



---

# Liftoff App Engagement Index Report

---

JANUARY - JUNE 2016



L I F T O F F

# Mobile App Engagement Index 2016

## Introduction

The Liftoff 2016 Mobile App Engagement Index measures the costs associated with the actions marketers want their users to take on mobile apps. The Index tracks the costs of App Installs, Registrations, Purchases, Subscriptions, Reservations, and In-App Purchases and further breaks down those costs per action (CPA) across gender and operating systems. It's focused on five major app categories: eCommerce, Finance, Gaming, Travel, and Utility.

The purpose of this Index is to give mobile marketers a way to benchmark the performance they saw with their user acquisition channels against what others in their app category experienced.

In the first six months of 2016, we saw the average cost to acquire a user who completed a purchase or subscribed to a service rise and fall. It's not unusual for CPAs to rise in the beginning of the year, as consumers are typically less likely to spend right after the holidays. But as spring comes around, users are more likely to pull out their wallets.

Gaming and travel apps also saw their costs for acquiring new, engaged users decreased over the first half of the year, especially as summer drew near. With consumers planning summer vacations and having more time to play games, engagement rates picked up considerably.

The Liftoff 2016 Mobile App Engagement Index is based on an analysis from January 1 through June 30 of more than 7.3 million app installs, 65 million post install events, 67% of which took place in North America, while 33% occurred in Asia, Europe, South America, and the Middle East.



## First Half 2016 Highlights

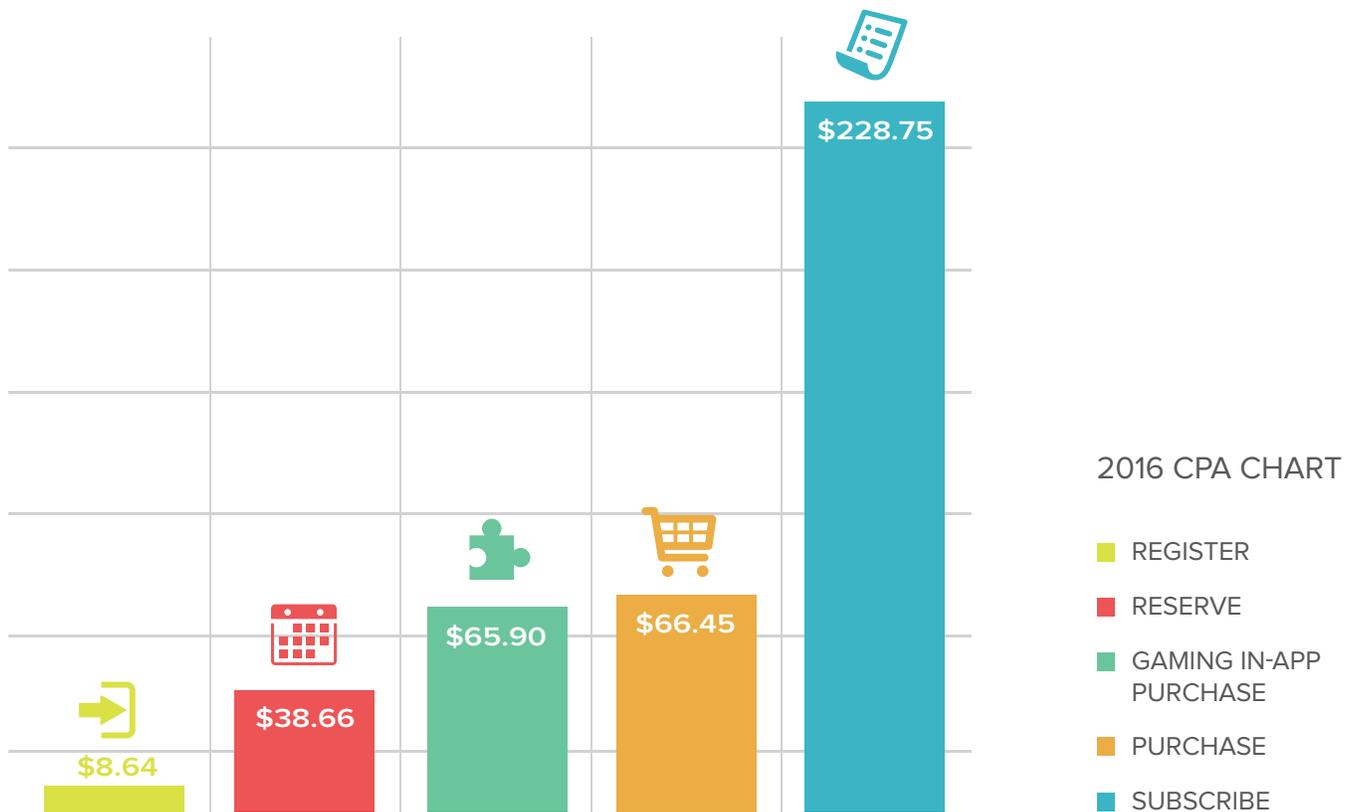
- The average cost per install was \$4.37. Utility apps were the cheapest at \$2.91, while Finance apps were the most expensive, costing \$6.63
- The cost to acquire a travel app user who made a reservation was \$38.66, down 14.6% from a year ago
- Gaming app users were 33.3% more likely to make an in-app purchase in Q2 than in Q1
- The cost to acquire a user who purchases a subscription service was \$228.75, a 30.7% increase compared to the cost in Q2 2015
- Women were 86.4% more likely to make a mobile purchase than men
- It cost 12.6% less to acquire a male who subscribed to a mobile service than female
- iOS users were 123% more likely to make a travel app reservation than Android users

# Mobile Engagement Benchmarks

The Mobile App Engagement Index benchmarks 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. The events measured are registering, making a reservation, completing a purchase, subscribing to a paid service, and making an in-app purchase in a game.

As in previous index reports, subscription and purchase events carried the highest user acquisition costs, while registrations - a non-transactional event - were the least expensive.

*The highest user acquisition cost category, subscription events, was 3.4x more expensive than the next most expensive category, shopping.*

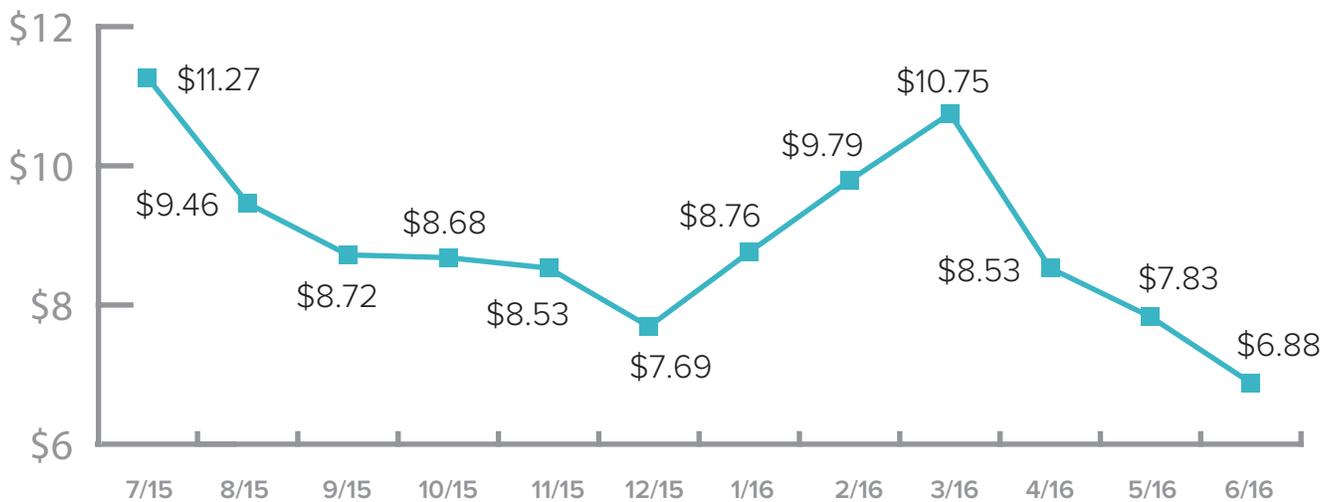


# Mobile Indexes

## Average Cost per Registration

The Registration Index measures the cost to acquire a mobile user from a paid app install campaign who creates an account in an app. Registration costs increased over the first few months after the holiday season came to a close, but decreased to a low of 6.88 by the end of June. In 2015, registration costs peaked during the summer, but it does not appear that will be the case in 2016 based on the current trend.

AVERAGE COST PER REGISTRATION



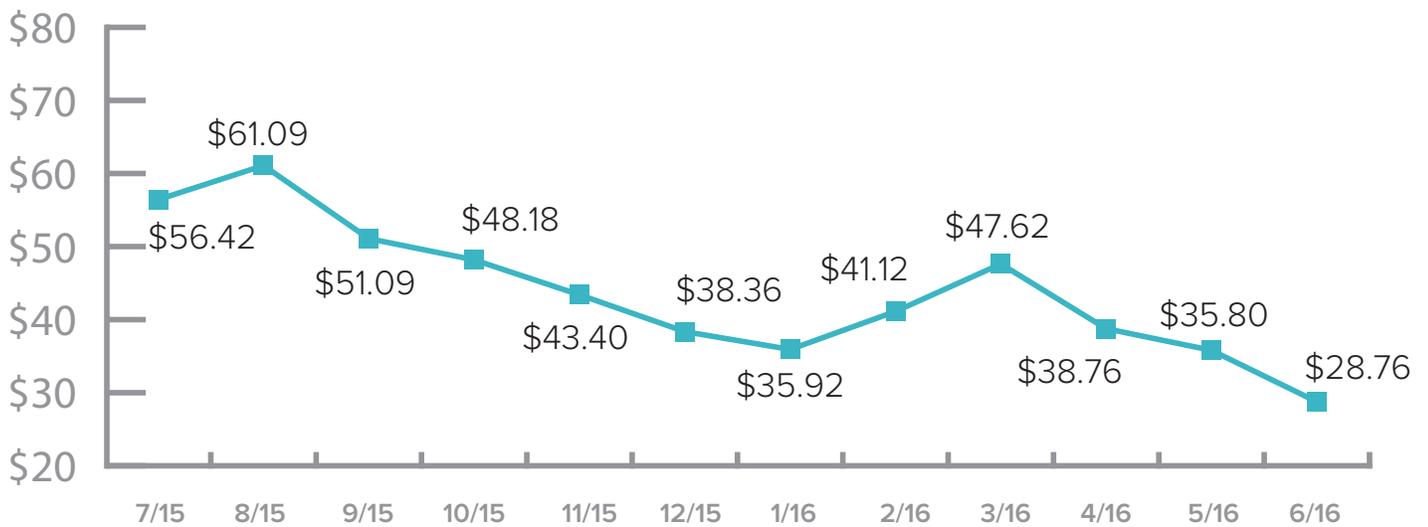
*Registration costs peaked in March for the first half of 2016. This trend is the opposite of what we saw during the summer of 2015.*

# Mobile Indexes

## Average Cost per Reservation

The Reservation Index measures the cost to acquire a mobile user who makes a travel reservation, such as a flight or hotel room, or makes a restaurant reservation. Reservation costs peaked in Q3 2015, but have steadily decreased since then - besides a brief increase in February and March. Last year, reservation costs were on the rise in Q2, but we saw the opposite this year - a sign that planning trips and dinner reservations on mobile devices has become more mainstream.

AVERAGE COST PER RESERVATION

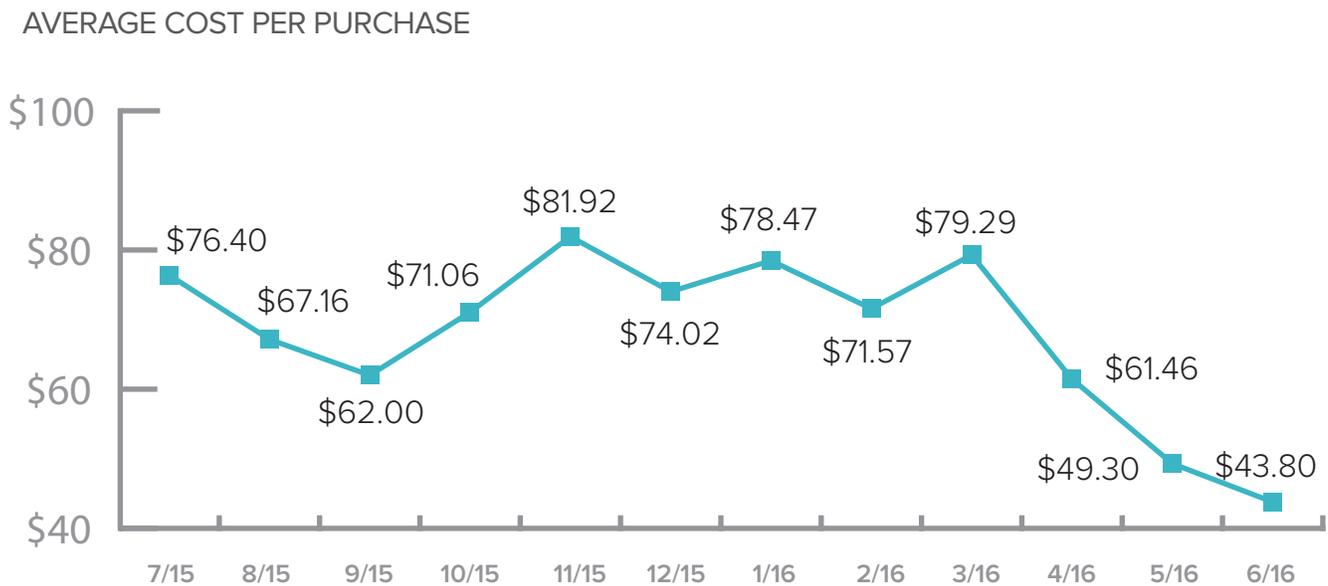


Overall, reservation CPAs are on the decline. This would indicate that booking travel on mobile is hitting critical mass adoption.

# Mobile Indexes

## Average Cost per Purchase

The Purchase Index measures the cost to acquire a mobile user who completes a first purchase. Following the 2015 holiday shopping season, the average cost per first purchase remained high through March, likely due to the fact that mobile retail shopping slows down tremendously in the first half of the year. But when the summer months come around and parents begin to make back-to-school purchases, the cost to acquire mobile shoppers decreases.



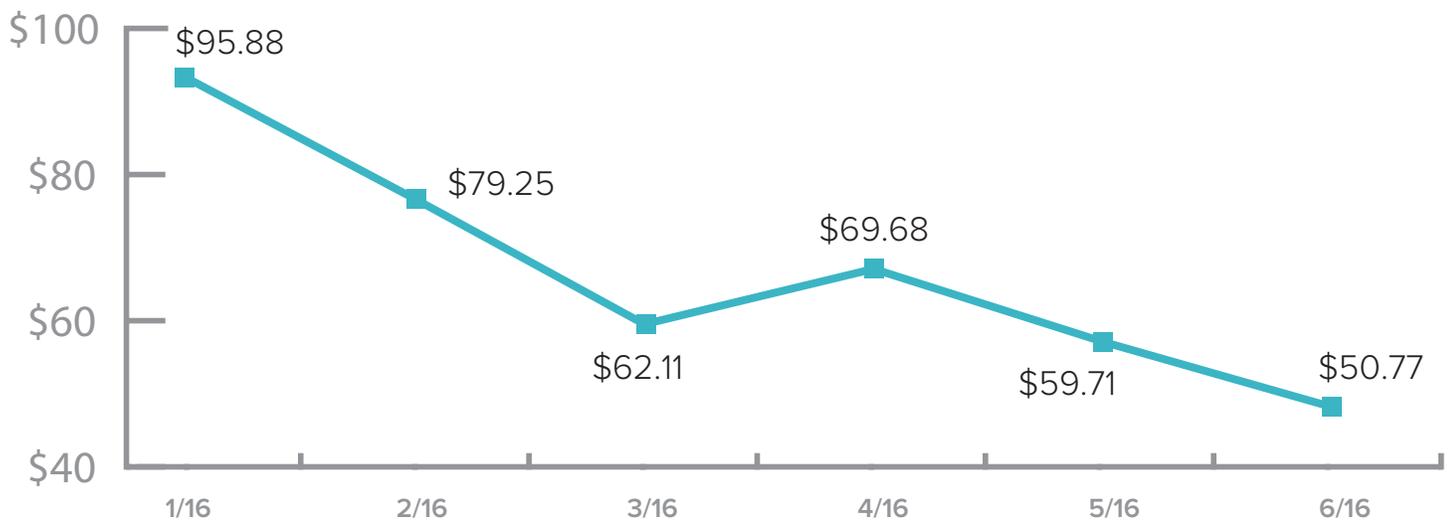
*June represented the lowest cost per purchase month. In fact, it was nearly half of what it was in March - the most expensive month in 2016.*

## Mobile Indexes

### Average Cost per In-App Purchase

The In-App Purchase Index measures the cost to acquire a mobile user who completes a first in-app purchase in a mobile game. In our first six months analyzing this action, we saw costs decrease from a high at the end of the holiday season to a low in the beginning of summer. With school out of session and mobile users taking time off in the summer, they had more time to play and engage with mobile games, leading to lower marketing costs.

AVERAGE COST PER IN-APP PURCHASE



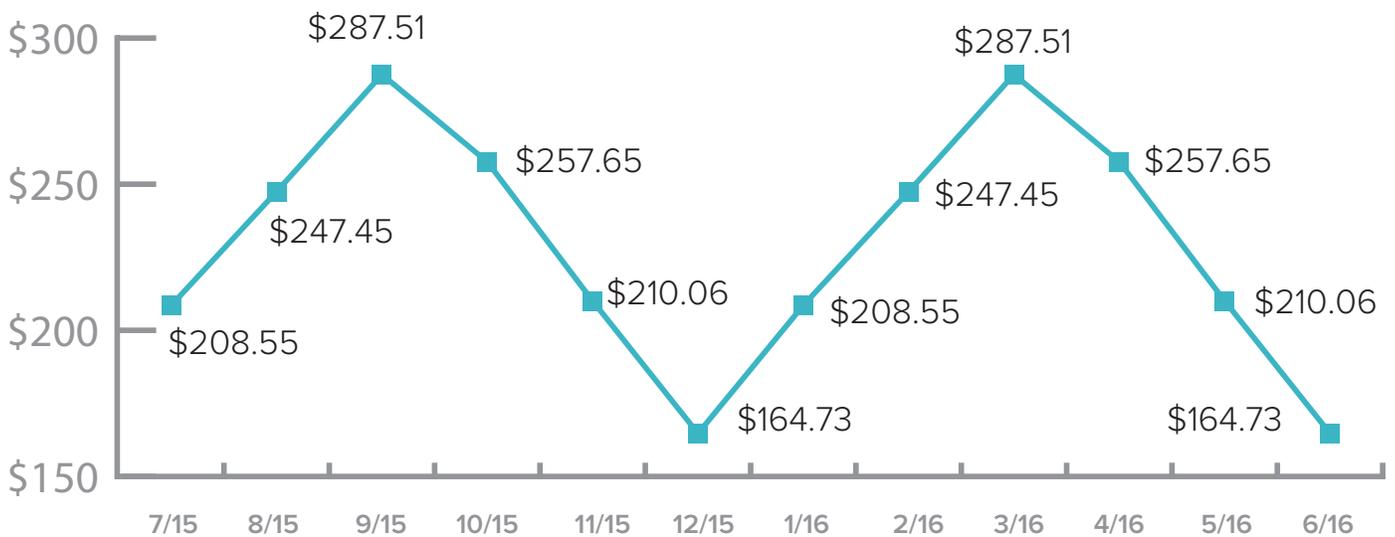
*From January to June, we saw a 47% decrease in user acquisition costs.*

# Mobile Indexes

## Average cost per Subscription

The Subscription Index measures the cost to acquire a mobile user who subscribes to a paid service. As with many other actions, subscription costs increased during Q1 2016 before coming back down in Q2. Consumers appear to be more cautious with their spending immediately following the holidays, but by the time April and May roll around they're more comfortable spending on subscription services, making new users less expensive to acquire.

AVERAGE COST PER SUBSCRIPTION



*Of all graphs presented, this one most clearly outlines a consistent seasonal trend. Like shark teeth, the graph shows acquisition costs were lowest in December and June.*

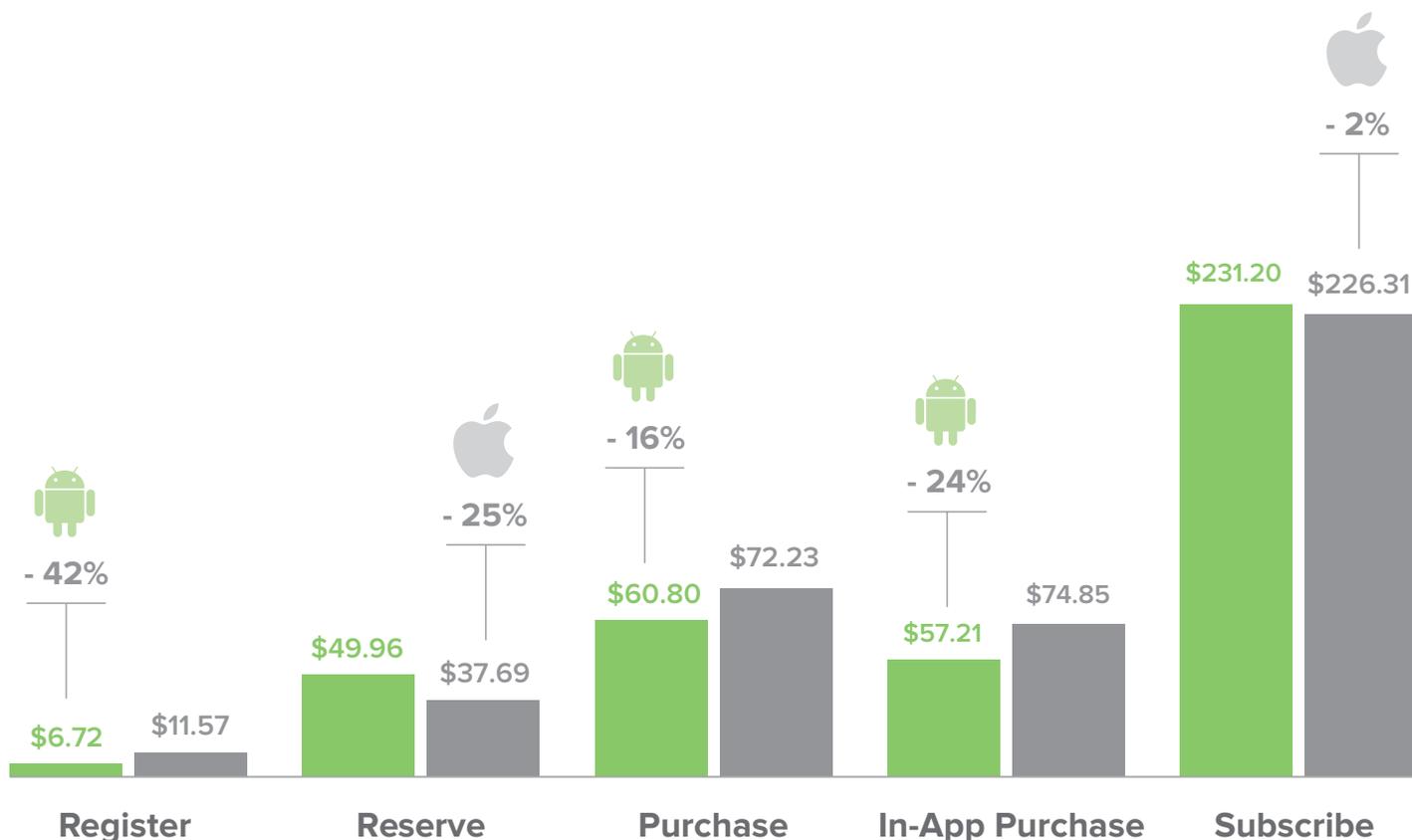
# Engagement by Platform

## iOS vs. Android

In the first half of 2016, we saw notable differences between the acquisition costs associated with iOS and Android users. Android delivered lower CPAs for both purchase events, while iOS came in with lower CPAs for reservations and subscriptions, however the gap between subscriptions was quite narrow.

Paid subscriptions were only 2.2% more expensive on Android than iOS, compared to 11% more expensive in Q4 2015, as iOS subscription CPAs increased by 24. The CPA gap between platforms in purchase activity has continued to widen - Android users cost 16% less than iOS. One year ago, it was iOS users who were 4% less expensive, but Android closed the gap and has distanced itself considerably.

iOS truly outshines Android in reservations. In 2016, acquiring a user who completed a reservation cost 37.69 on iOS, 24.6% less than on Android.



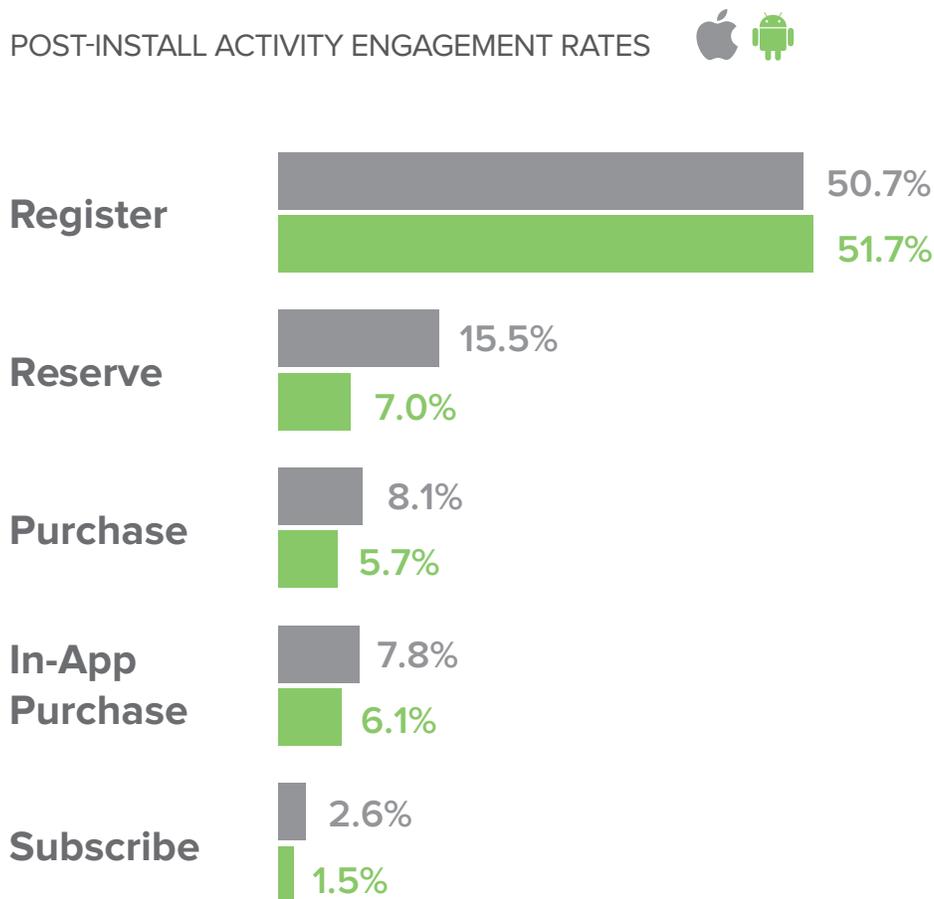
# Engagement by Platform

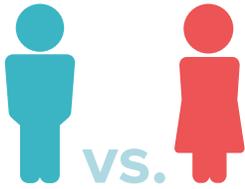
## iOS vs. Android

When it comes to which platform has better engagement rates, there is less competition. iOS users are much more likely to engage in post-install activity than their Android counterparts.

iOS especially outperformed Android in travel reservations, with 15.5% of users who installed going on to make a reservation, compared to 7% for Android. iOS also soundly outperformed Android in both purchase events and subscriptions.

Android users narrowly outperformed iOS users in registrations, a non-transactional event such as creating an account or user profile within an app.





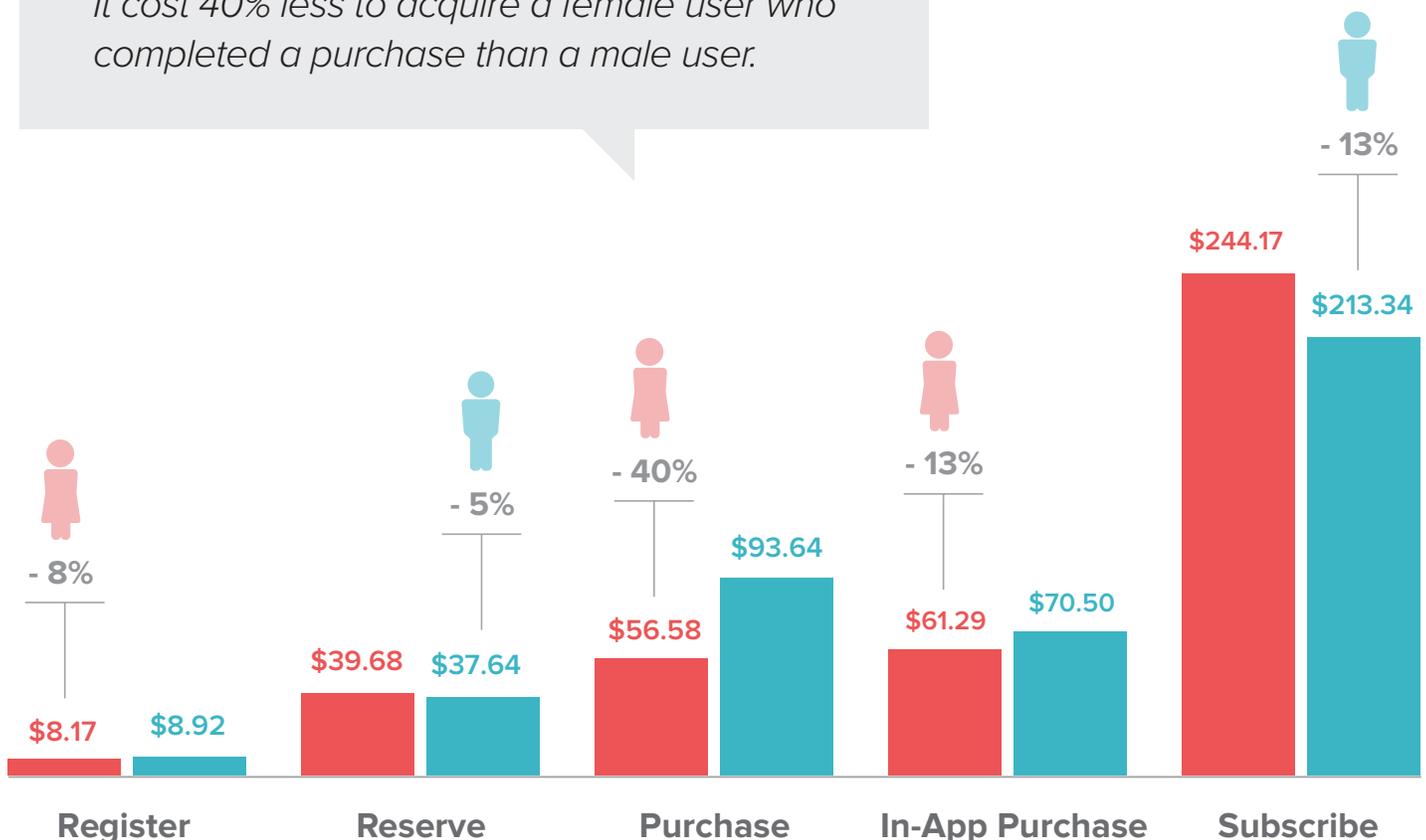
## Engagement by Gender

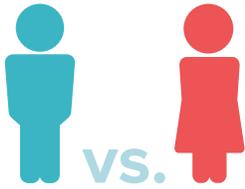
### Males vs. Females

In 2016, we saw noteworthy differences in mobile engagement CPAs by gender. Consistent with prior index reports, the cost per first purchase was substantially lower for women, suggesting that men are still far less inclined to buy on mobile devices. Women also had lower gaming in-app purchase CPAs, coming in at 13.1% less than male gamers.

Men, as in previous reports, had lower CPAs for subscription services than women. The cost to acquire a male subscriber was 12.6% less than women, further widening the gap compared to Q4 2015. The cost per reservation was also less expensive for men, by the slim margin of \$2.04.

*It cost 40% less to acquire a female user who completed a purchase than a male user.*





## Engagement by Gender

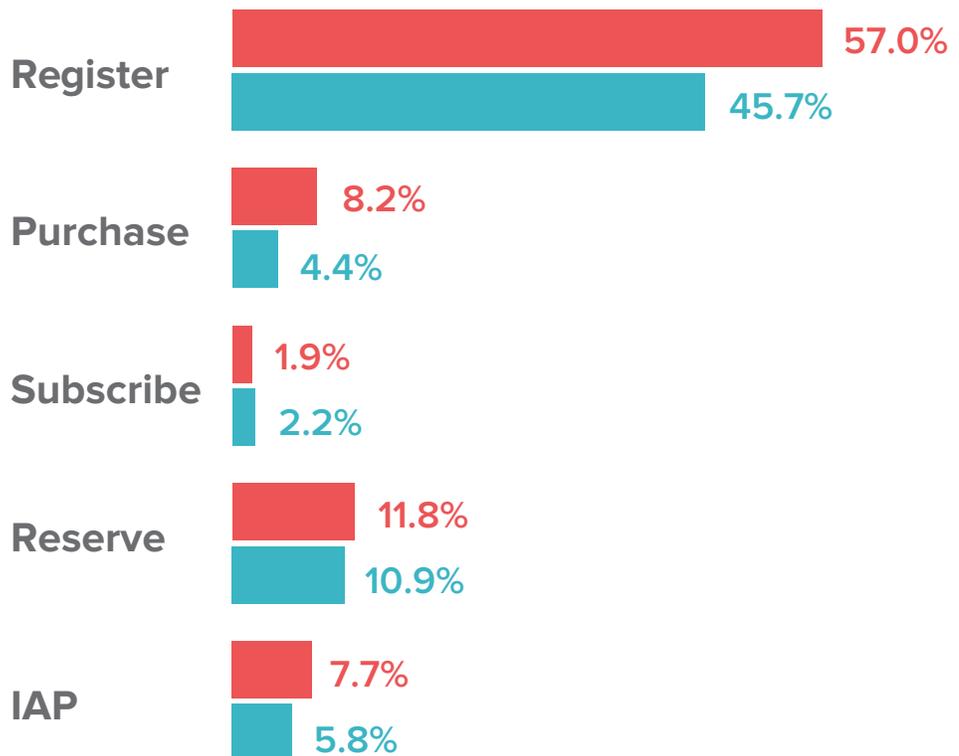
### Males vs. Females

There were also significant differences in install to action rates between men and women. Female mobile users were far more likely to register for an app, and nearly twice as likely to make a purchase.

Women are also more likely to make an in-app purchase in a gaming app than men. Males are traditionally more closely associated with being gamers, but on mobile, women are more likely to spend money on games.

Although male reservation CPAs were slightly cheaper than women, they were a bit less likely to make a reservation. Men, however, were more interested and likely to pay for a subscription service.

#### POST-INSTALL ACTIVITY ENGAGEMENT RATES



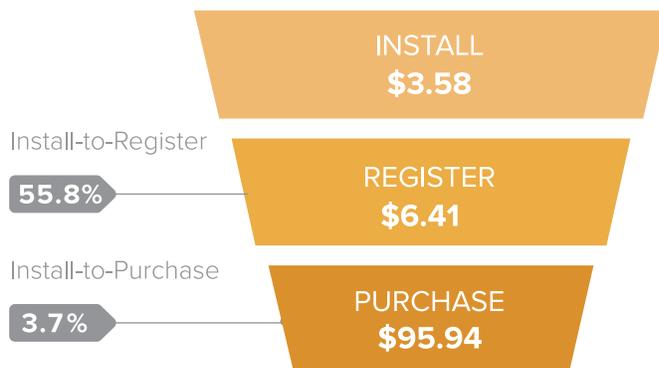
# Engagement by Category eCommerce

The install-to-purchase rate for new eCommerce app (e.g. retail apps, coupon apps, ticket purchasing apps, etc.) users was 3.7%. A year ago, the average install-to-purchase rate was just 2.2%, suggesting that mobile users have grown more comfortable buying on mobile. This is backed up by recent reports finding that **mobile accounted for 30% of eCommerce sales in 2015**, and by 2020 will account for 45% of all eCommerce sales, according to **Business Insider**.

The average cost to acquire a first time purchaser was \$95.94, a 54.5% decrease from Q2 2015, further suggesting that consumers are open to using mobile apps for their shopping.

As in previous Index Reports, women led the way in transactional eCommerce app engagement. They were both more likely to install and make a purchase, and 42% less expensive to acquire than men.

## SHOPPING APP ENGAGEMENT FUNNEL



## SHOPPING APP ENGAGEMENT FUNNEL BY GENDER



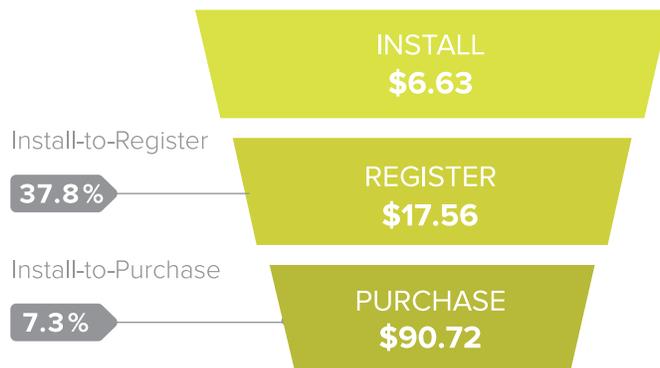
# Engagement by Category Finance

In 2016, finance apps (eg. financial protection, investment assistance, credit score monitoring, etc.) paid \$6.63 per install, the most of any app category analyzed. The cost to acquire a user who registered for an account was \$17.56, a slight increase over last year's mark of \$16.16.

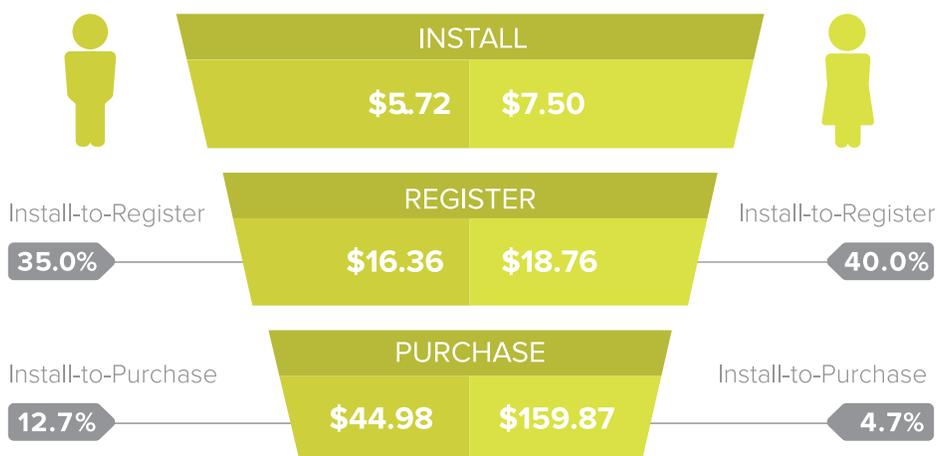
The purchase CPA for finance apps was \$90.72, an 8.6% increase over the last year. Unfortunately for finance apps, engagement rates have declined as the CPA has increased. In 2016, the install to purchase rate was 7.3% compared to 9.2% in 2015. Last year, we saw Finance app activity peak from July to October, and given the weak first half 2016 performance, marketers will be counting on an increase in activity this year too.

There are stark gender differences in the use of financial apps. 12.7% of men installed and made a purchase, compared to 4.7% of women. Women were also much more expensive, as their purchase CPA was 3.6x more expensive.

FINANCE APP ENGAGEMENT FUNNEL



FINANCE APP ENGAGEMENT FUNNEL BY GENDER



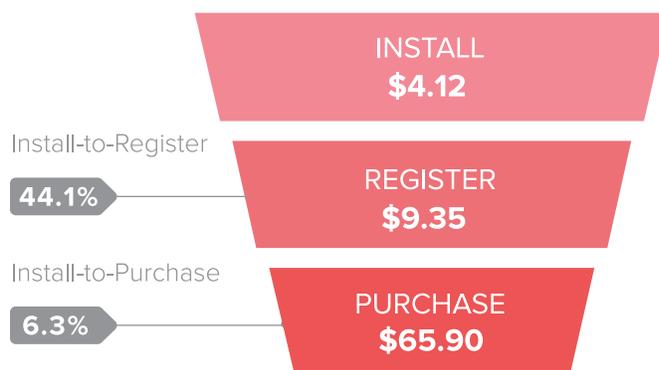
# Engagement by Category Gaming

Gaming app engagement is new to this edition of the index report. In 2016, it cost \$65.90 to acquire a user who made an in-app purchase (eg. extra lives, in-game currency, etc.), however there was a sizeable difference in CPAs for Q1 and Q2. In Q2, the cost to drive an in-app purchase decreased 24%, indicating that mobile users are more likely to spend on games when it gets closer to summer.

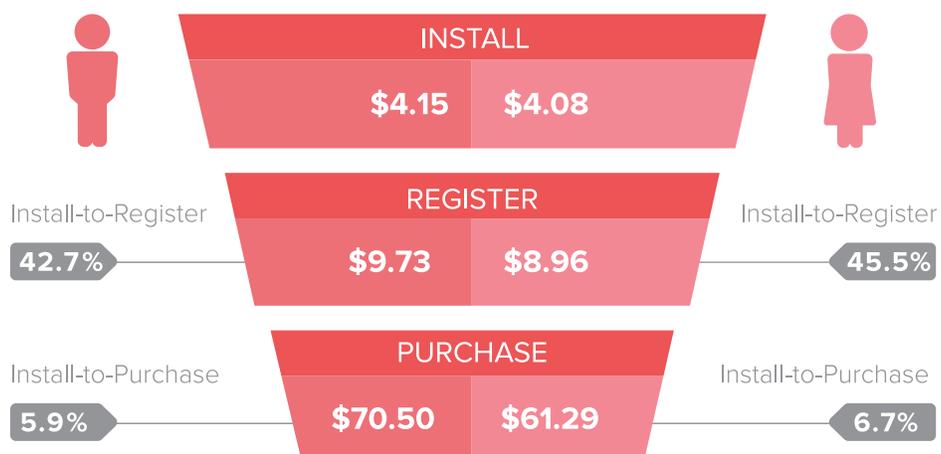
On average, 6.3% of those who installed a gaming app went on to make an in-app purchase. Engagement rates also varied greatly between quarters - users were 33.3% more likely to make an in-app purchase during Q2.

Men, despite historically being more likely to classify themselves as a gamer, were actually less likely to make in-app purchases and more expensive to acquire than women. 6.7% of women who installed a gaming app made a purchase compared to 5.9% of men. Female in-app purchase CPAs were also \$9 less than those for men.

GAMING APP ENGAGEMENT FUNNEL



GAMING APP ENGAGEMENT FUNNEL BY GENDER



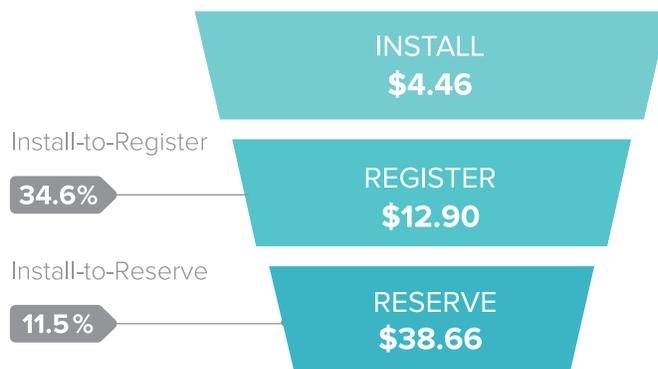
# Engagement by Category Travel

Travel apps (e.g. ride sharing, hotel and flight booking, etc.) have seen a decrease in acquisition costs over the last year. The average reservation CPA in 2016 was \$38.66, down 14.6% from this period in 2015.

Install to reservation rates have also decreased a little since last year, from 12.9% in Q2 2015 to 11.5% in 2016. It would not be surprising if reservation rates rise in the second half of the year, as Nielsen recently reported that **travel app usage has increased by 40%** in the last year, making it the fastest growing mobile app category.

When it comes to gender, men are slightly more engaged with travel apps than women. 12.9% of men who install a travel app go on to make a reservation compared to 10.3% of women. Reservation CPAs are close between genders - female users are only \$2 more expensive to acquire.

TRAVEL APP ENGAGEMENT FUNNEL



TRAVEL APP ENGAGEMENT FUNNEL BY GENDER



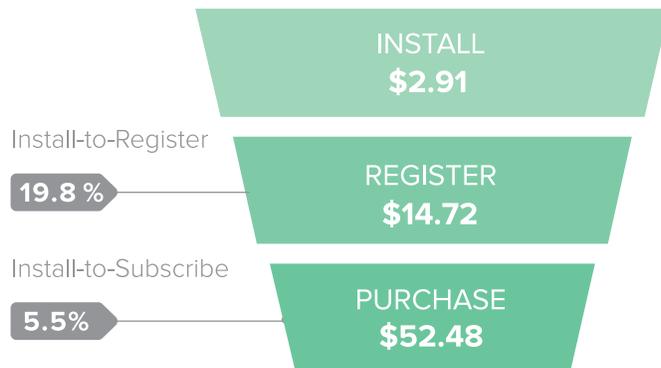
# Engagement by Category Utility

Acquisition costs for utility apps (e.g. free calling apps, survey apps, weather apps, etc.) are quite low at the top of the funnel, but purchase CPAs have increased considerably in the last year. The cost to acquire a new user who makes a utility app purchase was \$52.48 in 2016, a 46% year-over-year increase.

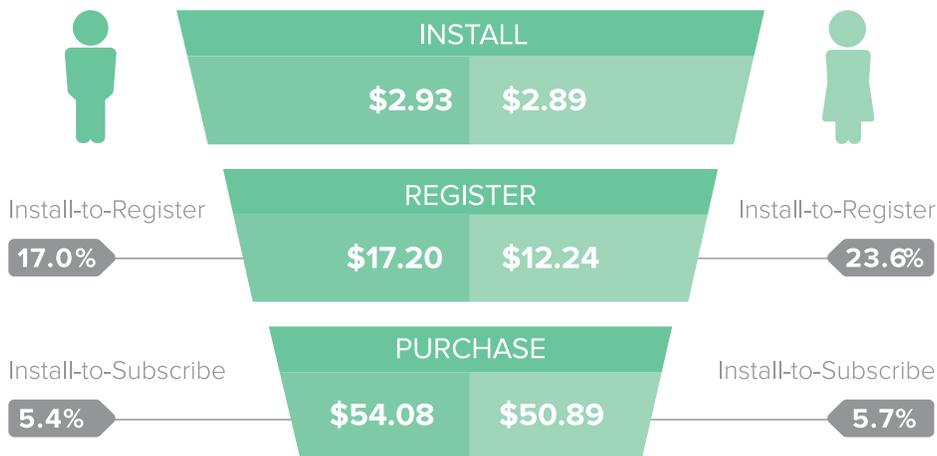
At the same time, we have seen the install-to-purchase rate decrease from 8.1% in Q2 2015 to 5.5% in 2016. Because utility apps have wide-ranging uses and prices, the CPA increase and engagement rate decrease likely has more to do with the apps on the market than a drastic change in user behavior.

Utility app registration rates are the lowest of all app categories at 19.6%, but given that these types of apps don't typically require a registration to be useful, this is expected.

UTILITY APP ENGAGEMENT FUNNEL



UTILITY APP ENGAGEMENT FUNNEL BY GENDER



## Conclusion

Most CPA benchmarks increased over the first half of 2016, but that will soon change. Our research has shown that Finance and Shopping apps typically perform well in the summer, so we expect engagement to increase in the second half of the year.

Gender differences will always be a factor in mobile app engagement, but the effects have remained consistent over time. Women are still more comfortable and willing to make mobile shopping purchases, while men are more likely to subscribe to mobile content or purchase financial services.

Operating systems also continue to influence user behavior. In the past, Android users were less likely to take transaction actions within apps, but this is changing. Android users who make mobile purchases have become far less expensive to acquire than iOS users, while the subscription CPA gap is nearly closed. iOS users maintain higher install-to-action rates, but if Android engagement continues to increase, the revenue potential for mobile apps that spend on Android user acquisition is massive.



### Fueling Mobile Growth.

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.