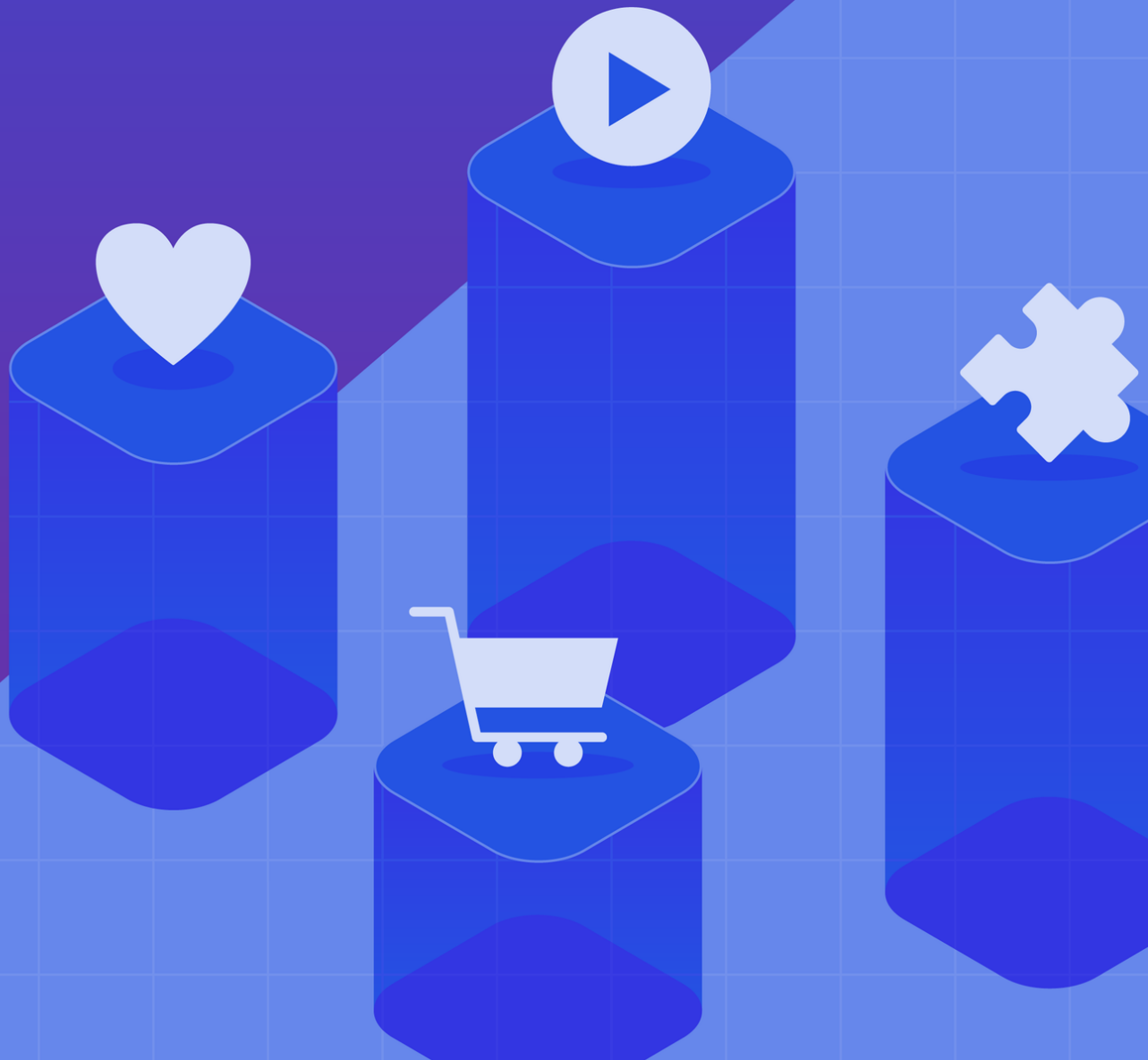




App trends 2020

A global benchmark of
app performance



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Executive summary

The outbreak of COVID-19 has upended economies throughout the world, including the App Economy. A multitude of government measures aimed at halting the spread of the COVID-19 virus, from social distancing and shelter-in-place to lockdowns and travel restrictions, have caused major disruption as countries around the world rally to halt the virus' impact.

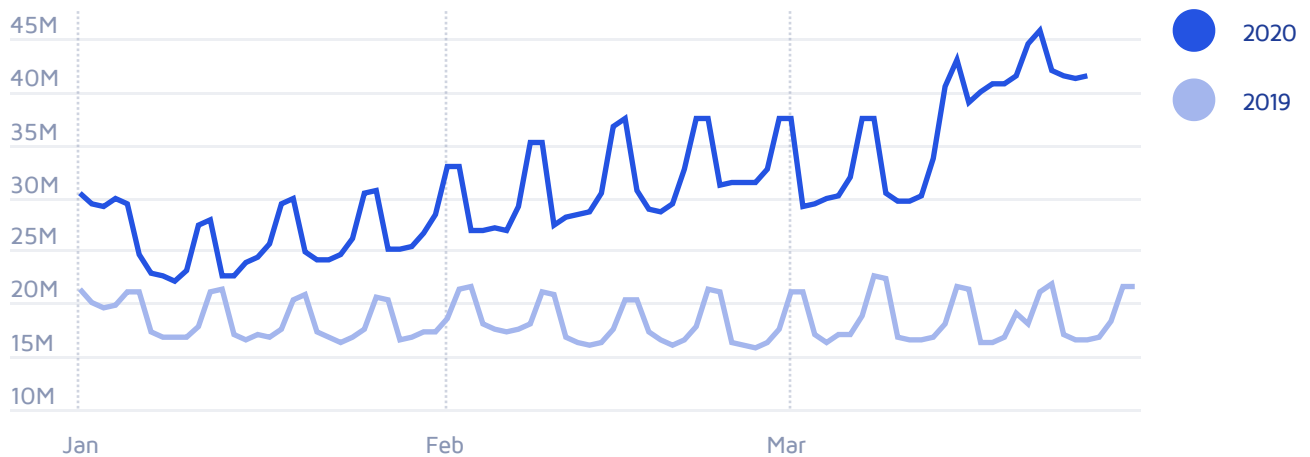
While this report focuses on long-term trends based on data from 2019, we have included an analysis from data gathered in Q1 2020 to provide some perspective of how COVID-19 has affected the App Economy so far.

Gaming

Perhaps to no surprise, Gaming has seen a significant uptick in installs. In the last week of March, the vertical saw more than double (132% increase) the amount of installs compared to last year, as populations across the globe have been spending more time stranded at home. In total, Gaming apps saw a 47% increase in sessions and 75% increase in installs in Q1 2020 compared to Q1 2019.

The anticipated slowdown in gaming for 2020 has faded for now, as idle time has spurred more users to look toward gaming and the sense of community in shared playing that this vertical often engenders.

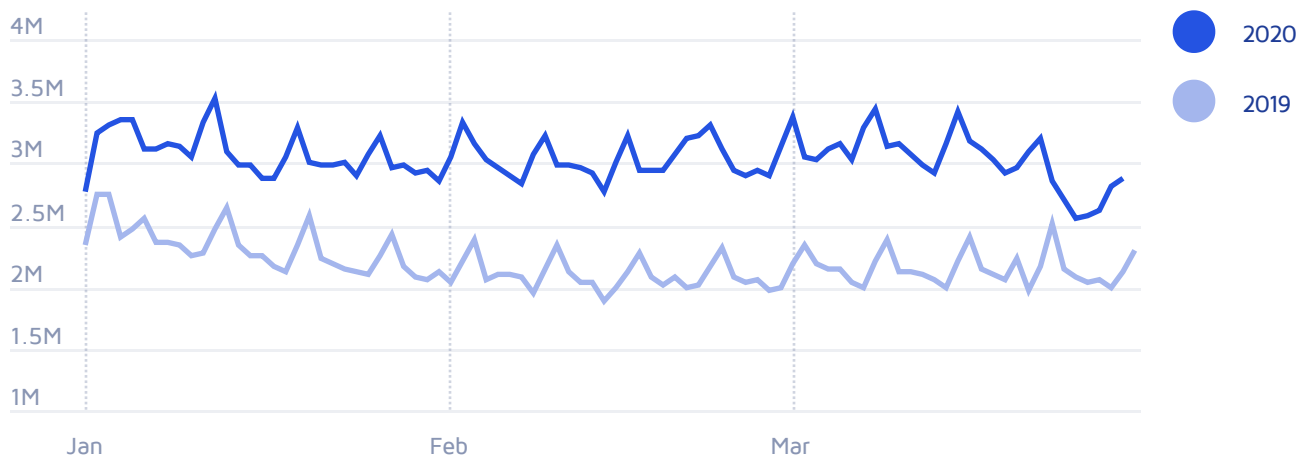
Gaming installs, Q1 2019 vs. 2020



E-commerce

E-commerce has taken a turn downward as shelter-in-place and social distancing gathered force in late March. Installs have been trending below the established baseline for 2020, down 12% week-on-week. With people at home and longer wait times for online orders becoming more prevalent, users may be turning to other pastimes to keep themselves busy, and have less need to shop.

E-commerce installs, Q1 2019 vs. 2020



Entertainment

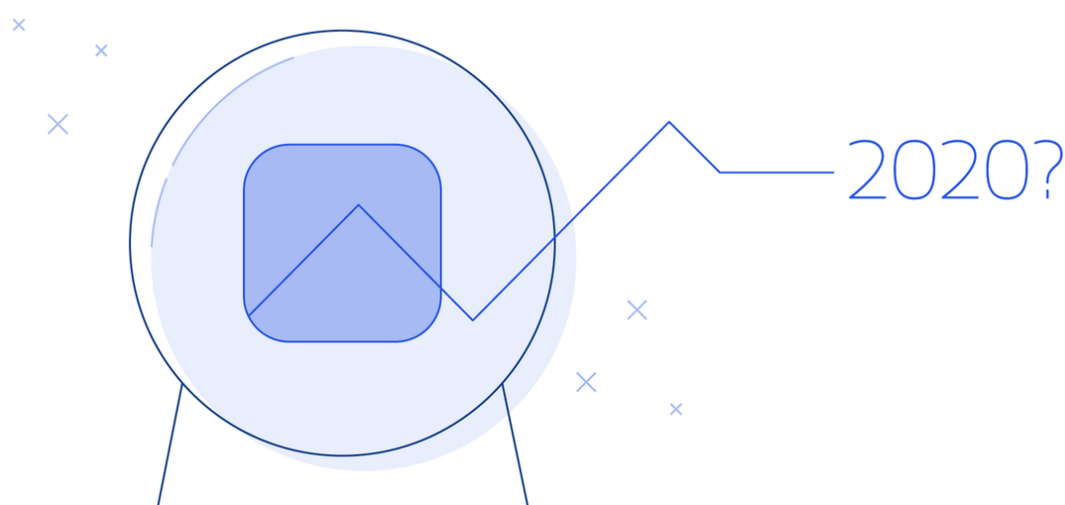
The stark uptick in installs for Entertainment apps tells the most clear story of where the App Economy is headed in the age of the coronavirus: toward the comforts of streaming. Installs have increased rapidly since people began staying home, trending 55% above where they were last year.

Entertainment installs, Q1 2019 vs. 2020



The data shows increases in sessions and installs across many other verticals. With the pandemic forcing the majority of employees to work remotely, it's no surprise that Business apps have also seen a huge rise in sessions (up 105% from Q1 2019) and installs (up 70%). Revenue events are also up 75%, as users opt for premium versions to help ease the transition to working from home. And as many restaurants are forced to turn to takeout-only, Food & Drink apps also saw a significant increase in sessions — up 73% on this time last year, while installs increased by 21%.

No one can predict whether these trends will sustain over the course of 2020 — but the data offered in this report offers valuable insights into app marketing overall. Beyond these abrupt movements in installs, we've seen little evidence to suggest that there's been a fundamental shift in user behavior, with users often taking the same predictable actions in-app, such as averaging a little above two sessions a day, to churning at predictable points in the customer journey. The silver lining for the App Economy in this period of uncertainty is the resilience of mobile technology to weather a shock as significant and far-reaching as a global pandemic.



The top three takeaways from the report

1

The current state of the market means newcomers have a difficult time in breaking through. As such, marketers are advised to build up their paid activities and focus less on organic. One tip to improve paid? Marketers have to make sure that campaigns are tied to the seasons and the contexts that allow you to engage and retain valued customers.

2

App marketers are looking to a broader range of networks to find new audiences. Our findings show that across the board, there is more experimentation with networks. So open the aperture of your view, but don't go all in — the more you succeed, the more you have to handle. Alongside fraud prevention, marketing automation promises to unlock this potential, giving marketers more time to manage even more campaigns.

3

The importance of re-engagement differs depending on your vertical, but many app marketers agree that not enough emphasis is placed on retargeting. In 2020 this activation technique could take more of the spotlight — Shopping leads the pack, but others could follow.

The brief

The global App Economy is a massive yet monstrously competitive market, with an increasingly formidable number of apps all competing for a scarce resource: user attention.

Sensor Tower data estimates that worldwide app downloads across the Google Play and Apple app stores reached 115 billion in 2019, a 9% year-over-year increase. That looming figure doesn't include the many third-party offerings that exist in markets such as China, Indonesia and the Philippines. Research from global telecoms company Ericsson reckons that new mobile subscriptions added in the last six months of 2019 from these three countries alone totaled an incredible 47 million — equal to the entire population of Spain.

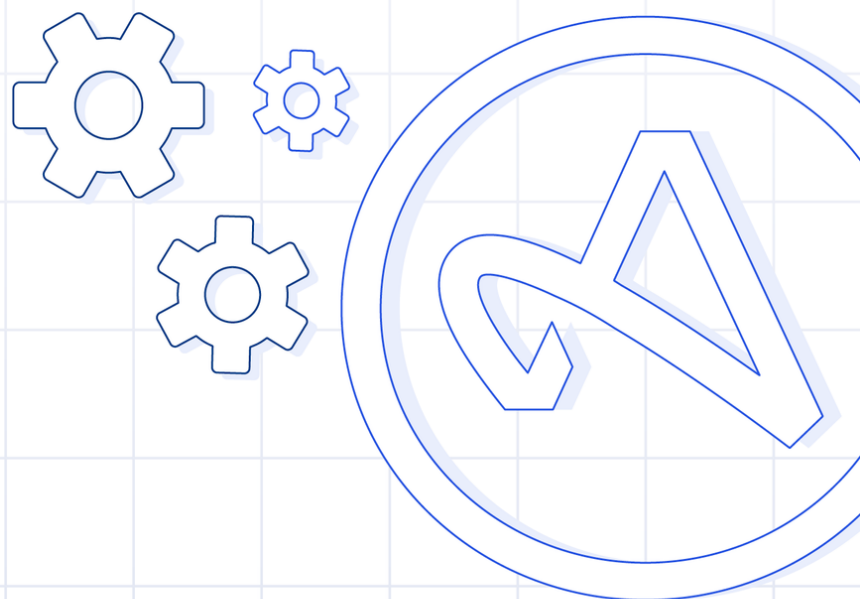
Sizeable audiences and their growth potential make for impressive stats, but more apps mean more competition for those audiences — and more pressure on marketers to meet their targets. Consumers are spoiled by choice, now expecting experiences that are highly relevant and genuinely valuable. Anything else is noise.

What's more, the customer journey has become complex and unpredictable, demanding marketers to think, act and manage campaigns in real-time. This is especially true for Gaming, E-commerce and Entertainment apps, the subject of the App Trends 2020 report.

This report draws from internal data and actionable insights to provide marketers a deeper understanding of their audiences and the behaviors that impact their bottom line. From post-install trends to the right time (and technique) to re-engage users, this report equips marketers with what they need to make data-informed decisions and reach campaign targets.

"Mobile marketing is undergoing an evolution, with advertisers now enhancing their marketing through automation. This has changed the battle from "putting out as much advertising as possible" to "putting out the smartest marketing possible". And as app marketing trends toward a more extensive diversity of channels, the key difference between success and failure will be found in the ability of marketers to find and engage with new, hard-to-reach audiences."

Paul H. Müller
Co-founder & CTO



Methodology

Verticals:



Games

Casual, Mid-core, Sports



E-commerce

Shopping, Marketplace & Classifieds



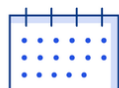
Entertainment

Music, Video streaming



Dataset:

A mix of Adjust's top 1000 and total dataset tracked by Adjust



Date:

01.01.2019 - 31.12.2019



Installs

Competition for users is increasing, forcing app developers to optimize their products and their campaigns. Our data shows that, in 2018, the number of installs from paid sources amounted to 24% of total installs. In 2019, that figure climbed to reach 30% — a 25% boost from the previous year, and taking more away from the organic slice of the market.

This observation is closely aligned with predictions from global research firm [eMarketer](#). The company forecasts mobile ad spend increasing by more than 21% to reach a massive \$120 billion in 2020. Will the focus (and flurry of activity) around paid advertising close the gap to organics in 2020? Could we soon see an equal number of organic and paid installs? This section examines the growth and impact of app marketing and asks the question: are app marketers moving to a new paid-first marketplace?

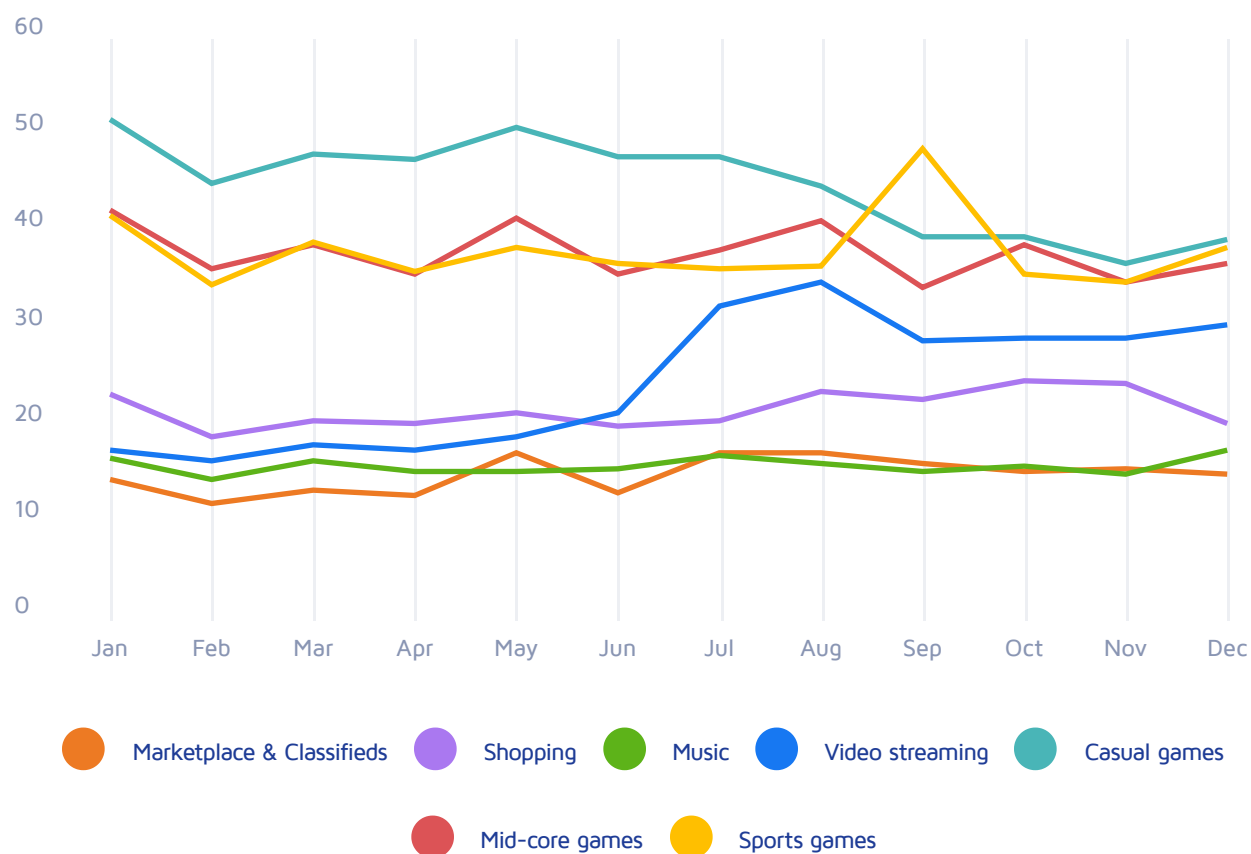
Mapping growth trends

Adjust's Growth Index charts the rise and fall of app installs to pinpoint patterns and provide marketers with a better understanding of user interest. In this report we examine the peaks and troughs across the calendar year. To define the Growth Score, we divide the number of installs per month by the number of monthly active users (MAU).

The Growth Score charts the growth of apps at a given moment — with a higher number of installs increasing the score. In most cases, a high score reflects a mix of a significant number of installs and a decrease in MAU. However, it's important to remember that a high score doesn't always mean that an app has more users. It can also indicate an app has a high churn rate. (MAU may fall because users are lapsing, resulting in a higher number of new installs as companies struggle to keep pace).

$$\text{Growth Index} = \frac{\downarrow \text{ No. of installs per month}}{\text{Monthly active users (MAU)}}$$

Growth Score per vertical



KEY FINDINGS

Gaming receives high scores throughout the year. The average Growth Score hovers around 40.3. But it's not a high-flyer for the entire year — the Growth Score for Gaming decreases by an average of 15% around December, a typical phenomenon for the vertical. Though Gaming is a constant pastime, users are always trying out new titles. For this reason, Gaming is a high-churn category, and this drop (despite high scores throughout the period) is a reflection of this changing dynamic.

E-commerce apps have a relatively low Growth Score in 2019, holding at just 18.22. But there are strong differences depending on the type of e-commerce. The Growth Score for **Shopping**, for example, dropped 13% over the year, while **Marketplaces** (apps that allow users to sell to each other) increased by 4%. It may be that the steady MAU and lower churn is linked to the social nature of Marketplace apps, and the wider assortment of goods on offer, keeps users interested and coming back.

Streaming apps were the growth winners in 2019. **Video** streaming saw its Growth Score jump 74% from January to December. By comparison, **Music** apps grew by only 4%.

Our findings match with [ironSource](#) data, which highlighted a slowdown in Games growth in 2019. Overall, growth in this app category, which was pegged at 7.7% in 2018, decreased to just 5.3%. "Looking ahead," ironSource states, "it's likely we've seen the end of the hyper-growth in Hyper-casual installs." Yet we expect Hyper-casuals will adapt to market changes and continue to prosper. Involving RPG elements, for example, has proven to retain players for longer, and Hyper-casual developers are keen on maintaining momentum in this space

Sluggish mobile commerce growth is also just one aspect of a broader trend. [eMarketer](#) forecasts that combined e-commerce sales will grow at a stable rate of 12.8% in 2020, on par with 2019. While the retail sector may be slowing, the role of digital mobile is growing at a staggering rate. Overall, e-commerce via online, mobile and app will account for 69% of total retail sales growth in 2020. Researchers are not alone

in this view. [Shopify](#), a multinational e-commerce company, estimates 54% of all e-commerce sales will happen on mobile devices by 2021.

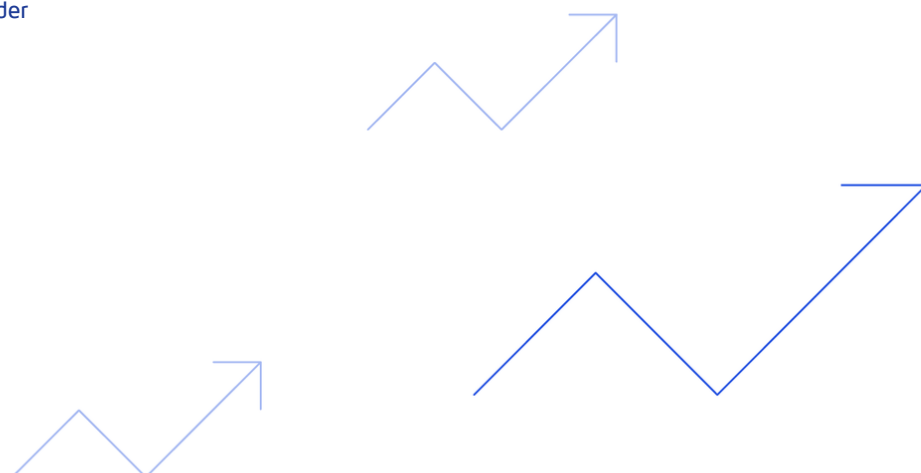
The rise of Video Streaming mirrors the movement of audiences to mobile, a channel that already eclipses desktop and television. [Zenith](#) reports that the average time people have spent watching video on their devices has increased by nearly one-third (32%) every year from 2013 to 2018. Competition for eyeballs is also fierce with players like Disney+, NBCUniversal's Peacock and WarnerMedia's HBO Max joining the "streaming wars" that already see Netflix, Hulu, Amazon Prime and dozens of smaller OTT platforms battle for audiences. But it's not just streaming channels competing for mobile and app viewers. The rise of eSports and streaming platforms such as Twitch, Mixer, YouTube Live and Facebook Live are also vying for their share of audience attention and spend.

"The obsession with short-term gains and growth hacks that marked the last years is fast being replaced by the realization that retention is the new growth. To succeed in this environment, it's not enough to fill the top of the funnel. Marketers need to have a firm grasp of full-funnel data, the ability to manage algorithmic campaigns and the vision to create cross-functional teams that combine talent from marketing, product and engineering."



MOBILEgroove

Peggy Anne Salz
Founder

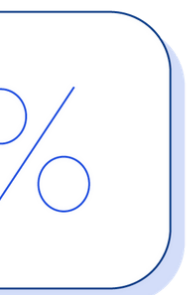
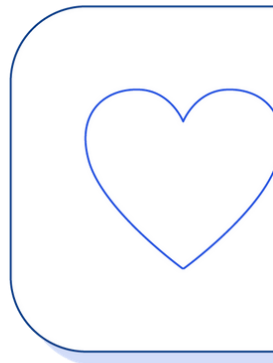
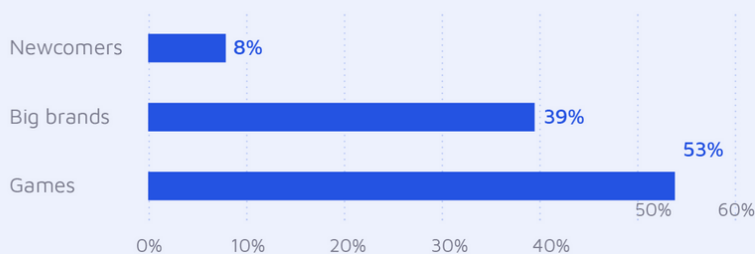


A good app is hard to find

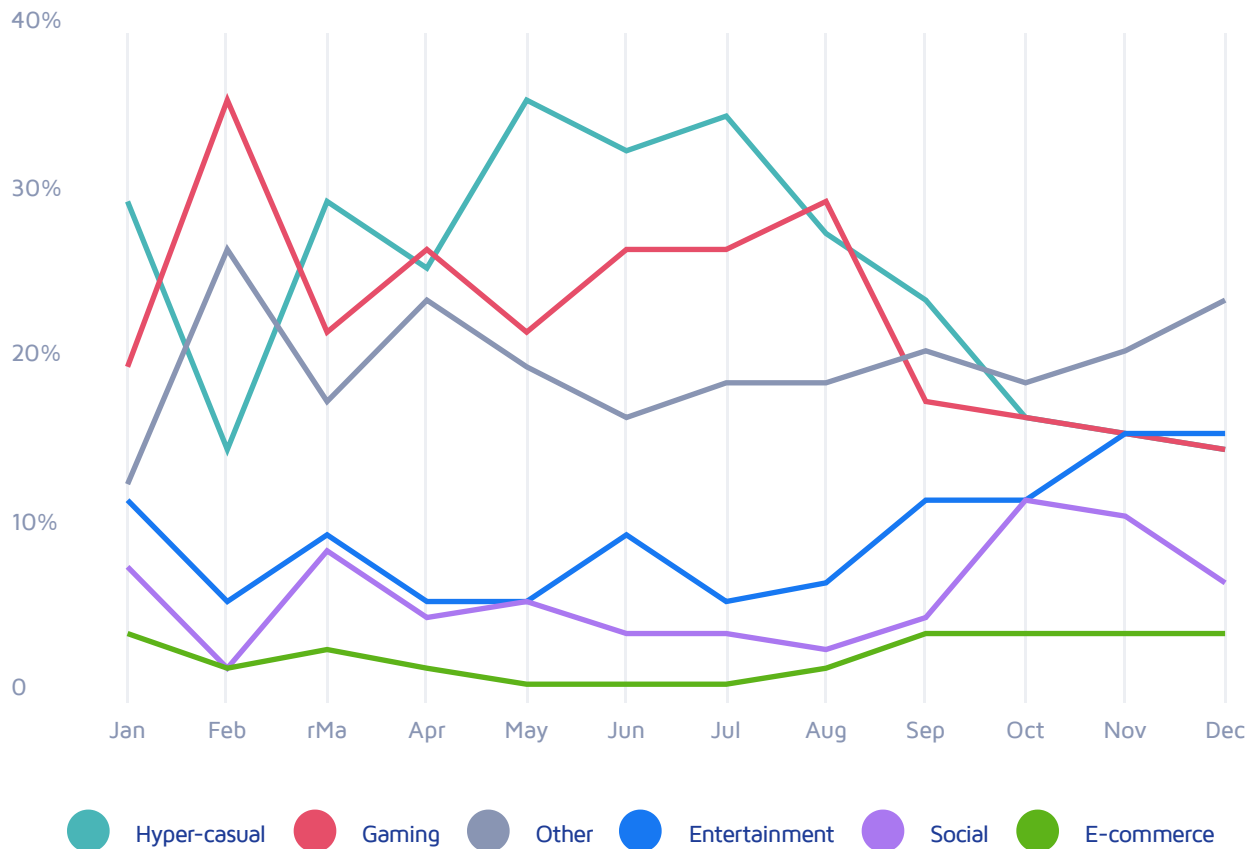
One of the biggest shifts of app marketing in 2019 was the significant drop in organic discovery. App store lists are now, more than ever, dominated by big-name brands and studios, shutting out the scores of indie developers eager to be discovered. Newcomers make up only 8% of apps listed on the App and Play store top charts.

We also observe changes in the lineup of top app categories throughout the year, based on rankings in the U.S. App and Play stores. The much-hyped hyper-casual category dominated the app store charts over the summer. But this roaring start loses steam later in the year. Hyper-casual (and Gaming as a whole) decline in the ranks in Q3 and Q4, precisely the period that Entertainment and Social apps rise up to steal the lead, suggesting a shift in how the stores ranked their lists in the latter part of the year.

New apps only appeared in 8% of top ten listings over 2019



Appearance in top 10 chart positions by vertical, for free apps in the App and Play stores



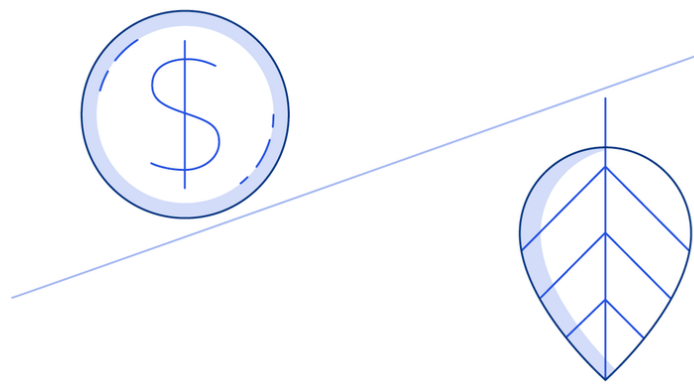
Marketers are advised to place less emphasis on their organic rankings. Christian Eckhardt, CEO & Co-Founder of Customlytics, a full-stack mobile technology and marketing consultancy, points out that "with over 10+ years of app stores being around, users are already very saturated with all kinds of apps. The likelihood of a user going to a store to browse or discover new apps has declined significantly, compared to the early days of the stores."



CUSTOMLYTICS

"Now it's much more about attracting users outside of the stores. This is what marketers should focus on."

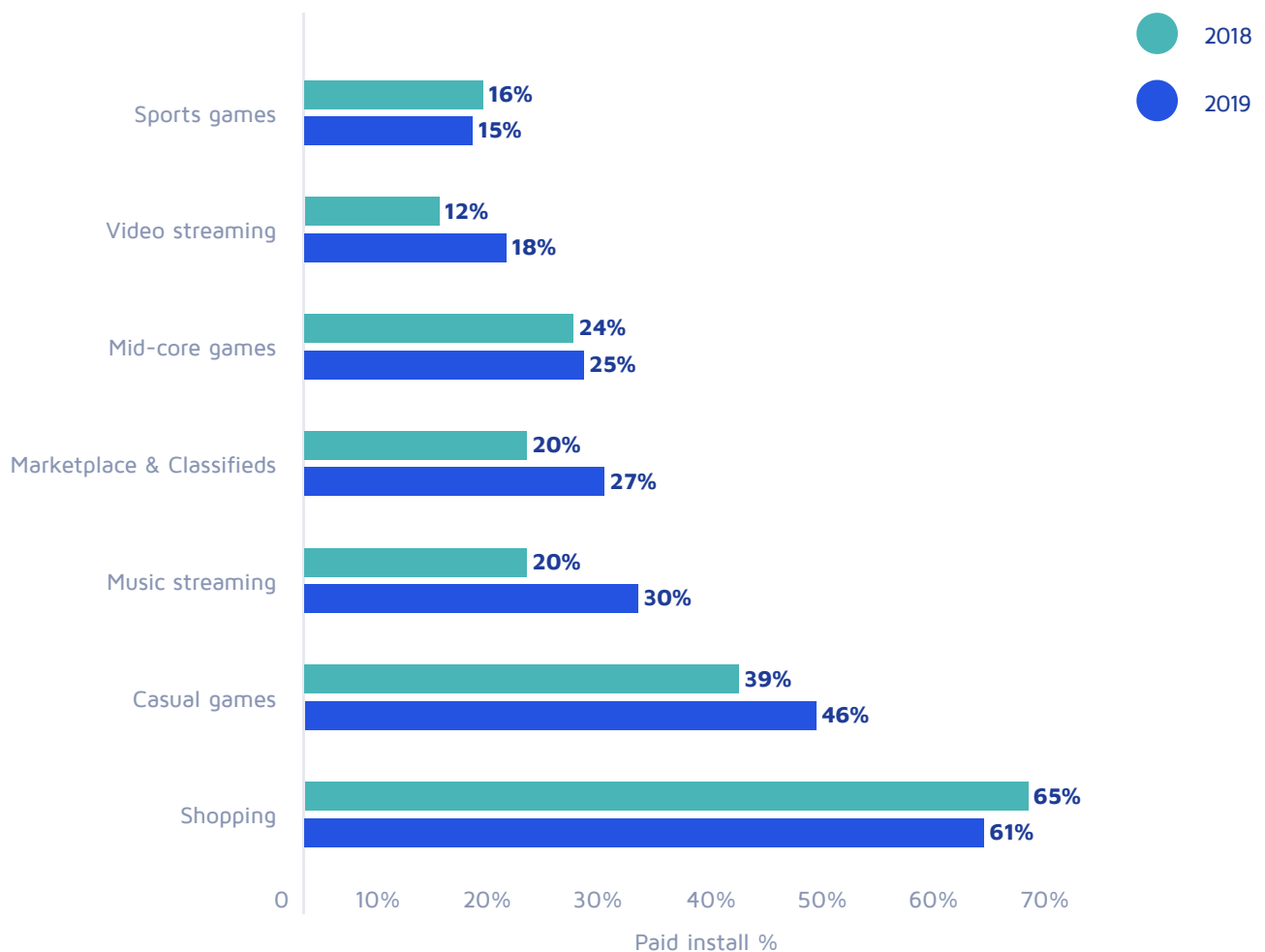
Christian Eckhardt, CEO & Co-founder



No pay, no play

If previous results are any indication, app marketing is fast becoming a pay-to-play game. The chart below reveals the split between paid and organic installs per vertical, detailing the typical share of installs — and the change in the share of paid over time.

Percentage of paid installs by app vertical, 2019 vs. 2018





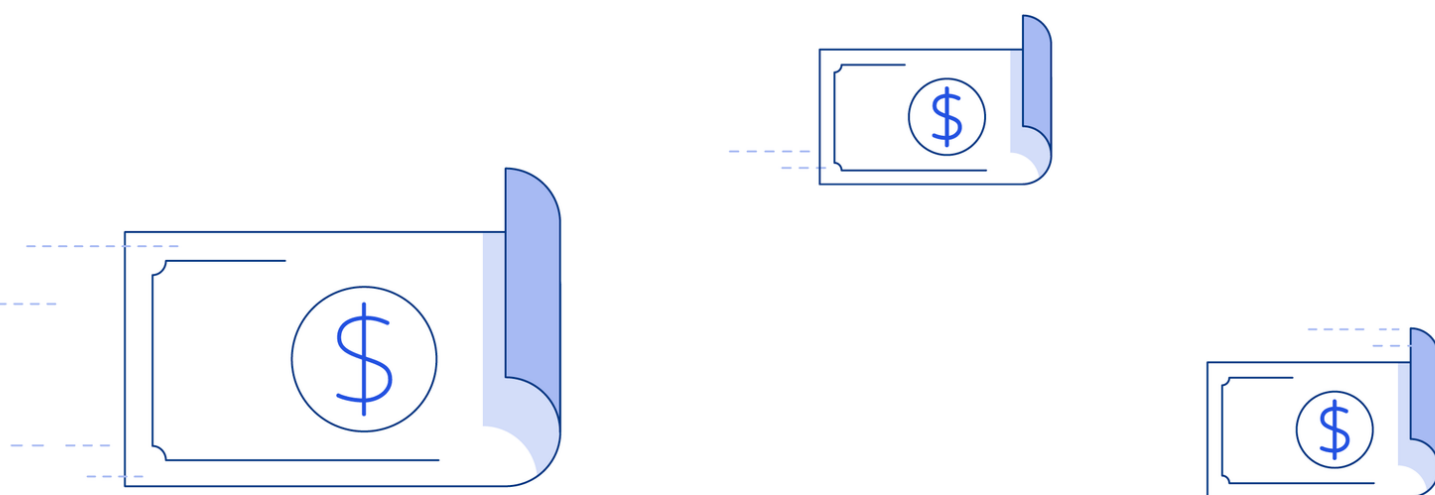
KEY FINDINGS

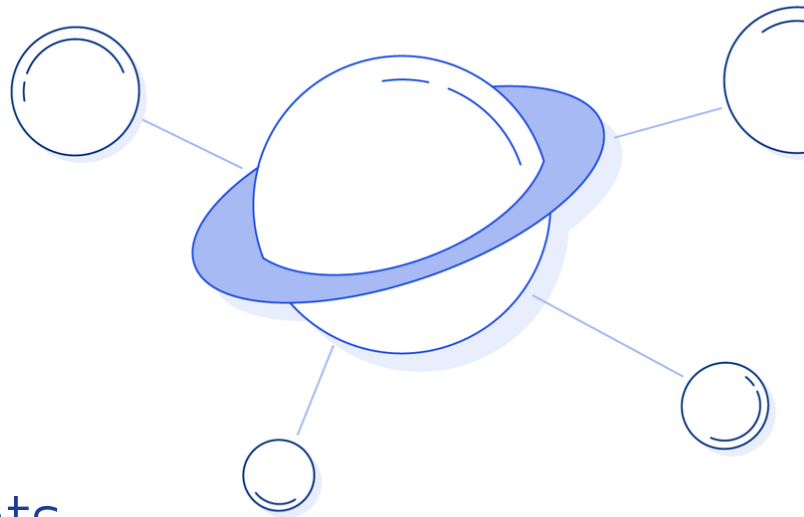
In line with findings reported in the [Adjust App Trends 2019](#) report, **Shopping** continues to acquire the most installs via paid campaigns, the number (61%) is down four percentage points on the previous year (65%). (The majority share of spend is invested into retargeting users. Full details feature later in our report).

Casual games' paid install share increased by 17% in 2019 (reaching 46%). This is no doubt linked to the rise of **Hyper-casual gaming** and the lucrative gains from the [ad revenue-based model](#) that allowed this app sub-category to break records.

Music streaming saw the largest rise in paid activity of all — a 50% increase as the battle for listeners rages on.

It's clear that companies must spend, and spend heavily, in order to compete. The factors driving this change are complex, from a narrowing of organic discovery to big players dominating the ad landscape. Furthermore, organic uplift (known as the K-Factor) has been decreasing. The changing ecosystem acts as a perfect storm, and brands have to work hard on improving their paid activities just to keep up.

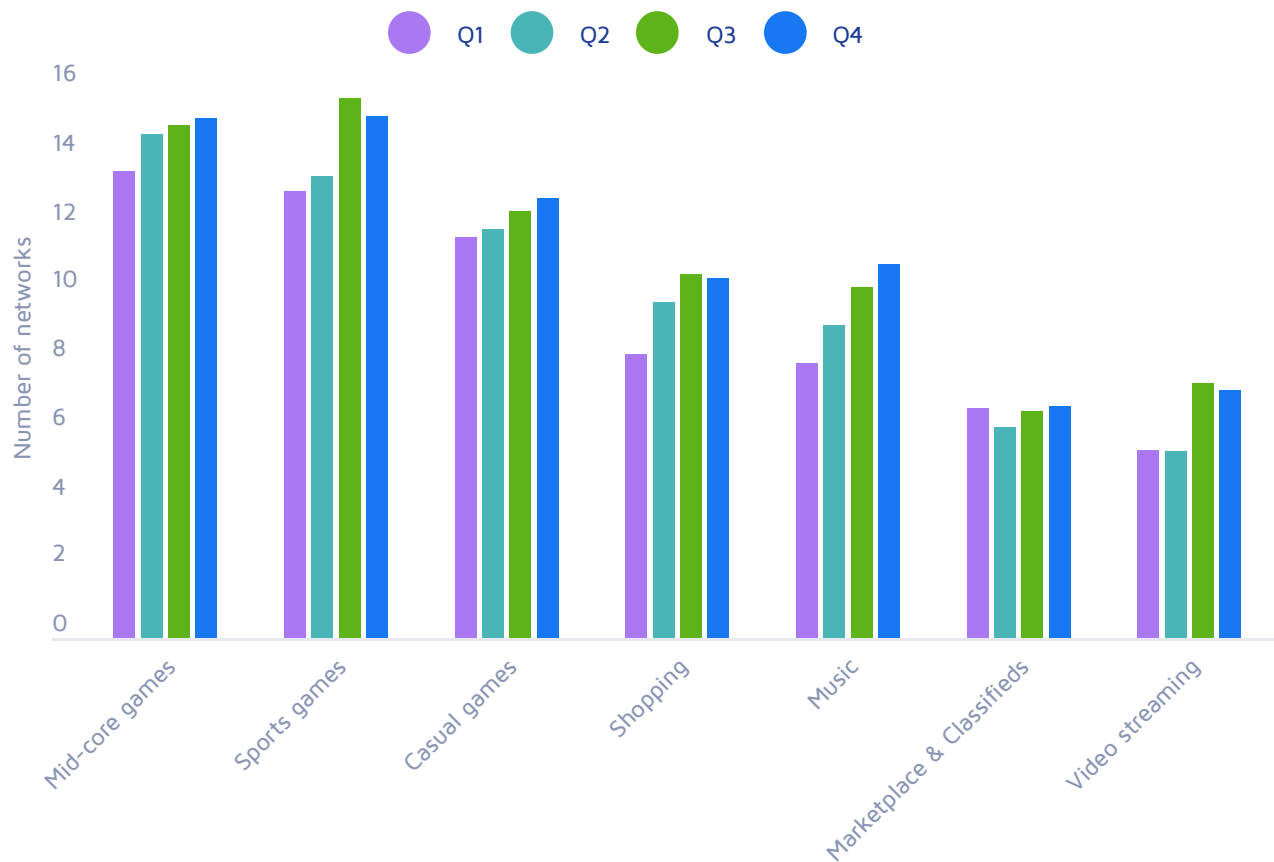




Network experiments

Mobile marketing is thought of as a two-horse race, with Facebook and Google reliable partners. But as inventory dips in the face of increasing demand, do app marketers look elsewhere? Our data — which measures the average number of networks per account, across the four quarters of 2019 — suggests marketers are spreading their budgets across more network partners.

Network appearances per account, by quarter





KEY FINDINGS

Over 2019, advertisers increased their number of network partners by 19%. These numbers reveal a consistency of experimentation and iteration across verticals, with only **Marketplace & Classifieds** the odd ones out with a stunted 1% increase in channel use.

In what may surprise some, **Mid-core** marketers experiment with networks more than **Casual games**. Mid-core games tend to be more targeted, but our dataset shows more diversity — with three more networks in use by Q4.

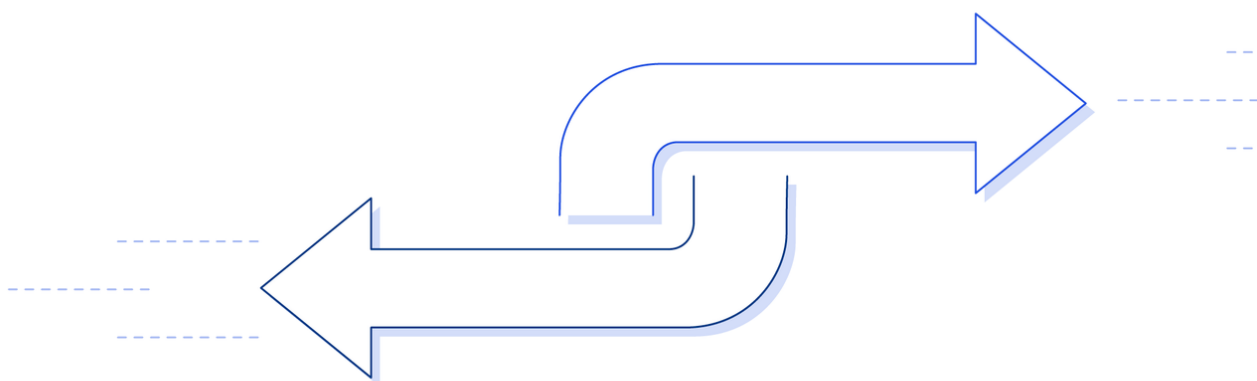
Entertainment apps not only spent more in 2019; they also incorporated more networks than any other apps category. **Music** increased its network spread by a staggering 36%, and **Video** streaming by 32%.

Users are constantly switching platforms, so expect this trend to continue as savvy marketers search for the next pocket of users. Thomas Petit, an independent growth consultant, sees this trend as a significant positive for the App Economy, noting that “more apps are becoming middle and top-class apps, whereas before there were only a few running 20+ partners.”



“With the overall app economy growing, more apps are reaching maturity. For those, there is more reason to diversify their partnership portfolio and reduce dependency on the major advertising players.”

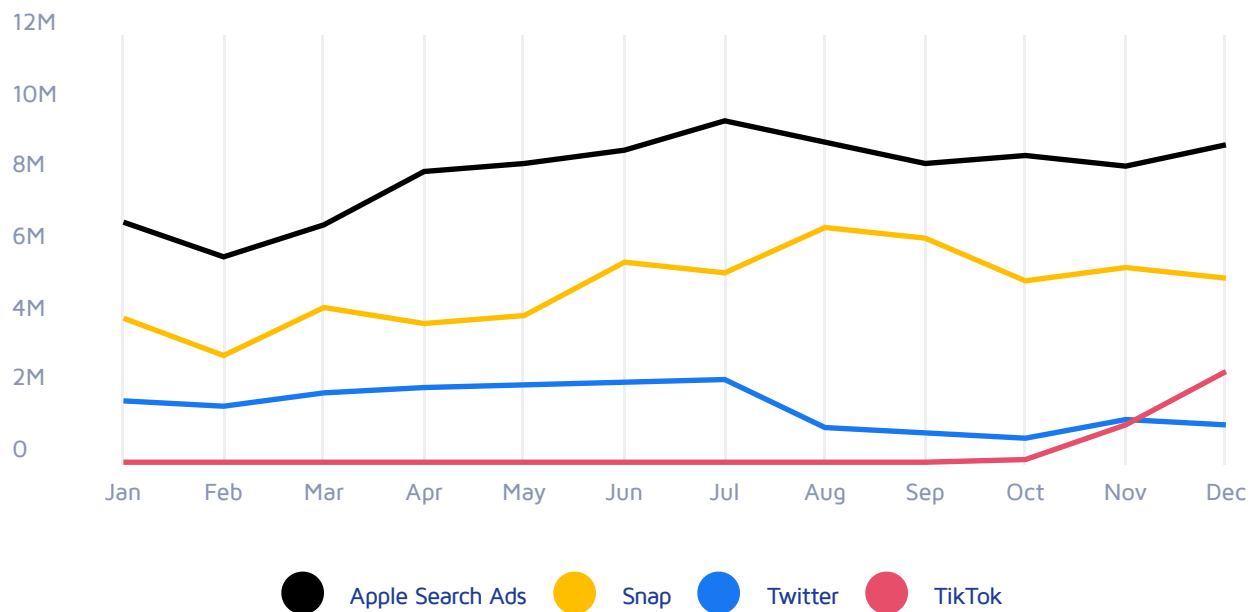
Thomas Petit, Independent growth consultant



Up and comers

But where is the spend going? We looked at the four biggest networks outside of Facebook and Google — Apple Search Ads, Snap, TikTok and Twitter — to see how marketers made use of them over time, and to spot new trends.

Network by install volume across 2019



KEY FINDINGS

TikTok was the surprise hit in 2019, taking off in Q4. Adjust tracked over 2.5 million installs from the platform in December — 57% more than **Twitter** in the same month. For a service that we only began tracking in August, this is quite a performance.

Adjust also saw 57% fewer installs from **Twitter** between July and August, affecting the rest of the year — which averaged under a million installs per month in the last five months of 2019. This drop was likely due to a complex mix of factors that Twitter enacted. However impactful they were in the short term, Twitter's improvements could help to lift this performance going into the year ahead.

Both **Snap** and **Apple Search Ads** saw growth in 2019. Snap install volume grew 27% and Apple Search Ads increased 32%.

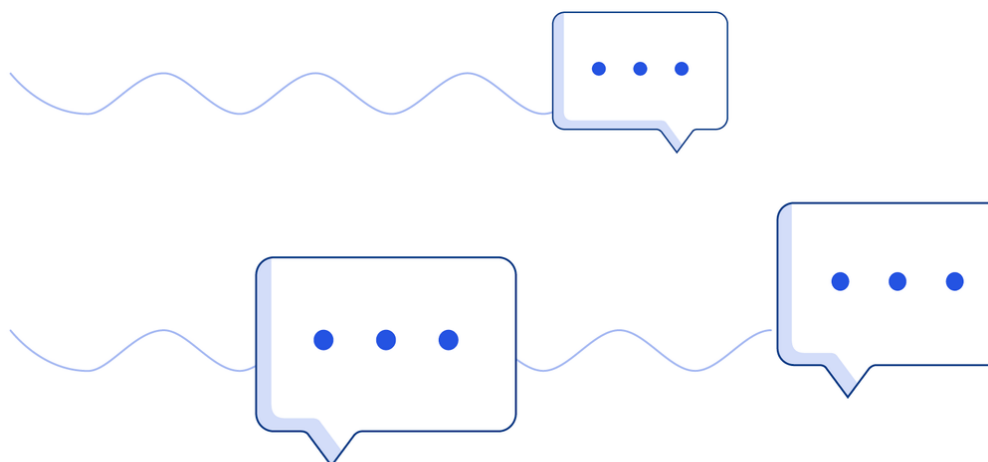
To succeed in 2020, brands need to be where their audiences gather. TikTok, is one of the few apps to see a [viral surge](#) in use, and is sure to see spend increase to match. Already, data shows smaller studios and indie gaming developers are flocking to the platform. A massive 88% of installs on TikTok chalked up in December 2019 came from small game publishers who didn't make Adjust's list of top 1,000 apps. From this, it appears that smaller game companies are trying (and succeeding) to capture the attention of a new type of casual audience on an entirely new ecosystem — and they could be paying a lot less to do so.



"Each social network requires different expertise of creative, targeting and incrementality measurement."

Moshi Blum, General Manager, Israel

Marketers are clearly experimenting with more channels to get better results. However, as marketers drive more spend into these channels on the back of successful experimentation, they will also need to acquire new skill sets. According to Moshi Blum, Adjust's General Manager, Israel, teams need to grow their knowledge of these networks and — more importantly — figure out what works and what doesn't.





Post-install trends

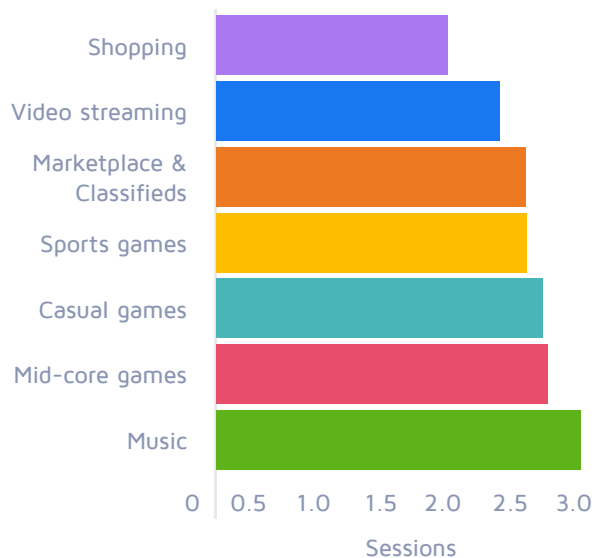
Users are becoming more app-focused. According to [eMarketer's Mobile Trends 2020 report](#), "time spent on mobile web is gradually declining, while time spent in apps is steadily increasing." The report found that in 2019, 90% of time spent on smartphone devices was in-app.

This represents a consumer shift marketers must be aware of, and capitalize on. This section focuses on the post-install metrics that matter: sessions and time spent, to see how different verticals compare.

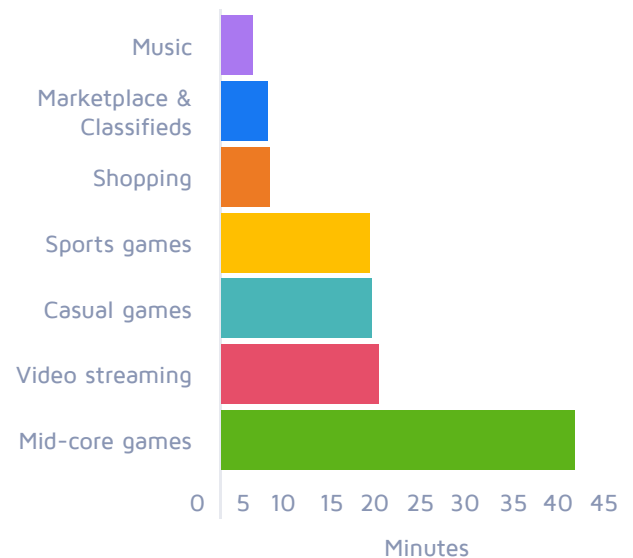
The session economy

Sessions indicate the health of your app's engagement by tracking how often users return to an app, revealing how motivated users are to come back. In the data below, we've averaged 30 days of session performance from the year to calculate the number of app opens per day and per vertical, as well as the average time spent in each.

Average **number of sessions**
per user, per day



Average **session length** per
user, per day

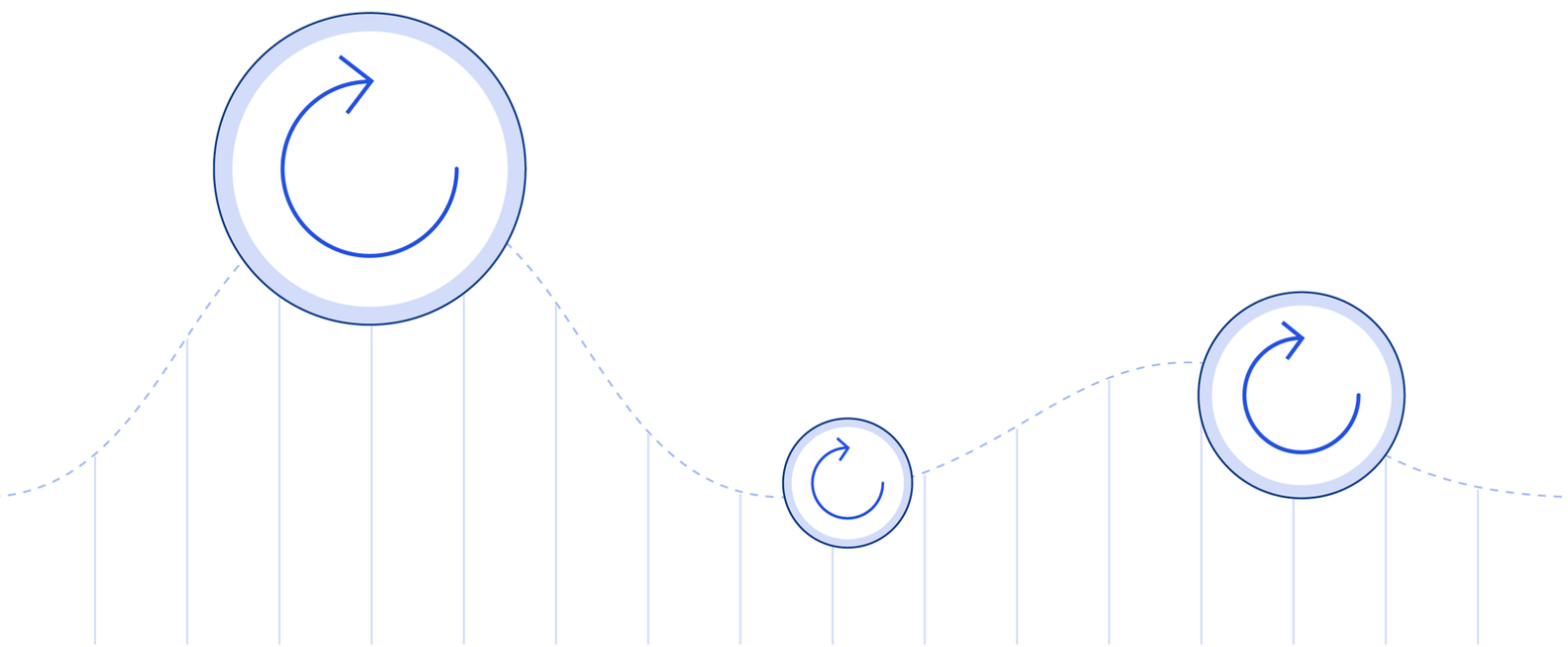


KEY FINDINGS

The average number of sessions per user is 2.36 per day.

While **Music** apps have the highest number of sessions, but they also have the shortest session length. (This is due to how Adjust records sessions, which need active, continuous use in order to register active session time).

Mid-core games have the highest attention and replayability, with gamers spending 57% more time on **Mid-core** titles vs. **Casual games**. The latter may drive downloads, but for continued interaction, **Mid-core gaming** can't be beaten, with an audience that wants to steal time to play their favorite titles in between a busy day-to-day.



A novel way to improve both the amount and length of sessions comes from Yury Bolotkin, Growth Specialist from Hyper-casual games publisher Popcore. "For us, session length is very important," Yury says, "the longer users stay, the more ads they watch." As such, the team creates more engaging mechanics in new games, and improves existing games by adding additional features that lengthen user stay. For instance, mechanics that reward inactive players give them more of a reason to return, and play for longer.



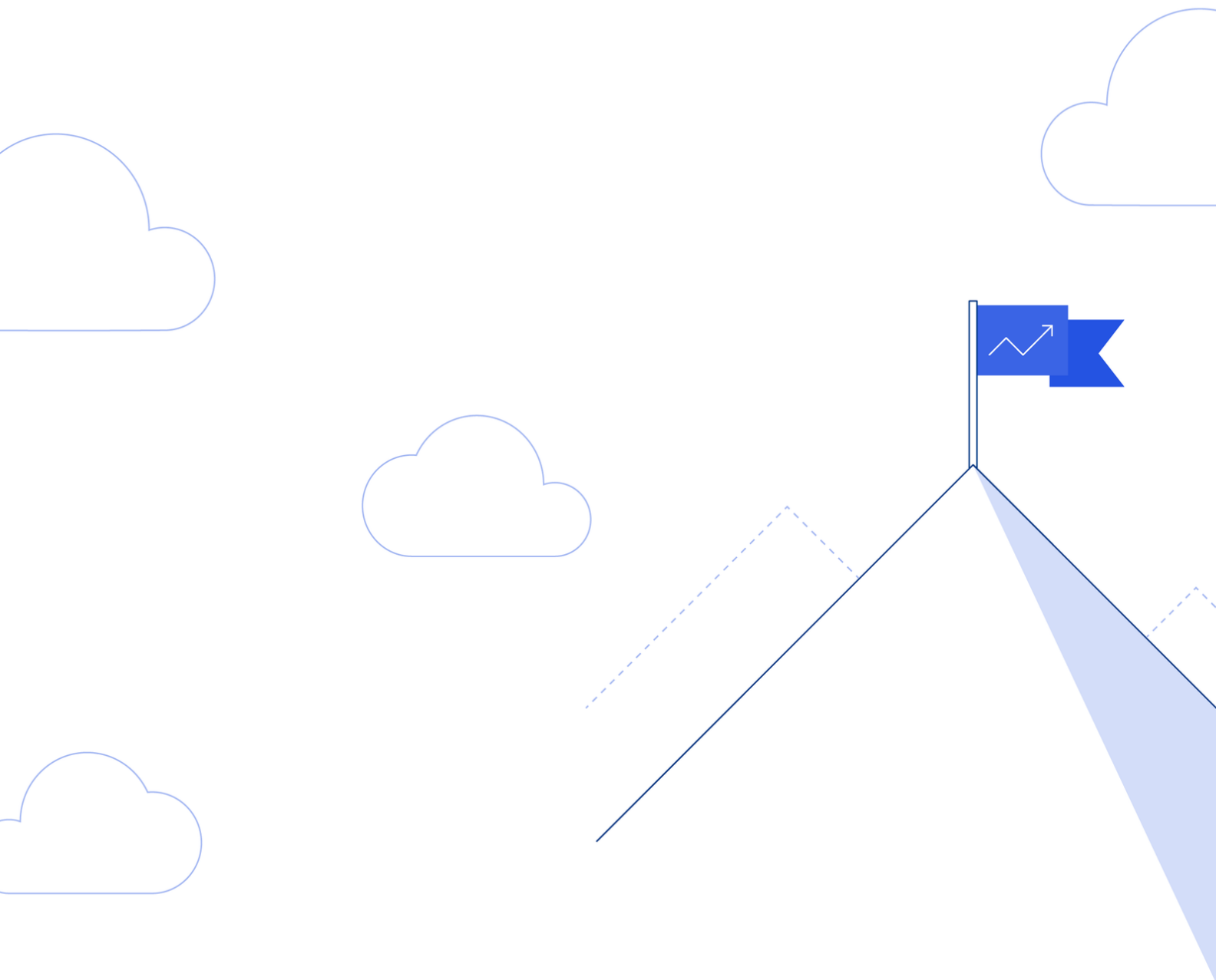
POP CORE

"A progression mechanic dramatically improves the number of times people login to a game and also extends the time users spend in-game."

Yury Bolotkin, Growth Specialist

An app a day

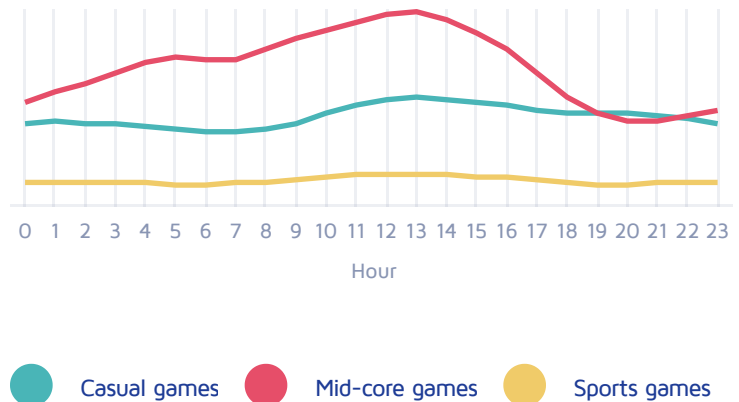
It's essential to know sessions and how often an app is used per day. But it's also crucial to know when your audience engages. Peak times offer a fantastic window of opportunity for reactivation campaigns. Timing a simple push notification to periods when you can be sure users are active in apps is a smart way to drive more users back to your app. The mobile industry is global, so the charts here display the total number of seconds an app is used, per day, to show you the hours when app users are most active (normalized across global timezones).





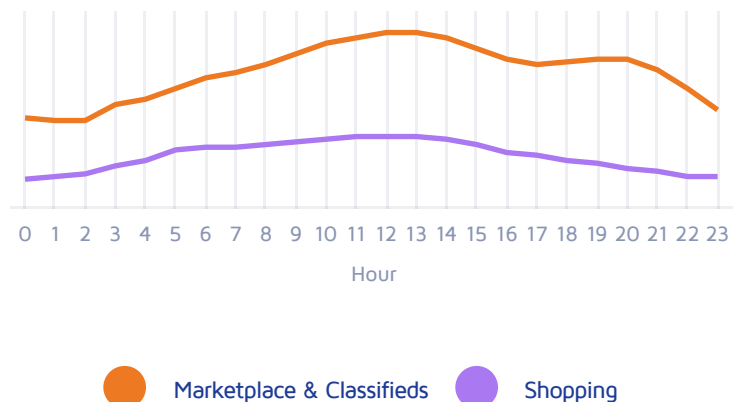
Gaming

Interestingly, usage of some apps doesn't shift significantly with the passage of time. This is the case for two of three Gaming app sub-categories: Casual and Sports. Casual game activity increases between 12 - 4 pm, but it's a modest jump of only 15%. Meanwhile, Mid-core games rise from very early in the morning (5 am) to peak at 1 pm.



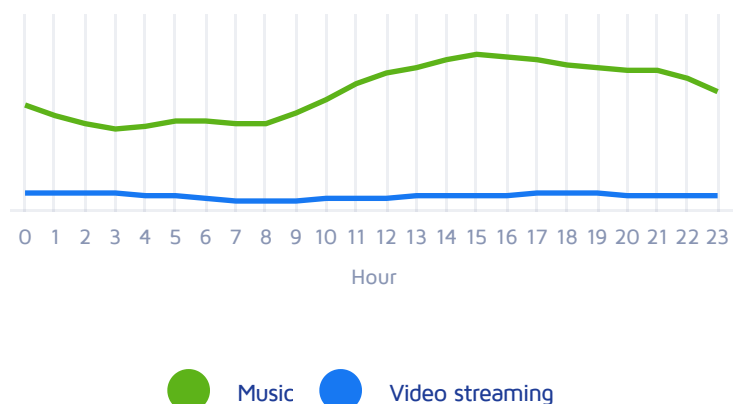
E-commerce

Marketplace apps continue their trend of higher use than Shopping apps. Of all, Marketplace accounts for 73% of the time spent in E-commerce apps overall. In the day, Marketplace apps receive the most traffic at lunch, but see a secondary peak at 8 pm. It's then that marketers should consider reaching users to act on the trend.



Entertainment

Entertainment apps have become our constant companion. Music apps see continuous use throughout the day, but mainly from 11 am - 11 pm. Video streaming apps maintain a consistent figure — most likely due to the smaller number of users in the dataset.





Engagement

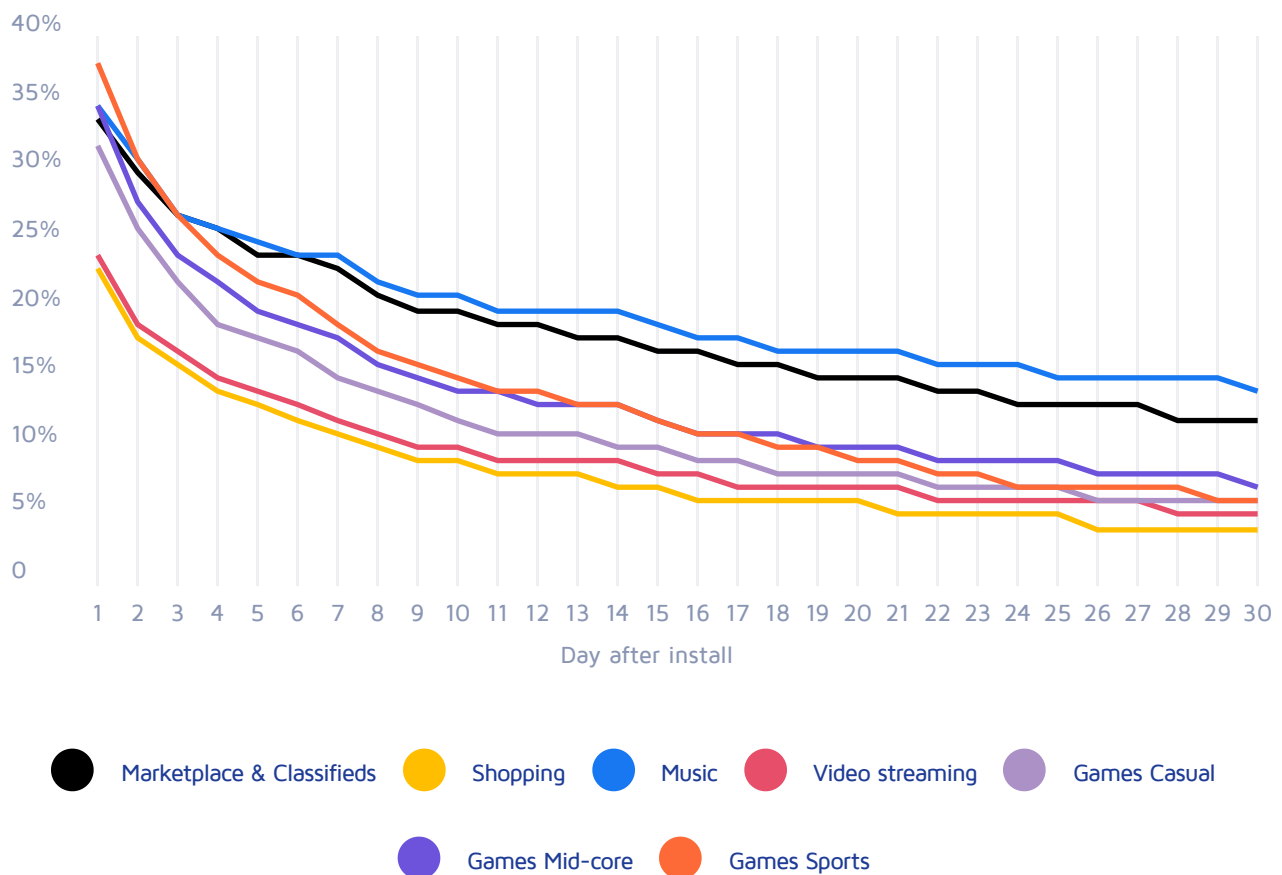
The pressure is on: marketers now need to be more resourceful with spend in a market where it costs more to acquire new users than retain existing ones. It makes business sense to move to a new, retention-focused model, one that maximizes lifetime value (LTV) through a mix of retargeting campaigns and re-engagement. But it's not that straightforward. Successful retargeting also requires marketers to move toward real-time personalization and more granular audience segmentation.

Marketers must also set realistic expectations for their retargeting campaigns. How frequently audiences use their apps depends on an enormous number of variables, ranging from the app category to the time of the year. One thing is for sure: not all apps are used daily and no app can retain 100% of users 100% of the time. This section provides insights into the retention curve, breaking down data by app vertical to help marketers set achievable user retention targets for 2020 — and beyond.

Coming back for more

Even the most addictive apps see users churn, but data shows the fall is not as steep for some as it is for others. An examination of the retention curve over 30 days, taken across 2019 and excluding reattributed sources, shows which app verticals are the stickiest, and which fail to keep their users.

Retention rates per vertical



KEY FINDINGS

Sports games retain best on Day 1, with 38% of users returning for another round. In comparison, **Shopping** apps retain poorly on Day 1, coming in at just 23%.

By Day 7, **Game** retention rates average 17%. **Marketplace** apps and **Music** tie, retaining 23.5% of users.

At the end of the cohort, **Marketplace** and **Music** app users are the most loyal. On average, 13% of users are interacting with the app on Day 30. By comparison, **Shopping** apps and **Video** streaming retain only 4.5% of users.

Notably, Marketplace apps retain well, tapping into the social aspects of shopping in order to improve stickiness. In the second issue of [LTV magazine](#), Yoann Pavy, Head of Digital Marketing at Depop, reveals the function of keeping a community is a driving force that has “flipped the traditional marketing funnel on its head.”

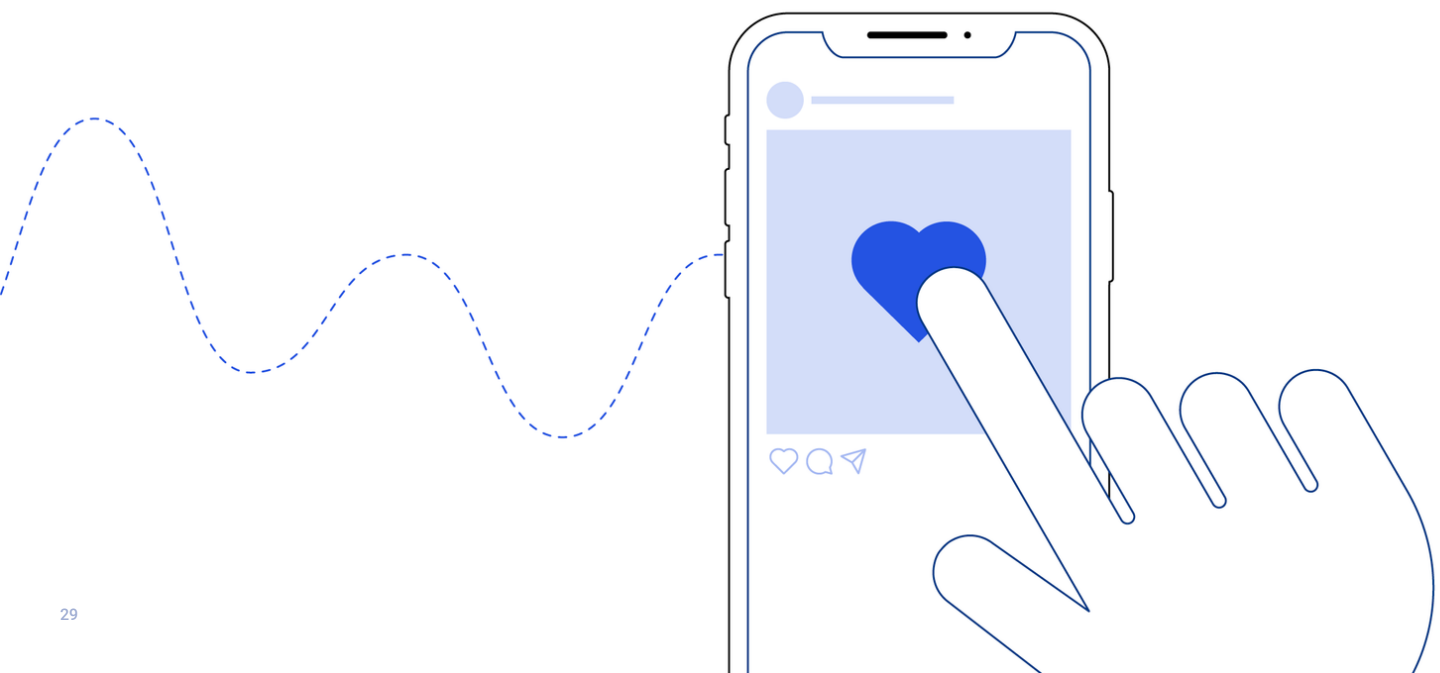


depop

“The fact that Depop is a social marketplace means users are going to come back on a daily basis to check what has been posted in the same way they would on Instagram, Twitter or Snapchat.”

Yoann Pavy, Head of Digital Marketing

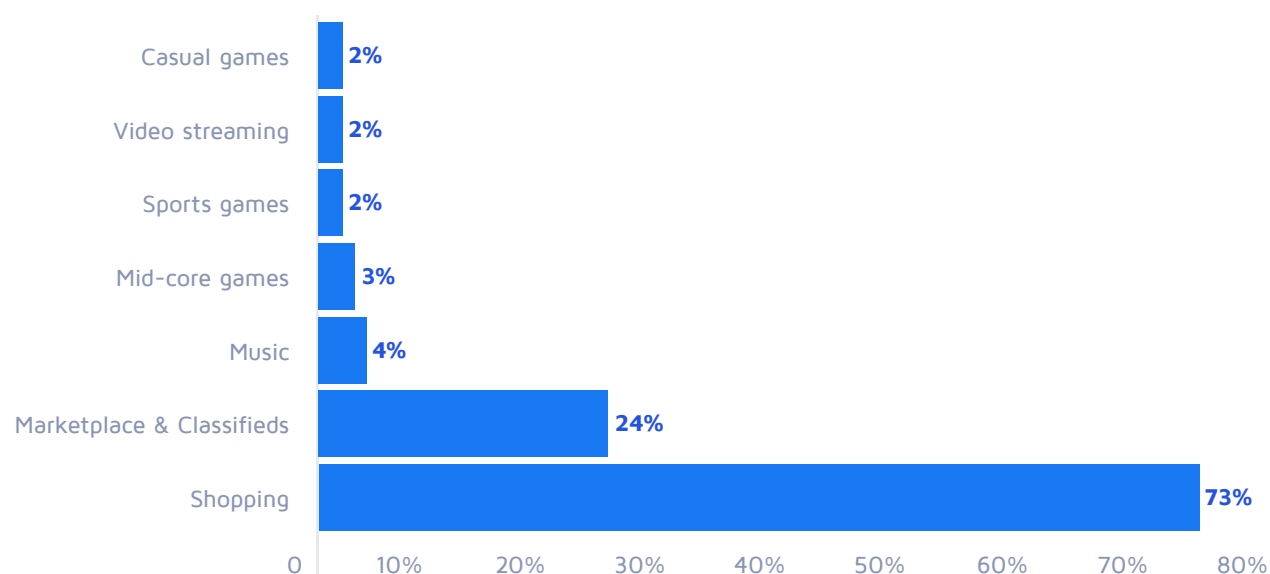
Shopping apps would do well to operate more like social media, if they want to increase stickiness and reduce the cost of retaining users. The same applies to the Gaming app vertical. The success of blockbuster titles, such as Fortnite, that turn gameplay into a community event, show the ability to play together is a powerful hook.



Re-engagement by the numbers

Retention marketing is a must, but it's not a given. Data shows all retention rates fall precipitously after Day 1, underlining the urgency of investing in efforts to re-engage customers. Acknowledging this research should prompt marketers across all verticals to take action. However, Adjust data shows that reality is quite different. Not all app verticals embrace retargeting — but those who do are heavy practitioners. The chart below displays the share of reattributions vs. attributions, revealing the app verticals that employ retargeting campaigns to drive customer connection and generate value.

% Share of reattributions vs. attributions

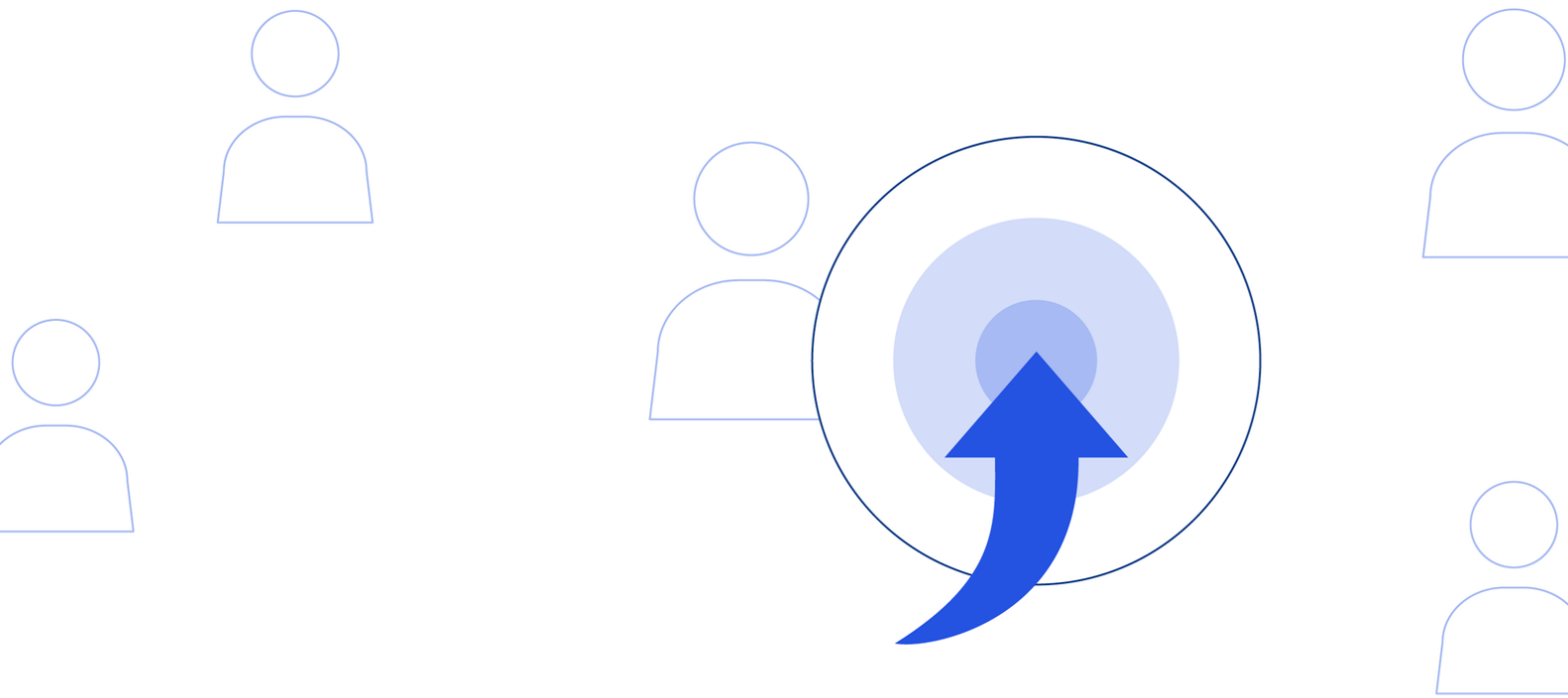


KEY FINDINGS

Shopping apps rely heaviest on retargeting: 73% of attributions for this vertical are a result of retargeting efforts. This makes sense if we consider the mission of apps in this vertical to win back lapsed users who abandon shopping carts, or simply present them with campaigns to clinch a sale.

Marketplace apps perform well when it comes to retaining users organically, bringing back a fair share of users from paid campaigns (24%).

Gaming and **Entertainment** drive an average 3% of users back to their apps via retargeting, showing the bulk of ad spend focuses on user acquisition.



In the App Economy, success isn't a numbers game; it requires strategies that get the right users into your app — and keep them coming back. It's here that the ability to personalize campaigns and communications is a must. But it's a massive challenge, demanding marketers evolve their ability to manage customer data and harness it to deliver experiences in real time that are matched to the consumer and their context. Brands such as [Nike](#) are well ahead of the curve, with CEO Mark Parker citing that a central aim of the company is "to be more personal at scale."

And marketers of all stripes should consider retargeting moving forward into 2020. Janos Perei, Chief Marketing Officer at Skill Yoga, views retargeting as an area that "many app developers are overseeing."



skillyoga

"For retargeting to work, there has to be a dedicated, campaign-specific offer. Without a good deal tied to the retargeting campaign your retargeting will not work well. Users need and expect something extra special."

Janos Perei, Chief Marketing Officer



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ABOUT ADJUST

Adjust is a global B2B SaaS company. Born at the heart of the mobile app economy and grown out of a passion for technology, the company now has 16 offices around the world.

Adjust's platform includes measurement, fraud prevention, cybersecurity and marketing automation products. Together, they make marketing simpler, smarter and more secure for the 32,000 apps working with Adjust. Global leading brands including Procter & Gamble, Rocket Internet and Tencent Games have implemented its solutions to secure their budgets and improve results.

Last year, the company secured one of 2019's largest funding rounds in Europe, raising nearly \$230 million.

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