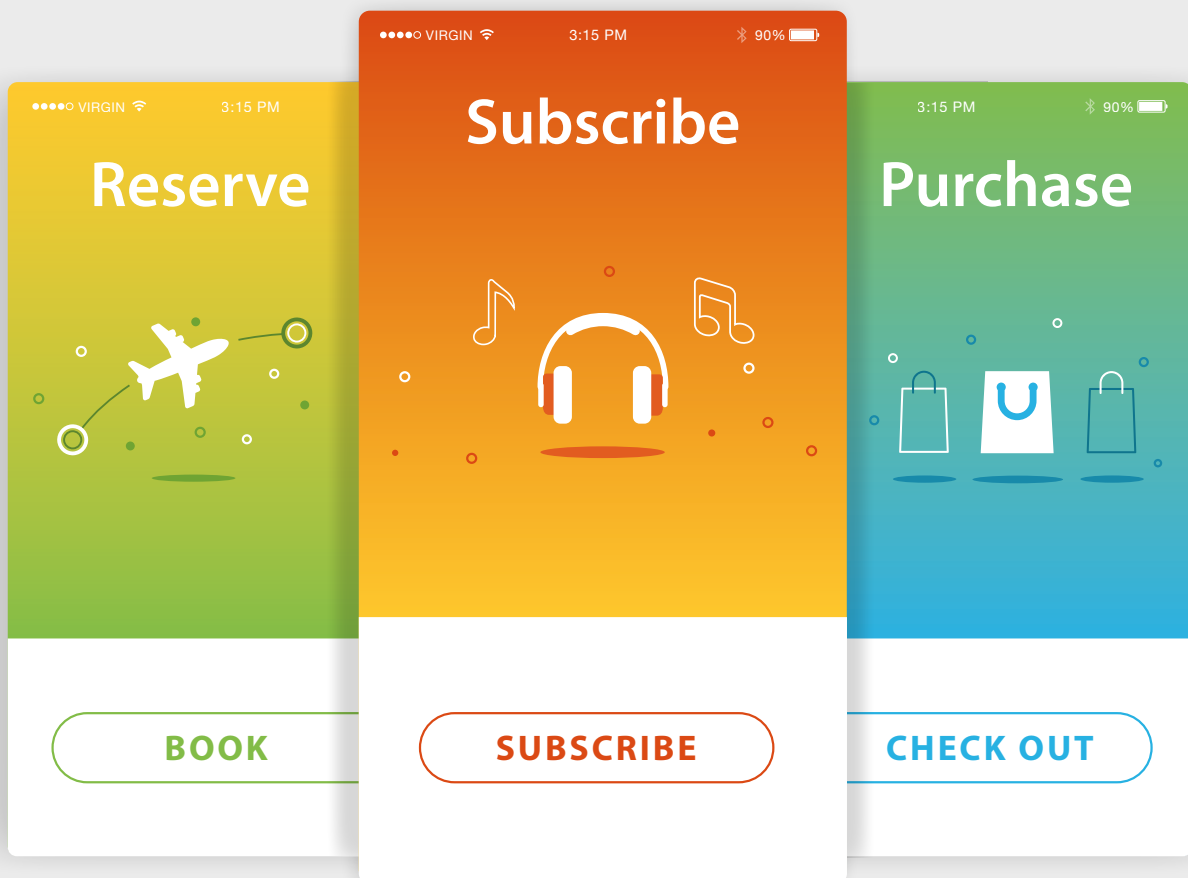




L I F T O F F

2017 MOBILE APP ENGAGEMENT INDEX

User Acquisition Trends and Benchmarks



September 2016 - August 2017

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Introduction

Top line numbers are adding up to show the app marketplace is maturing, creating ideal conditions for more apps to make the grade provided they are promoted in ways that are aligned with the preferences and profiles of their target audiences.

In addition to an avalanche in the number of mobile apps, triggered by unprecedented growth in smartphone adoption and usage globally, 2017 also witnessed a flurry of activity as marketers focused their attention and investment on making changes and improvements aimed at extending the reach of their mobile apps, or increasing user engagement – or both.

Let's start with the supply side of the equation.

The App Economy remains a monstrous and massively competitive market where the sheer volume of apps coming

online every month (over 11,000 app submissions in September in the Apple App Store alone based on [figures from Pocketgamer.biz](#)) can make any marketer anxious. A raft of recent market reports and forecasts from app market data provider App Annie put this incredible growth into perspective. The global app economy will be worth an astonishing \$6.3 trillion by 2021 – “that means users and developers will deliver growth equivalent in size to the economy of Japan.” Think about it. The App Economy is currently on course to grow to the size of a full-fledged nation state.

“ Armed with analytics marketers can aim high, but without visibility into benchmarks they can still miss performance targets by a mile. ”

Now, let's deep dive into the demand side of the equation.

More apps mean more competition to acquire and retain users – and more pressure on marketers to be more creative in how they identify, address and engage their audiences. Fortunately, people everywhere on the planet can't imagine a life without apps. Apps have become the new addiction, with users spending more time “in-app” than ever before. In the U.S. alone, audience measurement and research firm [comScore reports](#), mobile now represents almost 2 out of 3 digital media minutes. Moreover, mobile apps “have completely shifted the digital media landscape in favor of mobile,” with mobile apps accounting for a staggering 60% of total digital time spent. Overall, time spent on mobile is dominated by apps - outpacing time spent on the mobile Web by a ratio of 7:1.

The two sides of the equation combine to tell a striking story.

The good news: The App Economy is poised for a new phase of growth and innovation driven by an abundance of apps and an audience that can't imagine life without them. The not-so-good news: The App Economy has also become a loud and crowded space where users demand more from their experiences and marketers must do more to earn the attention of their target audience. From driving installs, to convincing users to engage frequently, more (and better) insights yield better outcomes.

Armed with analytics marketers can aim high, but without visibility into benchmarks they can still miss performance targets by a mile. With that in mind the Liftoff 2017 Mobile App Engagement Index distills data around costs and conversions across a broad range of apps to help marketers benchmark their performance and plan the year ahead. The Index also highlights key similarities and differences compared to the previous year.

The Lifftoff 2017 Mobile App Engagement Index draws from Lifftoff internal data from September 1, 2016 through August 30, 2017 which spans 120 billion ad impressions (120,029,467,758 to be exact), 1.3 billion clicks (1,309,986,171) and 41.7 million events (41,792,647) across 30 million (30,531,395) app installs.



Specifically, the Index tracks the costs of key engagement events across the funnel (App Installs, In-App Purchases, Purchases, Registrations, Reservations and Subscriptions) across six leading app categories (Dating, Finance, Gaming, Shopping, Travel and Utility). The Index also offers an additional level of granularity, breaking down data by platform (iOS and Android), user demographics (gender), and region (North America, LATAM, EMEA and APAC).

Finally, the Index uniquely highlights high-level trends in the relationship between cost and conversion, and maps these to months and periods of the year that offer marketers “windows of opportunity” to acquire high quality users. All of this combined makes the Index an essential read, and one that equips marketers to define targets, measure results, assess trade-offs and – ultimately – set stretch goals for the year ahead.

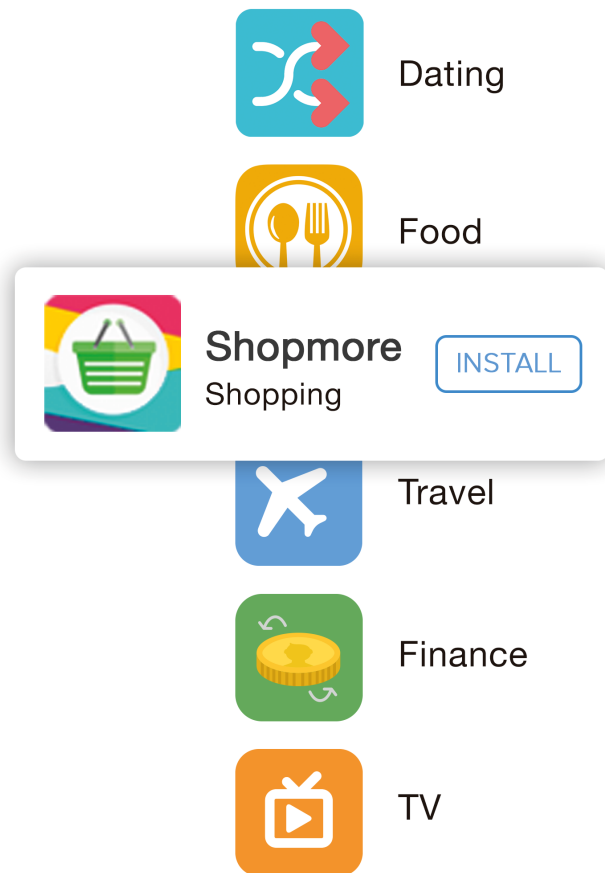
Mobile Engagement Benchmarks

The Mobile App Engagement Indexes benchmark the average cost to acquire a new user from a paid app install campaign who engages in a post-install event for the first time. As in last year's Index Report, we focus on key engagement events across the funnel (App Installs, In-App Purchases, Purchases, Registrations, Reservations and Subscriptions).

Significantly, CPAs and engagement rates for top-funnel events – for example, Install – are flat, suggesting that marketers who want to aim higher will have to go deeper in the funnel. If there is more mileage left then marketers will have to be more creative in how they approach users most likely spoiled by app choice and – quite possibly – annoyed by advertising that is hard-sell, not high-value.

Fortunately, marketers who focus more effort and spend on deep-funnel events will find an audience primed and ready to engage. Users are accustomed to making bookings with their apps, which helps explain why it costs somewhat less to acquire a user who completes this deep-funnel engagement. It's a similar story for Registration – an

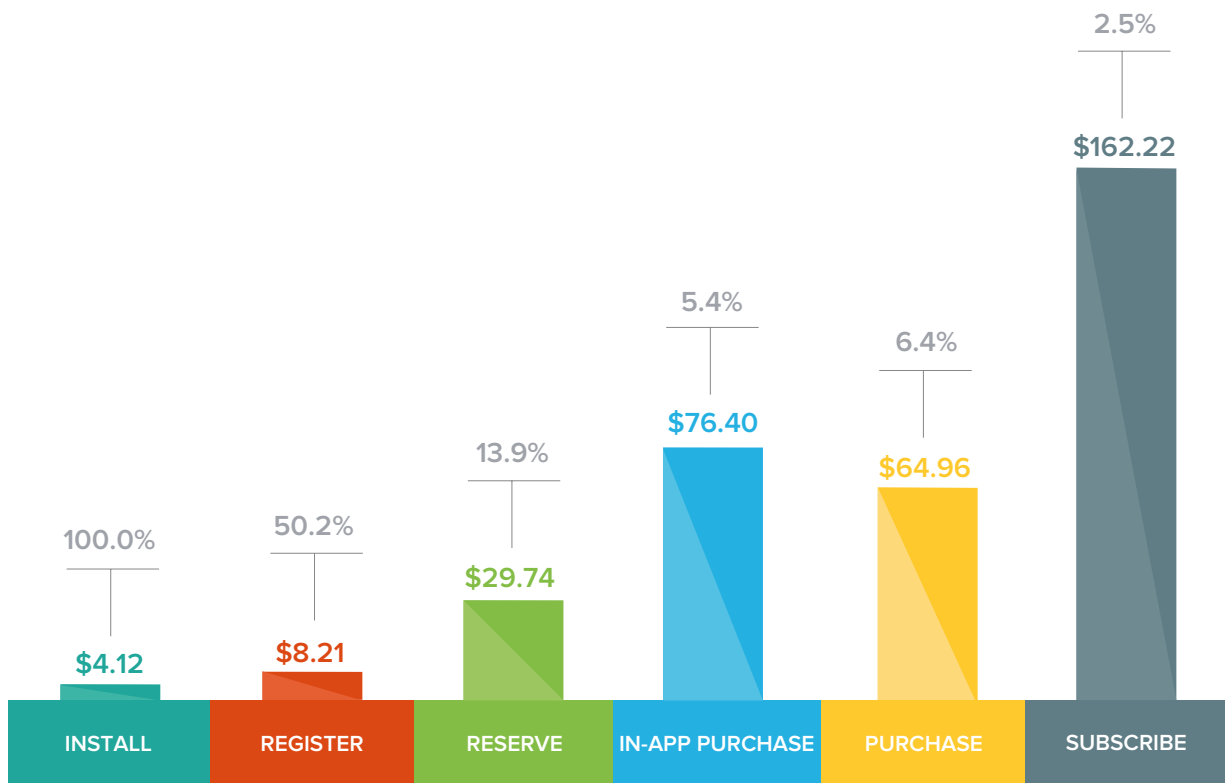
engagement event that is marginally cheaper and markedly more attractive as more users do it upon installing an app for the first time.



“ Expecting to acquire a first-time user to open their wallet is like believing you can buy a ticket and hit the lottery. It happens – but don’t count on it. ”

Predictably, the deeper you go in the funnel, the harder (and more expensive) it is to drive engagement. This dynamic explains the increase in CPAs for Purchase and In-App Purchase compared with the previous year. But, then again, expecting to acquire a first-time user to open their wallet is

like believing you can buy a ticket and hit the lottery. It happens – but don’t count on it. Marketers can narrow the odds in their favor by segmenting and re-engaging users who have shown by their actions (completing a registration, for example) that they are open and eager to do more.



COST & ENGAGEMENT RATES PER ACTION

Mobile Indexes

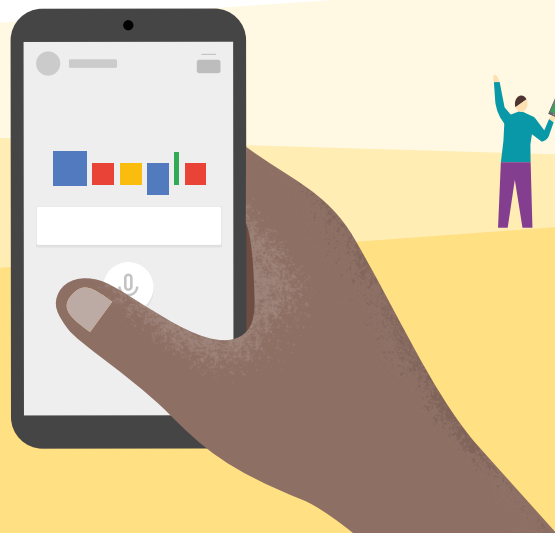
Reams of research show consumers regard their mobile apps as the ‘go-to’ for advice, assistance and access to a wide range of physical and digital goods and services.

It’s a trend that Publicis Group picked up on when it observed that mobile (devices as well as apps) had caused a seismic shift in how we define and spend our time. Downtime was starting to “disappear.” People were always on – and therefore always approachable provided marketers did it in appropriate ways that were genuinely useful or valuable – or both.

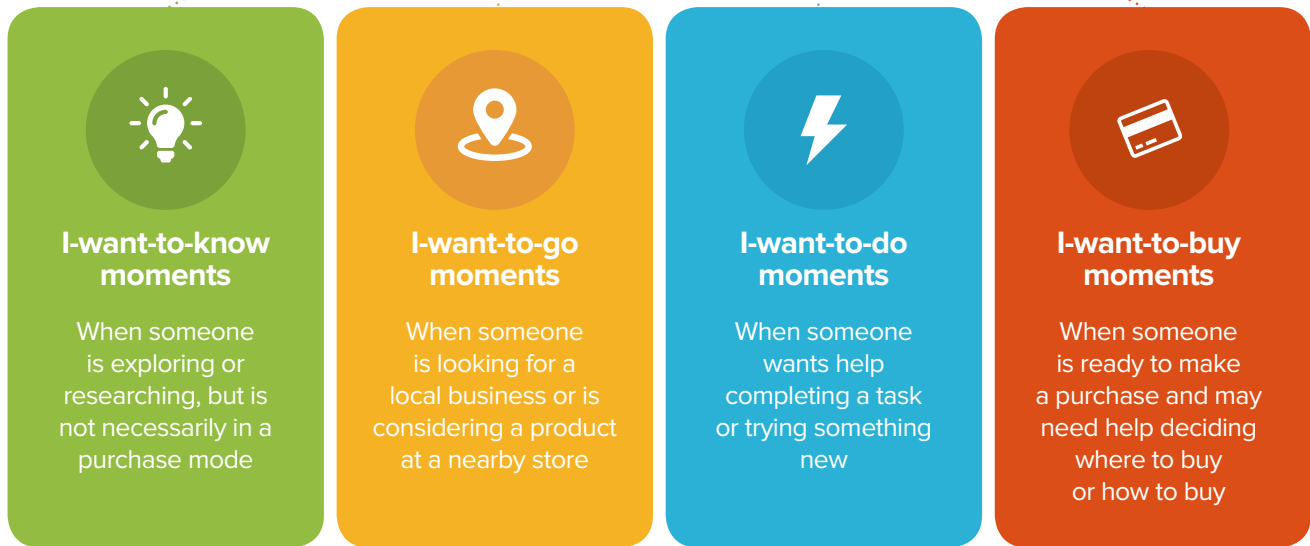
What’s more, Publicis sifted through its own proprietary audience research to identify ‘micro-leisure’ moments, small bursts of leisure time throughout the day people preferred to spend with smartphones to add value to their lives.

Connect the dots, and mobile apps have created new paradigms and new opportunities for marketers to engage with users. The best time to reach users is all the time – provided advertising fits the fragmented moments they spend on their apps.

Fast forward, and Google has mapped the new opportunity to engage with consumers to what they want, need and desire in the all-important “micro-moments” when their smartphone is the center of their universe or the source of their inspiration.



THERE ARE 4 GAME-CHANGING MOMENTS THAT REALLY MATTER



SOURCE: GOOGLE

Whether you call them ‘micro-leisure’ moments or micro-moments, the fact is they can happen at any time. This brings a boost to apps that are front and center with advertising that is targeted to satisfy the user’s urge to learn, do, find, or buy something at that moment. And this opens doors for new marketing and campaign approaches that go beyond traditional seasonal thinking and targeting.

Apps are always accessible and users are reaching to them according to their own timetable – not one that necessarily revolves around seasons or specific times of the year.

This observation dovetails with Liftoff data. The Index overlays acquisition costs with conversion rates to pinpoint areas of opportunity throughout the year when marketers can get value for money. The lack of clear correlation in the case of many app categories suggests it’s time marketers rethink the practice of timing app spend and campaign pushes to specific months or seasons, and open the aperture of what they offer and when to take full advantage of the multitude of “moments” apps are creating and users are embracing. With some imagination and inspiration marketers can even come up with some new ones of their own!

Average Monthly Cost per Install

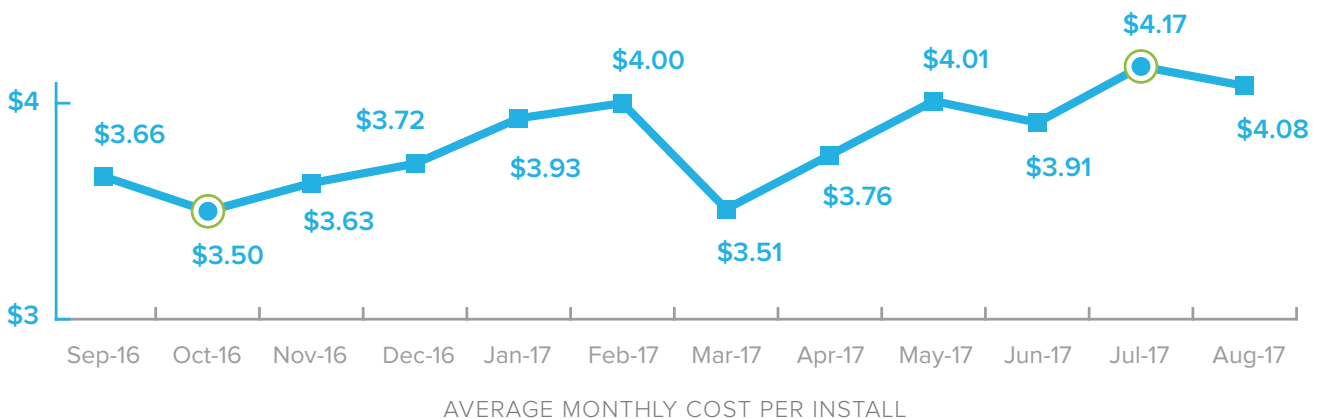
This chart measures the cost to acquire an app user across the six app categories analyzed in this report.

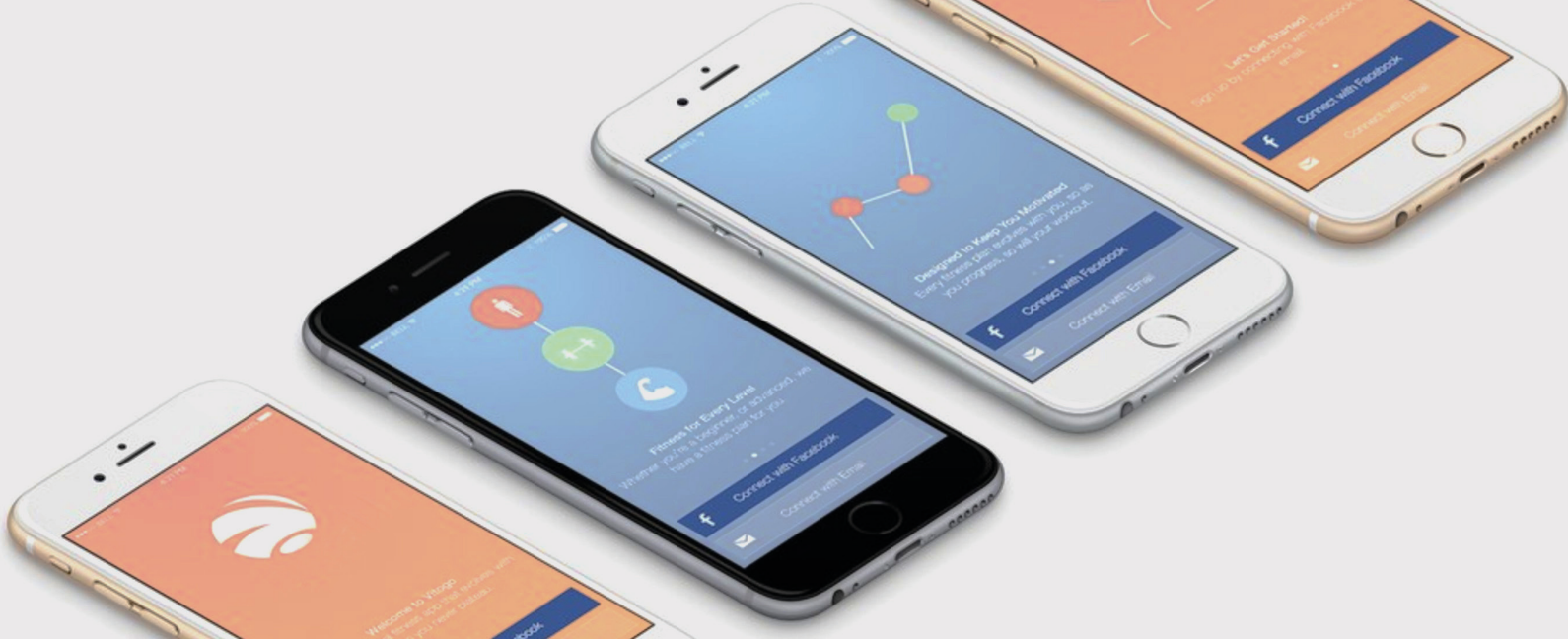
At first glance, it appears that CPIs vary significantly from month-to-month. But a deeper examination of the data reveals the standard deviation is only \$0.22, indicating that acquisition costs are fairly stable. If you are paying more, then optimize your campaign to identify – and rectify – what’s not working. If you are paying less, then congratulate yourself on your high performance.

Speaking of high - user acquisition costs do tend to rise around the holidays. However, that is a period of the year when big app names (particularly in the Games app category) traditionally invest heavily to hook consumers during holiday downtime. It’s a phenomenon detailed in the [2017 Liftoff Mobile Gaming Apps Report](#), which shows ad spend increases

over the holiday period when Games companies are vying for the influx of eager users exploring and installing gaming apps for the first time on new devices they received as holiday gifts.

Dips along the curve (for example, \$3.50 in October and \$3.51 in March) point marketers to periods when they might expect to get more UA bang for the buck. But keep in mind that this is a broad mix of apps – and without visibility into conversion rates (knowing what percentage of users acquired at this cost stay with the app), it’s difficult to pinpoint periods when marketers are getting real and lasting value for their money. One thing for sure: users are swayed by their own schedules, not seasonality. View the user journey through this lens – and it may open your eyes to new ways – and times – acquiring the right audience with the appropriate advertising can come at a bargain price.



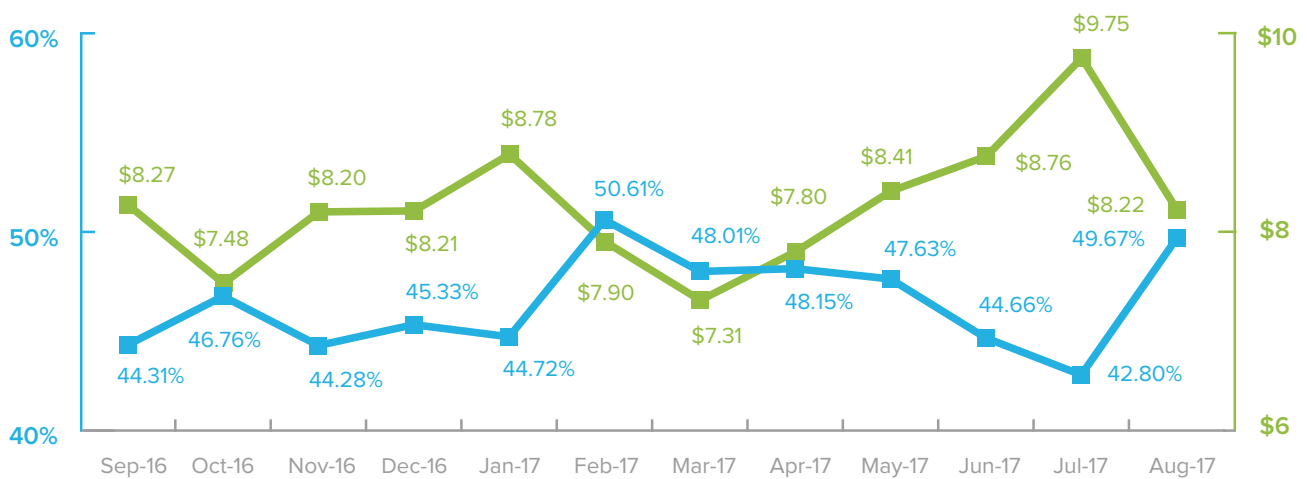


Register: Monthly Cost & Engagement Rates

The Registration Index shows the relationship between the cost to acquire a user who creates an account in the app and the conversion rate, the percentage of users who complete this action.

Keep in mind this event is more relevant to app categories (such as dating, travel, or finance), where collecting this key data from a user (who freely volunteers it) lays the

groundwork for a “social contract” that entitles – even obligates – marketers to deepen the relationship through engagement and re-engagement campaigns.



REGISTER: MONTHLY COST & ENGAGEMENT RATES



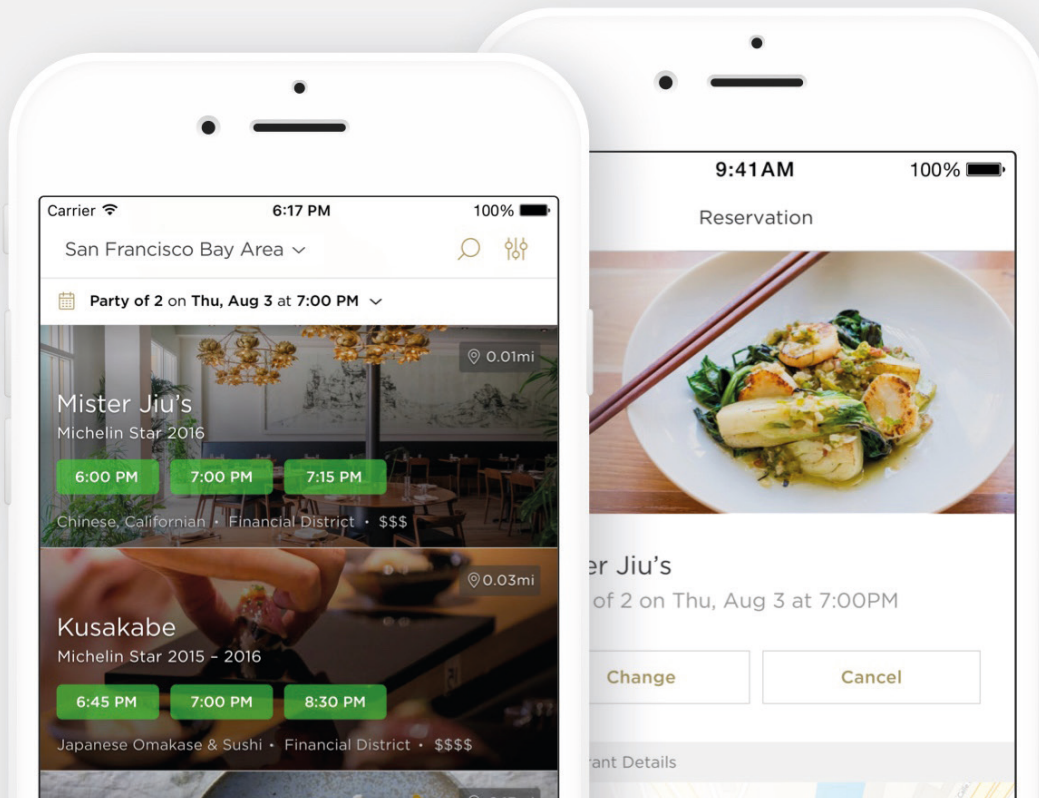
“ A registration in our app is crucial - it's the handshake, or beginning of our relationship with the customer. Without it, we simply can't get customers deeper in the funnel or monetize. ”



Annica Lin, Sr. Acquisition Manager, Stash

It's a help to know the best (and frankly, cheapest) times to acquire users who will convert, and that's exactly what this Index shows. You don't have to be a rocket scientist to see that marketers got value for money in the months of October and March (when acquisition costs were low and engagement was

high). But costs that *seem* pricey in other months (example: July when user acquisition costs hit a high of \$9.75) may not be telling the whole story. It may also be that – with a 42.8% conversion rate – the investment nets even higher quality users.



Reserve: Monthly Cost & Engagement Rates

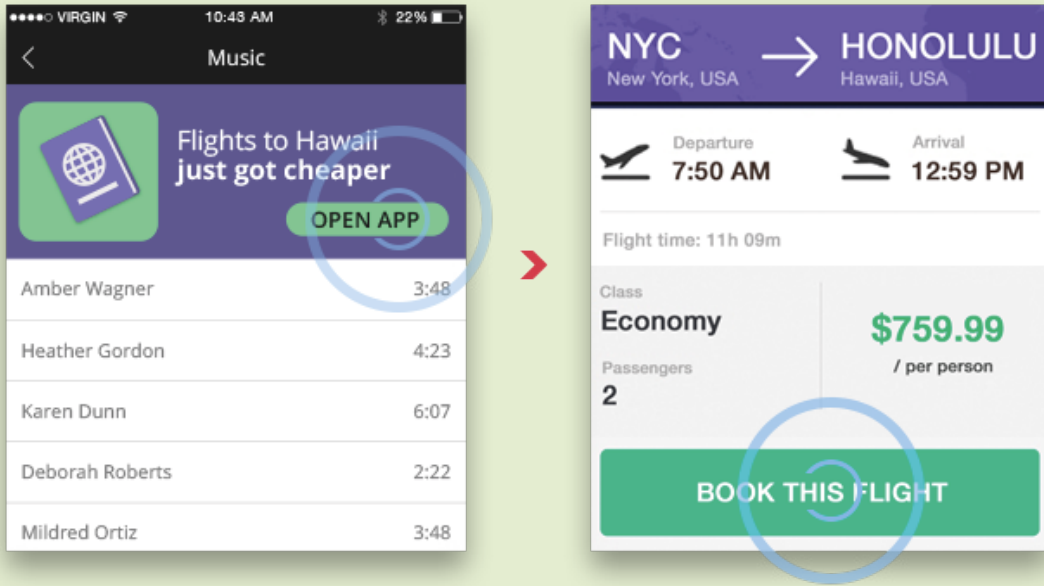
The Reservation Index measures the cost to acquire a user who then continues to make a reservation – for a flight, dinner, hotel or car sharing service – using the app.

Significantly, the overall decline in CPAs that was documented in the 2016 Index Report continued into 2017, underlining the key finding that “booking travel on mobile is hitting critical mass adoption.”

In 2016 acquisition costs were significantly higher, indicating that too many apps were fighting for the attention of too few users. This could

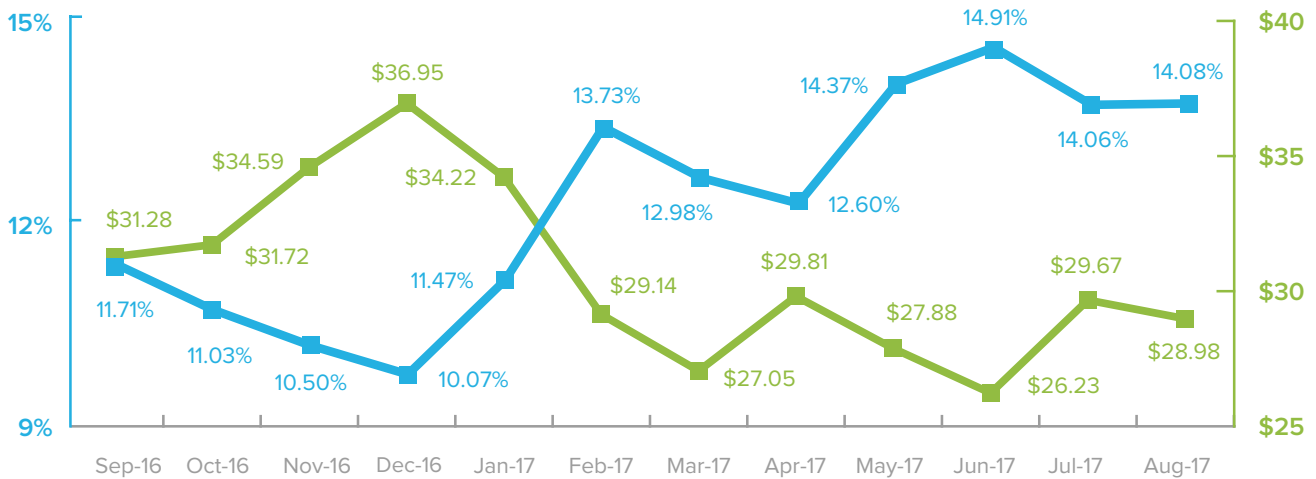
mean that users chose not to make booking with their apps because they weren’t accustomed to doing so.

Or it could mean that users were put off by the quality of the app experience and the hurdles they had to clear to input data and details. Are users more savvy, or have app companies improved the user journey? We can’t say for sure.



But one outcome of which we can be certain: relatively flat CPAs in 2017 for this deeper-in-the-funnel action tell a positive story. Clearly, planning trips – or just a night out – using a mobile app has become mainstream.

Marketers can dial down efforts aimed at educating users to use their apps to make reservations and double-down on campaigns to ensure users reach to their apps more frequently.



RESERVE: MONTHLY COST & ENGAGEMENT RATES

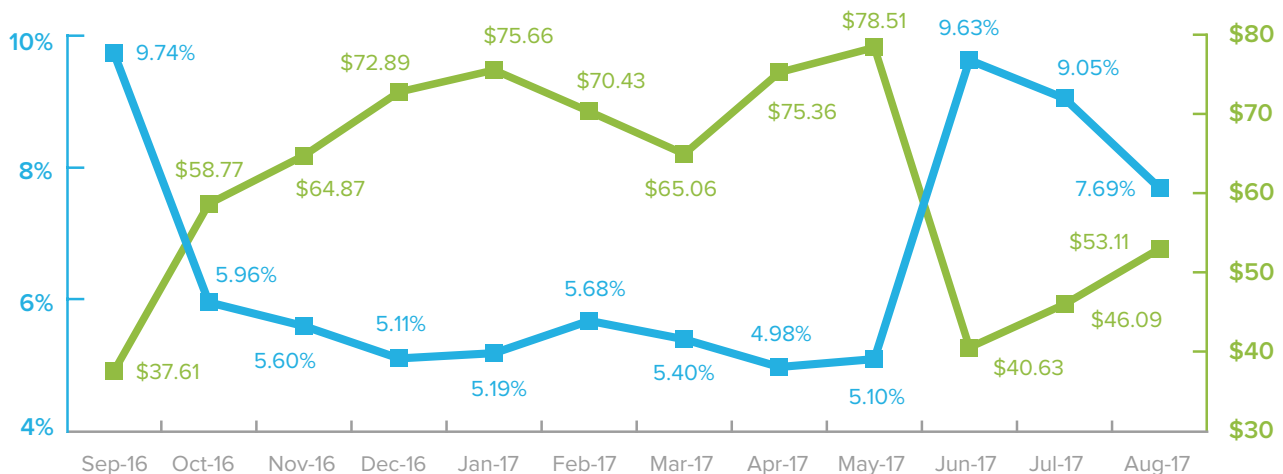
Purchase: Monthly Cost & Engagement Rates

The purchase Index measures the cost to acquire a user who completes a first purchase using the app.

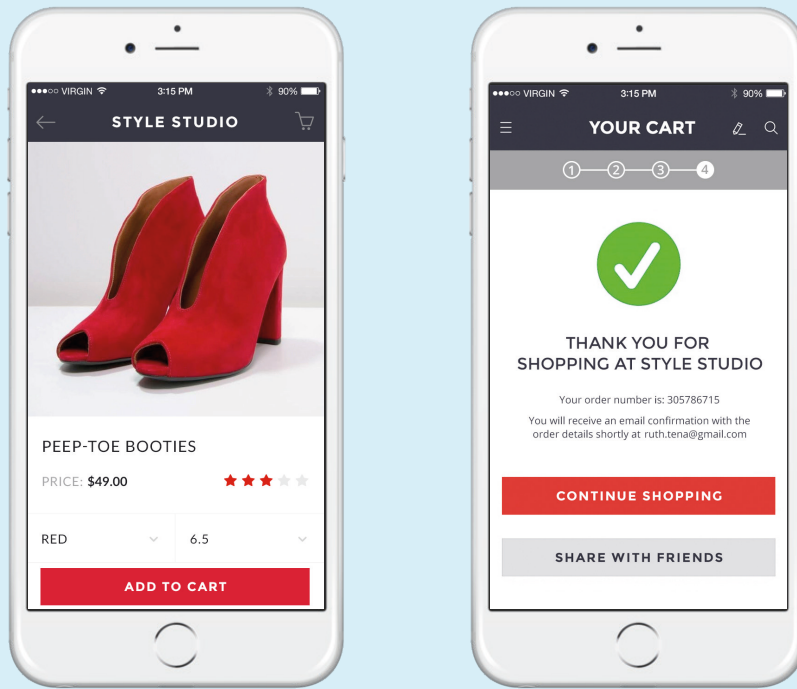
Thanks to the advance of mobile and apps, consumers no longer go shopping, they are always shopping.

This user behavior creates incredible opportunities as well as competition among commerce companies to inspire consumers in the all-important “I-want-to-buy” micro-moment. Significantly, Shopping is the one app category that can also time user acquisition and activation campaigns with the seasons and months of the year.

Predictably, the peak season for shopping activity – and acquisition costs – is the holiday season. In 2016 mobile shopping in the run up to the holidays smashed all records – everywhere. And 2017 is shaping up to be much the same. Little wonder that CPAs rise in the run up to the holidays, while users – overwhelmed with choice – are not a pushover to convert. However, for some app categories such as Luxury Goods, it’s easy to imagine that the value of purchases made by roughly 5% of app users is still a handsome sum.



PURCHASE: MONTHLY COST & ENGAGEMENT RATES



“ The holidays are important for our shopping app. For this reason, we do prep work on UA before holiday pushes, which results in better Q4 and Q1 performance. ”



Drew Frost, Sr. Product Marketing Manager, Sam's Club

That said, there are months when the cost to acquire shoppers hits more attractive levels for a wide range of Shopping apps. Case in point: CPAs plummet a whopping 48.2% from May to June (from \$78.51 to \$40.63), and continue to hover in that range throughout the summer. Summer is also the hazy, lazy season when many users are looking for items that

enhance longer summer days and long weekends. Pleasant weather also creates a slew of new micro-moments – if only during a midday lunch in a sunny, outdoor café – when users can quickly reach for their smartphone and shop for June bridal showers, back-to-school supplies, DIY and garden projects – or just get a head start on holiday shopping.

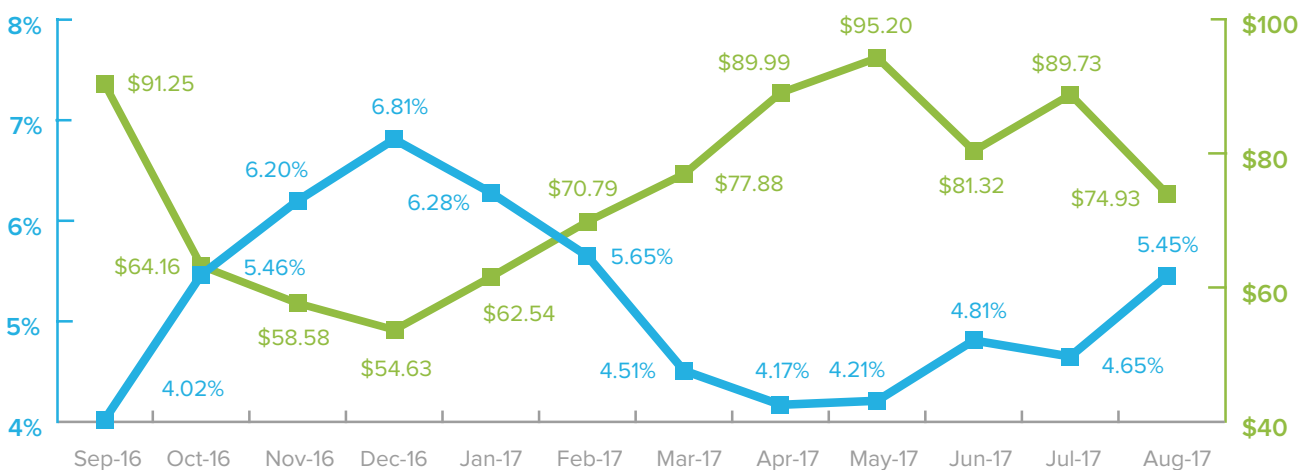
In-App Purchase: Monthly Cost & Engagement Rates

The In-App Purchase Index measures the cost to acquire a user who completes a first in-app purchase in a mobile game.

It's important to note that there are surprising and super-important differences between gaming app subcategories - which is why the [2017 Liftoff Mobile Gaming Apps Report](#) broke the data down into six groups: action-adventure, card, casino, casual, puzzle and strategy games. In this Index we combine the data across all app categories to provide marketers a Big Picture view of the trends and timings they can use to their advantage to engage their target audience.

Significantly, IAP costs that took a dive from January to June 2016 rebounded in 2017, indicating that more marketers

are likely becoming more methodical about their acquisition and engagement strategies. Rather than follow the crowd and spend big to rise above the pre-holiday “noise,” smart marketers appear to be setting their own schedules. The outcome is an extended post-holiday push – and a shift in competition cycles that also pushes up CPAs. In fact, they rise steadily from January (\$62.54) to May (\$95.20), while engagement rates during the same period hover in the 4%-5% range. This dynamic would suggest that users – inundated by advertising - are underwhelmed. Marketers would do well to fight ad fatigue with creatives and campaigns that inspire, not annoy.



IN-APP PURCHASE: MONTHLY COST & ENGAGEMENT RATES



“ Ad creatives are extremely important for increasing in-app purchases. Creative is not one size fits all. Identify the persona of your audience, and use a segmented creative approach to yield best results. Testing is key. ”



Winnie Wen, Senior Manager of UA, WB Games

Summer is still a “hot” time for engagement (which rises from 4.65% in July to 5.45% in August). Significantly, it’s the fall months (September onwards) that sees engagement rise, no doubt boosted by the wave of enthusiasm and euphoria that traditionally follows Apple’s annual unveiling of cool new “stuff” in September. (In fact, 2016 was the fifth year straight that Apple held

an early September event to announce new products – [a happening](#) that many app users and Apple fanboys follow like moths to a flame.) For marketers with games that take advantage of cool new Apple features – such as augmented reality (AR) – it might make sense to double-down on campaigns timed to Apple events, when user interest and passion for the new devices are high.

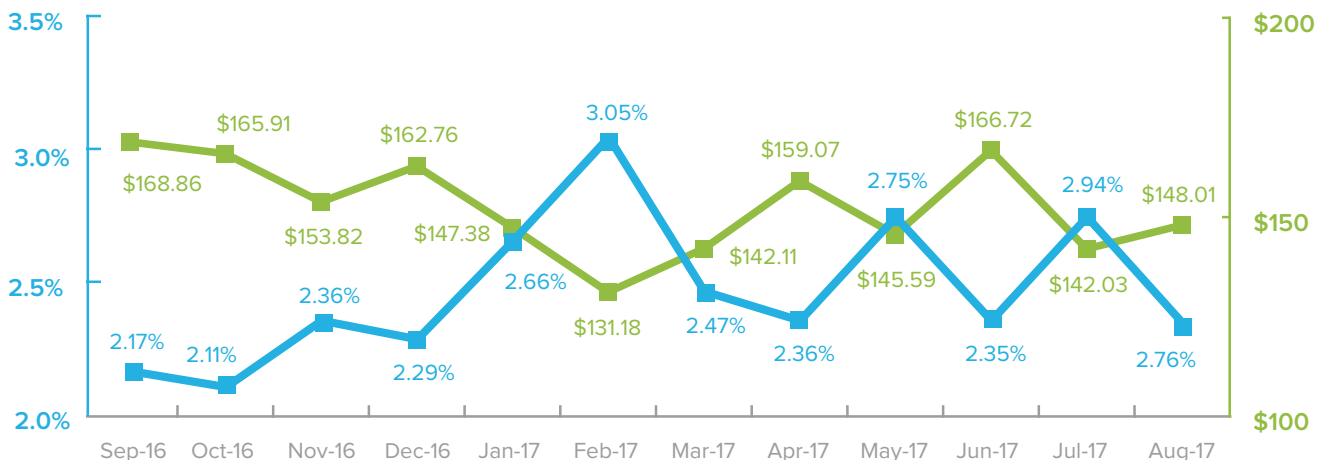
Subscribe: Monthly Cost & Engagement Rates

The Subscription Index measures the cost to acquire a user who subscribes to a paid service. Subscription apps are in a league of their own.

Users don't come cheap – but this category of apps alone can lay claim to the prize: the lasting loyalty of users so committed to an app that they agree to pay a recurring fee for the privilege to use. Even better, companies in this category have a stable and predictable cash flow that allows them to forecast and plan with a high degree of certainty and accuracy. All this comes at a cost.

But the category of Subscription apps is by no means generic. It

includes subcategories – Dating, Gaming, Finance and Shopping – that vary significantly in the audiences they acquire and activate. It's why the [2017 Liftoff Subscription Apps Report](#), the first-ever report to lift the lid on engagement trends and activities impacting user acquisition and engagement in this burgeoning app category, purposely breaks down data between app subcategories and surprisingly produces some very different results for each.



SUBSCRIBE: MONTHLY COST & ENGAGEMENT RATES



In this Index we focus on some high-level trends common to all Subscription apps. Generally speaking, engagement with subscription apps is fairly steady. This is likely linked to consumer “need-state,” not seasonal events. The takeaway: campaigns powered by appropriate messaging and effective targeting can reach and influence consumers all year long. That’s a huge window of opportunity.

There is also large variance in the cost to acquire a user. In the 2016 Index

costs peaked in March at \$287.51; in this Index costs hit a high in September at \$168.86. Are users more comfortable with the concept of subscription apps and therefore more open to commit to recurring costs? Or have marketers markedly improved how they articulate the value their app offers in return for a monthly fee? We can’t know for sure. But the positive trend – paired with lower costs – should encourage more app companies to embrace the subscription model and get in on the action.



Engagement by Gender Males vs. Females

This Index highlights some noteworthy differences in costs and engagement rates, but these differences are less extreme (compared to the previous year).

The message to marketers: Attach less importance to traditional stereotypes and invest more effort – and budget in efforts that cash in on the overall shift in user behavior that finds all users – males and females – using more apps to do more.

A prime example is Reserve. Last year, measured at 8.2% for females and 4.45% for males, engagement rates were markedly lower. This year, the Index shows CPAs for this event jumped to 15.1% for females and 14% for males, while costs remained relatively unchanged. Booking reservations

on mobile is clearly moving into the mainstream – all the more reason for marketers to shift from engagement campaigns aimed at educating and onboarding users to more holistic strategies sharply focused on convincing users to make booking apps a more integral part of the daily routine.

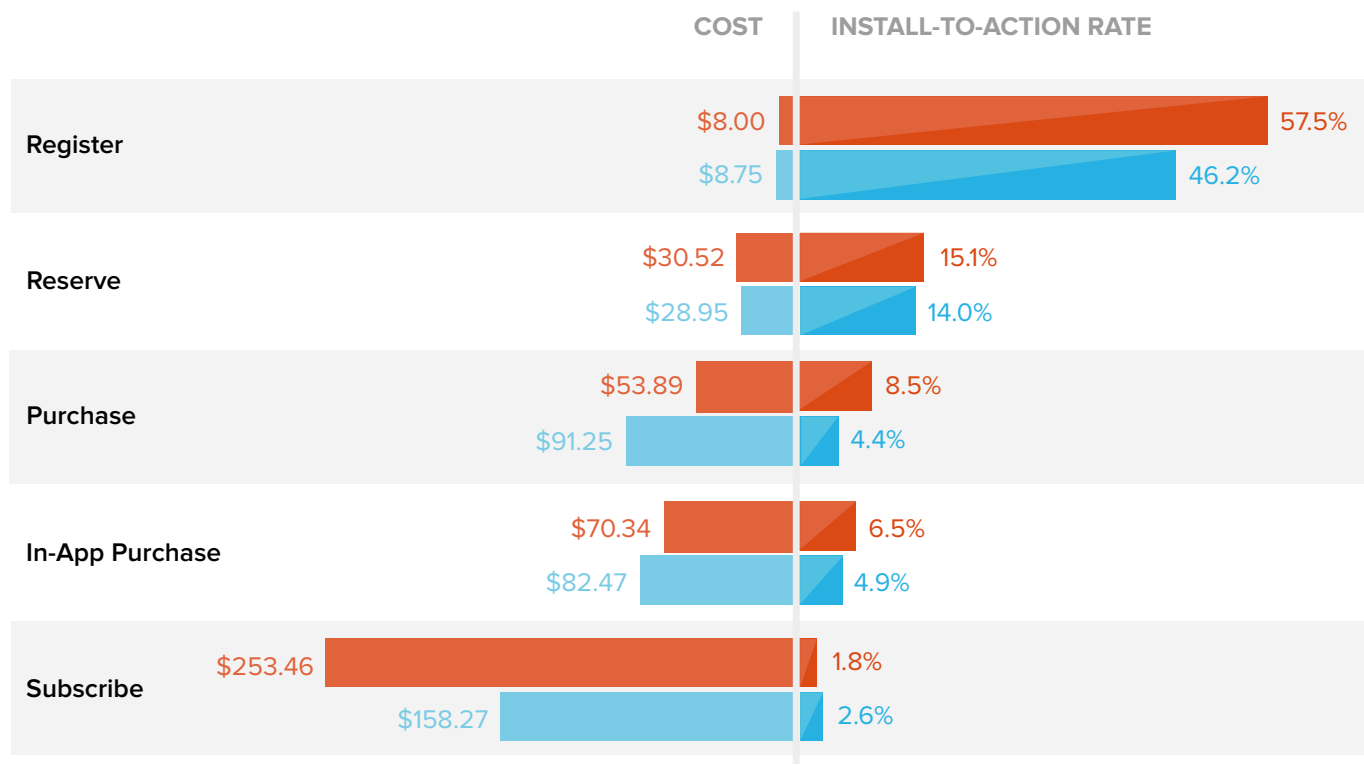
Whether this is linked to improvements in the app journey, or the outcome of a shift in user behavior that is seeing more consumers trade downtime for more time to browse and buy, we can't know for sure. But CPAs across both genders

show females aren't the only die-hard shoppers marketers need to target. Last year, post-install activity engagement rates for Purchase (females: 1.9%; males: 2.2%) were at the low end of the scale, while acquisition costs (females: \$56.58; males: \$93.64) were pricey. In 2017, acquisition costs are roughly the same (females: \$53.89; males: \$91.25), but engagement rates rocketed. Engagement rates hit 8.5% for females and 4.4% for males.

Predictably, engagement deeper in the funnel, such as Subscription, comes at a much higher price. But don't let what appears to be low post-install engagement rates discourage you. Depending on your

app and the monthly fee you charge, single-digit post-install engagement rates can mean a sizable and steady income for your app.

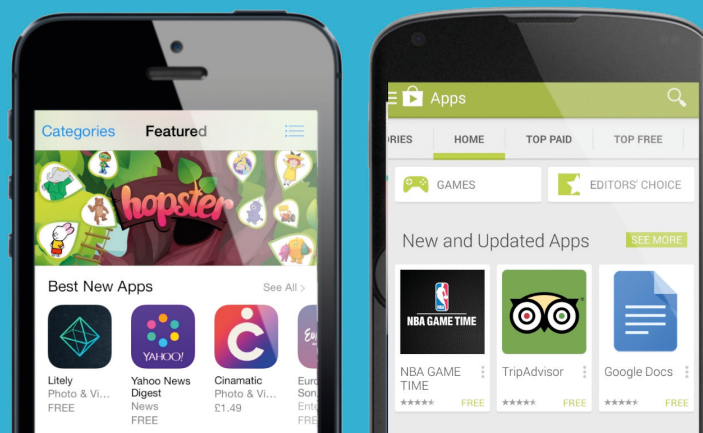
After all, this is also a category that includes Dating and Finance apps – subcategories Liftoff has shown appeal to males more than females. This explains the slightly higher engagement rates for males (2.6%) compared with females (1.8%). What's more, males are a bargain at \$158.27 (females cost a shocking \$253.46). If you have a subscription app, it might be a clever idea to re-balance your campaign away from catering to indecisive females to courting eager males.



Women

Men

GENDER: COST & ENGAGEMENT RATES



Engagement by Platform iOS vs. Android

Overall, the popular assumption that affluent iOS users do more and spend more than their Android counterparts is a stereotype supported by the data.

Put simply, iOS users – perhaps because the majority of them are female – tend to engage more. But they also tend to cost more.

Across the post-install engagement activity tracked in the Index, it's no surprise that iOS outperforms Android. But it's also significant that the activities where the difference between platforms is the greatest are also those events deeper in the funnel, where users often have to dig deeper in their pockets. An example is Register, a post-install activity that requires users to commit time, not cash. At \$6.57 Android cost nearly 44% less than iOS users, and convert at roughly the same rate (50.4% for Android compared to

47.3% for iOS). Marketers clearly have a captive audience across both operating systems – and should use advertising across all touch points to re-engage users and re-ignite their interest.

Reserve is another story. Last year costs were high and engagement was moderate. This year costs have dropped and engagement shows robust growth – supporting a key finding in the Index that booking is well on its way to becoming a mainstream activity. Its popularity spans both platforms with conversion rates for iOS users hitting a healthy 21.8%, almost one-third more than the previous year.

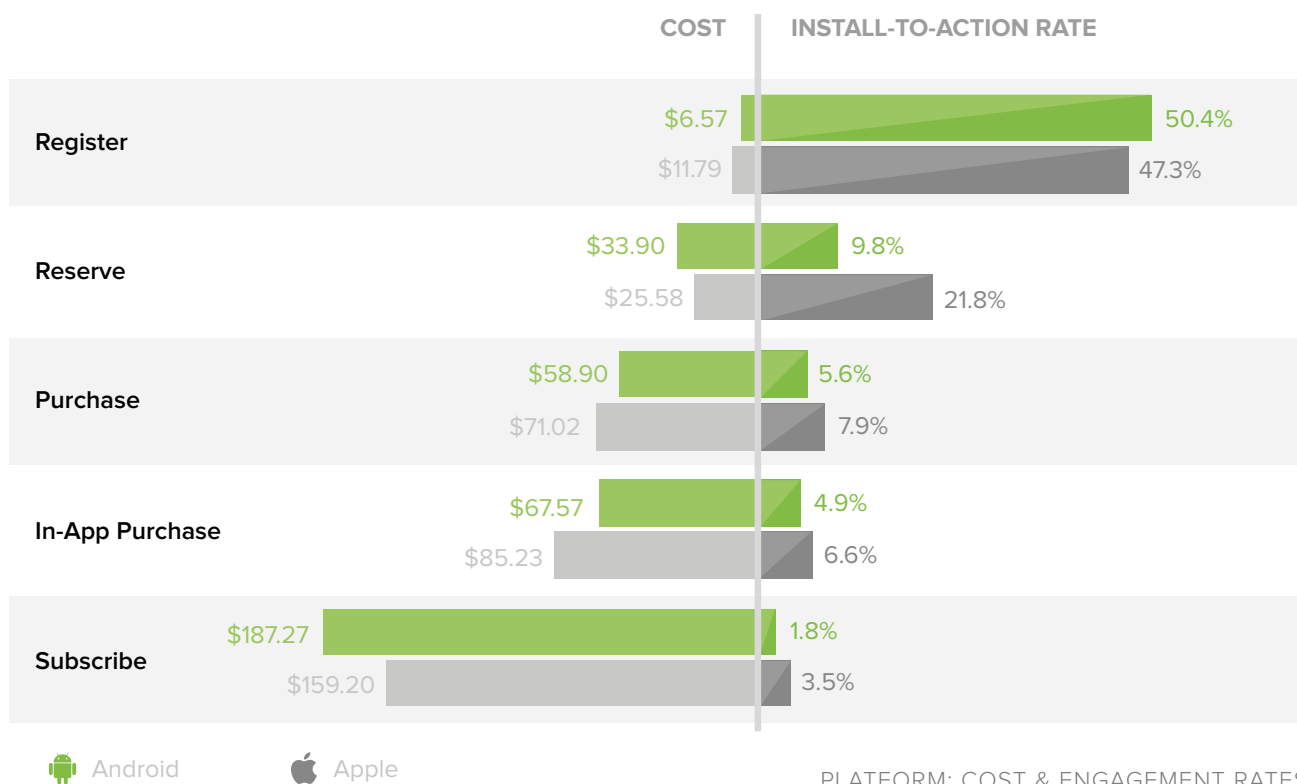
Significantly, Subscription is a post-install activity where marketers might again

profit from the propensity of iOS users to spend big. At \$159.20, iOS users cost 14.5% less than Android users (\$187.27). Plus, conversion rates for iOS (3.5%) are more than double. But marketers should also consider another important variable – outside the scope of this Index – which is the dollar amount of the monthly subscription. Are iOS users **really** the bigger spenders compared to Android? Look for the answers in your own data, and then act on them.

Overall, iOS users appear to be the prize, but [latest forecasts](#) from app market data provider App Annie hint the year ahead will witness the beginnings of a seismic shift in app and operating

system dominance, a change that could impact 2018 budget and planning.

Although the Apple App Store will remain the most lucrative app store through 2021 – generating \$60.3 billion - App Annie reminds us that Google Play and third-party Android stores will be the ones to watch. In fact, the combination of Google Play and third-party Android stores is “forecast to exceed iOS in 2017 as the sharp growth in the installed base of Android devices makes up for lower user purchasing power.” Android users may not have the deepest pockets, but the sheer volume of the purchases they make can still add up to a significant sum.





Engagement by Category

Data is essential to inform effective acquisition and engagement strategies.

But your own algorithm for success will depend on the metrics you demand and the trade-offs you are willing to make – and all that will depend on your app category.

This is where the Index adds value, organizing a wide range of data, insights and actionable advice by app category (Dating, Finance, Gaming, Shopping, Travel and Utility) to equip marketers, no matter their app or budget, to capture and convert their target audience.

Predictably, costs and conversions vary according to app category, but the observation that deep-funnel engagement activities come at a higher price is a recurring theme throughout the Index. At first glance, it's tempting to chalk it up to the adage: 'you get what you pay for' – but that would oversimplify the situation. A deeper dive in

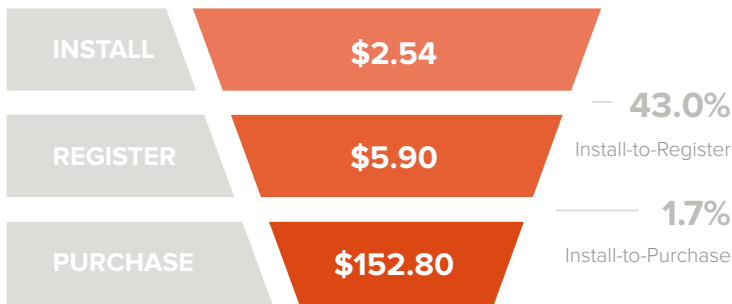
the data reveals exceptions to the rule and small differences in post-install engagement activity that can pay huge dividends.

In some cases, the best approach is to bargain hunt – pinpointing fluctuation across install costs in order to spend low and – hopefully – hit it big. In others, spending more to acquire more valuable users is an investment likely to pay dividends further down the line, turning moderate users into advocates and fans who are in it for the long haul. Again, what you aim for (and how high) will depend on what you hope to gain.

However, regardless of your app category or campaign objectives, it's always risky to drive your business blind. Use the data and benchmarks detailed in this section to inform your strategies and determine your roadmap.

Dating App Engagement

Dating apps demand a commitment from users, and their buy-in to pay a recurring monthly cost. Little wonder that deep-funnel, post-install engagement activity such as Subscription comes at a price.



DATING APPS: COST & ENGAGEMENT RATES

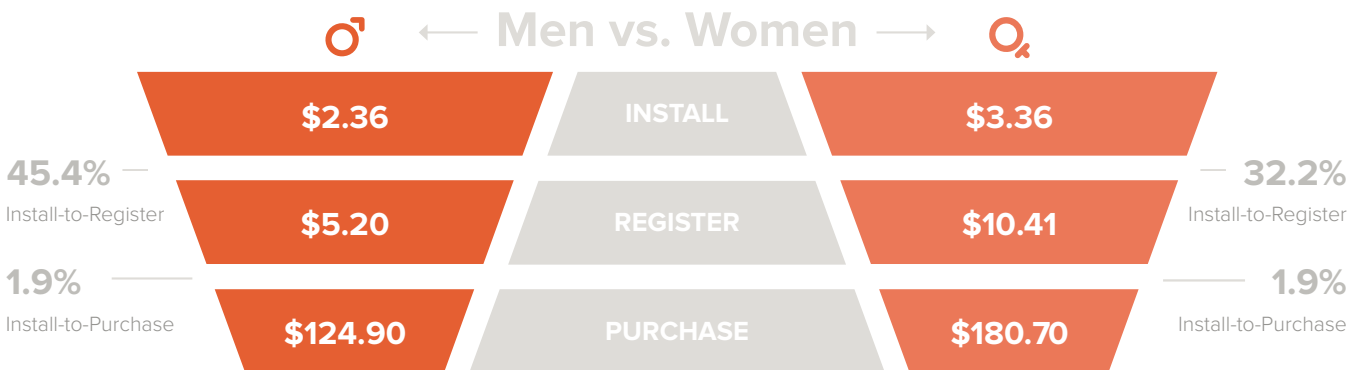
Overall, females are more expensive than males to acquire – but males are the prize when it comes to deep-funnel engagement activities.

Case in point: Register is where you don't want to cast too wide a net. The cost to acquire females (\$10.41)

is nearly double that of males (\$5.20). But engagement rates show a significant gap (32.3% for females and 45.5% for males).

The opportunity: Cash in on campaigns to acquire males at moderate prices and re-engage to get your money's worth.

The challenge: As no app in this category can thrive without a balanced mix and variety, marketers also need to get smarter about how they acquire and register females – otherwise males may be tempted to try their luck elsewhere.



DATING APPS: COST & ENGAGEMENT BY GENDER

Finance App Engagement

Recent reports suggest females may be better investors than men, but males are more likely to buy and sell stocks frequently. Females, on the other hand, tend to “have long-term goals, and [they] stick with the plan.” This finding is supported by Index data that shows significant differences between males and females.

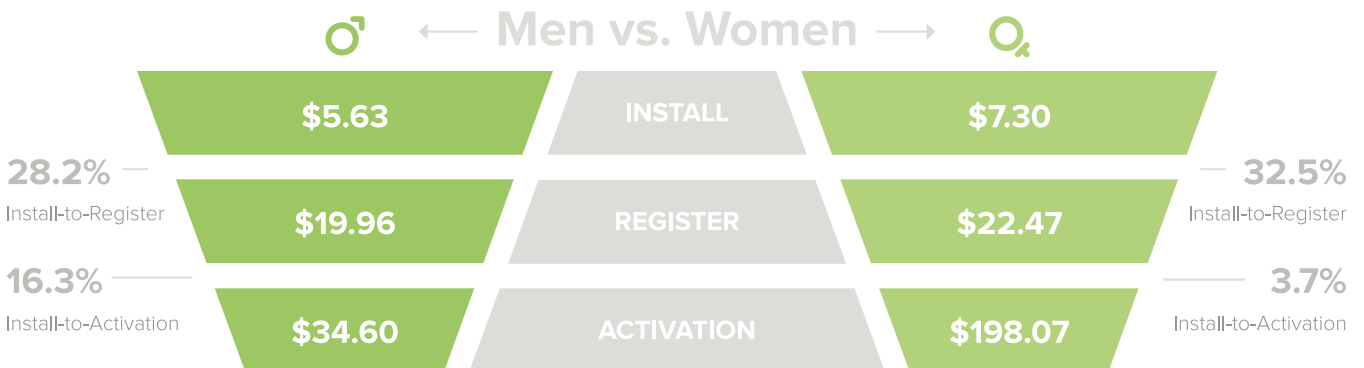


FINANCE APPS: COST & ENGAGEMENT RATES

Case in point: Activation, where males are a steal at \$34.60 (compared with females that cost a whopping \$198.07). Conversion rates clinch the deal, with 16.3% of males continuing to make an account activation compared to only 3.7% of females.

The opportunity: Acquire more males at a moderate cost and focus campaigns to drive deep-funnel engagement and lasting loyalty.

The challenge: More females (32.5%) than males (28.2%) are registering in the app, so reexamine the app experience you offer and the value you provide to identify friction and realistic reasons why females drop off in the app.



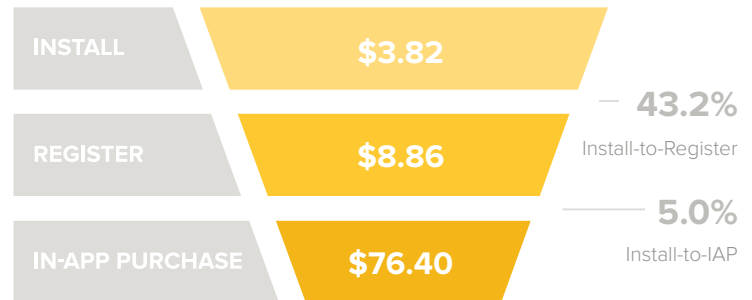
FINANCE APPS: COST & ENGAGEMENT BY GENDER

Gaming App Engagement

Gaming doesn't just define our downtime. Research in the [2017 edition of the milestone Mary Meeker report](#) underlines how gaming concepts increasingly shape every aspect of our lives, from how we work to how we manage our lives. Little wonder that costs and engagement rates differ only slightly between males and females.

Case in point: Conversion rates and prices have dipped slightly compared with last year, suggesting that males and females alike are showing early signs of ad fatigue. This dynamic naturally forces marketers to focus spend on driving deep-funnel engagement. Heavy competition for users is pushing acquisition costs for a user that goes on to make an in-app purchase into the stratosphere (\$76.40 this year compared with \$65.90 in 2016).

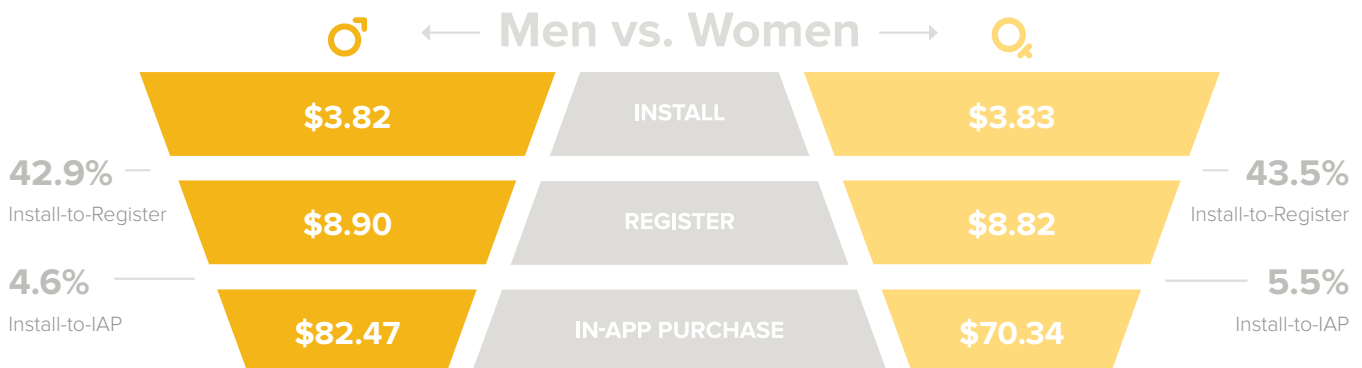
The opportunity: Double-digit numbers of users are registering in the app, but only single-digit numbers go on to make an in-app purchase. Turn a problem into an opportunity



GAMING APPS: COST & ENGAGEMENT RATES

by increasing the frequency and appeal of campaigns to inspire the all-important impulse buy.

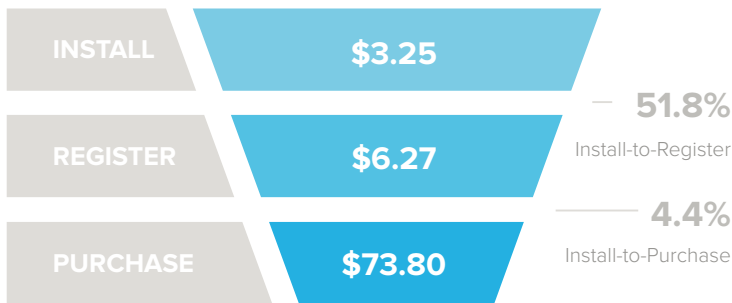
The challenge: Competition is fierce, so marketers will need to be more sophisticated in what they offer and how they communicate it. Experience beats everything – so make sure your advertising enhances the game, not interrupts it.



GAMING APPS: COST & ENGAGEMENT BY GENDER

Shopping App Engagement

Thanks to the advance of mobile and apps, consumers no longer go shopping, they are always shopping. It appears that the vast majority of users who install a shopping app have exactly this activity top of mind as over half (51.8%) continue on to register using the app.

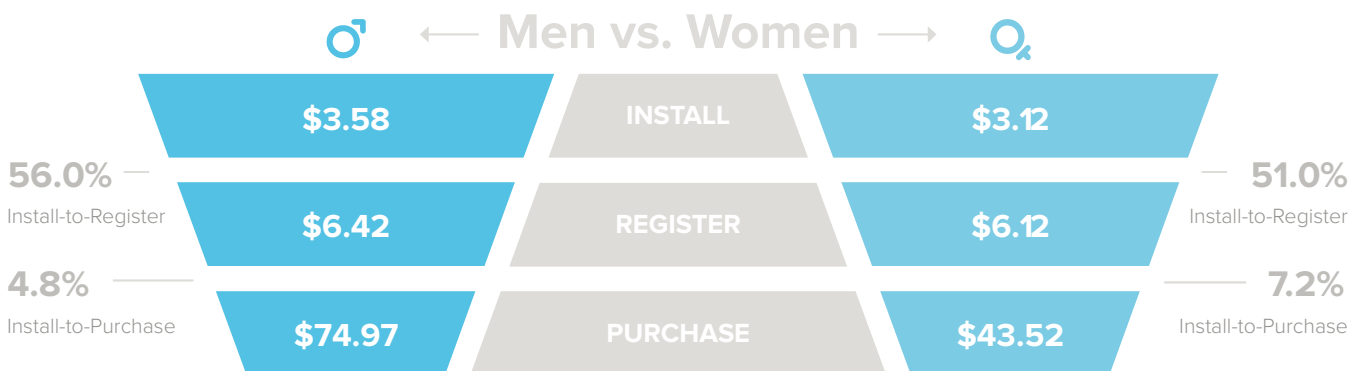


SHOPPING APPS: COST & ENGAGEMENT RATES

Case in point: Registration is a post-install activity where engagement rates among males and females are roughly the same (males: 56%; females: 51%) for roughly the same price (males: \$6.42; females: \$6.12).

The opportunity: Only 4.8% of males who install a shopping app also complete a purchase. Among females that total is nearly double, for nearly half the cost. Marketers with their eye on the prize should use compelling campaigns, offers – even personalization – to turn female shoppers into frequent buyers.

The challenge: In a word, competition. You can bet the farm that you’re not the only marketer excited by the eye-watering conversion rates for deep-funnel post-install activity. The pressure is on to harness all your consumer touchpoints to make users an offer they can’t refuse.



SHOPPING APPS: COST & ENGAGEMENT BY GENDER

Travel App Engagement

Users are reaching for apps every step of the journey – interaction that allows them to embrace and experience the value of using Travel apps to research trips, reserve vehicles and even book vacation trips. Top-of-the-funnel conversion rates for males and females hover in the double-digits – but there are subtle differences.

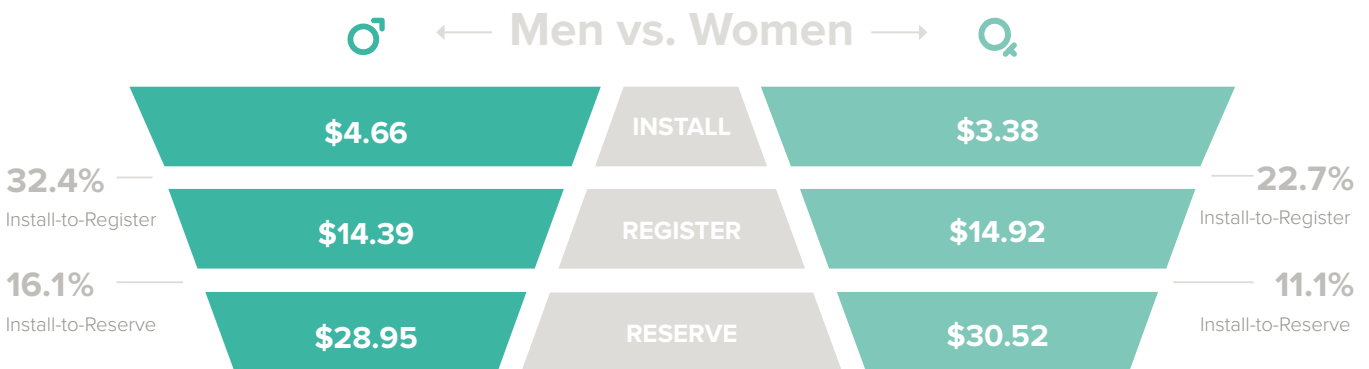
Case in point: The cost to acquire a user who makes a reservation using an app is roughly the same for both genders (males: \$28.95; females: \$30.52) However, engagement rates vary (males: 16.1%; females: 11.1%), suggesting males are a better investment.



TRAVEL APPS: COST & ENGAGEMENT RATES

The opportunity: Install-to-reserve rates for males are attractive, not prohibitive. Males continue to reserve 45% more than females.

The challenge: Install-to-register engagement rates are promising, but dip for those who continue on to a reservation. Where and why are users abandoning the app? Use your data to identify the disconnect, and address it.



TRAVEL APPS: COST & ENGAGEMENT BY GENDER



Utility App Engagement

Time spent in mobile apps rocketed to nearly one trillion hours in 2016, a trend that app market data provider App Annie reports shows no signs of slowing.



UTILITY APPS: COST & ENGAGEMENT RATES

Its [May 2017 app usage research](#) highlights two surprise findings. One, the average smartphone user uses over 30 apps per month (proving that apps have “successfully worked their way into dozens of the tasks that we perform each month.”) Two, Utilities

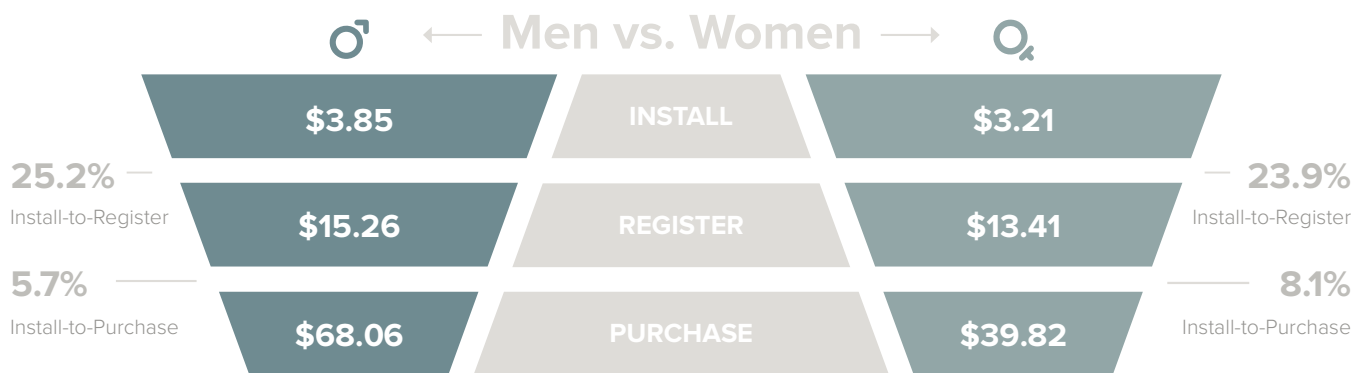
and Tools “lead the way,” which means users, on average, have more Utilities apps on their phones than any other category of app. (Granted, it doesn’t follow that Utilities apps are used more than other apps, but their dominant position on devices is surely a boost to visibility, discoverability and – ultimately – use.)

Case in point: From free calling apps to weather apps, Utility is a category that targets a broad audience and use cases common to both genders. Overall, CPIs (\$3.53) are somewhat higher than the previous year (\$2.91). But post-install

engagement activity is also up slightly to match.

The opportunity: Female users are cheaper to acquire and much more willing to make a purchase. At \$39.82 they offer incredible value for money. What’s more, with an install-to-purchase rate of 8.1%. females far outperform males.

The challenge: Purchase is a deep-funnel engagement that is tough to trigger, but worth the effort. Marketers are well advised to focus more effort on converting interested users into paying customers.



UTILITY APPS: COST & ENGAGEMENT BY GENDER

Regional Analysis

In addition to a review of cost and conversion rate data across gender and platform, this year's Index also goes one step further. For the first time the Index breaks down data and metrics by region (North America, LATAM, EMEA and APAC) to help marketers prioritize efforts and targets as they map out strategies to grow their audience and app foot print in the year ahead.

But before we embark on this “world tour” and highlight some of the key opportunities (and challenges) across the regions, keep in mind that differences in costs could be linked to the number of apps in each region, or the level of the mobile-readiness of users in that region – or both. A prime example is **LATAM**, where mobile app growth is soaring (as are engagement rates), while a lack of local payment infrastructure across predominantly rural areas means some users – though open and eager to make purchases – can't

use their apps to complete them.

Cost and conversion for **Install** tell a familiar story – that runs through the data like a leitmotif. North America, a region leading in the production of and passion for apps, naturally is home to a population of highly-engaged app users. The flip side: they come at a price. Significantly, both acquisition costs (\$38.07) and conversion rates (a whopping 15.9%) are attractive, indicating that users “get” the value proposition offered by retail apps. Such solid numbers beg the question:



Are consumers ripe for even more retail therapy?

Marketers that push the boundaries with marketing to tap this pent-up demand might be rewarded with a tidal wave of commerce.

Deeper down in the funnel differences between the regions become more pronounced and profound. At first glance, **APAC** appears to offer an audience that is motivated to engage with apps at reasonable prices. But turning eager app users into loyal app advocates requires marketers to employ effective campaigns that resonate with diverse populations.

At one level, marketers need to ensure apps and campaigns are localized and – more importantly – aligned with cultural norms and sensitivities their audiences value. At the other end of the spectrum, marketers must accept the role of a Sherpa, ensuring that all consumer touch points are aligned and locally relevant in order to accompany app users on a journey deeper in the funnel. Marketers that adapt their apps and campaigns to cultural differences can win big, but it's not an easy win.

Viewed through this lens, APAC makes good business sense if you have the app and the infrastructure to engage – and re-engage – your users. For marketers that lack the necessary arsenal of capabilities to support this level of depth and breadth in their campaigns, **EMEA** is better fit.

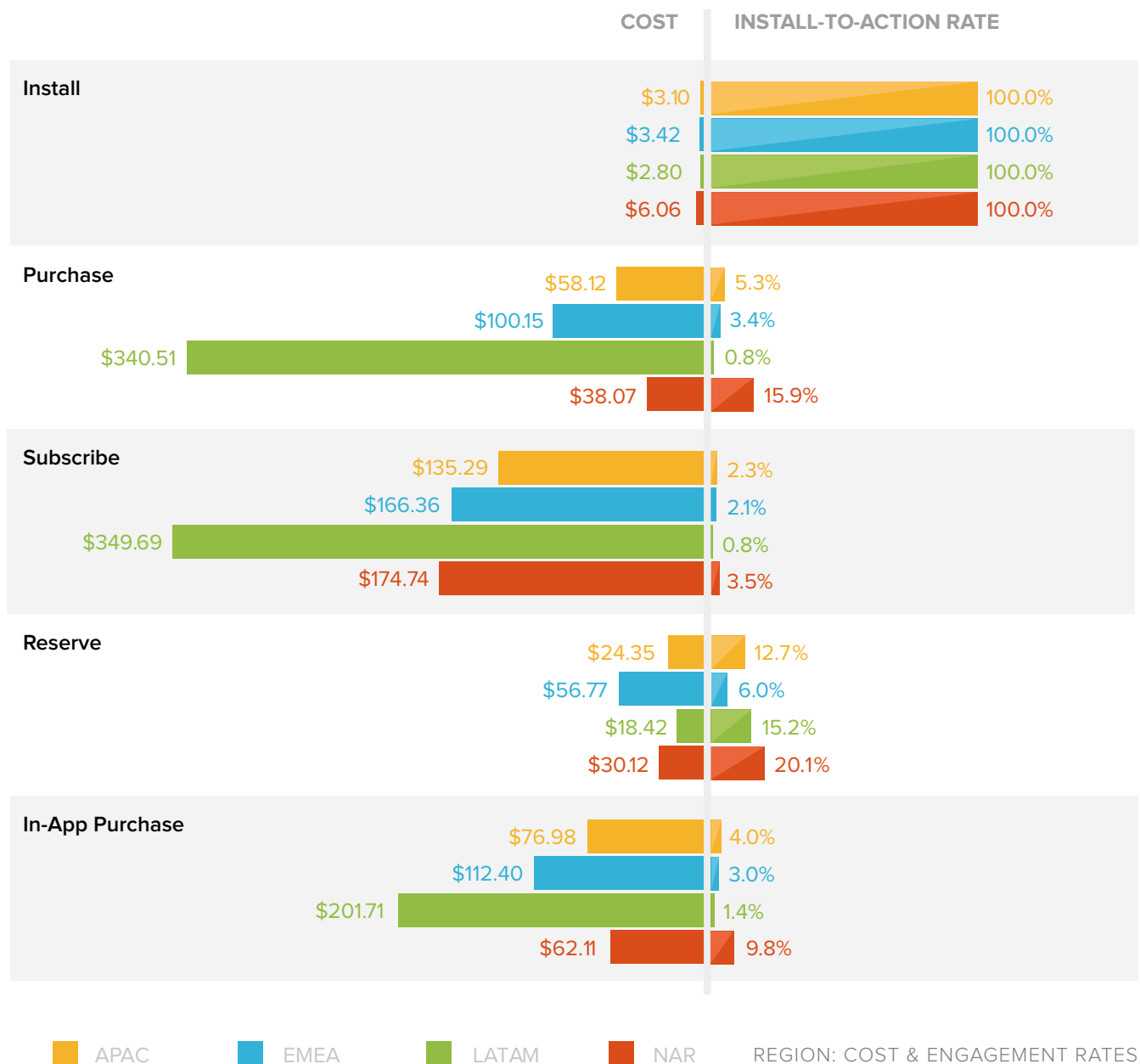
EMEA may not be as mobile savvy as APAC, but app use is on the rise as users discover they can do more with their apps. **Reserve** is a solid example. At 6% the conversion rate is positive and promising. Clearly, marketers have been successful in educating users and influencing them to make bookings.

Purchase is another matter. Numbers may seem small now but it won't stay that way for long. After years of stop-starts, mobile payments are finally poised for takeoff, according to [Forrester Research](#). It pegs the value of mobile transactions in the EU-7— France, Germany, Italy, the Netherlands, Spain, Sweden and the UK—to jump almost threefold during the next five years, from \$52 billion at the end of 2015 to \$148 billion by 2021. Drivers are the increased consumer awareness and a proliferation of mobile payment options – including apps that enable instant-commerce.

Overall, shoppers have shown little interest in making purchases with their app, but that is going to change – faster than you think. Will it be a boost to **Subscription** apps? The jury is out on that one, but it’s easy to imagine that effective marketing could unlock pent-up demand provided the value is clear

and the engagement is appropriate.

Connect the dots, EMEA is a market on the move – but to move the needle on their apps in the coming year marketers will have to double-down on efforts to develop and deploy campaigns that push the envelope and build trust.





Conclusion

Drawing from data across a broad range of apps and a wide array of post-install engagement activities, this year's Index is chock-full of analysis and actionable advice relevant to all marketers.

What you find valuable and worth taking on board as you plot your competitive course for the year ahead will – like all things – depend on your app category and your engagement objectives.

But a closer examination of costs and conversion rates reveals 4 mobile app marketing mega-trends you need to know no matter the audience you target or the budget you invest.

#1 The best time is all the time. Mobile apps have created new paradigms and new opportunities for marketers to engage with users. While the Index pinpoints opportunities throughout the

year (linked to seasonality and events such as holiday shopping), the lack of clear correlation in the case of many app categories suggests it's time marketers rethink the practice of timing app spend and campaign pushes to specific months or seasons, and open the aperture of what they offer and when to take full advantage of the multitude of “micro-moments” apps are creating, and users are embracing.

#2 *Real* results are generated deeper in the funnel. In many cases, CPAs and engagement rates for top-funnel events – for example, Install – are flat,

suggesting that marketers who want to aim higher will have to go deeper in the funnel. Fortunately, marketers who focus more effort and spend on deep-funnel events will find an audience primed and ready to engage. Against this backdrop, Registration is the new ‘install’ - standing out as the engagement event that is marginally cheaper (compared to last year) and markedly more attractive as more users do it upon installing an app for the first time.

#3 It's a banner year for booking apps.

Users are accustomed to doing more with their apps – and booking apps are in the sweet spot. Last year costs were high, and engagement was moderate.

This year costs have dropped, and engagement shows robust growth – supporting a key finding in the Index that booking is well on its way to becoming a mainstream activity. Its popularity spans both platforms and gender.

#4 High-value engagement activities

are never a free lunch. Predictably, engagement deeper in the funnel, such as Subscription, comes at a much higher price. But don't let what appears to be low post-install engagement rates discourage you. Depending on your app and the monthly fee you charge, single-digit post-install engagement rates can mean a sizable and steady income for your app.



Liftoff is a full-service mobile app marketing and retargeting platform which uses post-install data to run true CPA-optimized mobile user acquisition and retention campaigns. With Liftoff, campaigns are optimized to drive specific actions beyond the install, to acquire users who engage in more profitable post-install events like booking a hotel, subscribing to a service or making a purchase.