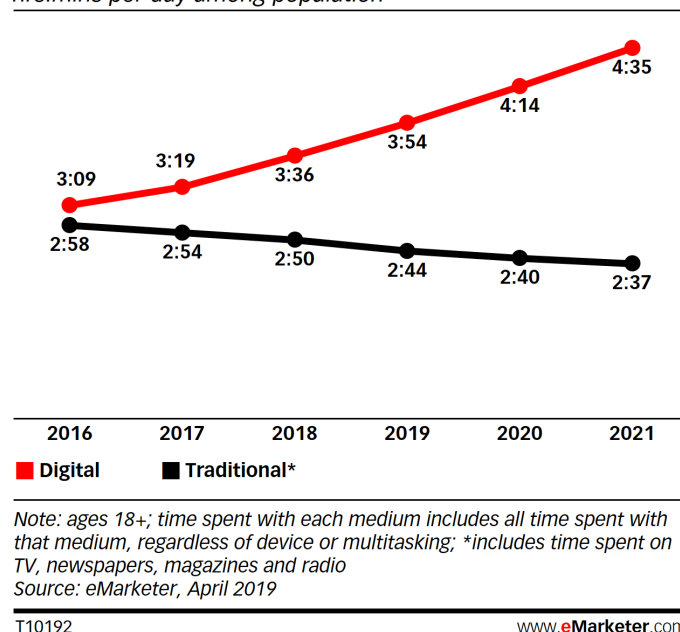
We don't get a breakdown of different media for China, simply a comparison of digital vs. traditional media; one which clearly shows the dominance of the former.

Average daily digital media time already was already 46 minutes greater than traditional media time in 2018. By 2021, the gap will be just shy of an hour, according to eMarketer. China's status as a digital-first market is more than clear.

TV vs. mobile devices: average time spent, Chinese users

Traditional* vs. Digital Media: Average Time Spent in China, 2016-2021

hrs:mins per day among population



Source: [eMarketer](https://www.emarketer.com)

India is a somewhat different proposition, being at a different state of digital maturity. Television remains the dominant form of media, with the shift to digital media – led by smartphones – a little slower. This looks set to remain the case for the foreseeable future, though eMarketer predicts that the share of average media time in India commanded by smartphones will increase from 13.7% in 2017 to 19.5% in 2021.

TV vs. mobile devices: average time spent, Indian users

Share of Average Time Spent with Media in India, 2017-2021

% of total

	2017	2018	2019	2020	2021
TV*	59.5%	58.7%	58.7%	58.1%	57.5%
Digital	27.7%	29.2%	29.9%	30.8%	31.6%
—Mobile (nonvoice)	21.6%	23.3%	24.2%	25.2%	26.0%
—Smartphone	13.7%	15.8%	17.1%	18.5%	19.5%
—Feature phone	6.7%	6.1%	5.7%	5.4%	5.1%
—Tablet	1.2%	1.3%	1.3%	1.3%	1.3%
—Desktop/laptop**	6.1%	5.9%	5.7%	5.6%	5.6%
Print*	7.0%	6.5%	6.2%	5.9%	5.8%
—Newspapers	6.5%	6.1%	5.7%	5.5%	5.4%
—Magazines	0.4%	0.4%	0.4%	0.4%	0.4%
Radio*	5.8%	5.5%	5.3%	5.1%	5.1%
Total time	4:13	4:38	4:59	5:14	5:24

*Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of multitasking; for example, 1 hour of multitasking on desktop/laptop while watching TV is counted as 1 hour for TV and 1 hour for desktop/laptop; *excludes digital; **includes all internet activities on desktop and laptop computers*

Source: eMarketer, April 2019

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www.eMarketer.com

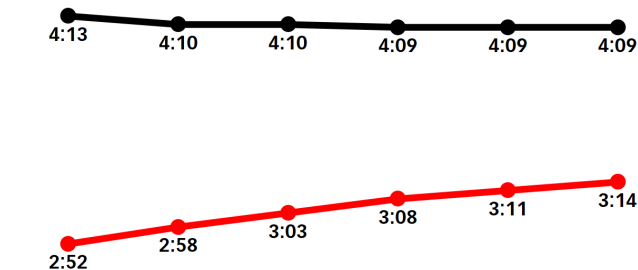
Source: [eMarketer](#)

While Japan is certainly a mature app market, traditional media is still predominant in terms of average daily time spent. Indeed, eMarketer predicts that we are unlikely to see a decline in traditional media time here.

On the other hand, average time spent with digital media is on the increase – so perhaps will come to overtake traditional media time at some undetermined point in the future. In 2019, Japanese media will watch 3 hours 21 minutes of television per day. This compares to 2 hours 52 minutes online – of which 59% is spent using mobile devices.

It is certainly a curious case, however, given digital media's pre-eminence in mature Asian markets. We might ascribe it to the much-discussed aging Japanese population – the older demographic being those we might expect to spend more time with traditional media.

TV vs. mobile devices: average time spent, Japanese users

Traditional* vs. Digital Media: Average Time Spent in Japan, 2016-2021*hrs:mins per day among population*

2016 2017 2018 2019 2020 2021

■ Digital ■ Traditional*

*Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of device or multitasking; for example, 1 hour of multitasking on Facebook while using Snapchat is counted as 1 hour for Snapchat and 1 hour for Facebook; *includes time spent on TV, newspapers, magazines and radio*

Source: eMarketer, April 2019

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www.eMarketer.com

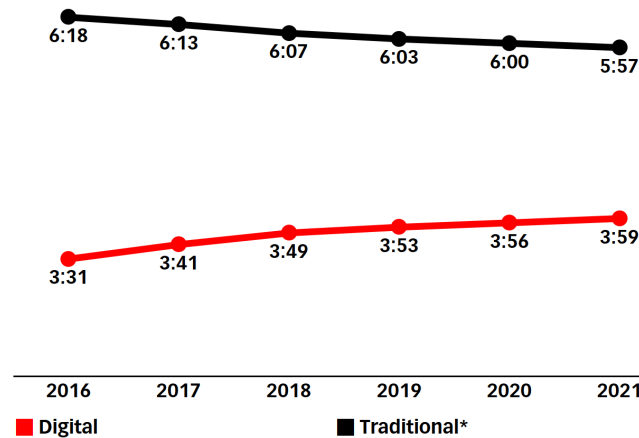
Source: [eMarketer](https://www.emarketer.com)

Moving over to Europe's biggest economy, Germany, we see a similar demographic phenomenon.

We might note that traditional media time is projected to be in faster decline here than in Japan. Growth in time spent with digital media, however, seems to be increasingly more steadily than elsewhere in the world. Nonetheless, online time (all devices) exceeds time watching television – with the gap estimated to reach 20 minutes in 2019.

Traditional media, therefore, still retains strongholds in mature markets.

TV vs. mobile devices: average time spent, German users

Traditional* vs. Digital Media: Average Time Spent in Germany, 2016-2021*hrs:mins per day among population*

*Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of device or multitasking; for example, 1 hour of multitasking on Facebook while using Snapchat is counted as 1 hour for Snapchat and 1 hour for Facebook; *includes time spent on TV, newspapers, magazines and radio*

Source: eMarketer, April 2019

T10187

www.eMarketer.com

Source: [eMarketer](#)

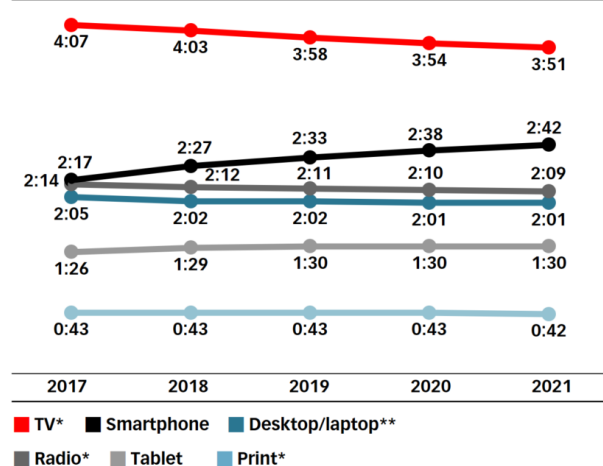
For France, eMarketer provide us with device-specific data once more, giving us deeper insight into some of the trends at play. We might note that average daily smartphone time is very much on the up. Television remains comfortably in the lead for now, however, though it is in slow decline.

As in the UK, radio continues to feature prominently in France – as does digital traffic from computers. Print media (here considered as one) consists of a small but still notable amount of daily media time.

TV vs. mobile devices: average time spent, French users

Average Time Spent with Media by Users in France, 2017-2021

hrs:mins



Note: ages 18+ who use each medium mentioned at least once per month; time spent with each medium includes all time spent with that medium, regardless of multitasking; for example, 1 hour of multitasking on desktop/laptop while watching TV is counted as 1 hour for TV and 1 hour for desktop/laptop; *excludes digital; **includes all internet activities on desktop and laptop computers

Source: eMarketer, April 2019

T10162

www.eMarketer.com

Source: [eMarketer](https://www.emarketer.com)

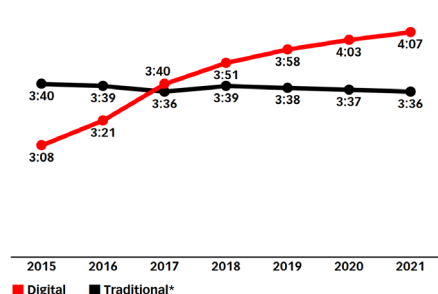
In South Korea average daily time spent with digital media has been excess of traditional media since 2017. This confirms the nation's status at being very much at the forefront of the digital revolution.

Breaking it down by media, mobile accounts currently accounts for 37.1% – slightly behind television.

TV vs. mobile devices: average time spent, South Korean users

Traditional* vs. Digital Media: Average Time Spent in South Korea, 2015-2021

hrs:mins per day among population



Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of device or multitasking; *includes time spent on TV, newspapers, magazines and radio

Source: eMarketer, April 2019

T10194

www.eMarketer.com

Source: [eMarketer](https://www.emarketer.com)

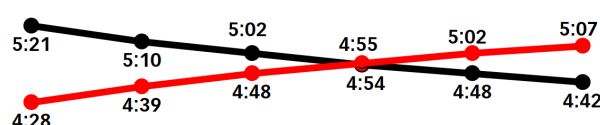
Finally, in Canada, 2019 is pegged as the year in which the average time spent using digital media overtakes traditional media – with the two accounting for very close to 50% each of total media time. The gap looks set to widen gradually over the next couple of years.

Mobile and television account for around a third each of total media time in 2019.

TV vs. mobile devices: average time spent, Canadian users

Traditional* vs. Digital Media: Average Time Spent in Canada, 2016-2021

hrs:mins per day among population



2016	2017	2018	2019	2020	2021
■ Digital	■ Traditional*				

Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of device or multitasking; for example, 1 hour of multitasking on Facebook while using Snapchat is counted as 1 hour for Snapchat and 1 hour for Facebook; *includes time spent on TV, newspapers, magazines and radio

Source: eMarketer, April 2019

T10188

www.eMarketer.com

Source: [eMarketer](https://www.emarketer.com)

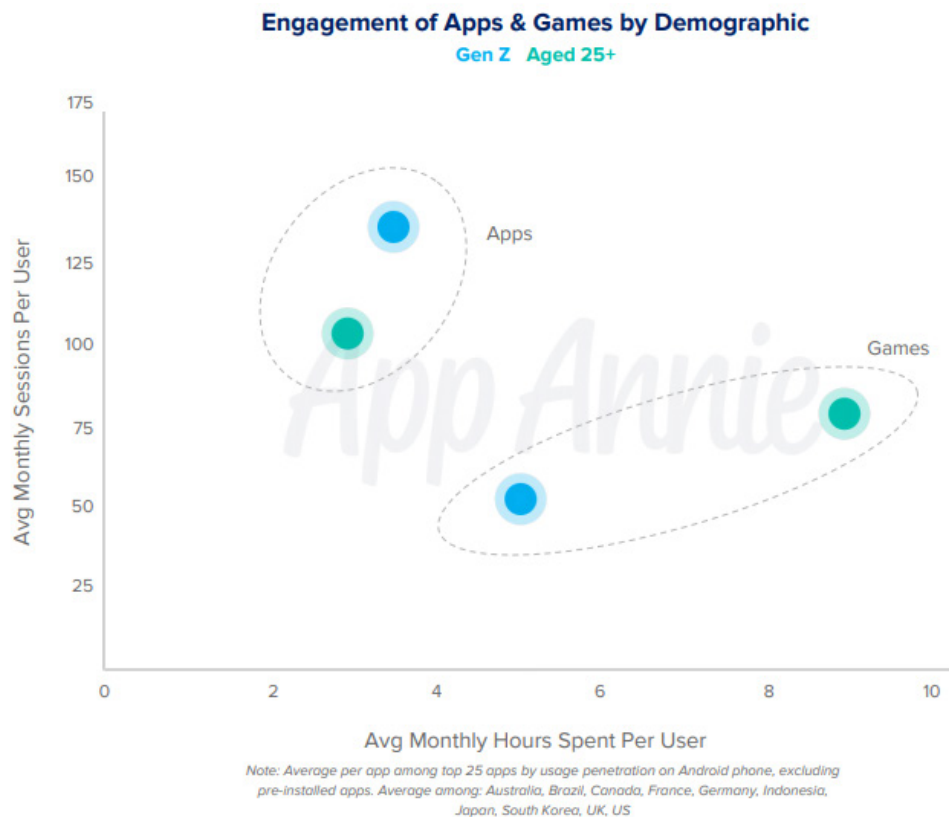
App engagement by age

Mobile app data shows that younger users, belonging to Generation Z, will use apps for more often and for a longer amount of time than those aged 25 and up. The former use apps for an average of close to four hours (per app) monthly, split between 125-150 sessions. The latter report closer to 100 sessions, for a total of less than three hours.

On the other hand, older users, spend nearly twice as long playing games than Generation Z (nine hours vs. five hours), over 50% more sessions (roughly 75 to 50).

These stats looks at the top-25 apps by penetration (sans pre-installed apps) in selected markets, and covers only Android devices.

Apps/game sessions and usage time by age



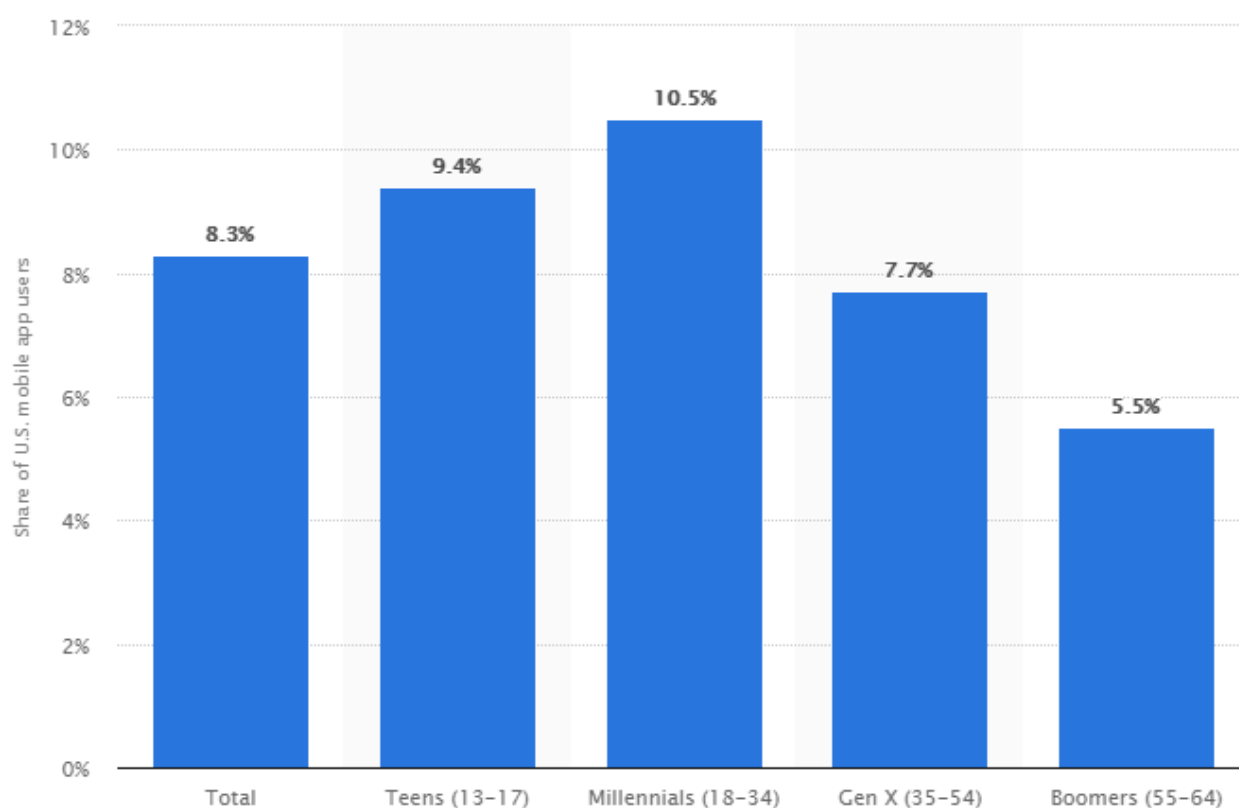
Source: [App Annie](#)

App usage statistics looking at the frequency with which apps are opened daily by members of different age brackets in the US show that Millennials open apps most frequently – averaging at 10.5 times per day (considering Millennials as 18-34 year olds). They are followed by teens, at 9.4. Unsurprisingly, Boomers come out last by this measure, at 5.5.

On average, US app users aged 13-64 open apps 8.3 times per day.

(there is a mislabelling on y-axis of the source graph, which should refer to the number of times, rather than percentages).

Apps/game sessions by age



© Statista 2019

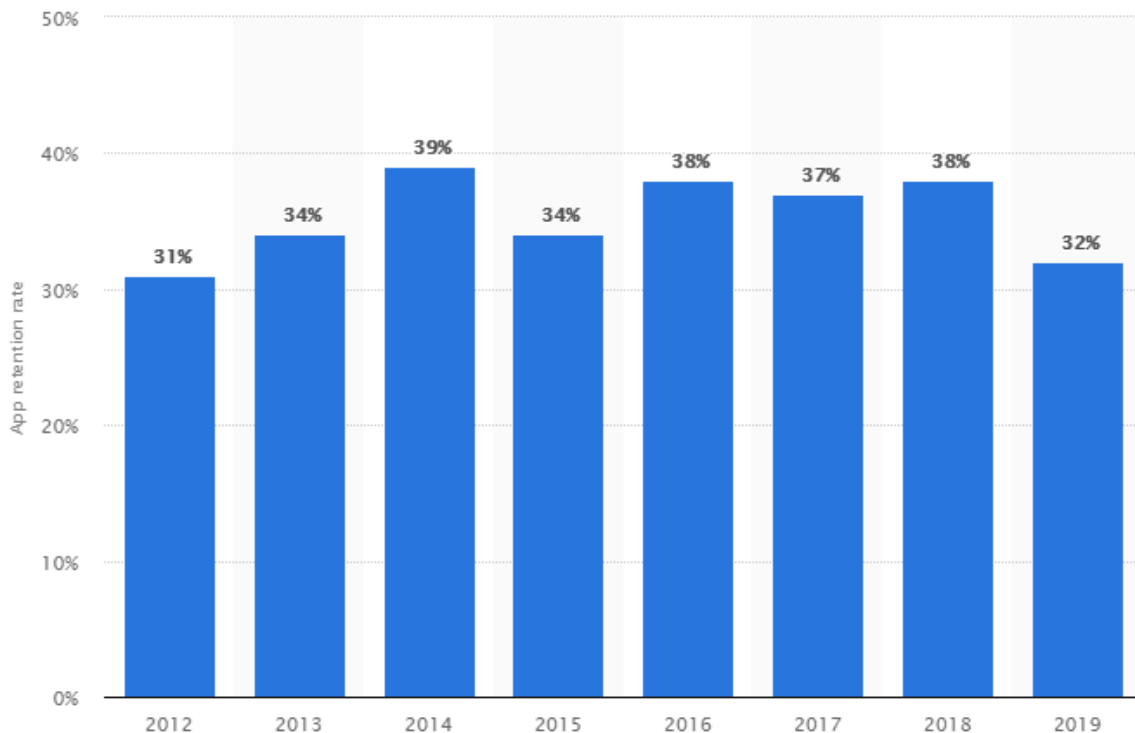
Source: [Statista](#)

App Retention and Churn Rate

Using 11 sessions as the watermark for app retention, we can see that, since 2012, the retention rate for apps has stayed in the 30s in percentage terms – at least according to one generous mobile app data set. Mobile app data showing a retention figure of 32% represents one of the lowest figures reported in recent times – with only 2012's 31% lower.

Indeed, it marks the end of three years of consistent retention of 37-38%. We might note, however, that such blips have occurred in previous years – the three-year run could well have been a five-year run were it not for lower retention in 2015. We shouldn't be hasty, therefore, to draw any grand conclusions from this, beyond that users expect quality, and will vote with their feet if apps are found wanting for it.

Average app retention rates, 2012-2019



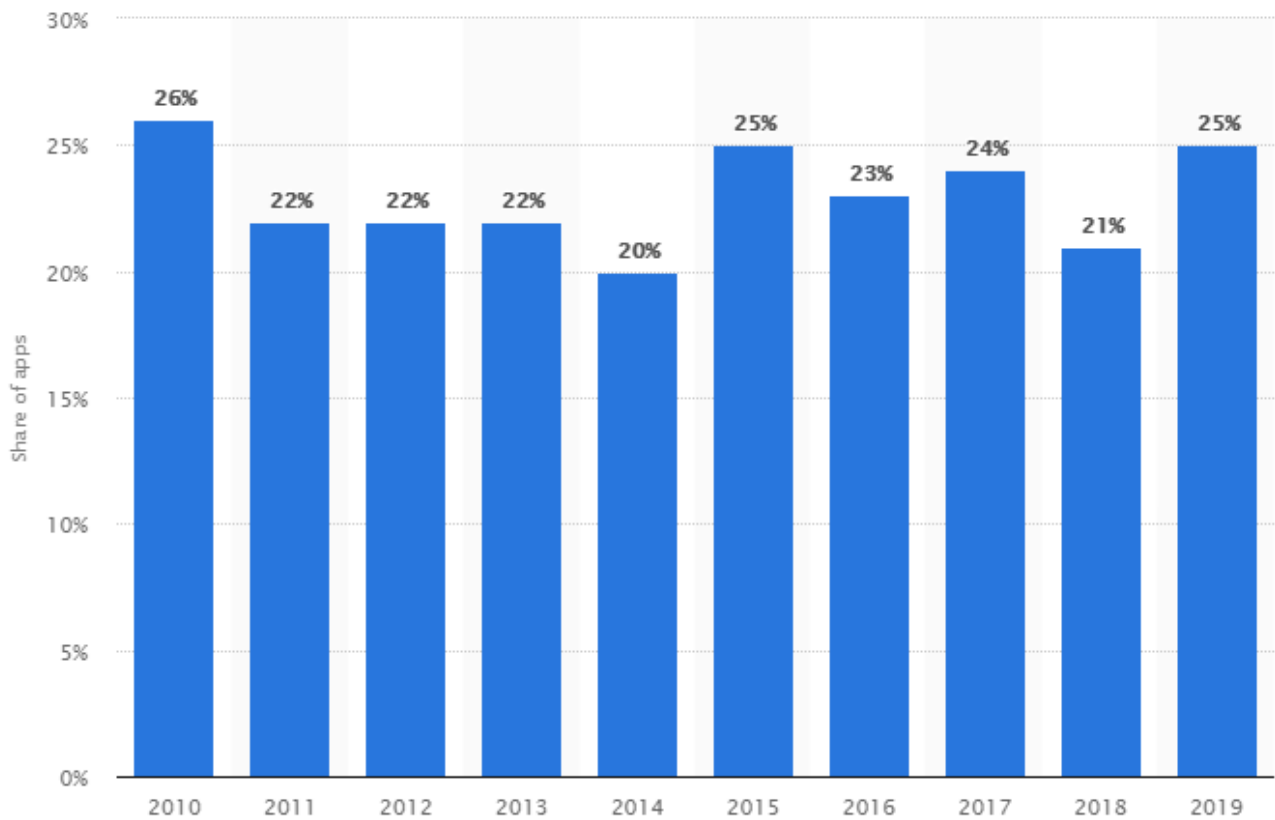
© Statista 2019

Source: [Statista](#)

Indeed, to illustrate this, we can look at the dark shadow of app retention rate: app abandonment rates. An app is counted as abandoned if it's only used once. The trends are a bit less obvious here, though we might note that 2019 again marks a post-2012 joint high point.

It's worth thinking about this carefully: 25% of apps downloaded around the world are only ever used once. Clearly, an app must make an instant impression – as it's a brutal world out there.

App abandonment rates



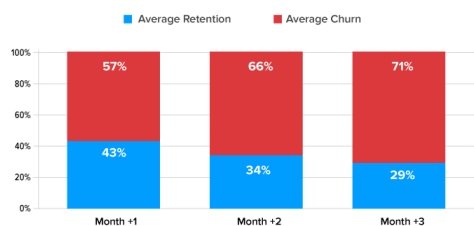
© Statista 2019

Source: [Statista](#)

Localytics also publish mobile app data pertaining to app retention and churn rates. Data published in 2018, looking back over 2017 found an average 90 day retention rate of 29% for all apps (again, somewhat generous by all accounts).

Over 50% of user churn occurs in the first month, after which we see an incrementally smaller percentage of users dropping out each month.

Three-month app retention/churn rate



Source: [Localytics](#)

Source: Localytics 2017



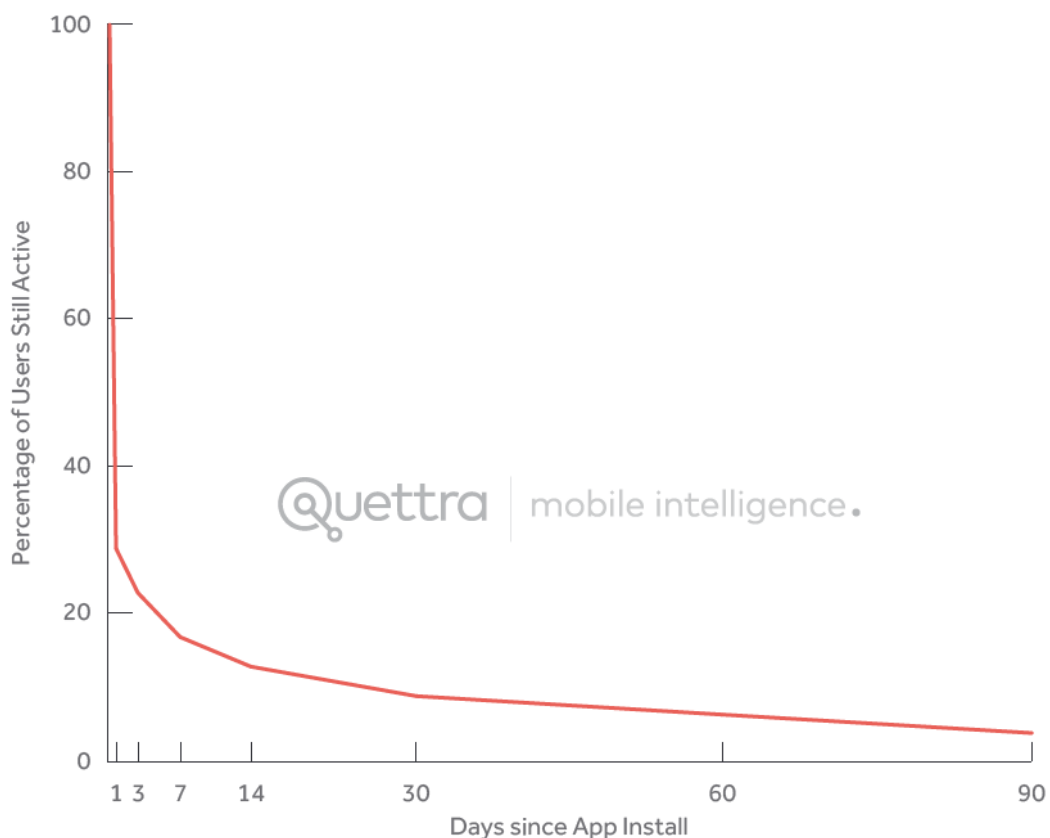
Quettra Mobile Intelligence mobile app data is used to map out a typical retention curve for Android apps below – which shows somewhat less generous results than those seen above.

We can quite clearly see that the first day puts paid to the vast majority of active users (29% remain). By 14 days, over half of those who made it past the first day will have dropped out. Users will continue to drop out past the 90-day mark, though after the 30-day mark we see a levelling out at least of the attrition rate.

This typical curve might be a small comfort, showing at least that to lose two-thirds of an app's users after a single day is very much to be expected.

Average retention curve

Average Retention Curve for Android Apps



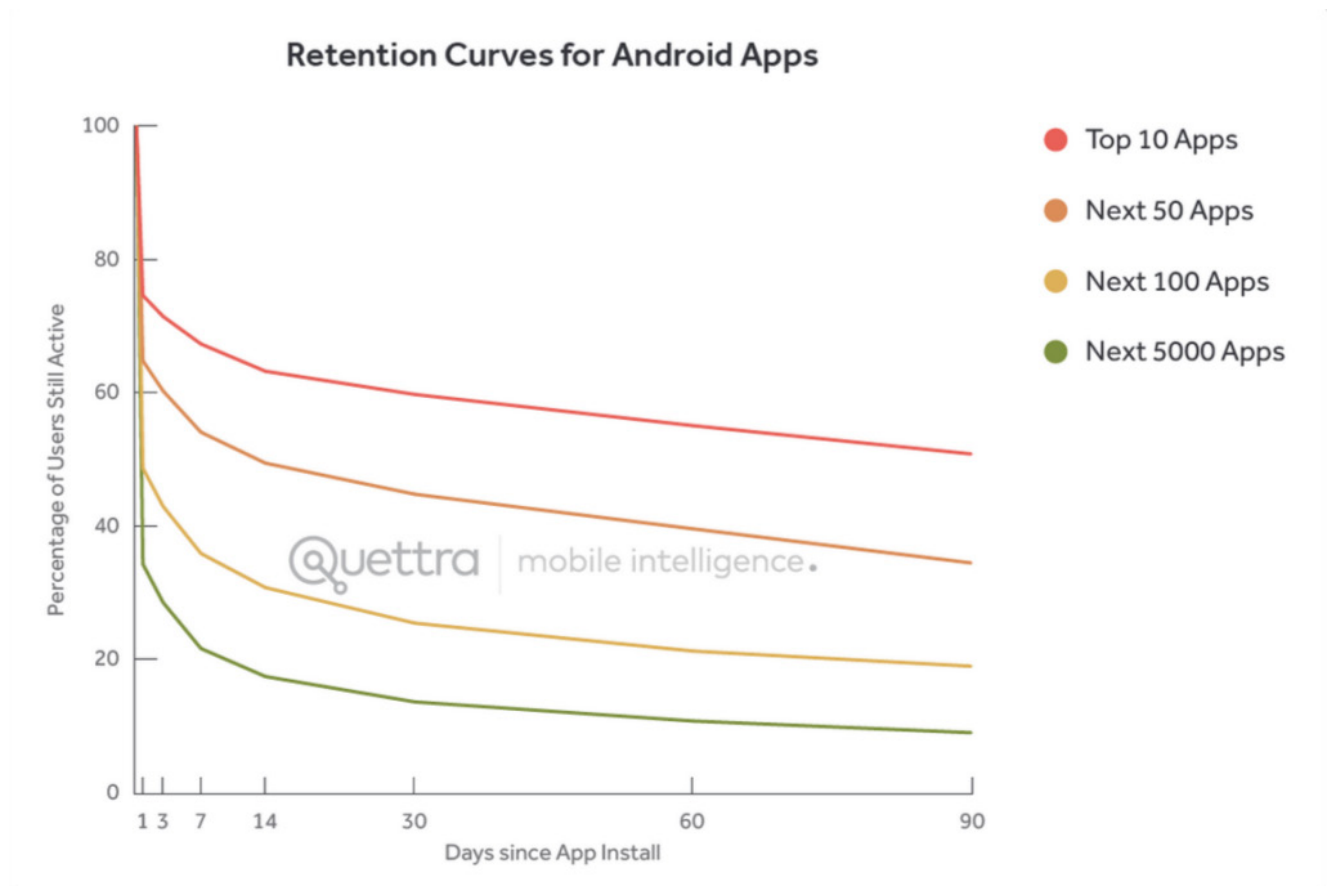
Source: [Quettra Mobile Intelligence via Andrew Chen](#)

At the same time, it doesn't mean that it shouldn't be cause for concern; particularly for app developers aiming to develop a top app. If we separate out the top-10 apps, then the next 50, then the next 100, and finally the next 5,000 (so basically looking at the top 1160 apps), we can see a significantly lower churn rate.

Indeed, the top-10 apps manage to retain more than half of new users after 90 days; the

next 100, 35% of new users, and the next 100 around 19%. Even the next 5,000 manage to retain a solid 9% of users – which as we can see above is considerably better than average app at this stage (that's 4% if you were wondering).

Average retention curve: top apps



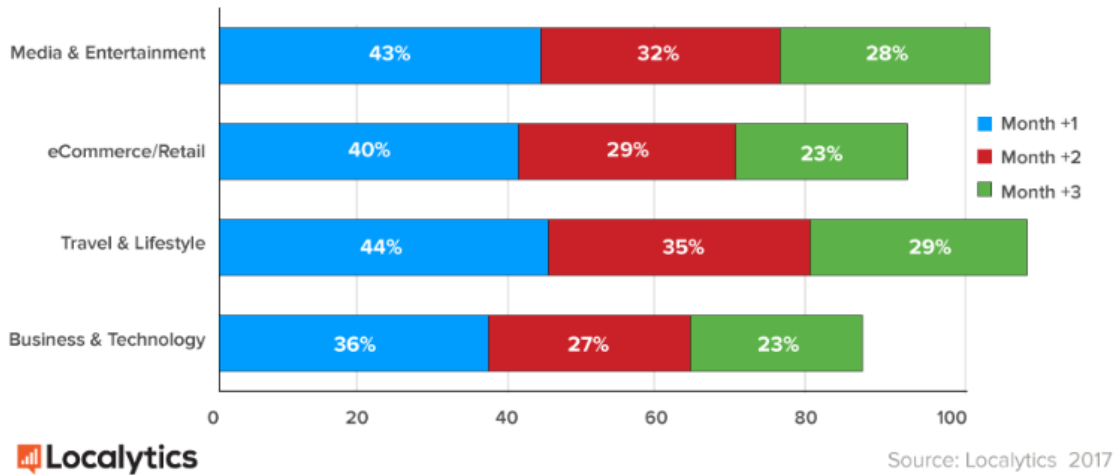
Source: [Quettra Mobile Intelligence via Andrew Chen](#)

Returning to the Localytics mobile app data, we can see how average retention rates differ according to a small selection of app categories. Ecommerce and business & technology have the lowest retention rate after three months, at 23% – with the latter already down to 36% after 30 days.

Travel & lifestyle reports the strongest retention rate of the selected categories after three months, at 29%, with media & entertainment only slightly behind at 28%.

Localytics peg the average 90-day retention rate for all apps at 29%.

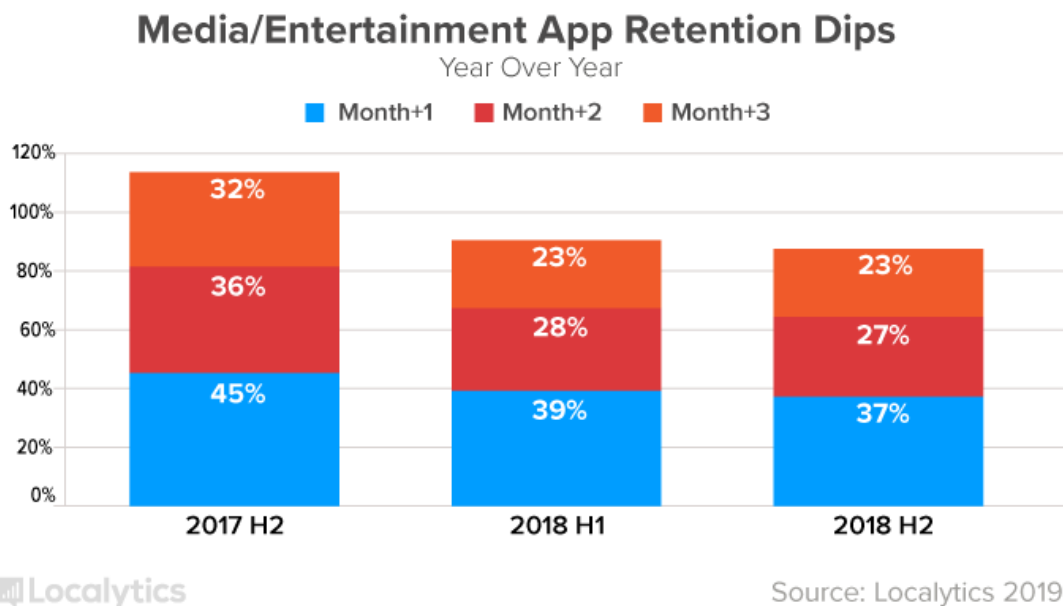
Three-month app retention rate by category



Source: [Localytics](#)

It might be noted that a later Localytics mobile app statistic finds a higher churn rate for media & entertainment apps, with the retention rate falling to 23% after 90 days. It is unclear whether this is more widely applicable across app categories or instead points to overcrowding/incumbent dominance in this category specifically.

Three-month app media & entertainment retention rate



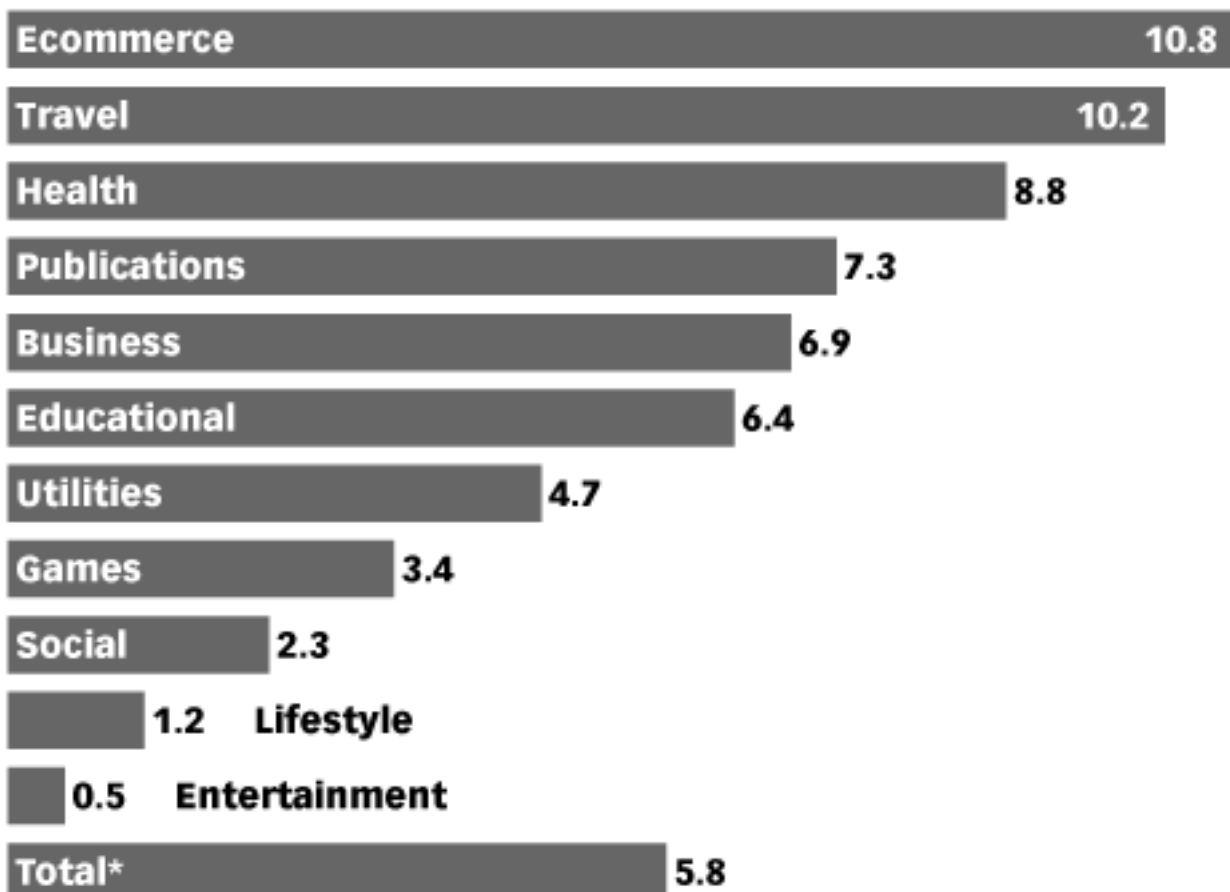
Source: [Localytics](#)

Unused apps, of course, soon become deleted apps. The average time between the last usage of an app and deletion varies by app category. Users tend to hang on to ecommerce and travel apps for over 10 days before deletion, while entertainment apps last no longer than half a day.

Average time between last app usage and deletion

Mobile App Performance Metrics Worldwide: Average Time from Last Usage Session to Uninstall, by App Category, Jan-July 2018

days



*Note: represents activity on Adjust's platform, broader industry metrics may vary; includes Android and iOS; *includes categories not listed*
 Source: Adjust, "Unmasking Uninstalls: Three Data Points to Think About," Sep 6, 2018

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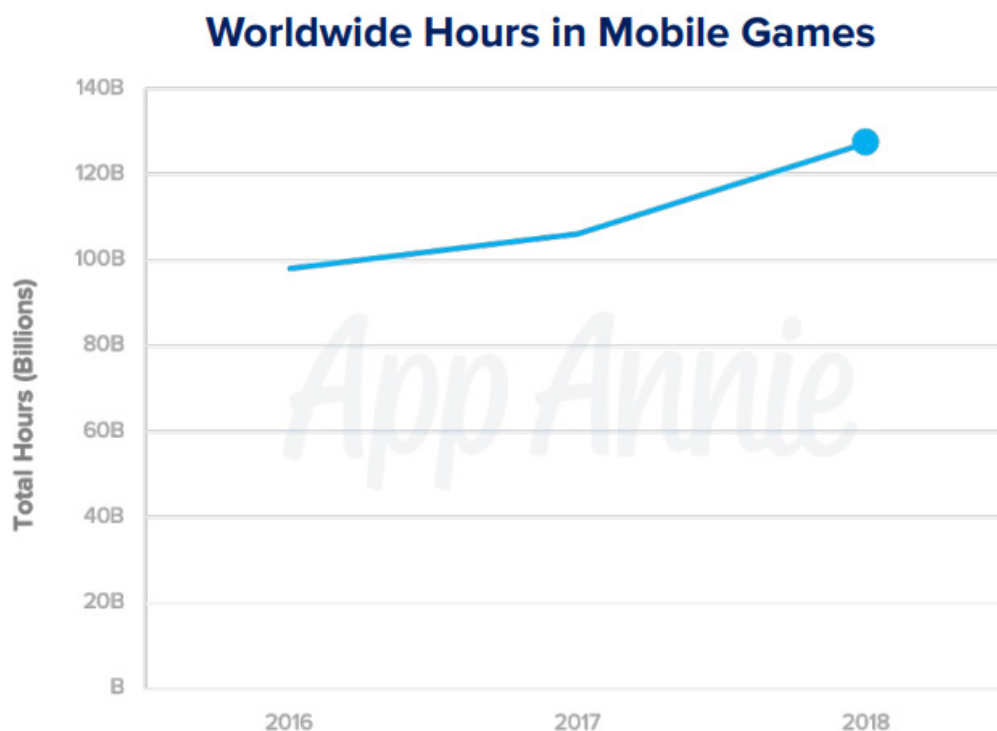
www.eMarketer.com

Source: [eMarketer](#)

Mobile Game Usage Statistics

Mobile gaming clearly continues to be on the up. The global total for mobile gaming hours on Android devices came to over 120 billion hours in 2018 – up from just under 100 billion hours in 2016.

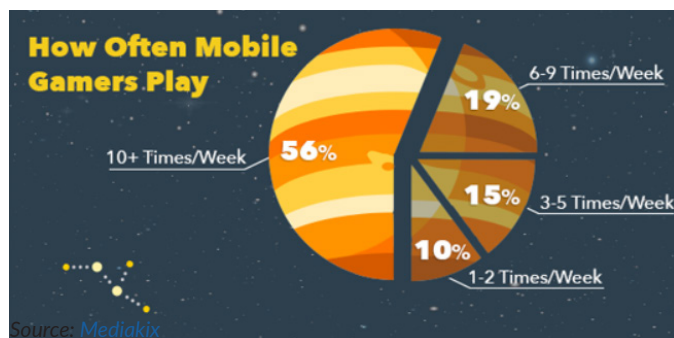
Total gaming hours worldwide – Android



Source: [App Annie](#)

Mobile gamers are, it seems, dedicated users, with 56% logging over 10 sessions a week. A further 19% manage at least 6-9.

Average weekly mobile gaming sessions

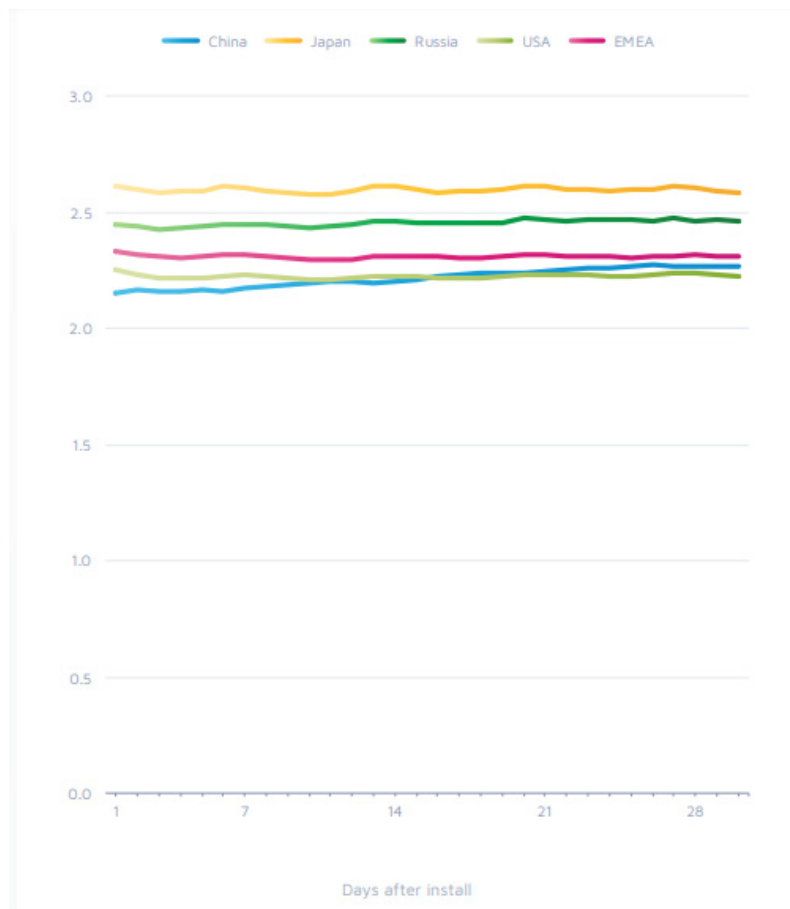


Adjust's 'Mobile Gaming Benchmark 2018' report finds that Japanese users log the highest number of daily sessions, at around 2.6 (after 30 days). Russian users are not far behind, at just under 2.5

Users in the US log the least number of sessions, at somewhere around 2.25 after 30 days – though this is up on day one sessions.

Users in the EMEA region log slightly more than the US, though considering this market covers everywhere from Norway to South Africa, from Spain to Oman, perhaps it is not the most illustrative figure...

Mobile game sessions by country

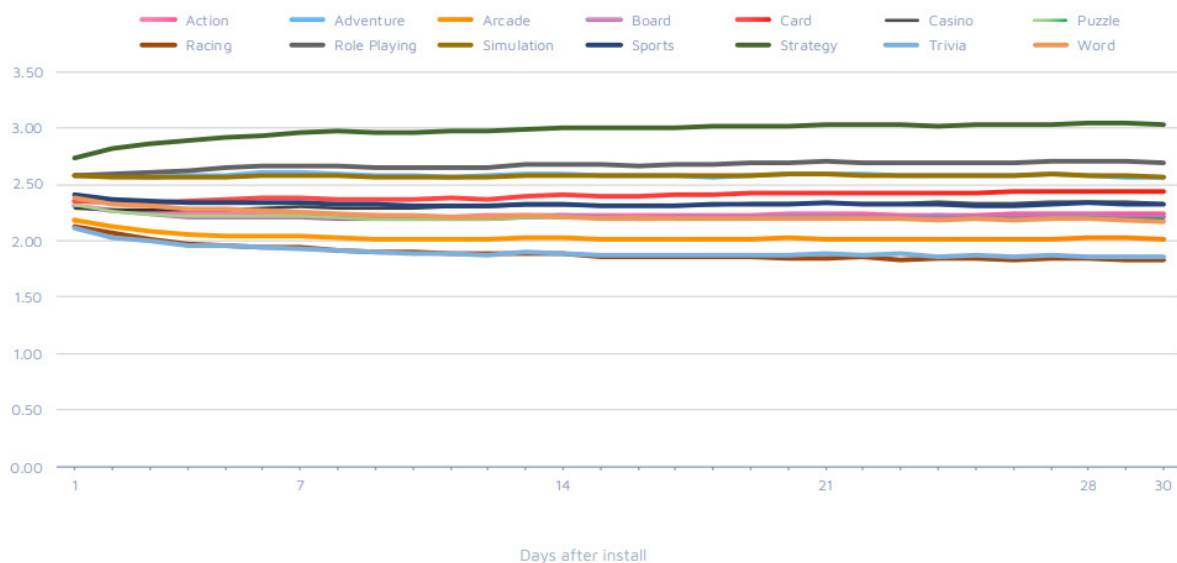


Source: [Adjust](#)

We might also break mobile game usage stats down by genre. Here we can see that certain categories are more compelling to users than others (if we use sessions as our measure).

Users of strategy games log the highest number of daily sessions (around three after 30 days), followed by role-playing games. Racing and trivia games, on the other hand, average a whole daily session fewer after 30 days.

Mobile game sessions by genre



Source: [Adjust](#)

eMarketer app usage stats referenced by Mediakix find that US adults spent an average 23 minutes per day playing mobile games (so 2.7 hours per week).

App Annie found that games accounted for 10% of mobile time – though this varied a great deal from market to market.

Breaking this mobile app data down by country, App Annie analysed the proportion of gaming hours accounted for 16-24 hour olds, and those by users aged 25+.

We see a good deal of variety across markets. In South Korea, for instance, younger gamers only account for 13% of mobile gaming hours.

But if we look across the Sea of Japan to Japan, younger gamers put in a third of total gaming hours, while across the Yellow Sea to China, it rises as high as 50%.

Mobile gaming time by age, by country

Source: App Annie

In further evidence of the games market's openness to a diverse range of titles, we might note that the top-five games command a far smaller percentage of usage time than the top-five apps in other categories. According to Comscore, the top-five games accounted for just over a third of minutes.

On the other hand, the top-five messenger apps accounted for 94% of usage time, as did the top-five social networks. Entertainment was only a little less top-heavy, with five apps accounting for 84% of app time.

Proportion of time spent playing top-five games vs. other app categories

Source: Comscore

In line with the rise of hyper-casual games, it seems much mobile gaming time occurs in the little gaps during the day. For teen users, using transport is optimum mobile gaming time. For adult users, at home, multitasking is the most elected option (in a survey conducted by EEDAR).

Waiting for someone/something is also a popular choice with both, as is the very 21st century option of 'in the bathroom'. Indeed, the last mentioned is more common among adults than focused play.

A sizeable proportion of teens will play with others in person, while a small proportion of adults and teens alike will actually play mobile games while waiting for console/PC games to load!

~~When do users play games?~~

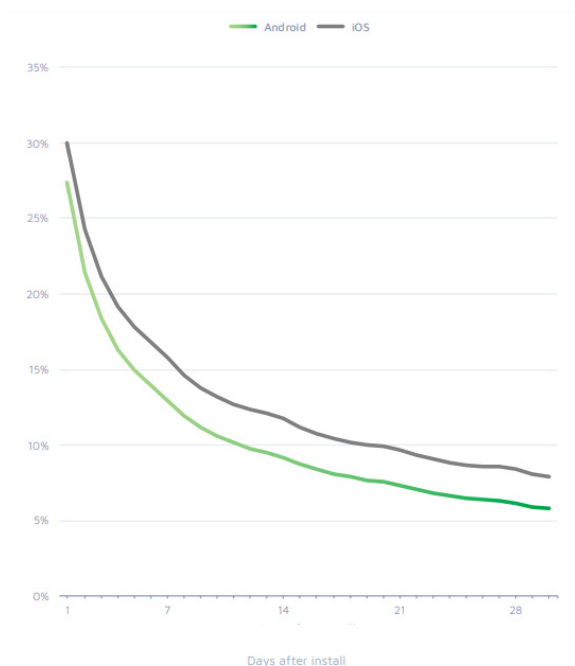
Source: ~~VentureBeat~~

Mobile game retention rates are not dissimilar to overall app retention rates; a sharp drop followed by a gradually shallowing curve, ending at 5-10% after 90 days.

Adjust's Mobile Gaming Benchmark 2018 looks at retention rate by OS. Here we see that iOS games enjoy a slightly better rate of retention after 90 days. Indeed, the gap of 2-3% is bigger than has been reported previously.

It seems that Android games are treated in a far more disposable manner.

Game retention rate by OS



Source: [Adjust](#)

Breaking it down by country, we see some pretty significant differences. Japanese users, according to this particular set of mobile games statistics, have the lowest churn rate – with close to 10% of users retained after 90 days. Users in China are the most fickle, with only around 2.5% left after the same time period.

Users from other regions all hover from 5-7.5%, though the slightly unhelpful EMEA grouping used here may well contain a multitude of diverse figures...

Game retention rate by country



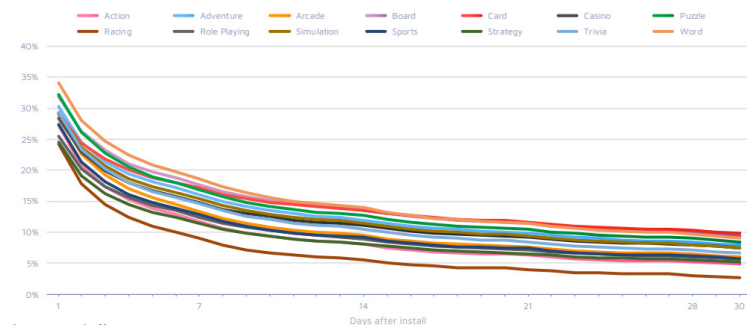
Source: [Adjust](#)

Of course, as we saw above, all games are not made equal – and we might note that some genres fare far better in terms of retention than others.

After 90 days, the most likely mobile gaming categories to be retained are card games, board games, and word games – there's something to be said for keeping it simple.

On the other hand, racing games quickly stand out at suffering from the highest churn rate...

Game retention rate by genre



Source: [Adjust](#)

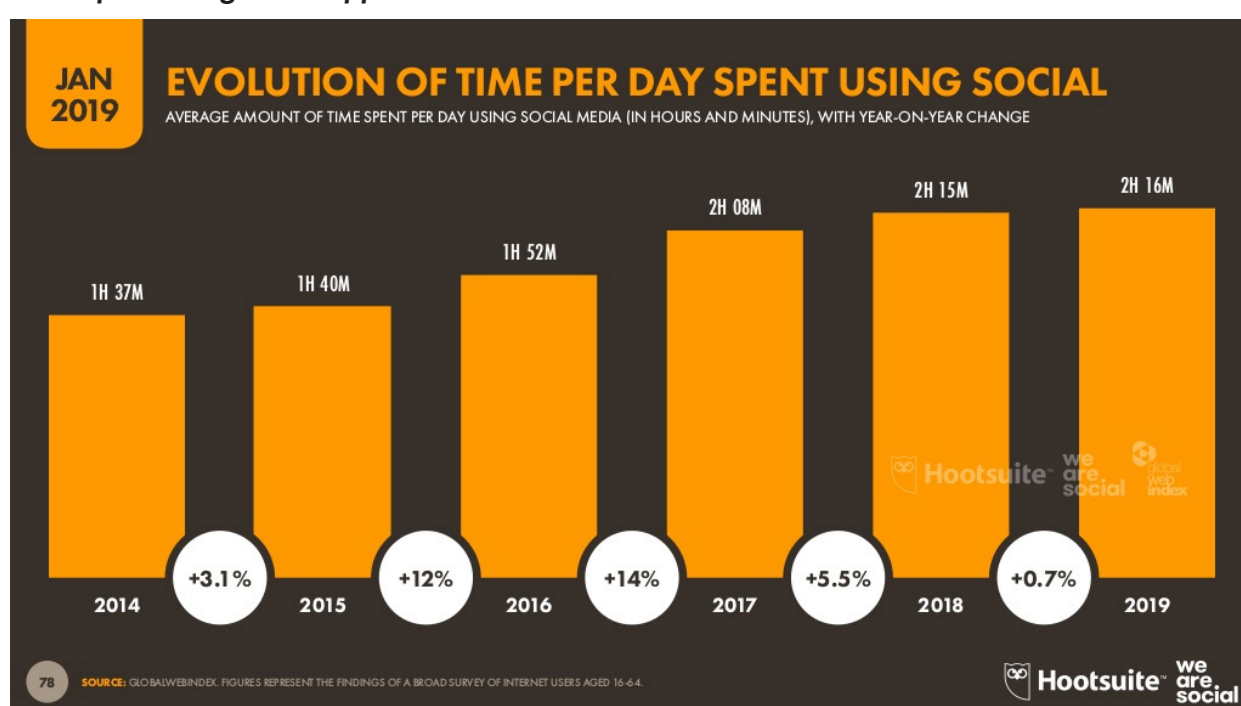
App Usage Statistics: App Categories

Social app usage statistics

Hootsuite and We Are Social's Digital 2019 report finds a very small increase in social media usage compared to the previous year's report. Average daily usage by precisely one minute, to 2 hours 16 minutes. Growth seems to be slowing in this measure, perhaps indicating the general maturity of social media in many global markets.

If, however, we look at the five-year change, back to the 2014 report (referring to 2013 data), we have seen a 40% increase in the average daily time spent using social apps.

Time spent using social apps

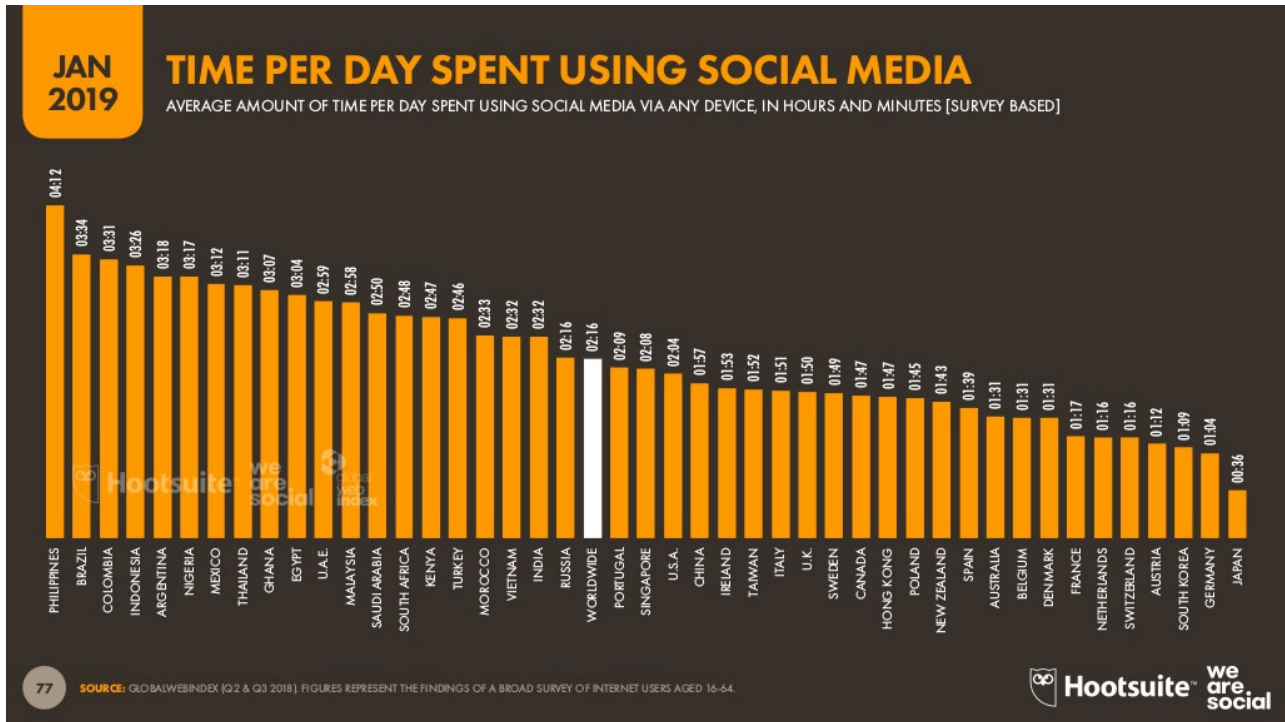


Source: [Hootsuite/We Are Social](#)

Breaking the app usage statistics down by country, we see that the highest levels of daily usage are reported in Asian, South American, African markets. The highest reported figure comes from the Philippines, where average daily usage levels stood at 4 hours and 12 minutes. Brazil (3 hours 34 minutes) and Colombia (3 hours 31 minutes) come next.

Nigerians spend the longest time on social media in Africa, with an average of 3 hours 17 minutes per day putting it in sixth overall. The Portuguese are the keenest social media users entirely in Europe (discounting Turkey and Russia, which post higher figures), with 2 hours and 9 minutes daily. The US leads the way in North America, at 2 hours and 4 minutes).

Time spent using social apps by country

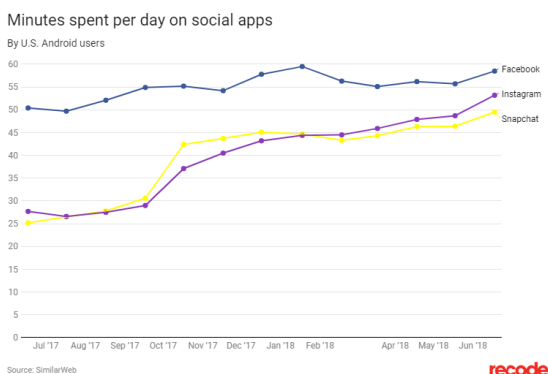


Source: [Hootsuite/We Are Social](#)

Looking at three of the biggest social media platforms in the US, we can see that from June 2017-June 2018, time average spent using Instagram and Snapchat increased – to 53 and 50 minutes respectively.

While time spent using Facebook peaked (during this period at least) at 60 minutes in January 2018, we still see a general upward trend in terms of time spent, with the average at the end of the period in consideration coming to 59 minutes – up nine minutes in total.

Time spent using popular social apps, US users



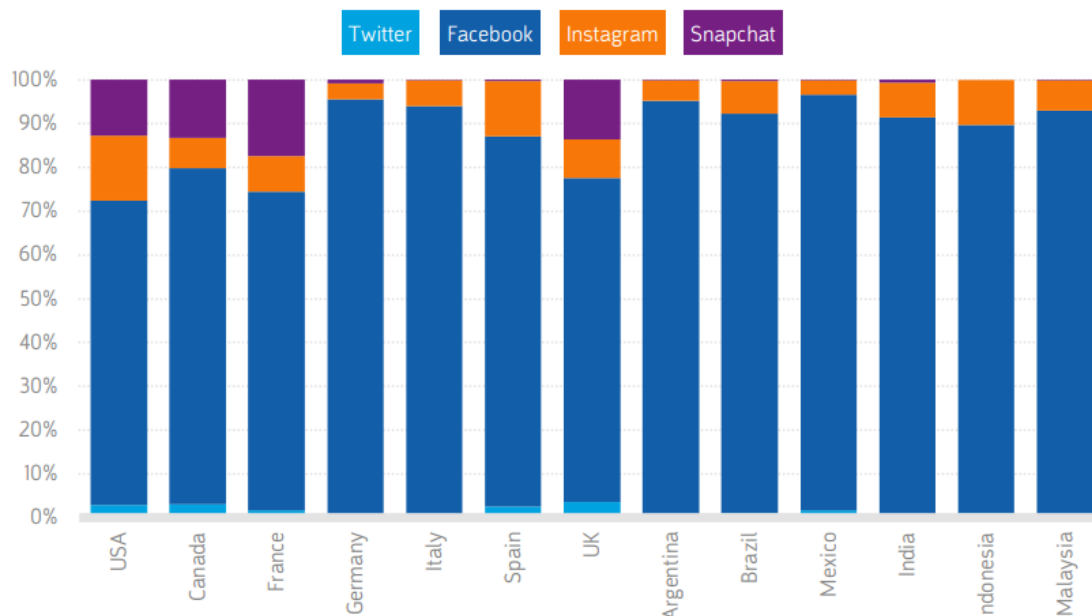
Source: [Recode](#)

If we look at the proportion of time spent using four-top social media platforms across Comscore's selection of markets, we can see that Facebook is still extremely dominant. Indeed, in a fair proportion of these markets we can see that Facebook accounts for over 90% of combined minutes. These markets are a combination of European, Latin American, and Asian markets – so we can't really draw many useful conclusions from this!

It is in North American, and some European (UK and France) markets where we see the lowest level of Facebook minutes. Here, a mixture of Instagram and Snapchat make up the difference.

Twitter use is slight, proportionally, accounting for a mere sliver of North American and European social media time. In Mexico too, a blink-and-you'll-miss-it proportion of aggregated social media time is spent with Twitter.

Proportion of social media time spent in top social apps



Source: [Comscore](https://www.comscore.com)

Comscore app usage statistics yield familiar results, finding that, of the time spent globally using messenger apps, WhatsApp is dominant in the greatest share of markets – with a few exceptions in which Facebook Messenger remains dominant.

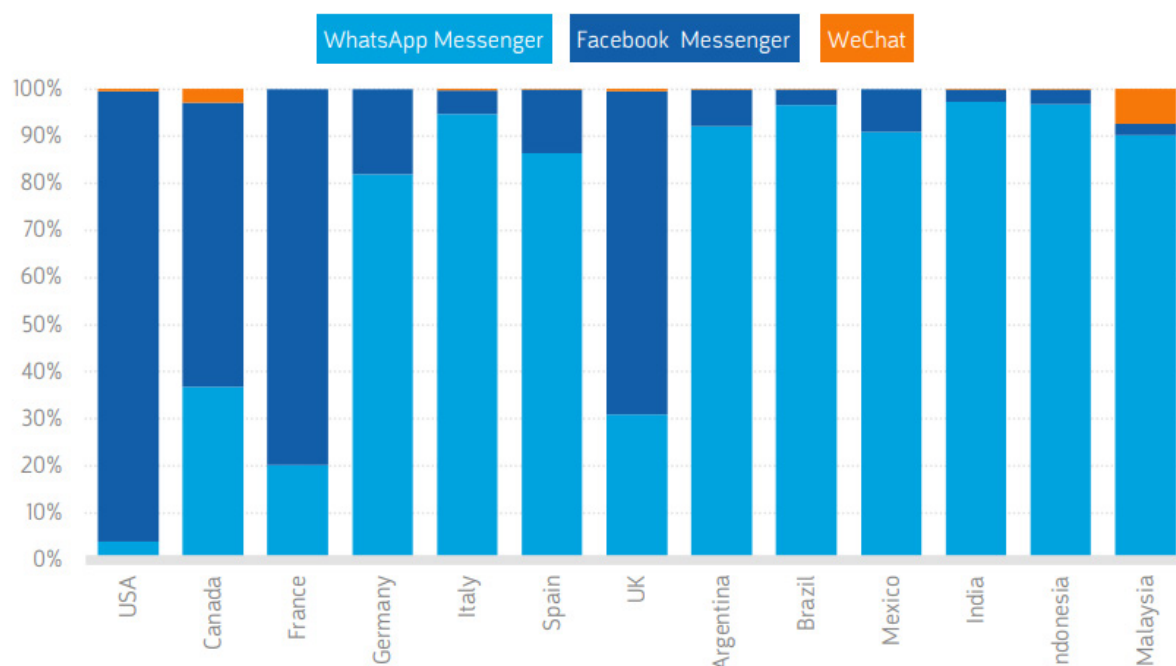
The latter are to be found in North America, and a couple of European outposts – though the inclusion of the UK among these outposts runs contrary to most analyses, which show the primacy of WhatsApp in the country. Perhaps this is due to a quirk of Comscore's methodology, foregrounded in a measure of proportion of time spent rather than frequency of usage. We might note also that this data was published in 2018, looking back over 2017.

We might also note that WeChat features in a few markets – most notably in Malaysia and

Canada. The Chinese super app's international push is largely viewed as a failure. Nonetheless, its use among the Chinese diaspora in certain Western markets is sufficient for it to feature notably here (albeit in a proportionally small percentage).

Malaysia, on the other hand, is a market into which Tencent has made an active effort to penetrate.

Proportion of time spent using top messenger apps

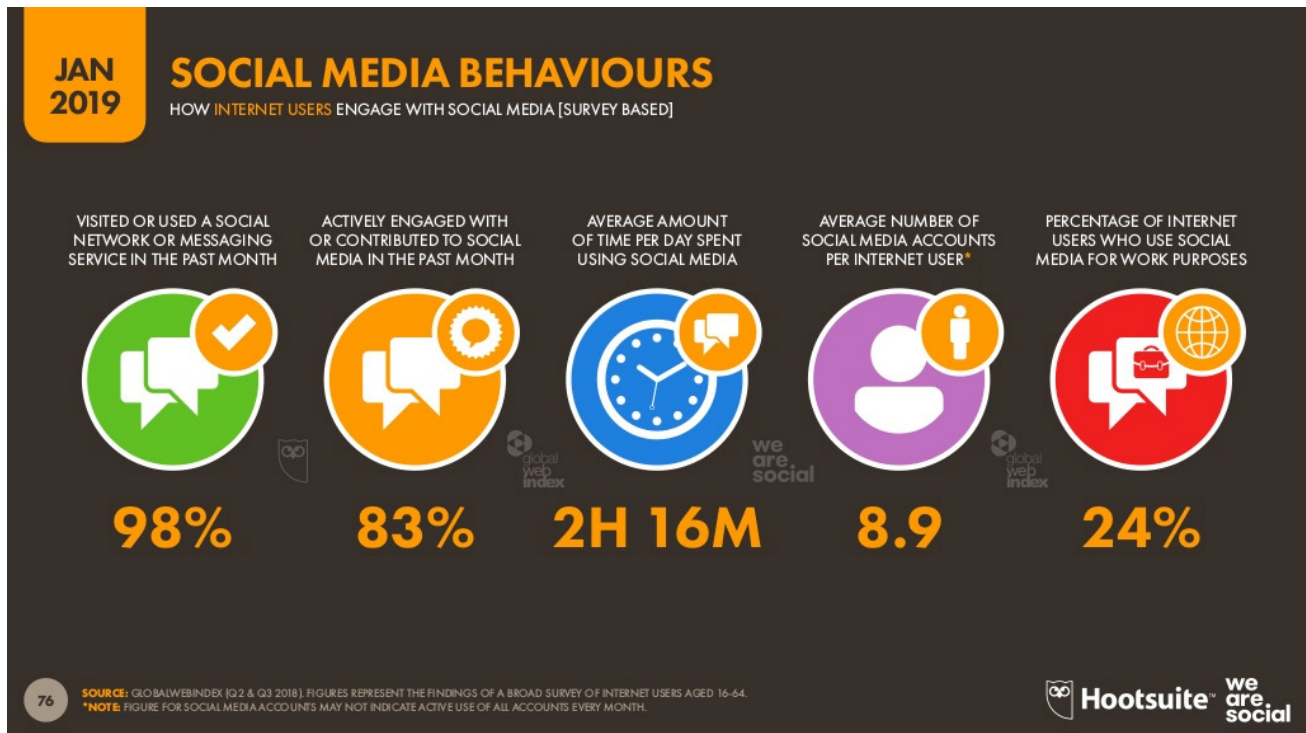


Source: [Comscore](#)

The Hootsuite/We Are Social reports, based on a Global Web Index survey, that 98% of internet users had visited a social media site in the month prior, with 83% saying they had actively engaged with or contributed to social media. If further proof of the ubiquity of social media were required, there you have it. We might also note that 24% use social media for work purposes – reflecting its creep into other areas of life beyond the strictly ‘social’.

While users will certainly have their favourites, and accounts don’t necessarily equal engagement, we might note that users certainly don’t seem averse to opening accounts with new platforms: the average number of social media accounts per user stands at nine!

Social media behaviour



Source: [Hootsuite/We Are Social](https://wearesocial.com/hootsuite)

App Annie's analysis reflects the above findings. In its State of Mobile 2019 report, usage of social & communication apps does not seem to have grown as aggressively as other app categories between 2016 and 2018 – though this is in no small part due to starting from a higher base.

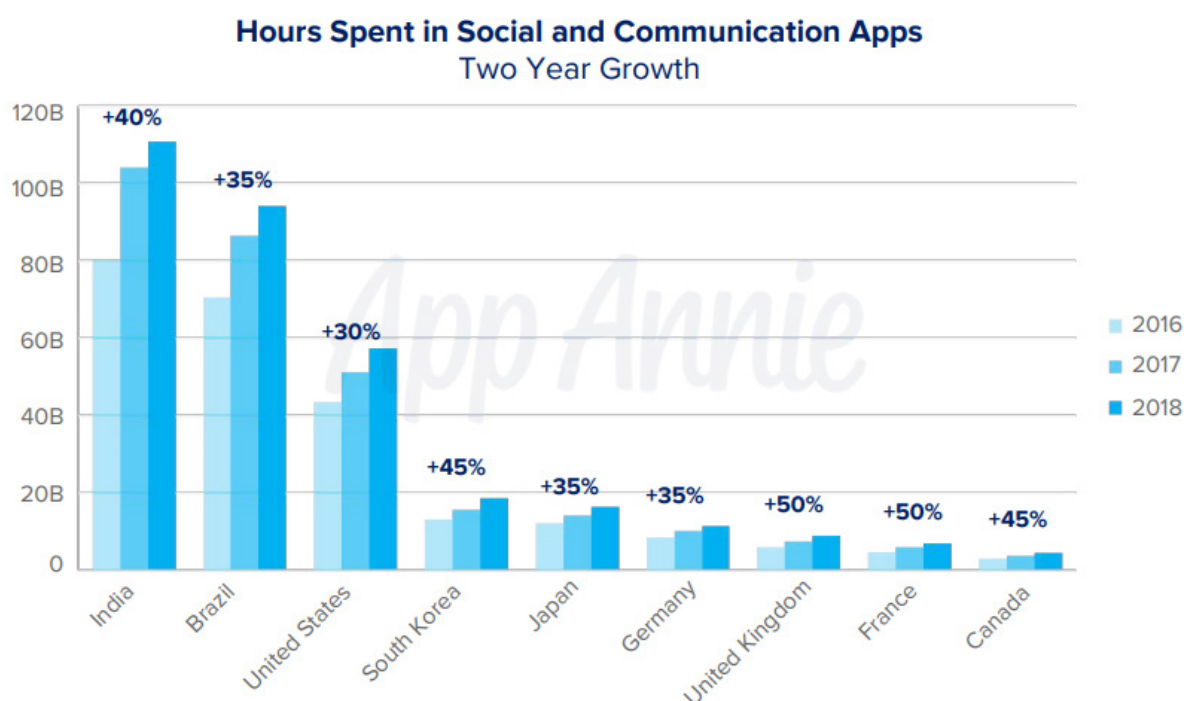
India and Brazil are well out ahead in terms of hours spent. Indians spent around 100 billion hours using social & communication apps in 2018, compared to 80 billion hours in 2016. Brazilians climbed from 70 billion hours in 2016 to over 90 billion hours in 2018. The inclusion of communication apps is perhaps key here, opening up new channels of communication to these nations in various stages of development, where previously opportunities to communicate might have been limited.

These two stand alone by this measure; the US comes next, in a group of one. Time spent using social & communication apps in the US increased from a little over 40 billion hours to close to 60 billion hours.

Japan posts a relatively low total amount of hours for a nation with a sizeable population and a very mature app market. We might note here, however, that only Android-related data is available – so the prevalence of iOS again is worth considering in its absence.

As it is, it comes in fifth behind South Korea, which has posted an impressive 45%; exceeded only by the UK's 50% increase.

Hours spent using social & communication apps in selected markets, 2016-2018



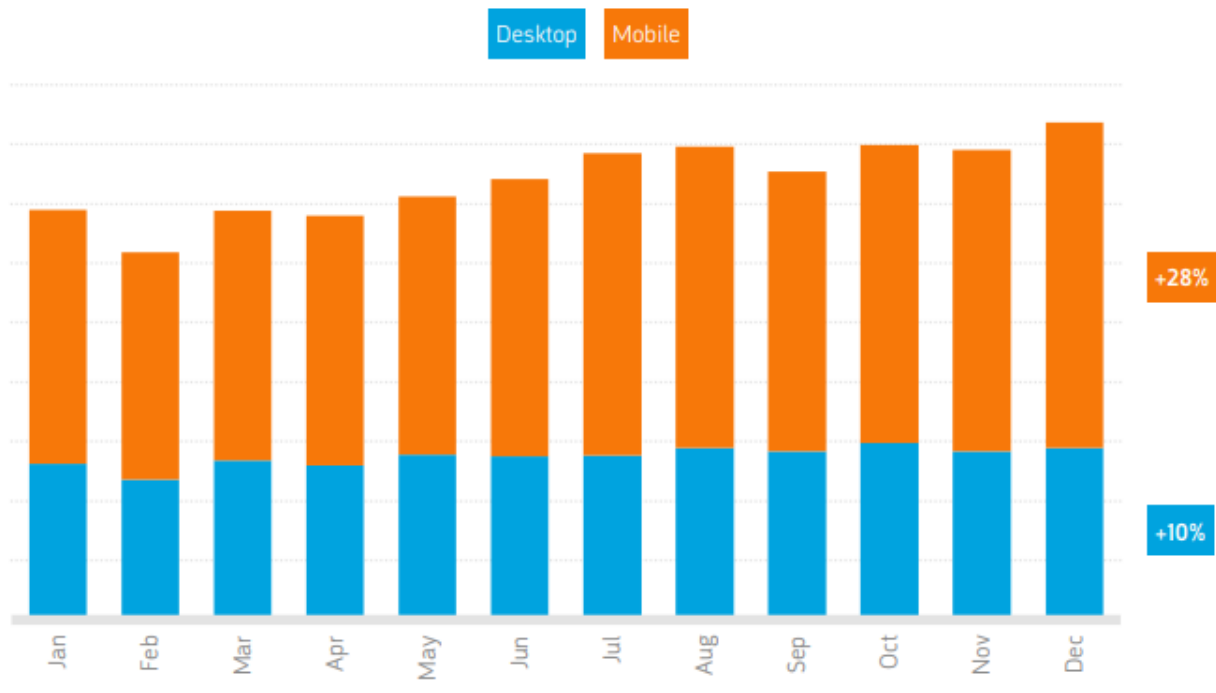
Source: [App Annie](#)

Video app usage statistics

Video has been one of the key app growth areas in recent years. It is estimated that video accounted for 75% of IP traffic in 2017 – and will increase to 82% by 2022.

Comscore video app stats published in early 2018 found a 28% increase in mobile time spent watching videos compared to the previous year. We might note here that time spent watching videos on desktop computers also increased 10%.

Video growth on mobile and desktop



Source: [Comscore](#)

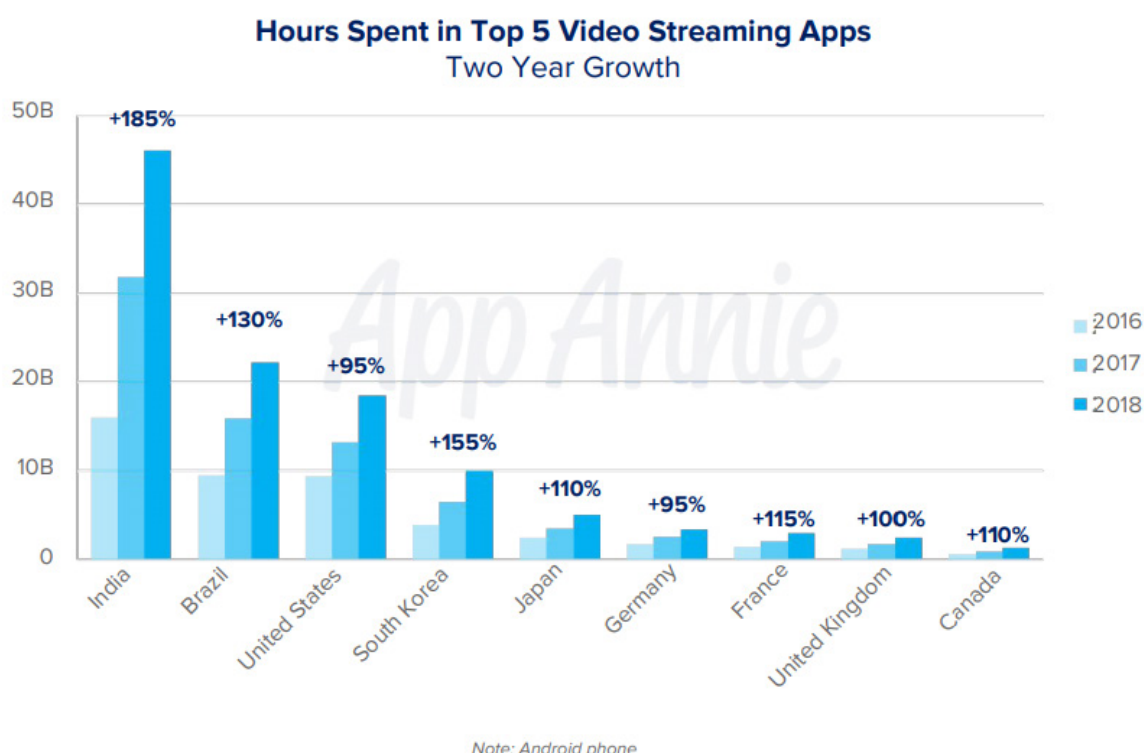
Focusing on specific platforms, between 2016 and 2018 we saw an increase in the time spent in the top-five video streaming apps across a range of countries.

As elsewhere (where China is excluded) India leads the way, both in terms of the total hours watched – not too far off 50 billion hours –and in terms of the increase since 2016: 185%. Brazil comes in at second, with over 20 billion hours watched, while South Korea has seen the next biggest increase at 155%.

It is perhaps illustrative that the 95% increase in viewing hours posted in the US can be considered among the more modest increases. European markets also post 'modest' increases. These are Android figures, so the caveat about Japan once again applies.

Not included in the graphic are Australia, Indonesia, and Thailand – all of which reported over 140% growth in the time spent using top-five video apps.

Hours spent using video steaming apps 2016-2018



Source: [App Annie](#)

Localytics find that the average total time spent using media & entertainment apps (so widening our purview slightly from video apps) has increased over the past few years.

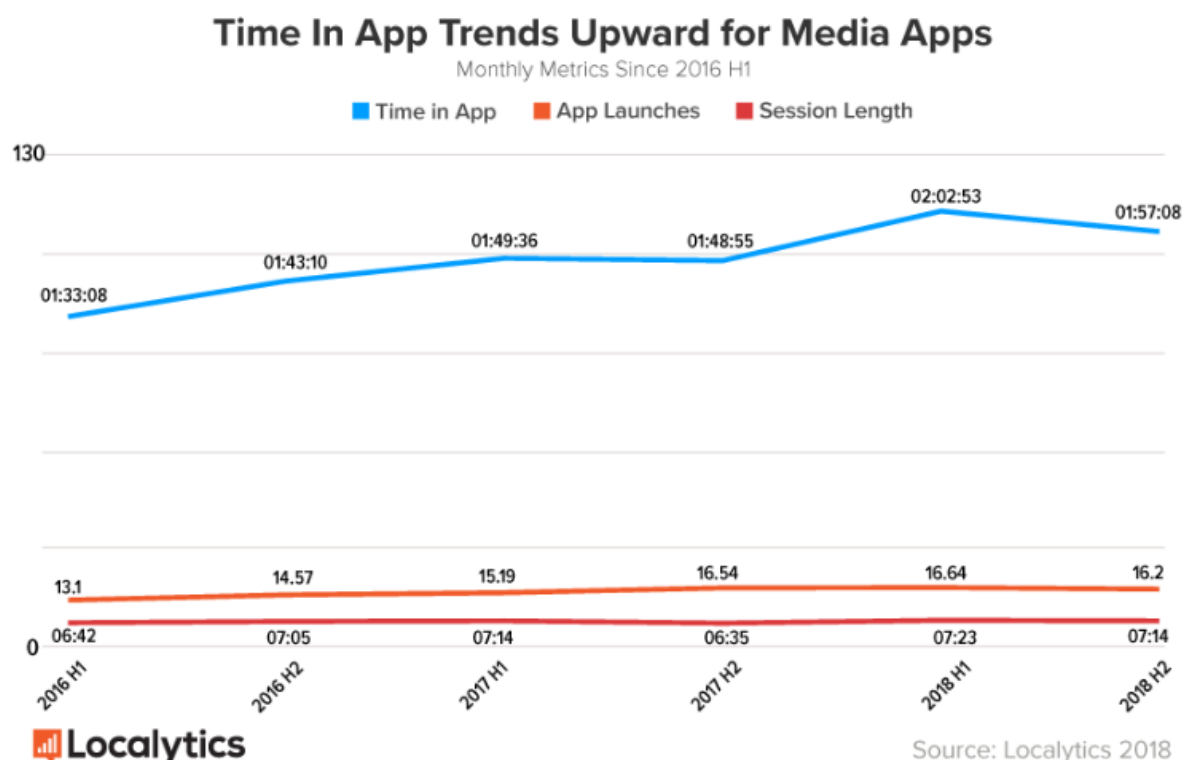
Both the average number of app launches and the length of each individual session have increased to contribute to this.

In the first half of 2016, we were looking at 13.1 monthly launches of entertainment apps per week, with an average session time of 6 minutes 42 seconds, giving us total average usage time of 1 hour 33 minutes. By the second half of 2018, this had increased to 1 hour and 57 minutes, from 16.2 launches and average session time of 7 minutes 14 seconds.

While the overall trend has been upwards, there have been also small declines between halves. Indeed, the highest number of sessions, average session length, and average total time spent in app were at their highest in the first half of 2018.

We might also note that sessions were higher in the second half of 2017 than a year later; albeit significantly higher session length sees more time spent in app overall in H2 2018.

Average time spent using media/entertainment apps



Source: [Localytics](#)

App usage statistics: Other app categories

Above we discussed the huge rise in downloads of food delivery apps around the world. Here we can see the considerable uptick in usage of food & drink apps between 2016 and 2018 (including restaurant-specific apps, with quick-service restaurants in particular identified as growth area).

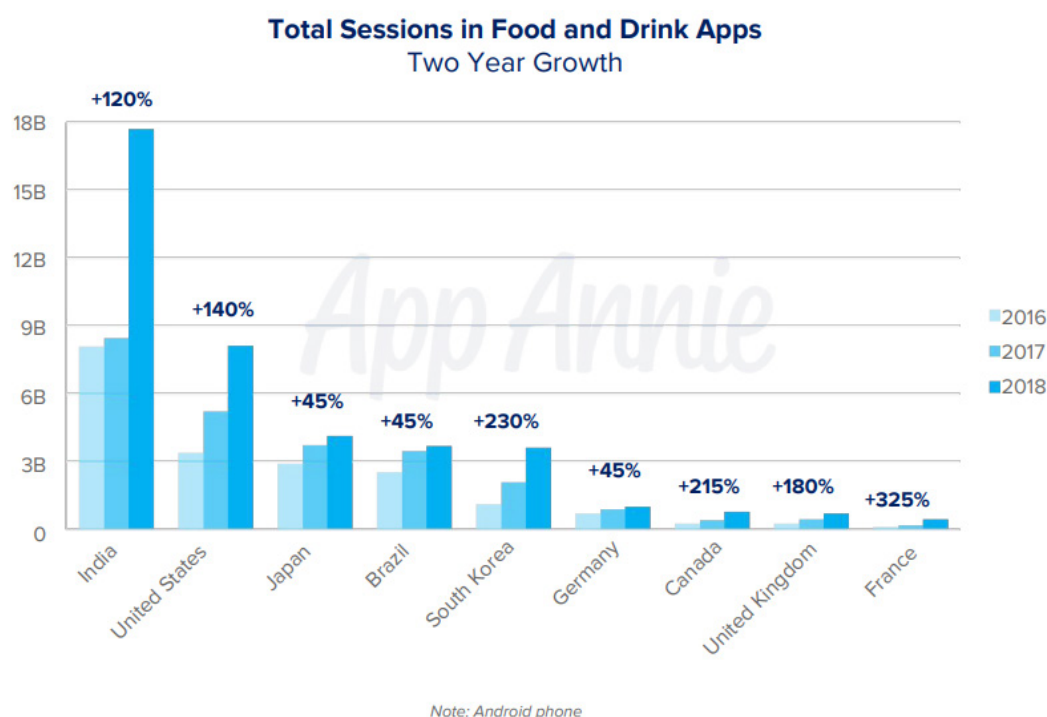
While India did not see the greatest percentage increase in sessions of food & drink apps, the close to 18 billion sessions logged here puts it far and away ahead of any other nation (China is excluded from the selection here, due to a lack of data).

We see the largest growth registered by the smallest market in terms of sessions, with French food & drink app users logging 325% more sessions in 2018 than 2016. Though it is far from becoming the most-active market, this is still worth noting from a nation with a deeply-entrenched culture of eating out.

Other notable increases come from the US, where we saw 140% more food & drink app sessions, and South Korea, where we saw over 3 billion sessions in food & drink apps in 2018, representing a 230% increase in total food & drink app sessions.

After India and the US, the Japanese are the most active food & drink app users.

Food & drink app usage by country



Source: [App Annie](#)

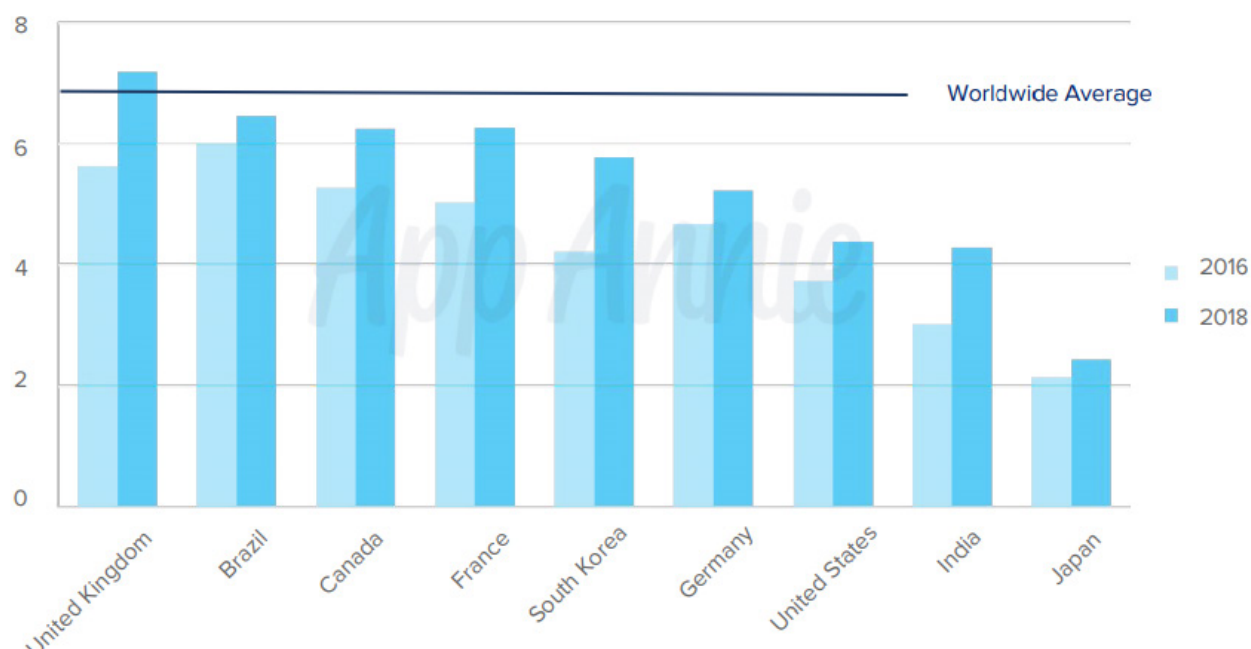
While not as pronounced as growth in other type of app usage, we've seen an increase in engagement with retail banking apps between 2016 and 2018. In that period, the British have become the most keen users of such apps (among the featured countries – Australian users log over 10 banking app sessions per week), overtaking Brazil. UK users log slightly over one session per day on average. The global average stands at around seven per week.

Interestingly, the least-engaged featured nation by this measure was Japan, where users log-in to retail banking apps for just over two sessions per week – a very slight increase over 2016. This is thought to be down the relatively limited functionality of apps available in Japan.

These figures are Android only.

Weekly sessions in retail banking apps

Average Weekly Sessions Per User
In Top 5 Retail Banking Apps



Note: Android phone; Top 5 by MAU, Worldwide average is top 10 by MAU

Source: [App Annie](#)

Globally, we see a higher level of engagement with fintech apps in 2018 than in 2016, with weekly sessions growing faster than the average MAU of fintech apps.

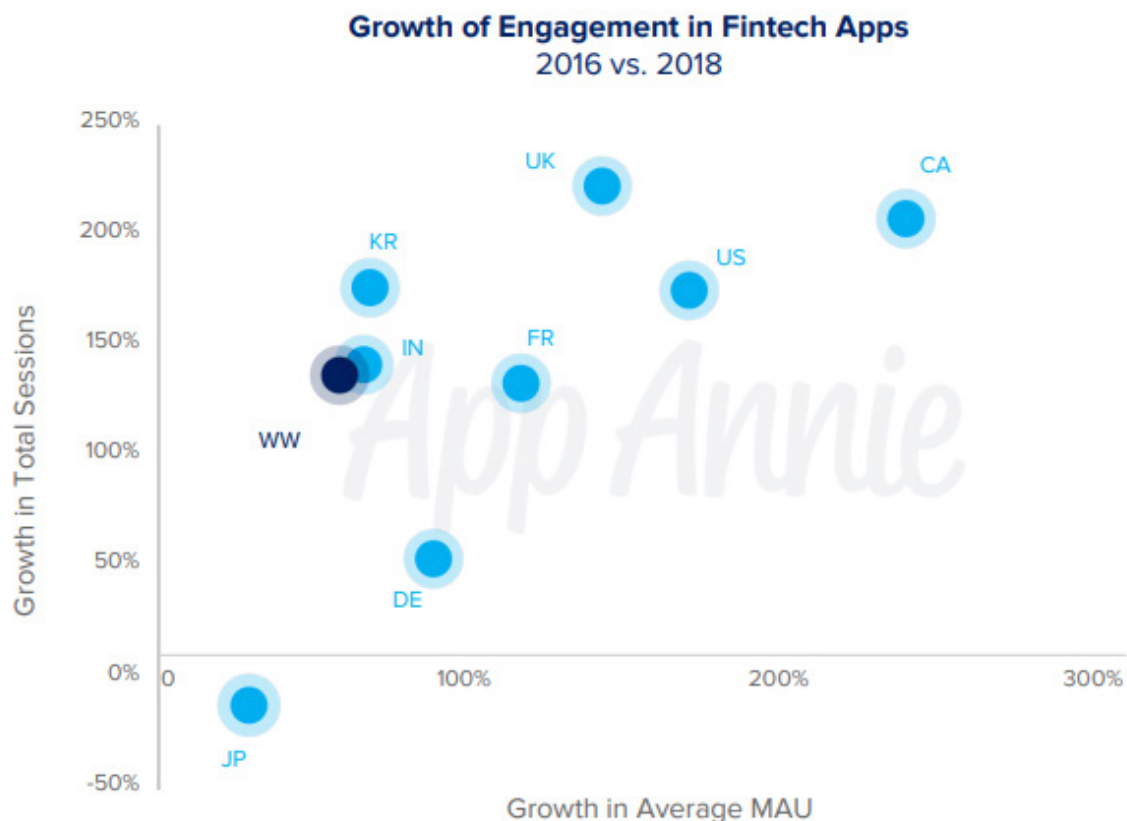
The paradigm seems to differ from country-to-country. The UK stands out in engagement terms, with an increase of over 200% in weekly fintech app sessions, coupled with around 150% growth in MAU. Canada is also noteworthy, logging a 200% increase in sessions combined with something like a 225% increase in MAU, while the US hovers at a little under 200% in each measure.

Like the UK, France, India, and South Korea have seen significant increases in average MAUs exceeded by even more significant growth in sessions. Japan stands out as the negative outlier here, with a decline in fintech app sessions combined with relatively low levels of MAU growth.

That said, there have been success stories in the Northeast Asian powerhouse – Softbank's PayPay payment app, linked with Yahoo! Wallet, saw 46x growth between November 4th and December 2nd 2018. We might also note, once again, that these figures, though averages, are related only to Android devices; Japan is very much an iOS nation.

China is once again excluded from this analysis.

Engagement vs. MAU in fintech apps, 2016 vs. 2018



Note: Android phone; Worldwide excludes China; Top 5 Fintech Apps by average MAU

Source: [App Annie](#)

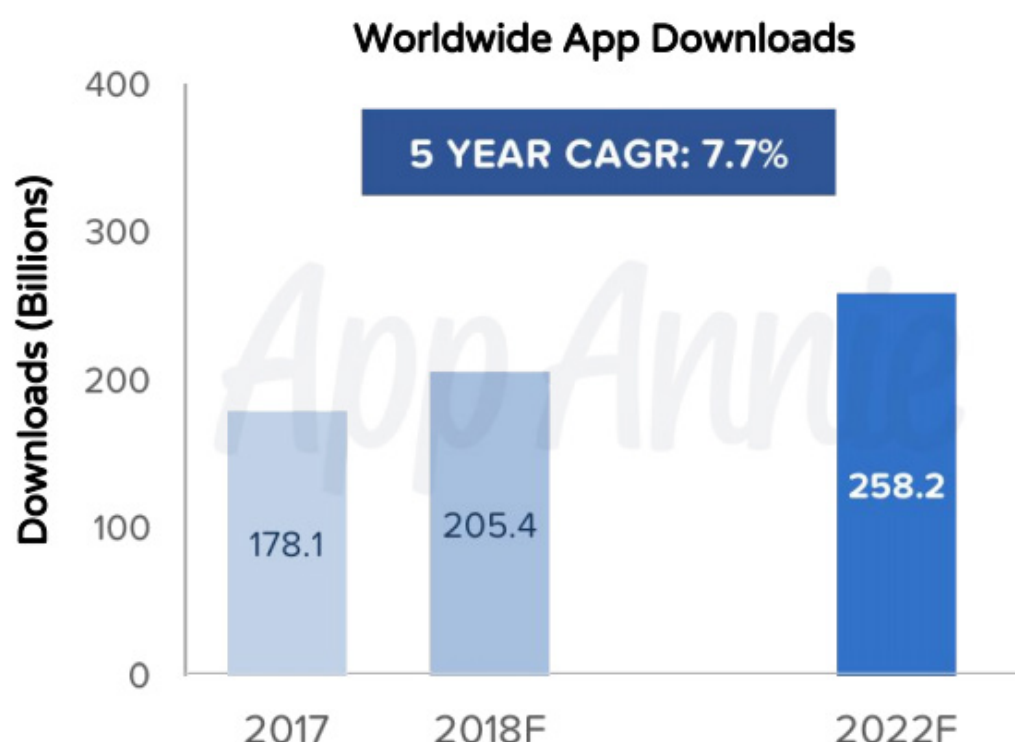
App Download Statistics: Future Predictions

App Annie predicts that the total number of app downloads will come to nearly 260 million in 2022. This prediction has been extrapolated from the 2017 figure of 178.1 billion app downloads, based on a compound growth rate of 7.7%. The predicted figure would see 45% growth over the five-year period between 2017 and 2022.

It should be noted, therefore, that this figure will need to be revised down, with the actual 2018 figure coming in at over 10 billion lower than the 205 billion predicted here. While we are seeing continued growth in the number of apps being developed and downloaded, we perhaps can't always expect year-on-year growth levels to grow or even stay consistent.

In the same set of predictions, App Annie also expects the market to include 6 billion mobile devices – representing 56% growth on 2017.

Forecasted app downloads



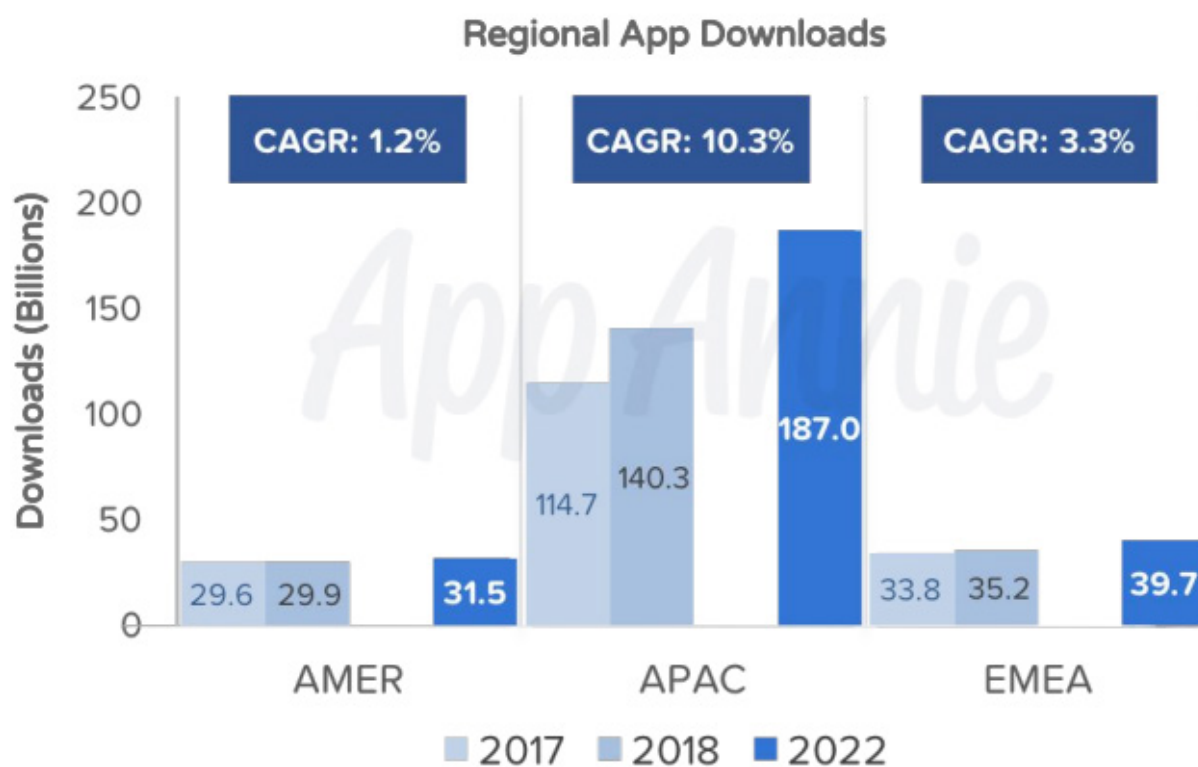
Source: [App Annie](#)

With the previous caveat in mind, let's look at the regional breakdowns. App Annie predicts that the most rapid growth will come from the APAC region, which contribute 187 billion downloads in 2022, courtesy of a CAGR of 10.3%. While the precise figures may need some reconsideration, it seems almost certain that global growth in app downloads – at least up until 2022 – will be driven by developing economies in this diverse and densely-populated region.

As mentioned above, the share of downloads made from the APAC region stood at 64% in 2017. App Annie predicts that this share will increase to 72% in 2022. Both the EMEA and AMER will grow at a slower rate than overall global compound rate, posits App Annie. The former will account for 15% (down from 19%) and the latter for 12% (down from 17%).

These slower growth rates in EMEA and AMER markets are down to a relatively high level of saturation in already mature markets, which growth in emergent markets will not sufficiently offset by 2022.

Forecasted app downloads by region



Note: iOS App Store, Google Play and third-party Android stores combined
Downloads are first time downloads only; reinstalls and updates are excluded

Source: [App Annie](#)

Of the top-five countries by app download volume, App Annie predicts that three will increase their market share by 2022, growing at a faster rate than overall growth. These include first and second place China and India – which looks set to enter a period of rapid growth – and fifth-place Russia.

The US is predicted to see a decrease in app downloads over this period. Nonetheless, the top-three countries together are predicted to contribute close to two-thirds of global downloads, as compared to 58% in 2017.

China alone accounted for 45% of mobile downloads in 2017; the 2022 figure suggested here would see this creep up to 46%. India, on the other hand, would see a far more significant increase, doubling its share from 7% of global app downloads, to 14%.

Forecasted app downloads by country

Top Countries by Downloads (Billions) in 2022

Rank	Country	2017	2022	Change from 2017
1	 China	79.3	119.5	51%
2	 India	12.1	37.2	208%
3	 United States	11.3	10.3	-9%
4	 Brazil	6.3	8.4	34%
5	 Russia	4.3	6.7	55%

Note: iOS App Store, Google Play and third-party Android stores combined

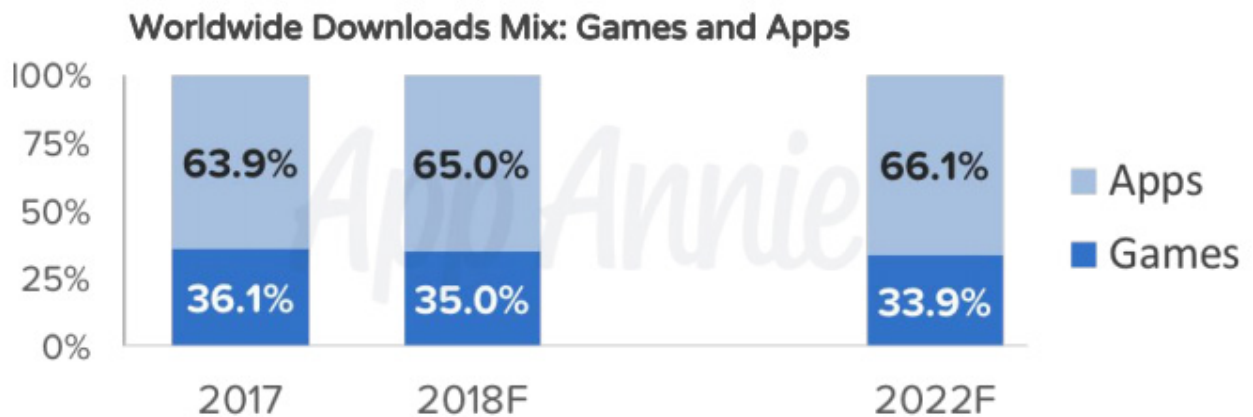
Source: [App Annie](#)

Interestingly, App Annie forecast a slight decline in the download volume of games vs. other apps – from 36.1% to 33.9% in 2022. The reasoning for this is that games tend to play a crucial part in the earliest ‘experimentation’ phase of app market maturity. As markets move towards the ‘adoption’ phase, other types of apps can enter the market, as users move on to using their apps for more advanced functions than gaming.

While there may be sound logic in this, we might also consider the possibility of an increasingly mature mobile gaming landscape; and differences between markets. Perhaps in less mature markets, games will take a stronger hold during the middle and later stages of maturity.

If the theory does hold out, we might also see maturity realised at a different pace than that predicted here.

Games vs. app download forecast



Source: [App Annie](#)

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