



2020 Mobile App Trends Report

A New Era for the App Economy



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Introduction

The 12 months we recount in this report will likely be remembered as the most disruptive and demanding in our modern times. Mandatory shutdowns emptied streets and interrupted school for [nearly 1.6 billion](#) students. The outcome was an explosion of activity and interaction like no other as people everywhere relied more than ever on mobile and apps to access essential services and enrich their lives. Global events combined to “[change consumer behavior on mobile forever](#),” according to app store intelligence provider App Annie. It’s just the tip of the iceberg.

An exodus of consumers to digital safe spaces on mobile and in apps has accelerated change and transformed entire industries. A prime example is e-commerce, which has been catapulted [more than four years into the future](#) in just under four months. In-app shopping activity shot to new heights, and installs in Europe alone grew by more than one-third. Fintech app downloads surged and usage rocketed by [as much as 85%](#) in the U.S. as people “[ditched in-person banking for apps](#).”

In the meantime, other activities, such as remote working, have emerged to shape society and new habits. Video and chat apps that allow teams to stay connected shot into the stratosphere. And, on [a single day in March 2020](#), users downloaded the Zoom video conferencing app more than 2.1 million times.

From money spent to time spent, the global App Economy saw the biggest growth in its history.

- Consumers downloaded nearly 35 billion new apps in Q2 2020. ([App Annie](#))
- Global app revenues crossed the \$50 billion mark in the first half of 2020, up nearly 25% from the second half of 2019. ([Sensor Tower](#))
- App usage soared, and the average time spent in apps increased by 20 minutes per day compared with Q2 2019. ([Strategy Analytics](#))

But not every app category is raking in the revenues. For struggling app categories such as travel, hotel and ride-sharing, app launches are down "as much as 60-80%." There are also signs that appealing app categories, such as entertainment and gaming, are losing steam as lighter wallets depress spend.

During a time of disruption, we benefit from guidance and expert insights. This report combines Liftoff internal data with app market intelligence, user engagement and retention metrics across a variety of app categories (E-Commerce, Finance, Gaming, Social, Travel, Utility) and regions (APAC, EMEA, LATAM and North America) to provide marketers a more holistic view of key trends, triggers and outcomes. This report also surveys app marketing experts to highlight the impact of unforeseen change (the spread of COVID-19 and the decision by Apple to effectively disable IDFA) on their business and budget allocation.

We want to thank our partners for contributing their data and insights, equipping marketers to power sustainable growth and engagement as they prepare to write the next chapter in marketing.

With data from

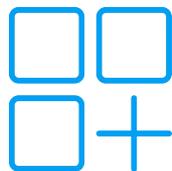


APP ANNIE



Methodology

Liftoff's Date Range: Sept. 1, 2019 - Aug. 31, 2020



1,051

Apps



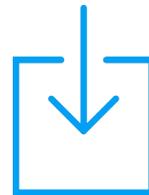
623B

Impressions



8.8B

Clicks



381M

Installs



478M

First-Time Events

The Shifting App Economy

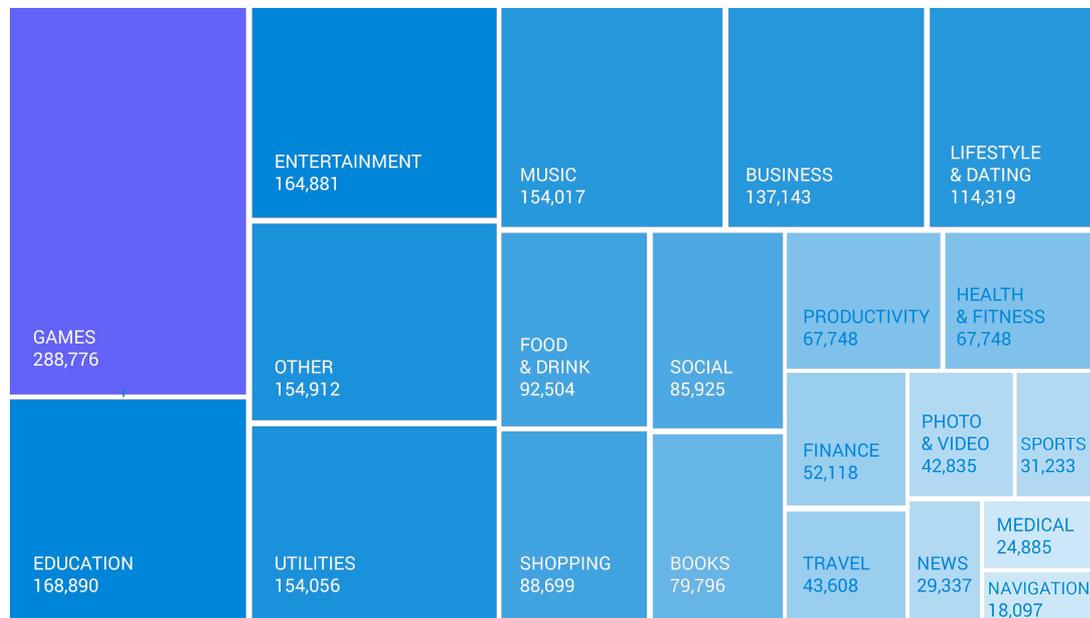
New app releases hit the 2 billion mark while audiences flock to app categories that allow them to spend time (and money) on their terms. Social, entertainment and gaming apps rake in revenues, education soars, and travel feels the squeeze.



Apps Released Between Q3 2019 and Q2 2020 by Category

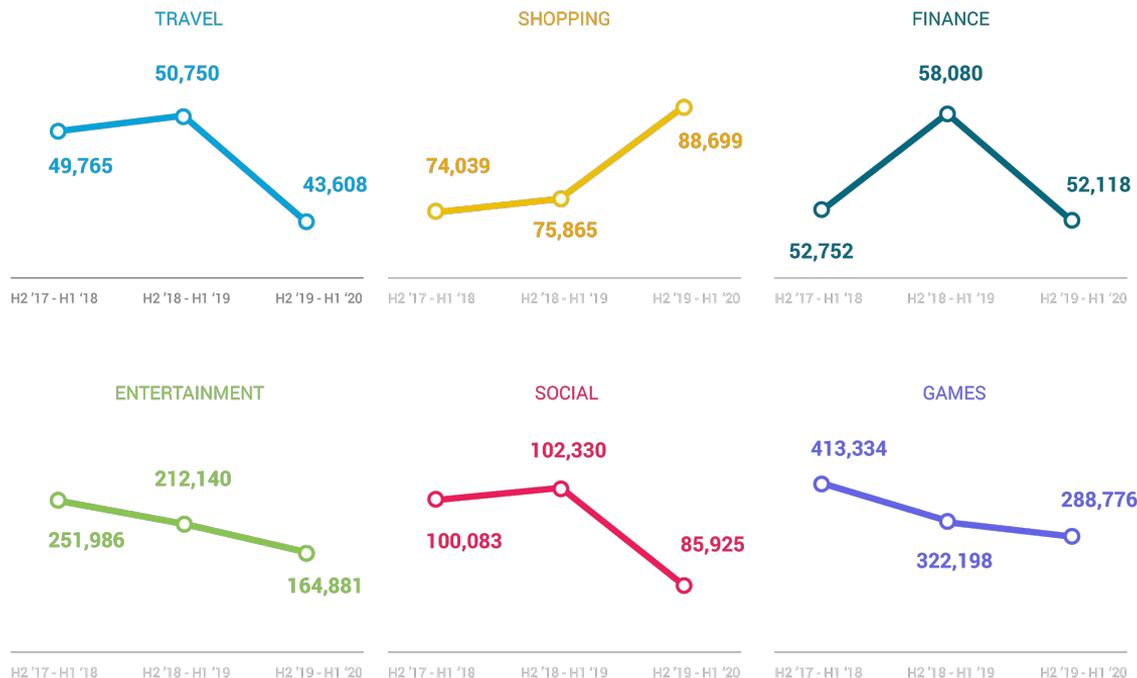
Total: 2,059,000

New app releases surpassed the 2 billion mark but show signs of slowing. Gaming is the largest category (14%) of releases, but education apps soar 8% driven by mandatory school and campus closings.



The decline in new app releases suggests some categories are running low on inspiration. But a 17% increase in new shopping apps shows brands and retailers are just getting on the bandwagon.

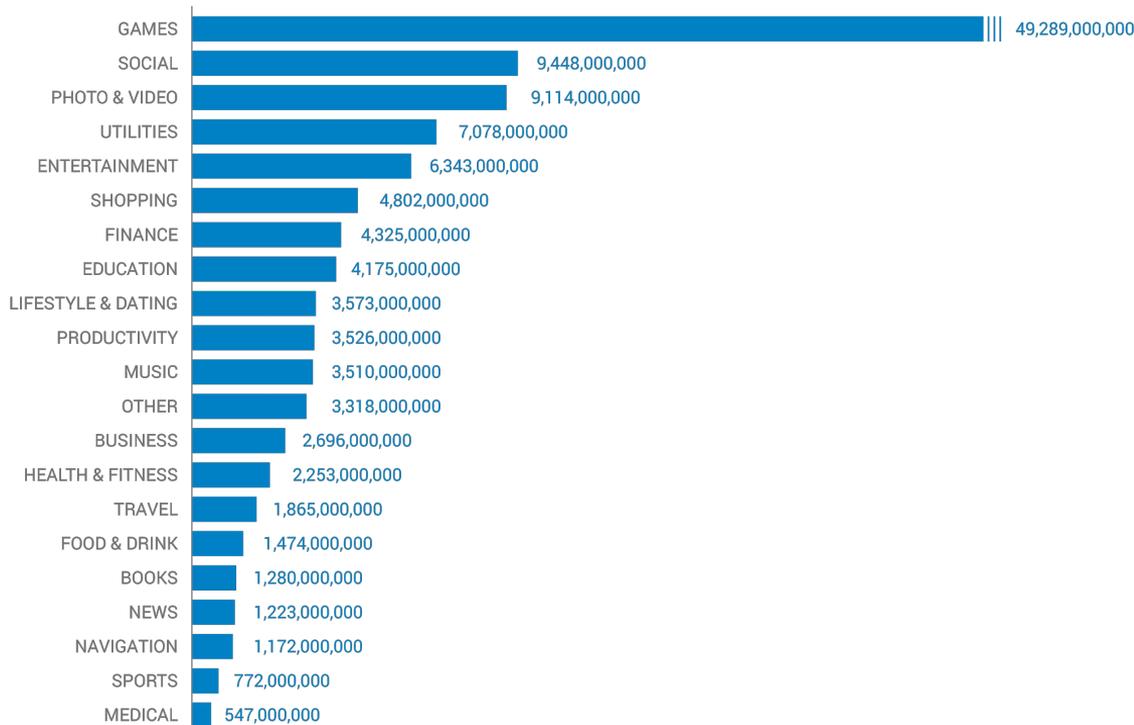
New Apps Added by App Category YoY



Source: App Annie

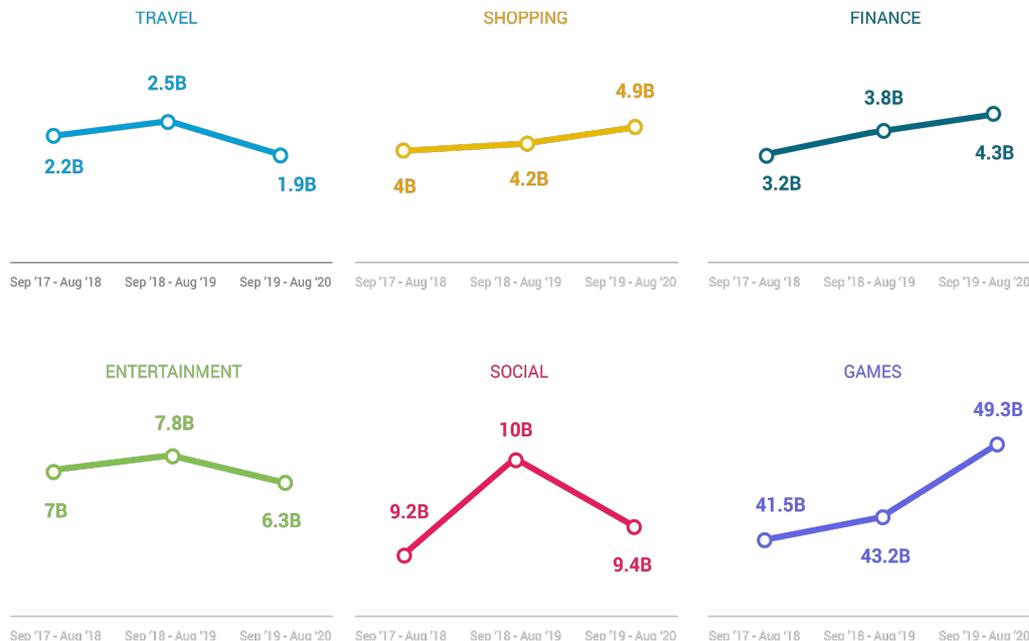
App download numbers show signs of slowing. Total download numbers (121.7 billion) are flat (-0.51%) compared to the previous year.

App Downloads by App Category, Sept 2019 - Aug 2020



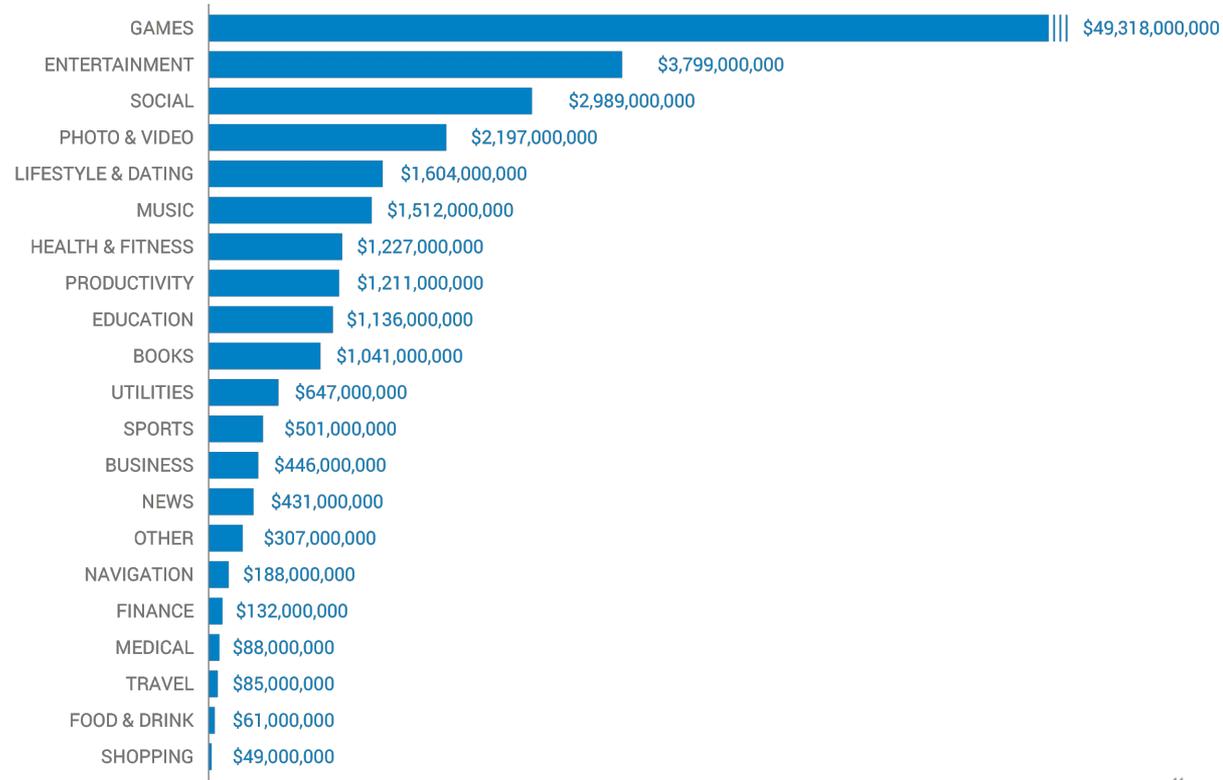
Downloads for some app categories have flattened or fallen due to the pandemic. But others, like gaming, shopping and finance, have hit all-time highs.

App Downloads by App Category YoY



Revenues generated by gaming apps outpaced all other categories combined. Shopping and food & drink list last as their revenues do not pass through app stores.

iOS App Store and Google Play Store Revenue by App Category, Sept 2019 - Aug 2020



The lockdown put the squeeze on travel apps (-34.6%). But social (+20%), entertainment (+15.2%) and gaming (+8.9%) generate impressive revenues as consumers confined to quarters pursue new pastimes.

iOS App Store and Google Play Store Revenue by App Category YoY



Source: App Annie



“ Apps are the connective fiber of your business, providing seamless, personalized experiences across both physical and digital contexts. ”

Skye Featherstone - Product Marketing Manager

A new wave of brands are turning to apps to discover new growth in response to rapid social and economic changes. As Skye points out, “from fitness to financial services, brands from every industry are reimagining how apps can drive key business results, not just luxury metrics. To succeed, app marketers need to focus on differentiation to cut through the competition.” Given branding budgets can recede during times of uncertainty, app marketers have been “thrown into the spotlight, now more than ever, to do the heavy lifting of customer growth and retention through performance marketing.”

Snap Inc. is a camera company. Snap believes that reinventing the camera represents their greatest opportunity to improve the way people live and communicate. Snap contributes to human progress by empowering people to express themselves, live in the moment, learn about the world, and have fun together.



Assessing the impact of COVID-19

The global pandemic highlights the importance of marketing and the majority of marketers stay the course, increasing or maintaining spend. Revenues climb for many marketers and access to highly engaged audiences is a bonus.



Survey results reveal unforeseeable events have propelled positive outcomes for most marketers.

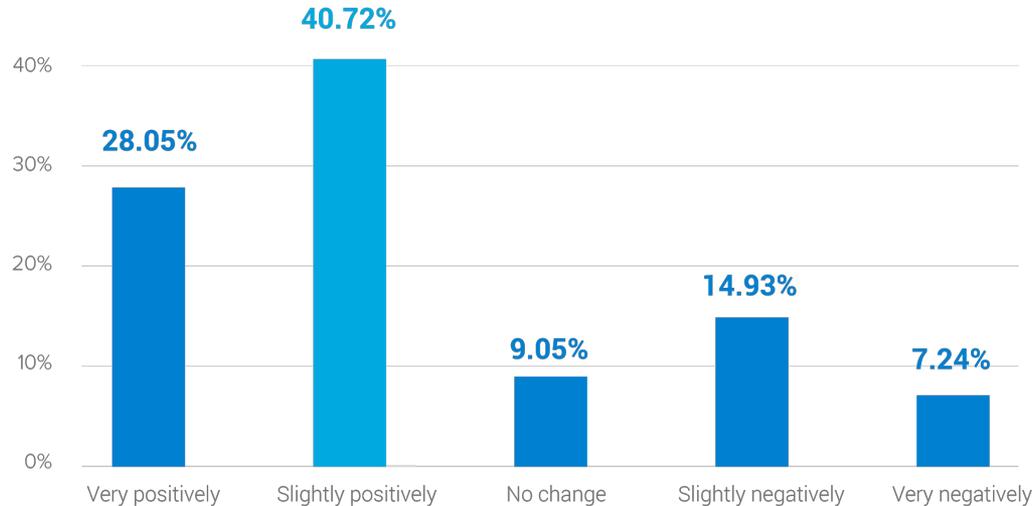
Global management and consulting firm McKinsey sees light at the end of the tunnel. It reports consumer behaviors are settling into [a new normal](#) as people everywhere learn to live with the reality of COVID-19 and more countries reopen parts of their economies. The impact on businesses has been transformative, and sometimes tragic. Some industries, such as travel, brace for losses set to [cross the \\$1 trillion mark](#). Others, such as fitness, have evolved. Forbes reports fitness apps downloads are up [by 146%](#) compared to last year thanks to improvements in business models and the introduction of mobile video.

So, what is the initial impact of unforeseeable events in the macro-environment on app marketers' strategies and spend? Our global survey of 230 marketers, many of them [Liftoff Mobile Heroes](#) (marketing experts recognized for their user acquisition expertise and success), suggests respondents have not just weathered the storm. Significantly, the majority of respondents have emerged stronger and share a positive view of the overall impact on budgets and their bottom line.

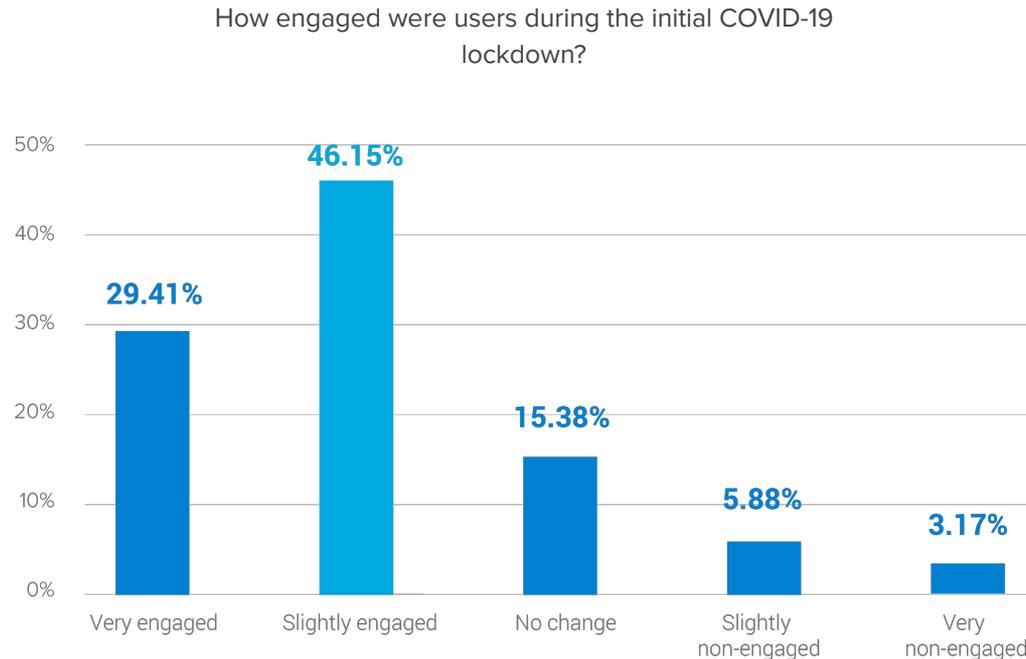
We draw from this survey data to provide a snapshot of the measurable impact of COVID-19 on campaigns and shine a light on how marketers are adapting to change. In unpredictable and experimental times, there isn't a playbook to follow. So, marketers are leading with decisions that drive results.

The pandemic had profound impact on most businesses, but not negative consequences for UA efforts. The vast majority of marketers (69%) reported a positive influence on their campaigns.

As a general sentiment, how did the effects of COVID-19 impact your user acquisition campaigns overall?

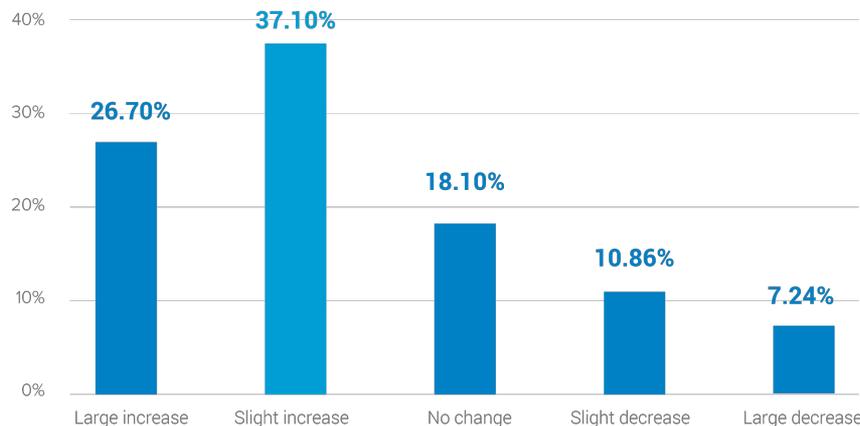


Audience desire for connection, communication and new pastimes was a bonus, providing 75% of marketers access to more highly-engaged users from the get-go.

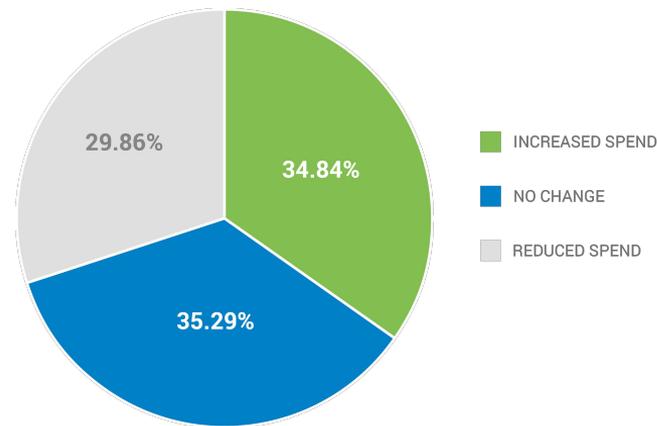


The pandemic brought a windfall of profits and a positive impact on the bottom line. The majority of marketers (64%) recorded an increase in revenues, and nearly 35% increased budgets to grasp the opportunity.

How did the effects of COVID-19 impact your app's revenue?



How was your marketing budget affected by COVID-19?



User Acquisition Trends

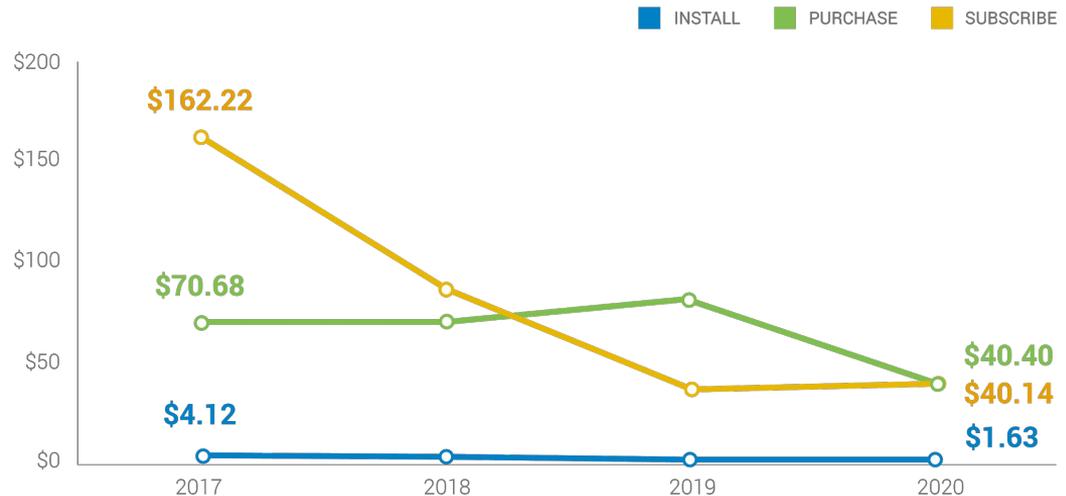
CPIs hit a new low and conversion rates for purchase and subscription converge somewhere in the middle. A breakdown by app category shows finance and e-commerce apps offer marketers impressive results at an affordable price. But longer time-to-action rates suggest marketers have to do more to drive habitual usage and deliver value.



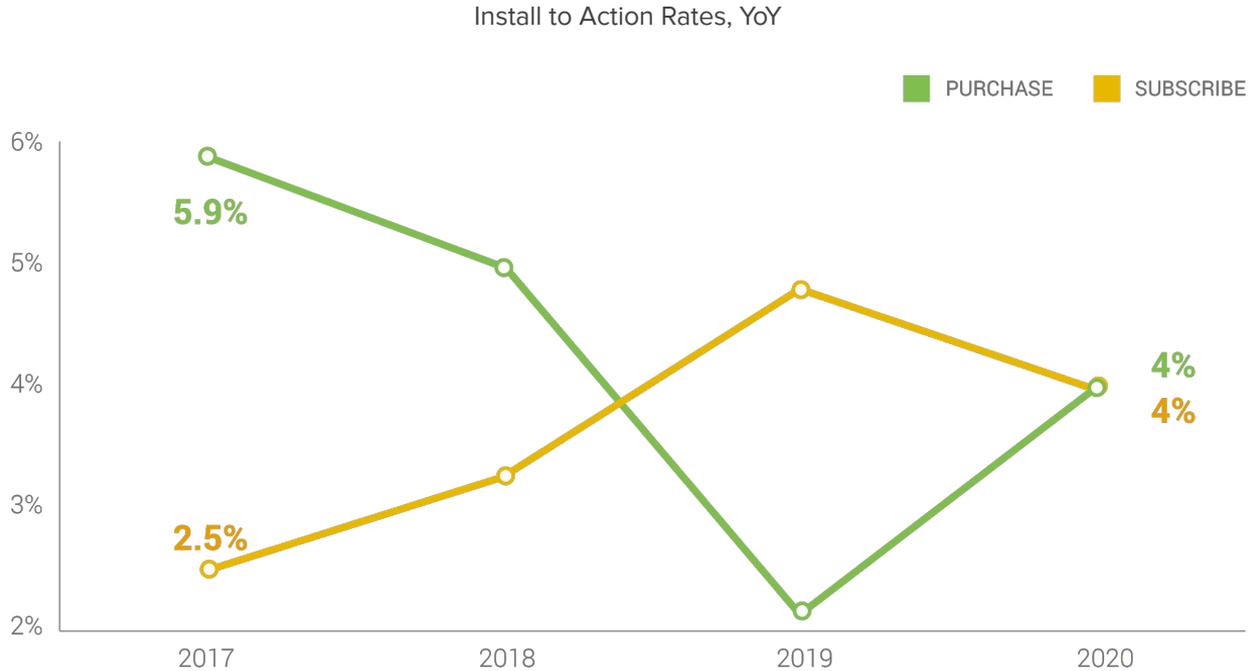
CPIs hit a record low and purchase costs reach their most affordable levels. But the rising cost of acquiring a subscriber suggests marketers must do more to convince users to commit.

- **Install:** CPIs hit their lowest rate ever at \$1.63, down nearly 7% from the previous year (\$1.75).
- **Purchase:** The e-commerce explosion, accelerated by the global pandemic, allowed marketers to acquire purchasers at affordable prices. At \$40.40, costs were down 46.3% compared to the previous year (\$75.22).
- **Subscribe:** Lighter wallets appear to have curtailed commitment to pay recurring costs. At \$40.14, costs jumped 10% compared to the previous year (\$36.39).

Cost by Action, YoY

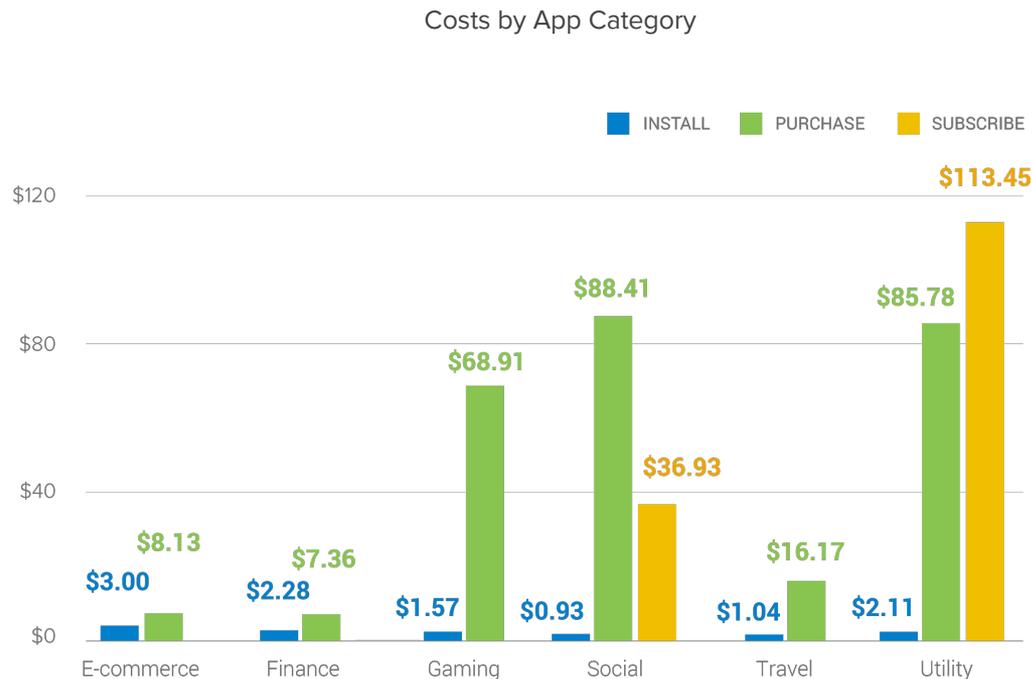


Conversion rates for purchases rise and rates for subscriptions drop. But engagement rates for both actions converge at 4%.



E-commerce and finance apps are a bargain, offering moderate CPIs and the lowest purchase costs.

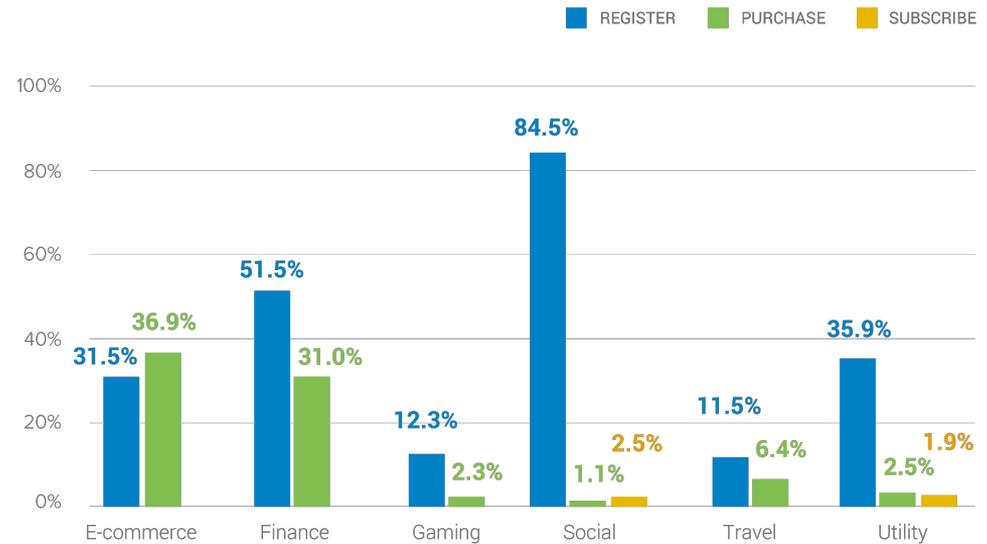
- **Install:** CPIs for social (\$0.93), travel (\$1.04) and gaming (\$1.57) come in at an average of 27.6% lower than the \$1.63 benchmark for all app categories combined.
- **Purchase:** Purchase costs for gaming, social and utility apps are up to 2x the average cost of \$40.40. Significantly, costs for e-commerce and finance are attractive, at 5x lower than the average figure.
- **Subscribe:** Costs for utility apps (already at the high end of the scale for purchase) are a whopping \$113.45, nearly 183% more expensive than the overall average (\$40.14).



E-commerce and finance apps offer the highest conversion rates for a moderate cost. Social presents marketers with a mix of challenges and rewards, combining the highest engagement rate for register (84.5%) and the lowest for purchase (1.1%).

- Register:** Marketers appear to excel at driving registrations, scoring high conversion rates across most categories. Gaming (12.3%) and Travel (11.5%) come in at the lower end of the scale, suggesting campaigns fail to resonate with audiences.
- Purchase:** Install-to-purchase rates for e-commerce (36.9%) and finance (31%) are impressive, offering marketers exceptional value for money. Social apps show the biggest decline (-98.7%), followed by gaming (-81.3%).
- Subscribe:** Utility apps combine the highest costs with the lowest install-to-subscribe rates.

Install-to-Action Rates by App Category

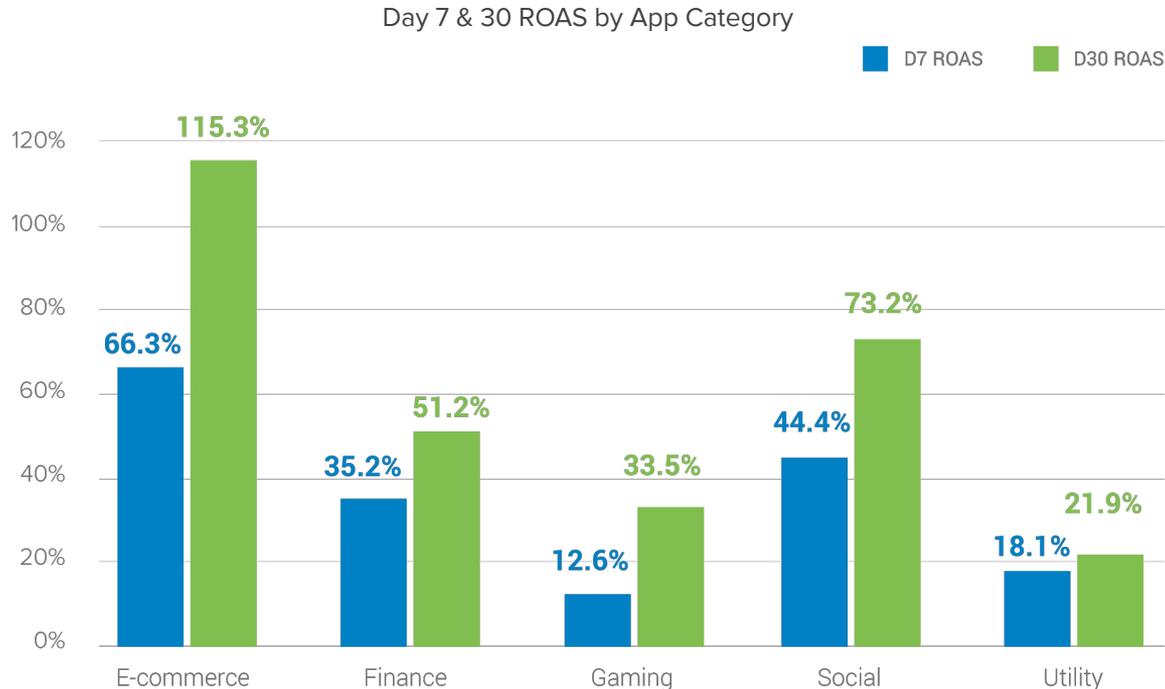


Install-to-Action times suggest audiences downloaded apps that helped them spend time (social) or enjoy time (entertainment) with high intent.

At 5 minutes, education app users converted the fastest, a rate undoubtedly impacted by mandatory school and campus closures that prevented 1.6 billion students from attending school in person. Higher install-to-action times for e-commerce apps suggest marketers must do more to prime purchasers. It's a similar story for gaming apps, a category where users are weighing their options before making an in-app purchase.



Gaming and utility apps offer the lowest Day 7 and Day 30 ROAS, while e-commerce, social and travel apps reach higher percentages on both days.

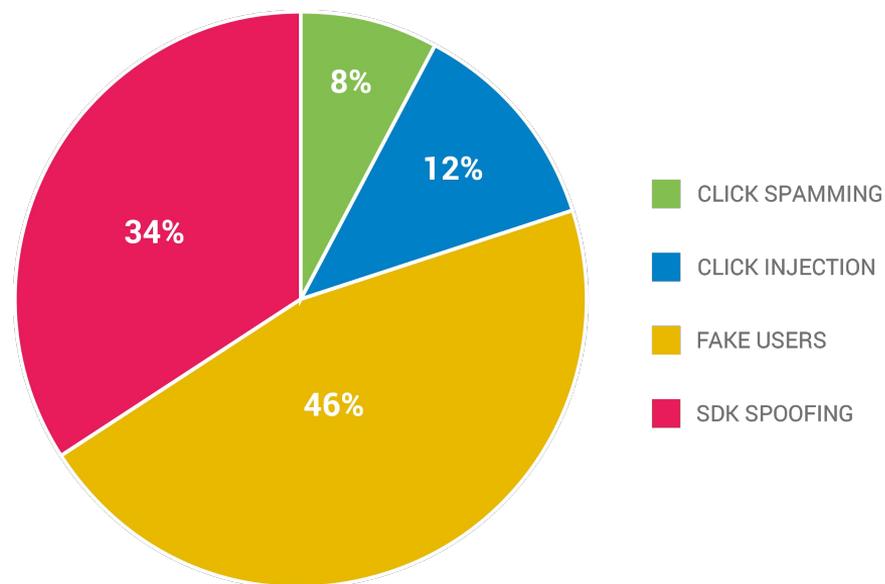


Fake Users account for nearly half of all mobile ad fraud detected by Adjust

Mobile measurement and fraud prevention company [Adjust](#) draws from data around the 189 million fraudulent installs rejected by its Fraud Prevention Suite (FPS) from January to August 2020 to highlight the most common forms of mobile ad fraud.

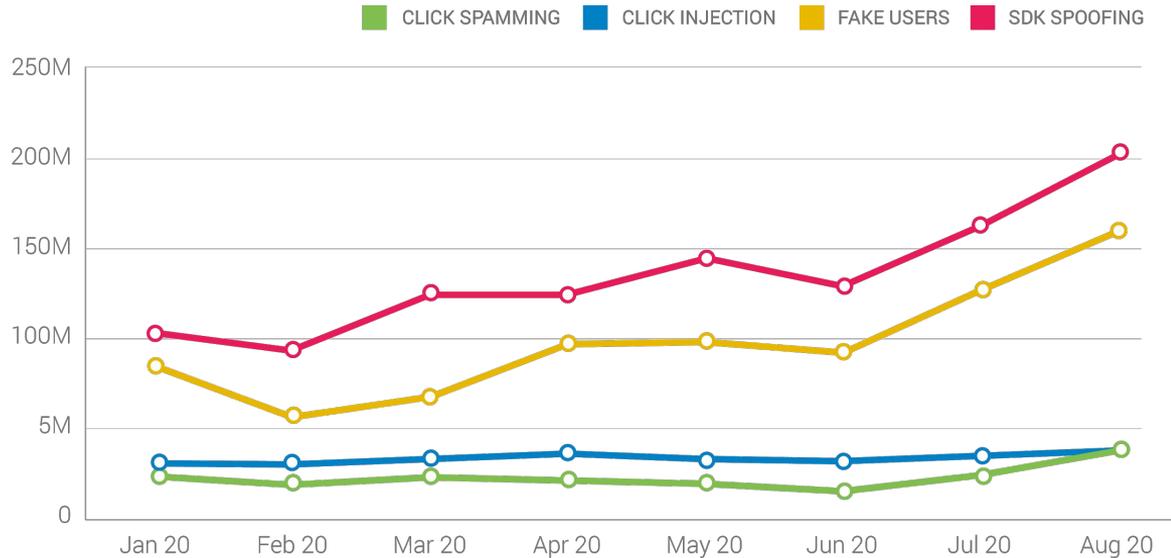
Significantly, Fake Users—that emulate clicks, installs, and in-app events, causing advertisers to pay for an activity that is not completed by a real user—continue to account for the majority of ad fraud detected by Adjust’s FPS, reaching 46% up from 40% the previous year.

Distribution of fraud types detected by Adjust’s Fraud Prevention Suite



Adjust reports mobile ad fraud types are rising. It's a dangerous dynamic that calls on marketers to ask questions, audit sources and be vigilant.

Rejected installs by Adjust's Fraud Prevention Suite based on fraud type



“ Ad fraud remains an underappreciated problem in the mobile advertising ecosystem. ”

Pola Vayner - Team Lead, Fraud Specialists



Marketers must safeguard their brands and their revenues, and it starts with understanding the different types of ad fraud and the actions they can take. This is where Adjust data provides insights into the most prevalent types of ad fraud, highlighting subtle shifts in percentages which can have a huge impact on what marketers need to know and combat.

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. They make marketing simpler, smarter and more secure for the 40,000 apps working with Adjust.



Seasonal Trends

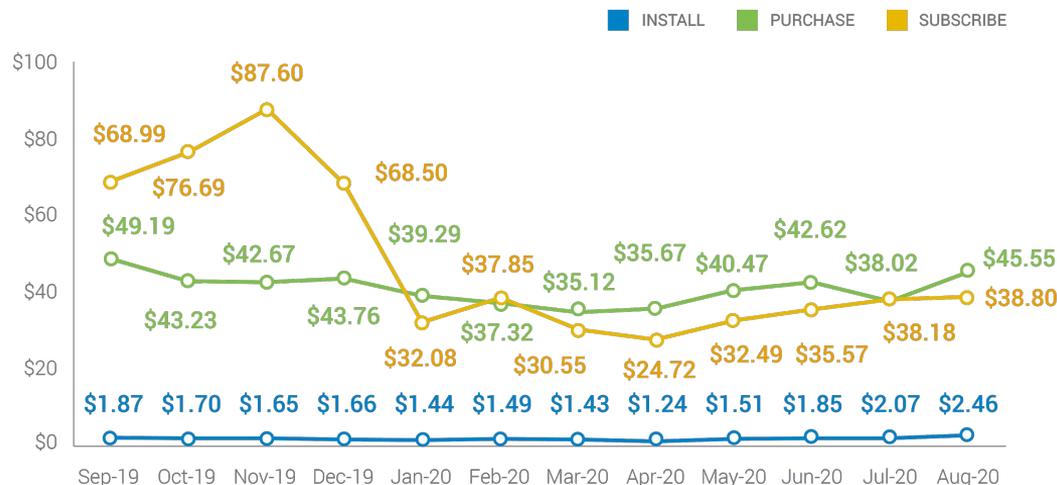
Lockdown measures force a new dynamic in Q1 2020 when CPIs drop and purchase activity explodes. June sees costs climb across the board. But rising engagement rates for purchases and subscriptions signal strong consumer confidence and signify value for money.



Across the board, costs are rising after hitting a record low in the midst of the pandemic.

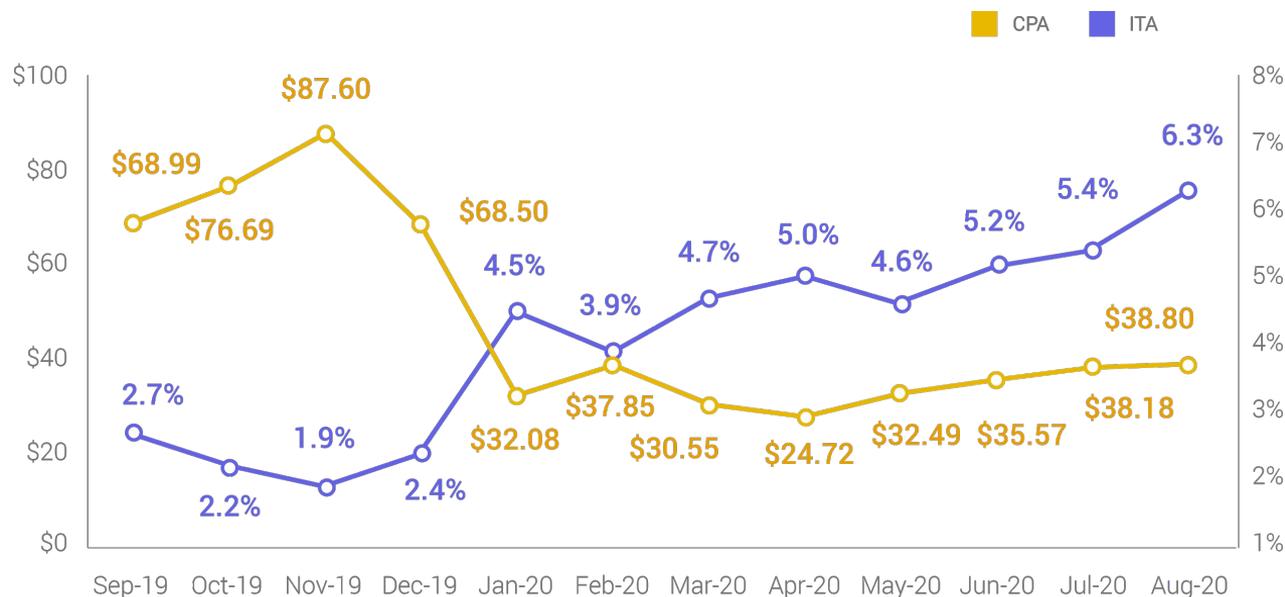
- Installs:** CPIs are rising after COVID-19 lockdowns in April fuelled record downloads.
- Subscribe:** Notably, costs for subscriptions, which started significantly higher in November, dropped 3x to their lowest point in April (\$24.72). Since April, prices continue to rise (by \$14.08 or 57%) to hit a high of \$38.80, suggesting the initial drop due to COVID-19 has run its course.
- Purchase:** In contrast to subscriptions, purchase costs show less volatility throughout the year. Between April and August, costs differ by less than \$10, suggesting consumers' interest in shopping is constant, not seasonal, and not adversely affected by COVID-19.

Average Monthly Costs

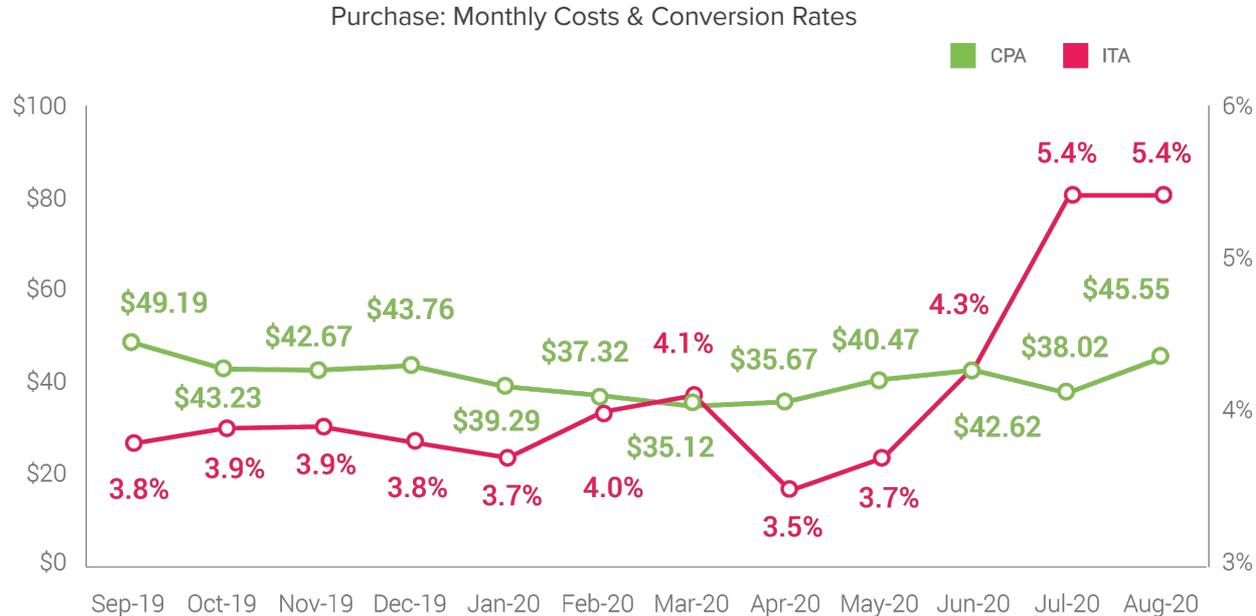


Impacted by global lockdown measures, conversion rates get a boost from January onwards, increasing steadily (roughly 0.4 percentage points) month-to-month. Meanwhile, subscription costs heat up from April to hit an 8-month high of \$38.80.

Subscribe: Monthly Costs & Conversion Rates



Costs and conversion rates converge in February and March when mandatory lockdown measures ignite a commerce explosion. Engagement levels rebound to reach significant heights in July and August, suggesting shoppers' confidence is growing strong.



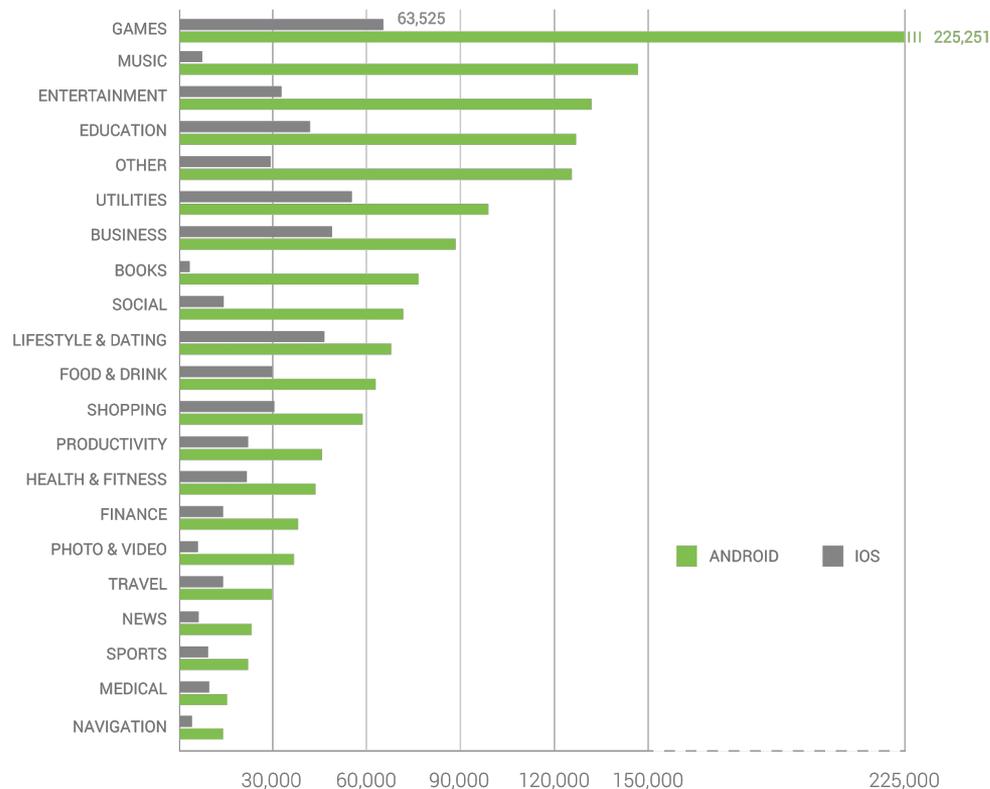
Platforms

2020 was a banner year for Android, which chalked up more new app releases, more volume and more shoppers than iOS. But it's not the hands-down winner on all counts. iOS delivered greater revenues, impressive conversion rates and stronger retention rates across the board.

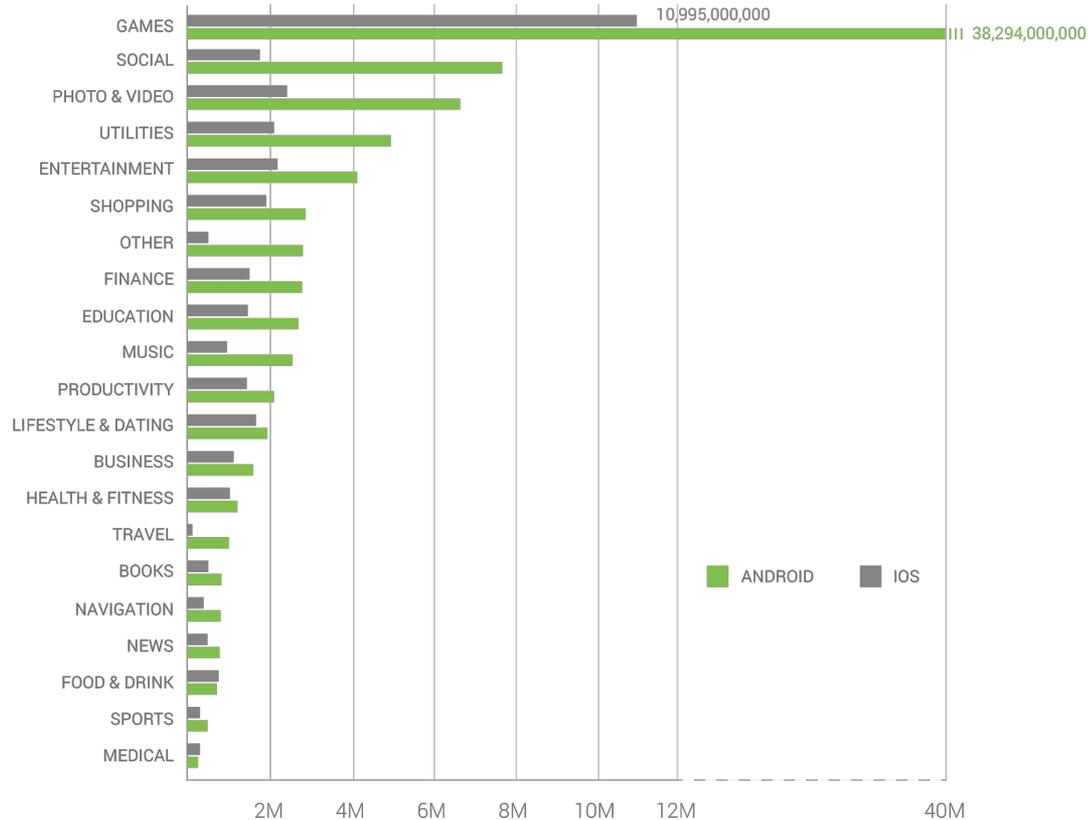


In 2020, Android is the platform where the action is. New app releases on Android outpaced iOS by a ratio of 3 to 1.

Apps Released by Platform

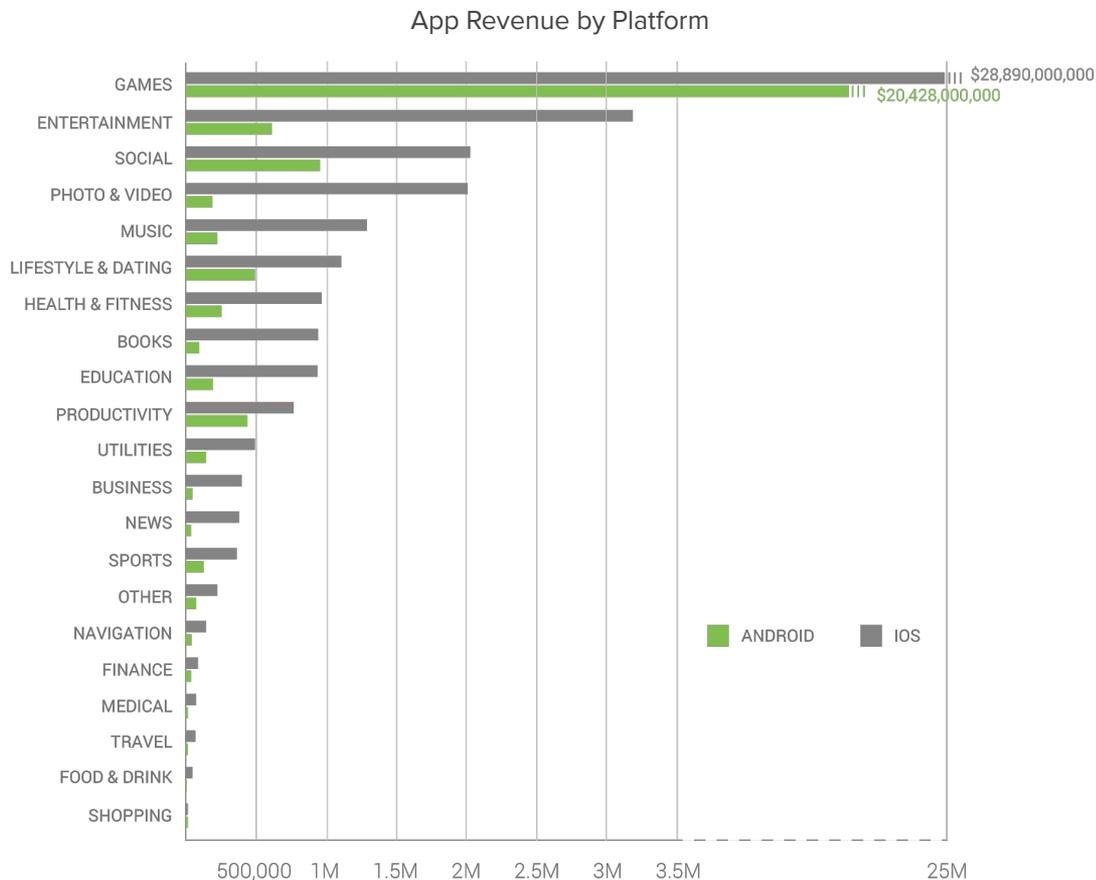


App Downloads by Platform

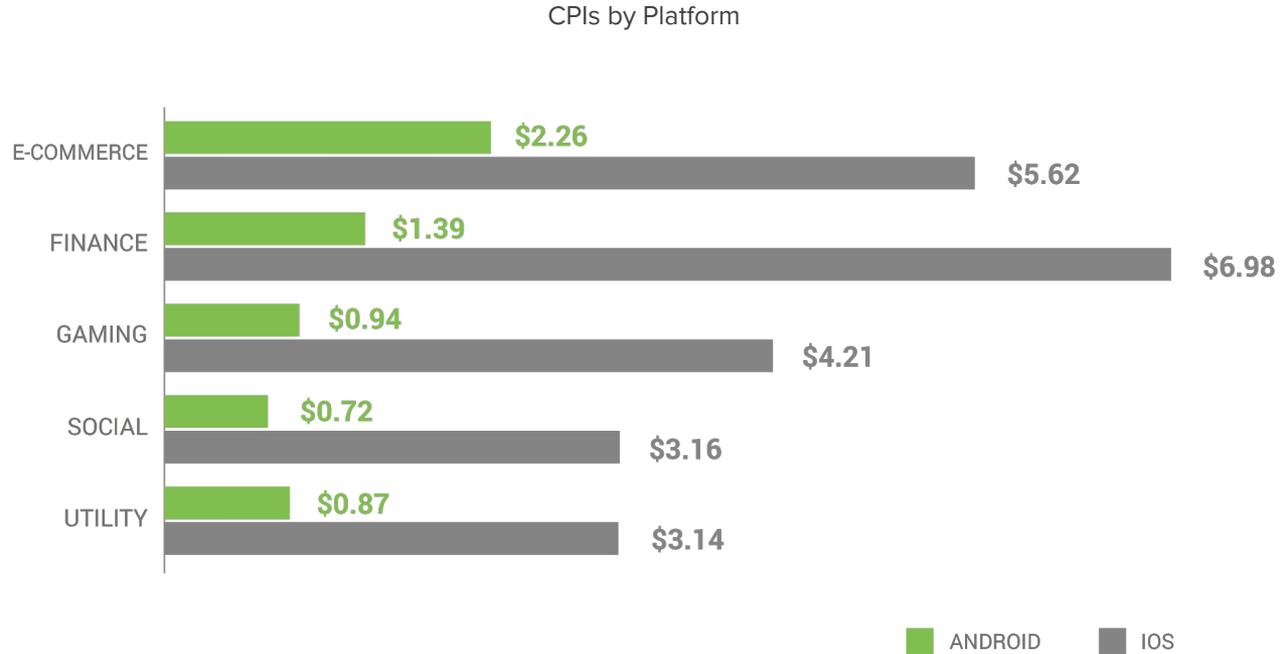


Android offered marketers massive volumes, chalking up 152% more app downloads than iOS.

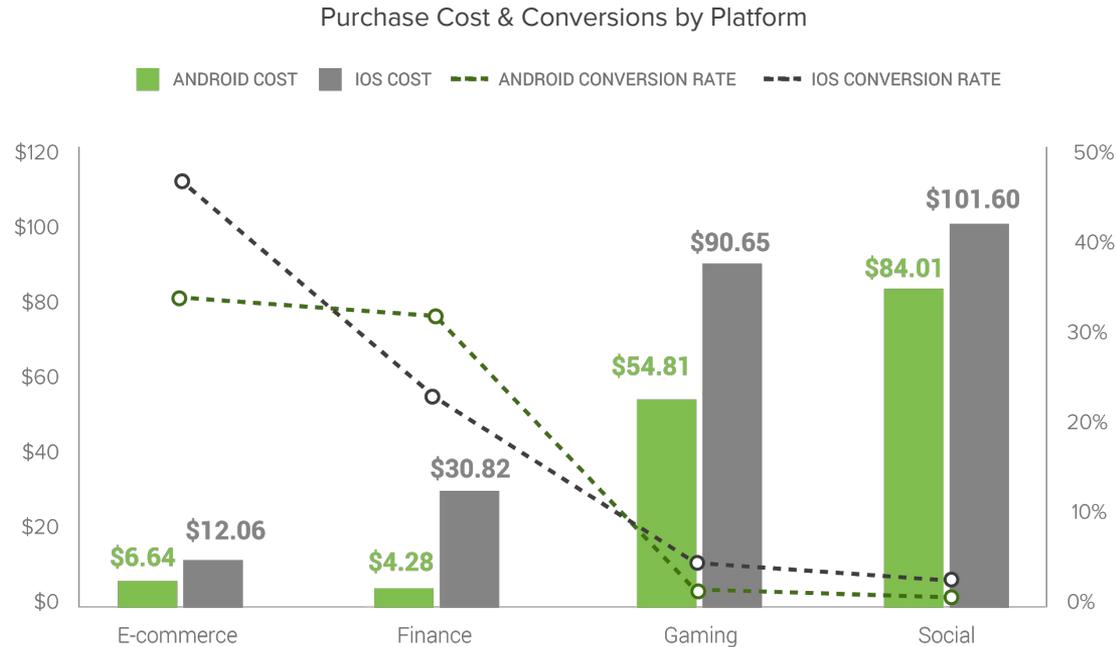
In 2020, marketers drove more downloads on Android, but they made more money on iOS. In total, revenues generated on iOS topped Android by 82%.



CPIs on iOS are, on average, 4x higher than on Android.

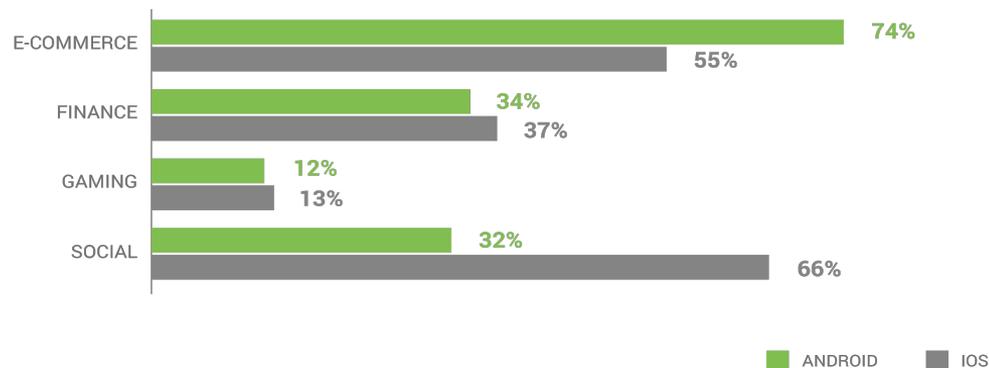


Higher purchase costs (135%) for iOS can be daunting. But a closer examination of conversion rates reveals iOS offers significant value for money, surpassing Android in high-growth app categories including e-commerce, gaming and social.

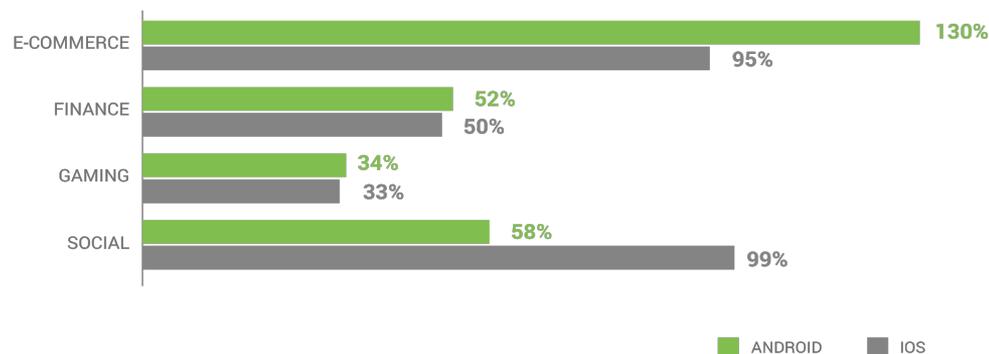


E-commerce apps offer exceptional ROAS, and Android delivers a dividend (130%) by Day 30. Interestingly, finance and gaming apps on Android lag behind iOS on Day 7 but pull ahead by a similar margin to offer favorable ROAS on Day 30.

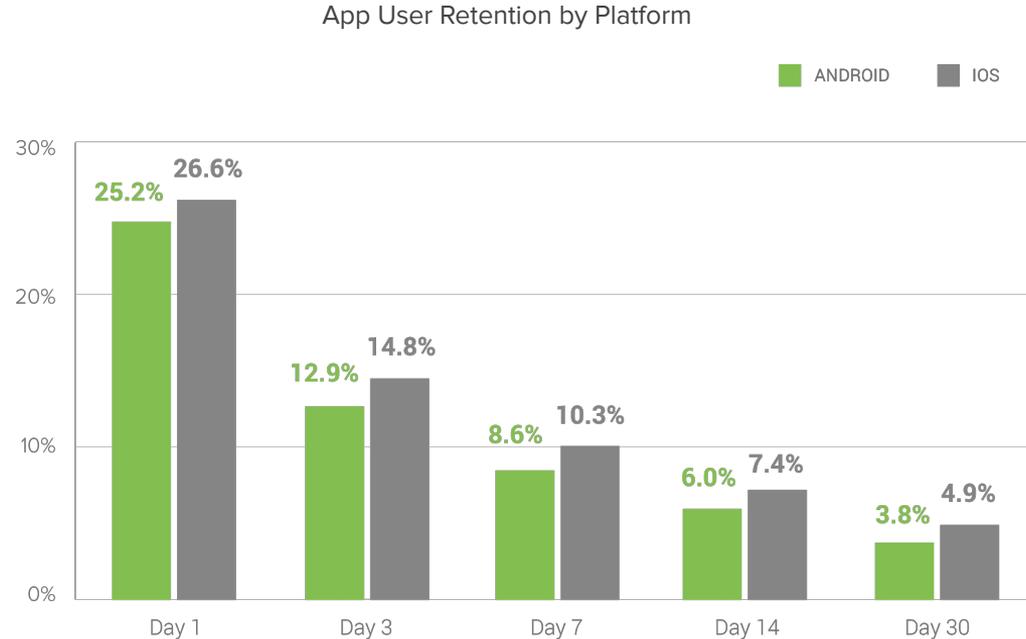
Day 7 ROAS by Platform

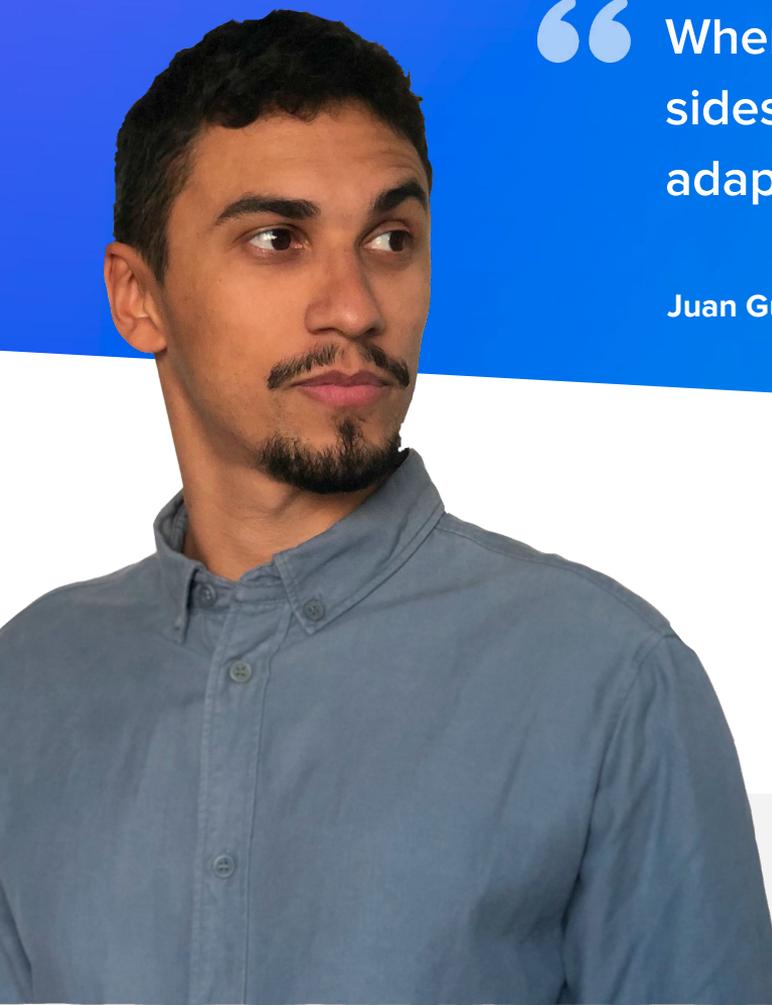


Day 30 ROAS by Platform



Retention rates for both platforms start out strong. Overall, iOS users are consistently more loyal than their Android counterparts. But this gap narrows on Day 30, when the difference shrinks to 1.1 percentage points.





“ When there is uncertainty and it’s affecting all sides of the industry, we have to be swift to adapt in ways previously not thought of. ”

Juan Gutter - Performance Marketing Lead

Glovo!

When the news broke over iOS 14’s IDFA change, one of the first challenges marketers faced was understanding the size of any change. As Juan says, “it’s the role of marketing and data teams to guide and inform stakeholders.” To communicate effectively, Juan points out, you need to break down the problem, “we started estimating the impact, what was going to change, and evaluate solutions.” It’s also important to find out how marketing partners (and competitors) are adapting. A clear and precise assessment will help amplify your voice and reach key decision-makers from other departments.

Glovo allows you to get the best products of your city in a few minutes. They connect users, businesses and couriers to make that possible. The project was born with the aim of transforming the way users acquire what they need, making cities more accessible. Glovo wants to have a sustainable impact on the economy, society and environment.

Assessing the Impact of IDFA Deprecation

Continuing our survey, we found that the vast majority of marketers sense that IDFA deprecation is bad news. Many are weighing their options and nearly one-third are considering shifting spend to Android.



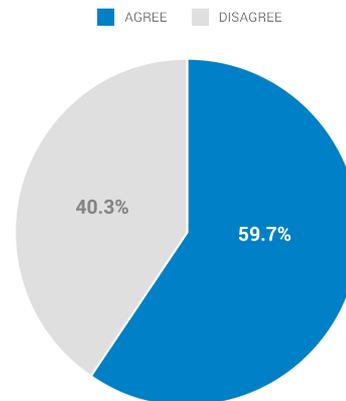
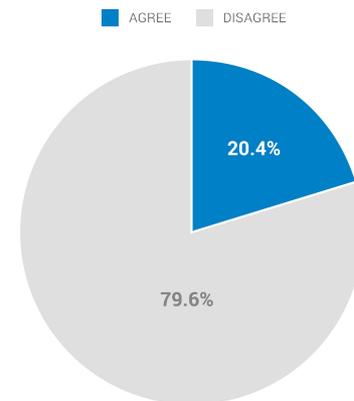
14

The vast majority of respondents are convinced IDFA changes are good news for users, not marketers.

COVID-19 has [changed business forever](#). But the impact of Apple's announcement that application developers in iOS 14 will need to seek end-user permission before gaining access to Apple's mobile device ID, also known as Identifier for Advertisers (IDFA), is less clear-cut.

Who benefits from IDFA deprecation? In our survey, most marketers (**59.7%**) agree the changes are good news for users eager to protect personal privacy and data, but they are less upbeat about the impact on their own campaigns. Nearly **80%** believe it spells bad news.

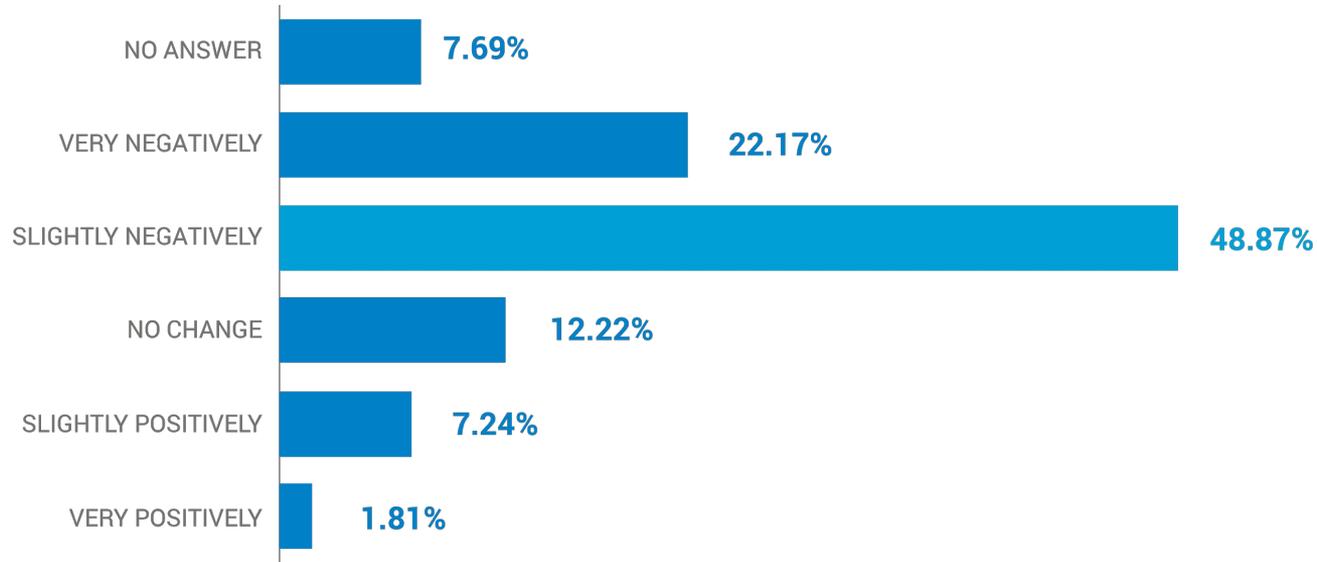
Would you agree that the potential end of the IDFA on iOS is good for **marketers**?



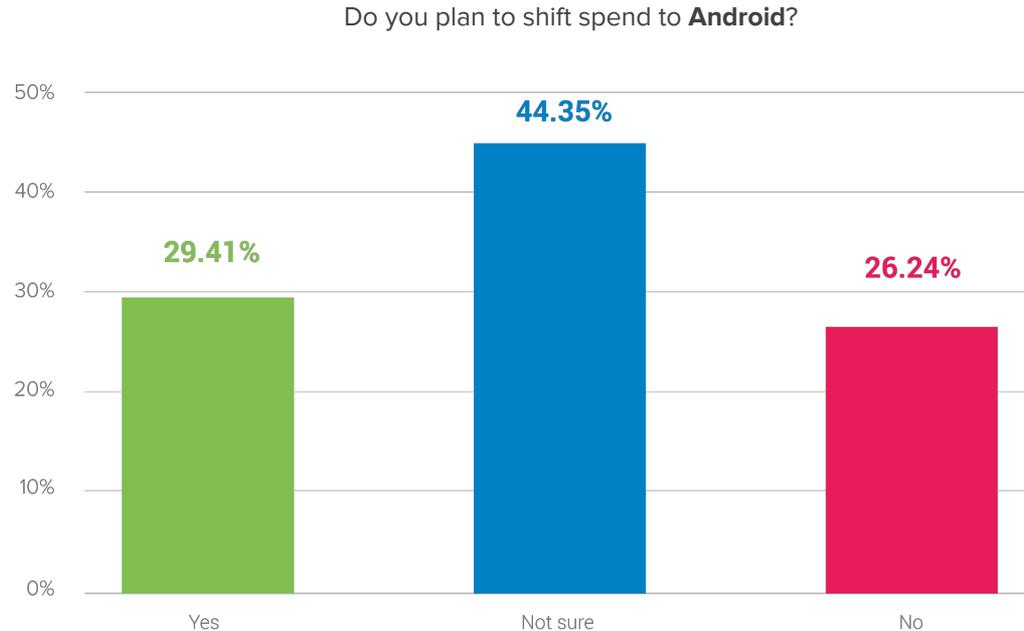
Would you agree that the potential end of the IDFA on iOS is good for **app users**?

Can IDFA deprecation cripple UA campaigns? Over 70% of respondents predict a negative impact.

How do you feel iOS 14 will impact your user acquisition campaigns?



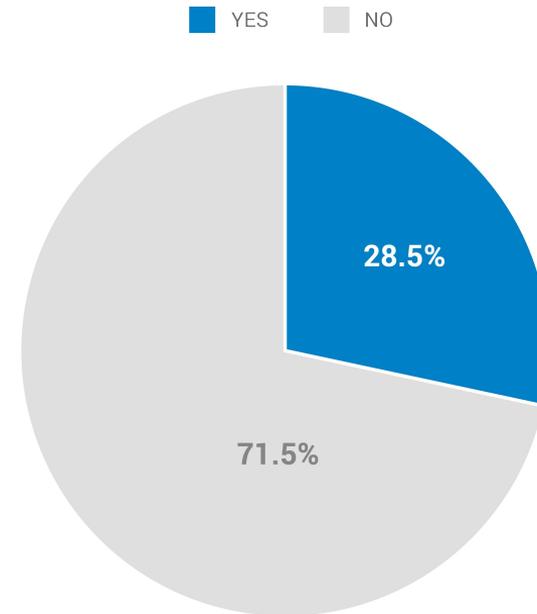
Marketers have to prepare for measurement post-IDFA deprecation, but many are prepared to shift budget instead. While 44% are undecided, nearly one-third (29.4%) are placing their bets on Android.

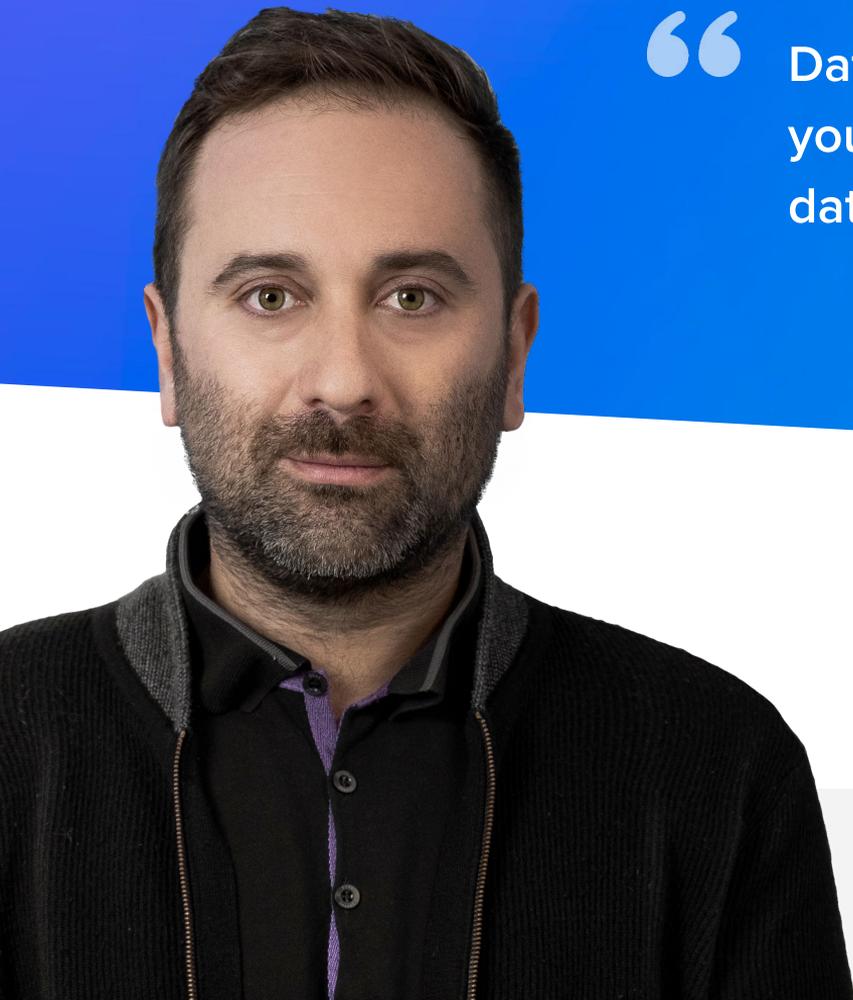


Most respondents have not disabled ad tracking settings on their mobile devices.

Research suggests the percentage of users who have switched on Limited Ad Tracking (LAT) in the US alone has [grown 2x in the last 4 years](#). Marketers are users, too, but their actions and attitudes around ad tracking are a notable departure from this trend. A massive 71.5% have chosen not to disable ad tracking on their own devices.

Have you opted out of ad tracking on your device?





“ Data is so crucial to marketing, but you need to be so careful with the data that you collect. ”



Stas Rozenbaum - Head of Growth

Few marketers are more privacy-focused than Stas Rozenbaum. As Head of Growth at Ada Health, he deals with the strict requirements of a health app based in Berlin, Germany—a stalwart enforcer of the GDPR. In his view, app companies must nail their data protection early. Marketers can't achieve this without a Data Protection Officer that knows their area thoroughly, "if you're working out privacy without support, you need focus on adding this crucial resource."

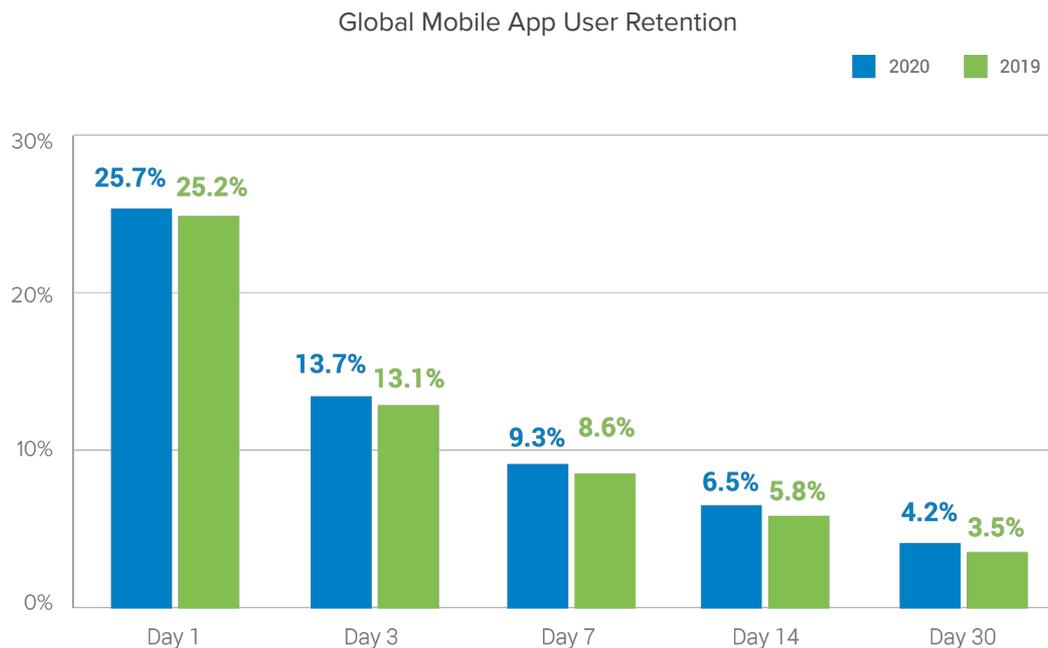
Ada is a global health company founded by doctors, scientists and industry pioneers to create new possibilities for personal health. Ada's core system connects medical knowledge with intelligent technology to help all people actively manage their health and medical professionals to deliver effective care. Ada is proud to collaborate with leading health systems and global non-profit organizations to carry out this vision.

App Retention

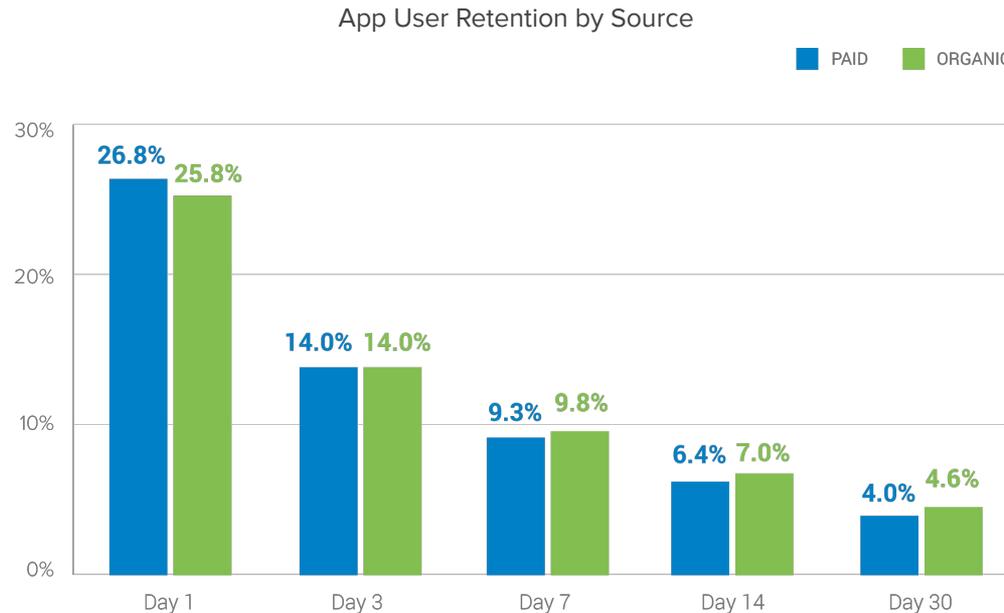
Retention rates show little or no difference compared to the previous year and paid acquisition continues to outperform organic early in the curve. A breakdown of retention by app category reveals apps that let users spend time and money get off to a strong start. But finance and information apps enjoy longer-term loyalty.



Retention rates that hover at roughly the same rates as the previous year are a credit to marketers and their campaigns. However, there is significant room to improve as continued lockdowns open opportunities for apps that provide utility and enjoyment.

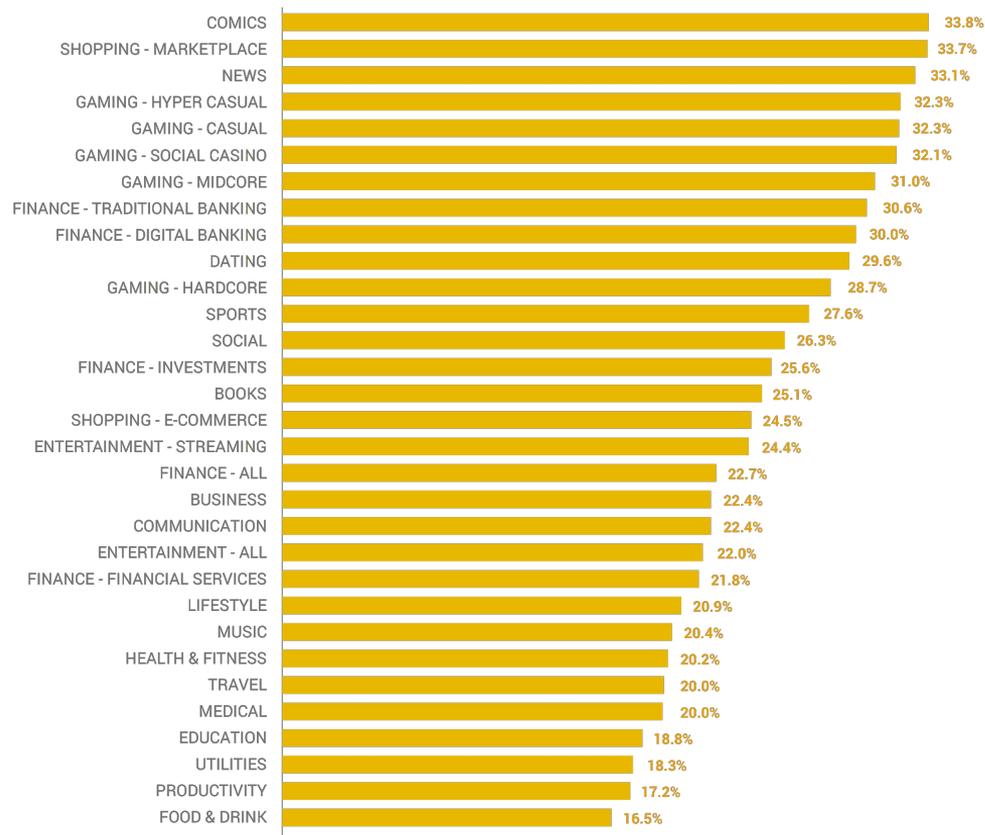


Paid advertising delivers dividends on Day 1. But the gap closes on Day 3, before tables turn and organic finishes on Day 30 as the stronger source, with a 0.6 percentage point edge over paid.

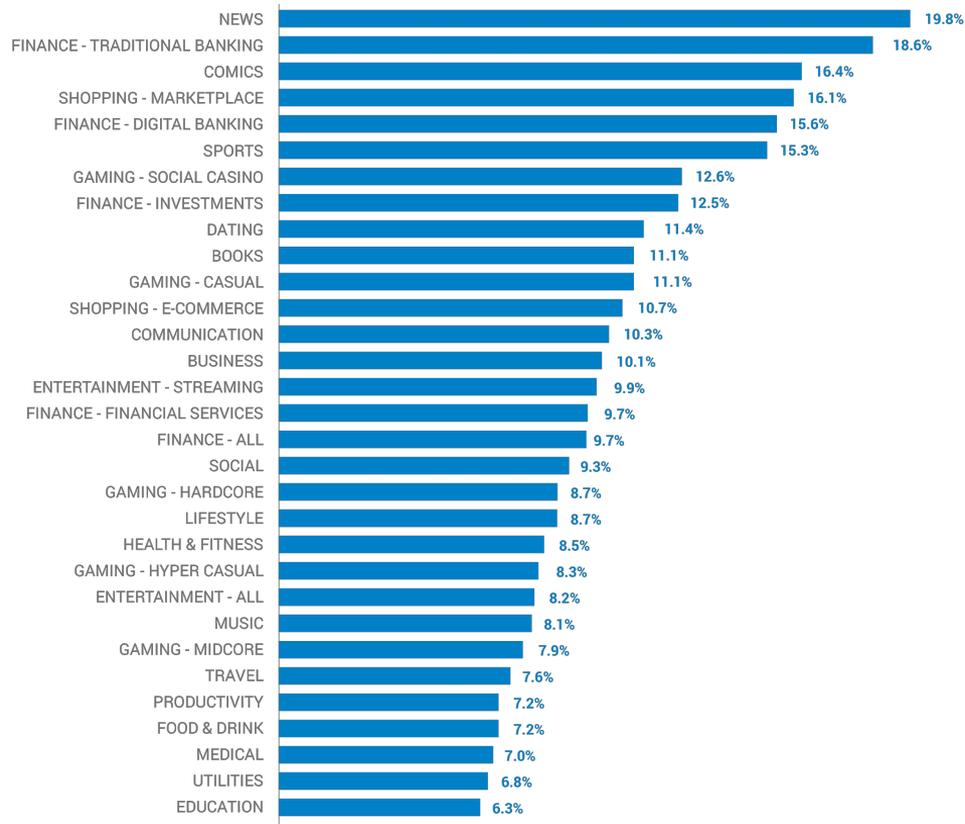


Entertainment, information, shopping, finance and gaming app categories dominate the charts, showing the highest Day 1 retention rates.

Day 1 Retention by App Category



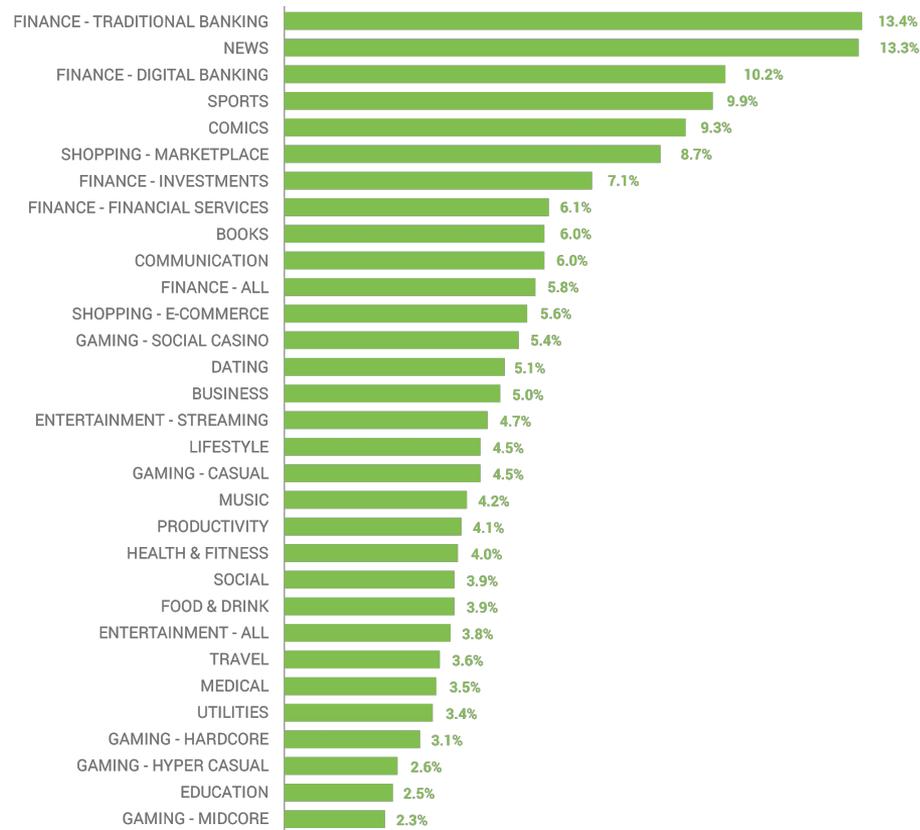
Day 7 Retention by App Category



By Day 7, the mix of the most engaging app categories has shifted significantly and gaming apps, except for social casino, have lost their lustre.

At Day 30, app categories that allow consumers to manage money or spend it top the list. News and sports apps benefit from a supply of fresh content while interest in gaming and entertainment apps grows stale.

Day 30 Retention by App Category





“ Retention always goes hand-in-hand with monetization. You can't have success with retention being at the core. ”

Jason Conger - Head of User Acquisition



As the app marketplace continues to be more competitive, it becomes that much harder for new products to stand out. That's why marketers are increasingly focused on maintaining successful apps. As Jason notes, "live operations are now such an integral part of a successful mobile gaming studio." To maintain a loyal & engaging fanbase, studios must plan and iterate on a program of ongoing in-app events to bring users back for the content they can't get enough of.

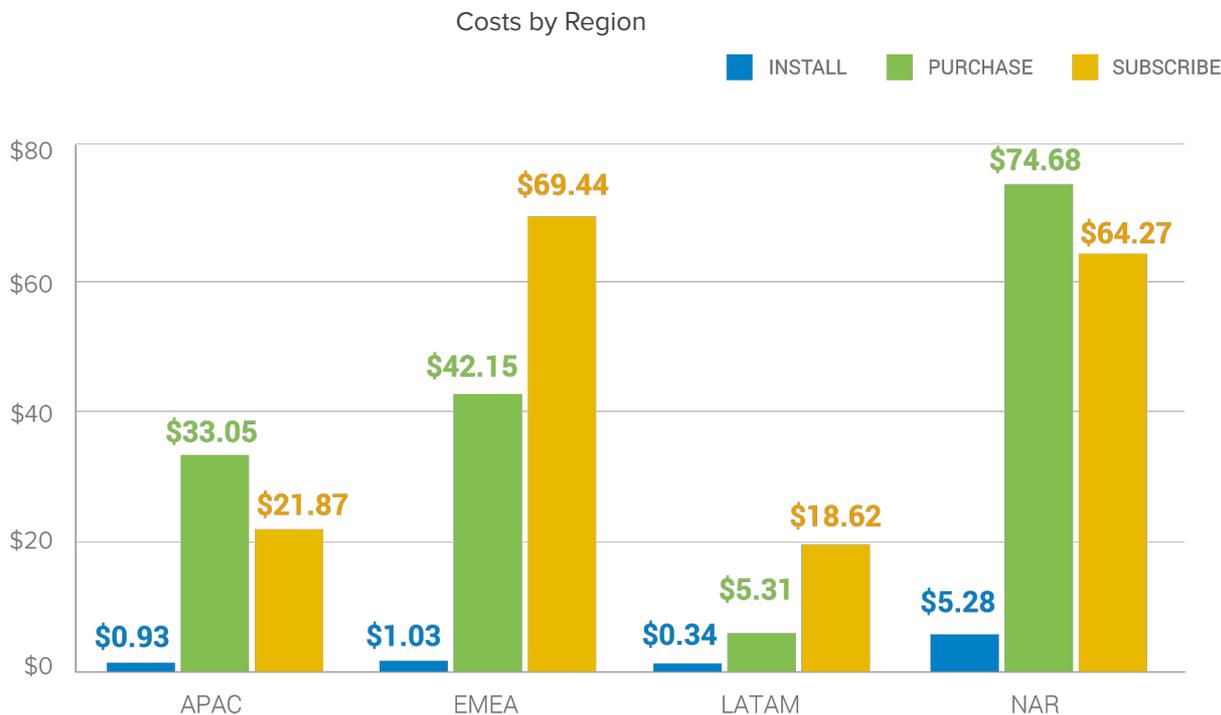
Wooga is based in the heart of Berlin where about 300 employees from around the world work together to create high quality story-driven casual games. Wooga creates joyful experiences that awaken their players' desire to see what happens next. They provide a place for them to become a part of exciting worlds that touch their hearts with thoughtful stories, in which their actions drive the narrative forward.

Geographical Analysis

Marketers can acquire highly engaged purchasers in North America and recruit committed subscribers in APAC. Retention rates and ROAS are fairly consistent across regions — but marketers can recoup ad spend fastest in Japan and Korea.



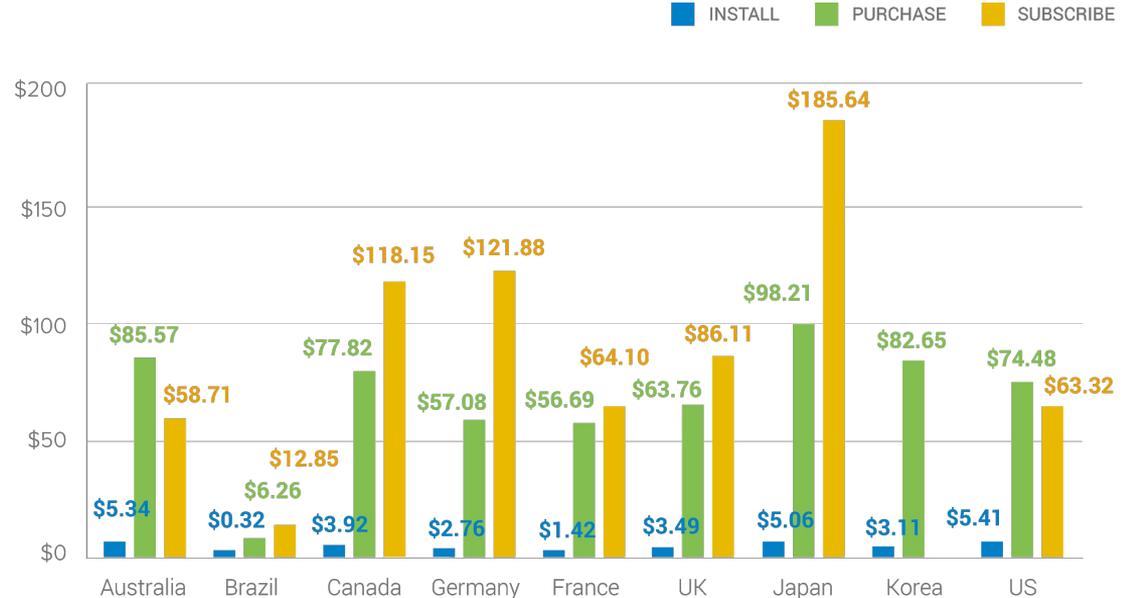
At 3x the average (\$1.63), CPIs in North America are steep. APAC and LATAM consistently offer higher value for lower costs. In both regions, the cost to acquire a subscriber is roughly half the average (\$40.14).



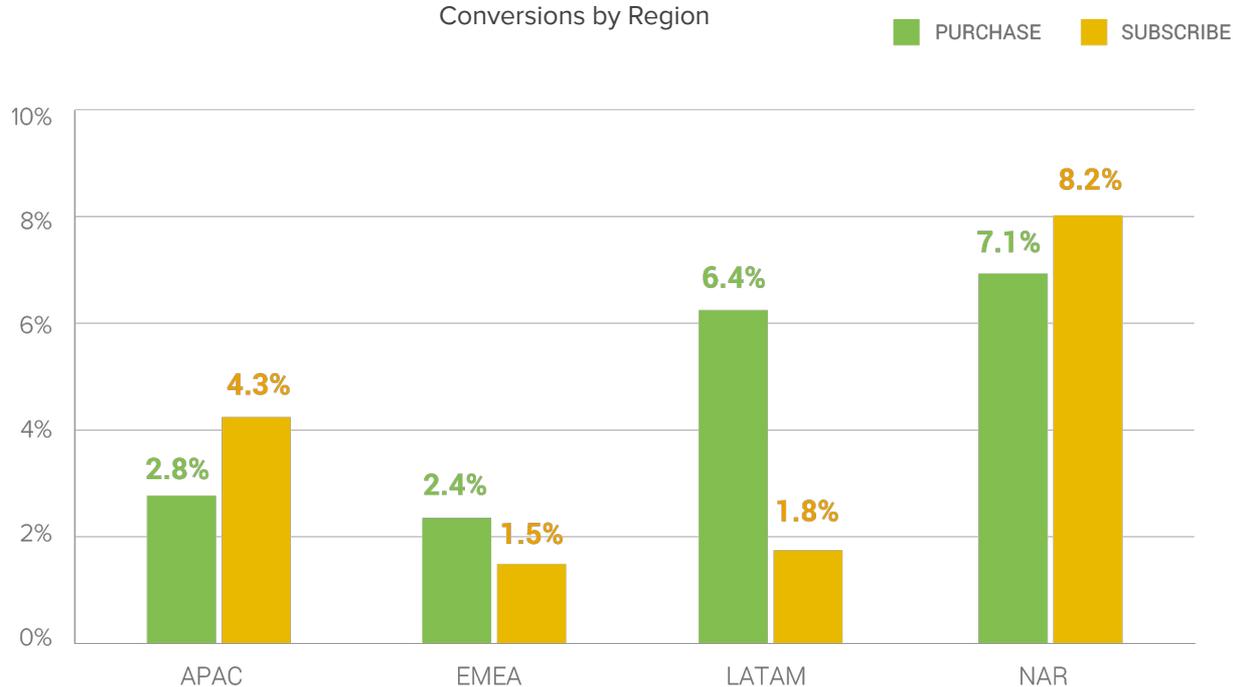
Brazil offers a winning combination of low CPIs and low subscription costs. The US leads with the lowest purchase and subscribe costs compared to the NAR region.

- Install:** At \$0.32, Brazil offers bargain prices, undercutting costs for the LATAM region by \$0.02. At the high end, CPIs in Australia (\$5.34) are nearly 5x costs for the APAC region (\$0.93).
- Purchase:** Costs across all countries exceed the average for their respective region. France may appear to offer attractive prices. But a closer examination reveals costs are over one-third higher than the EMEA average (\$42.15).
- Subscribe:** Brazil, France and the US stand out with costs that are significantly lower than their regions, offering savings that range between almost \$1 and \$6.

Costs by Country

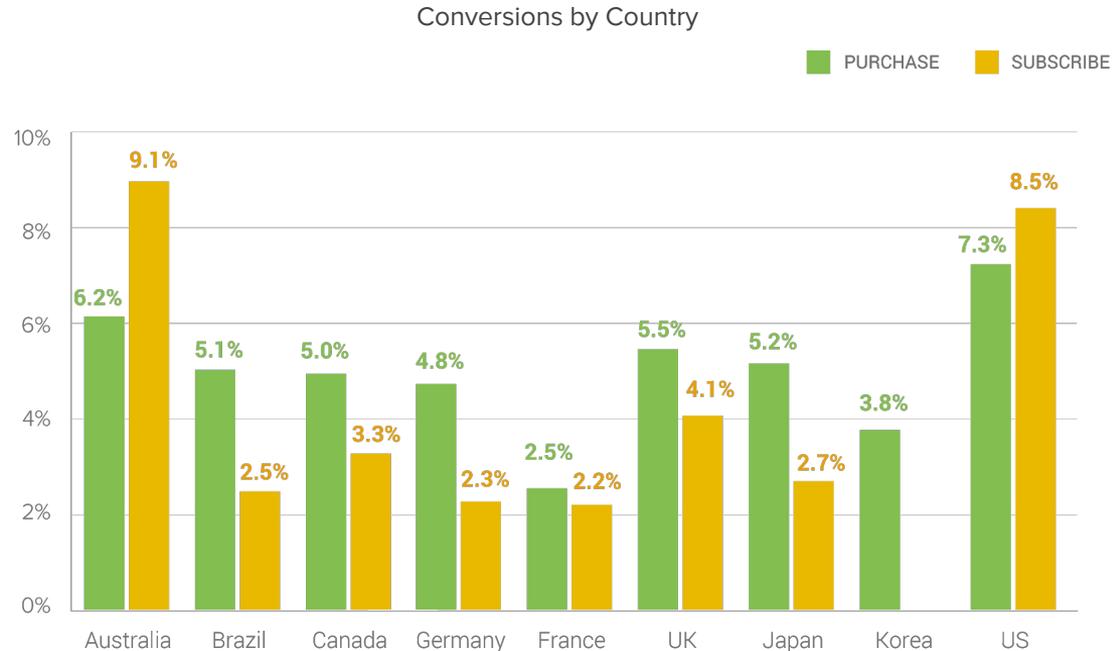


LATAM and North America are home to engaged purchasers, hitting conversion rates that are up to 3 percentage points higher than the global average (4%). EMEA places last, reaching conversion rates that are far below the average.



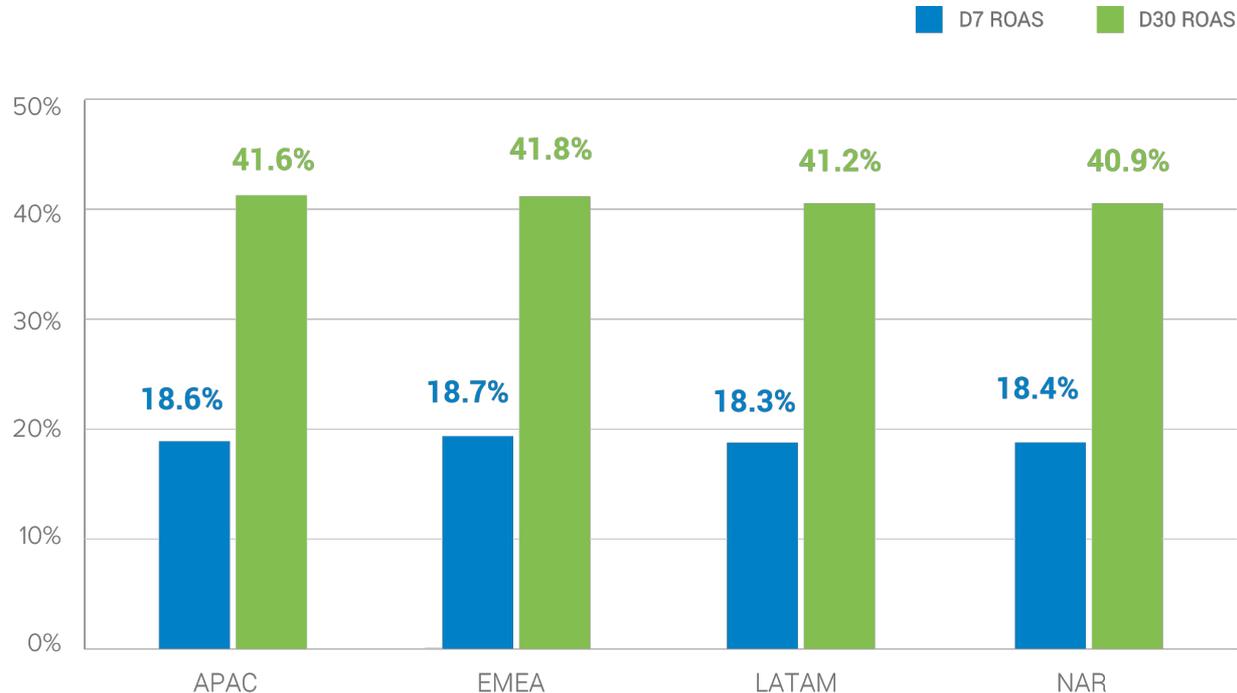
The US leads with the highest conversion rates for purchases, followed by Australia. The situation switches deeper in the funnel where Australia steals the lead on the US in subscriptions.

- Purchase:** In APAC, Australia is 2x the regional average (6.2%), and in EMEA, the U.K. (5.5%) hits a similar high. Meanwhile, North America is a mixed bag with the US (7.3%) coming in only marginally higher than the regional average and Canada lagging 2.1% points behind the regional benchmark.
- Subscribe:** Overall, engagement rates for the majority of countries exceed the regional average. A stand-out example is Australia (9.1%), which offers the highest engagement rates in the group (more than 2x the APAC average of 4.3%). Notable exceptions include Canada (at 3.3%, nearly 5 percentage points under the regional average) and Japan (2.7%).

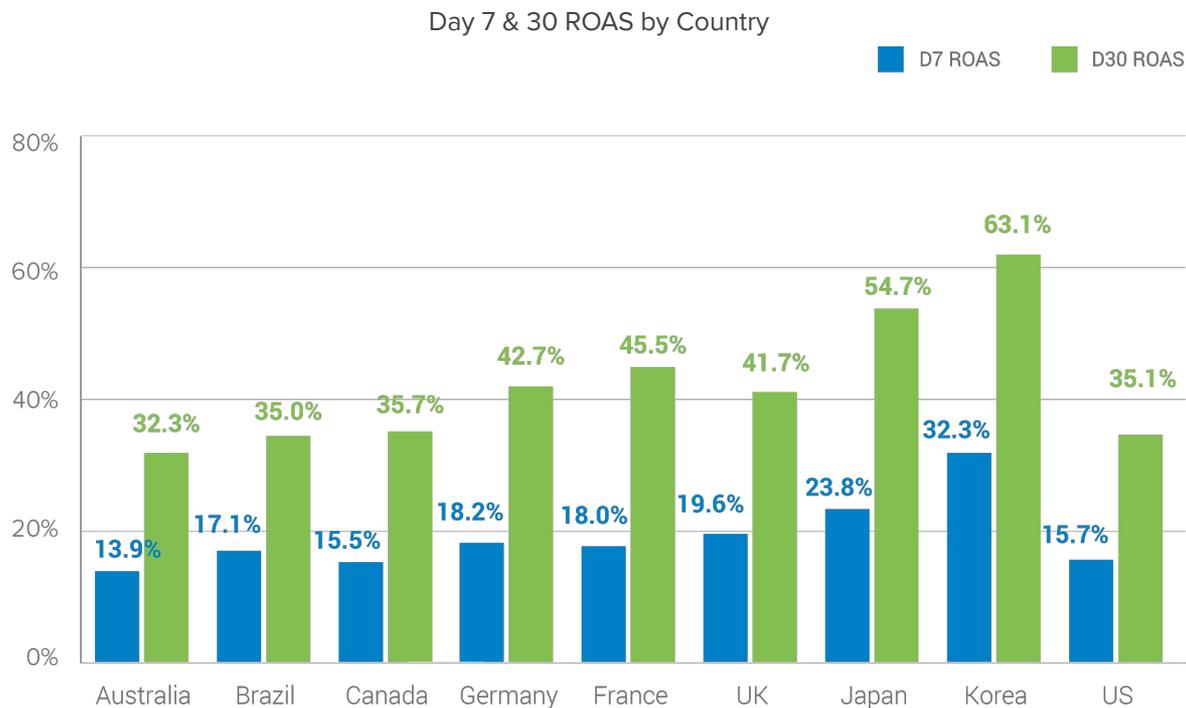


Although CPIs vary widely across regions, return on ad spend is consistent, allowing marketers to recoup roughly 40% of costs in 3 weeks.

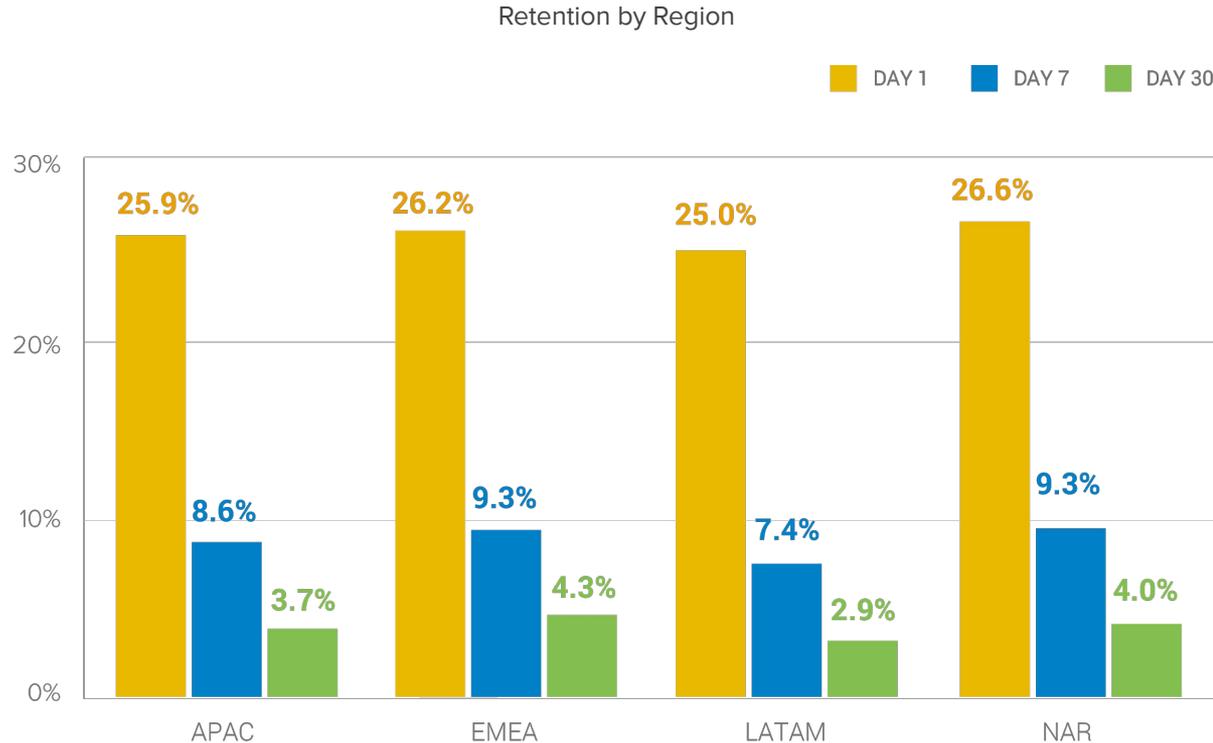
Day 7 & 30 ROAS by Region



Japan and Korea impress with the highest ROAS rates in the group. At the other end of the scale, ROAS rates in Australia disappoint, placing lowest in the group and significantly under the regional average.



Day 1 retention rates are similar across all regions. By Day 30, EMEA pulls ahead of North America, reporting marginally higher rates than the average (4.2%).



“ We should be treating data as part of the story, not the entire picture. We should be trying to gain a better understanding of the human story behind the data. ”

Mirela Cialai - Senior Global Director of Marketing

ZINIO™

“An important lesson we’ve learned over the course of this year was that our approach in the way we’re looking at the data should change, fundamentally,” says Mirela, “Instead of looking at the data in isolation and reach conclusions based entirely on the existing data, we should use it to ask more questions.” 2020 has seen user behavior shift considerably. ZINIO could no longer rely on users steadily accessing the app on weekends as activity spikes appeared seemingly at random. Based on ongoing findings, ZINIO introduced more personalization, ensuring delivery of the right type of content to users when they need it.

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Liftoff is a performance-based mobile app marketing and retargeting platform which uses post-install user data to run true cost-per-action user acquisition and re-engagement campaigns. Powered by advanced machine learning and lookalike targeting, Liftoff campaigns are optimized to drive actions beyond the install, like booking a hotel, making a reservation, or renewing a subscription. Liftoff's cost-per-action model helps customers scale and grow by acquiring users that actively spend in revenue-producing events. Headquartered in Palo Alto, CA with offices in New York, London, Singapore, Tokyo, South Korea, Paris and Berlin, Liftoff works with leading app publishers and brands across the globe.

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