MOBILE APP ENGAGEMENT
INDEX | Q1 2015

LIFTOFF

LIFTOFF MOBILE
APP ENGAGEMENT
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Introduction

Mobile is an incredible space to work in these days. Mobile now accounts for a staggering 52% of time spent with all digital media, with 86% of this time spent in apps. And the trend isn't slowing down anytime soon. For the marketers, product managers, and engineers who are a part of it, we get to see first hand how fast the space is moving, and participate in building it.

But as a channel, mobile is young, lacking many benchmarks and best practices to help guide our efforts. Even with a great mobile app, building an active and profitable mobile user base is no small feat. And with over 1.3 million apps to choose from, the challenge is very real, requiring a significant investment of time and money into both paid and organic user acquisition efforts.

The Liftoff Mobile App Engagement Index answers many key questions about the impact of paid media on app engagement, setting cost-per-engagement benchmarks and conversion rates for the most common "post-install" events that users complete on mobile. Events measured are first time events only and include registering, sharing content, making a reservation (e.g. hotel, taxi, airline), making a purchase and subscribing to a paid service.

The index also examines engagement within six different app categories including Dating, Finance, Shopping, Social, Utilities and travel.

New to the Index is a look at the impact of gender on mobile engagement. Not surprisingly, differences do in fact exist amongst the genders, just as they do between iOS and Android users.

The Index is based on an analysis of 22.5 million app installs and 550 million post-install events.

Highlights

- **Mobile advertisers spent an average $9.54 to acquire a new registered user,** consistent with the prior 3 months.

- **Social apps convert 76.3% of all installs into registered users,** followed by ecommerce apps (72.5%) and financial apps (43.8%).

- **Non-transactional events cost less on Android than iOS,** including registering (42.2% less) and sharing content (24.2% less), partly a reflection of the lower cost of mobile ad inventory on Android.

- **Transactional events where users spend money cost less on iOS than Android.** Specifically, acquisition costs are lower for users who make a reservation (6.8% less), make a purchase (20.4% less), and subscribe to a service (22.4% less).

- **Of users who install a dating app, 52% of men create an account whereas only 41% of women do.** And yet 31.6% more women pay for a dating app subscription than men.

- Of all mobile users who installed a shopping app, **women converted from install-to-purchase 30% more than men.**

- **Women installed a social app and shared content nearly 40% more than men,** and at a lower cost per first-time share ($7.74 vs. $10.52).
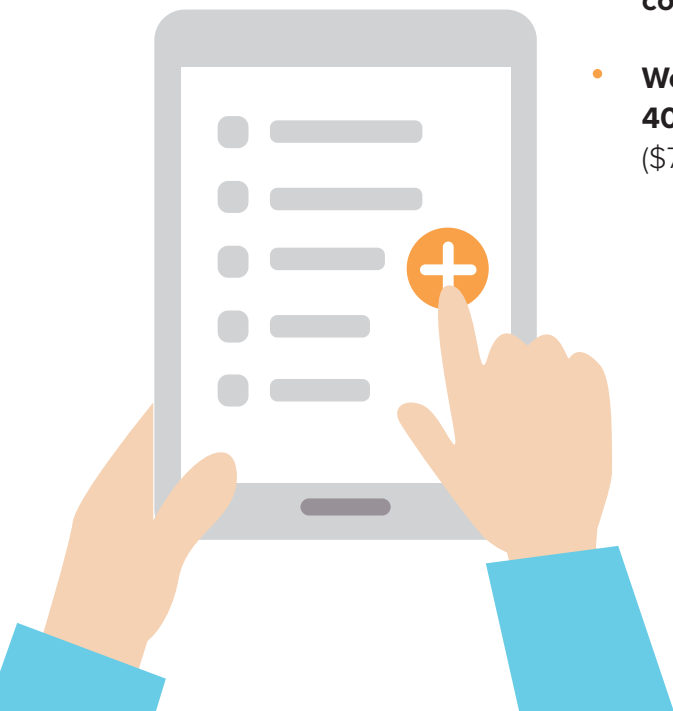
Mobile CPA benchmarks are heavily influenced by several factors including volume of users, app install campaign targeting and optimization, ad creatives, app store rating and reviews, and the in-app experience.

Mobile Engagement Benchmarks

To establish mobile CPA benchmarks, we calculated **the cost to acquire a new user from app install campaigns who engage in a post-install event for the first time.** Post-install events measured include (1) register / create an account, (2) share content, (3) make a reservation (e.g. airline, hotel, taxi, restaurant), (4) make a purchase, and (5) subscribe to a paid service.

Similar to Q4 2014 CPA benchmarks, mobile events which occur earlier in the funnel and do not require a financial transaction have by far the lowest cost-per-action, like registration and sharing.

Companies spent an average of **$9.54** to acquire a registered user from mobile app install ads.

| Register | Share | Reserve | Purchase | Subscribe |
| $ 9.54 | $ 23.14 | $ 42.19 | $ 86.57 | $ 202.33 |
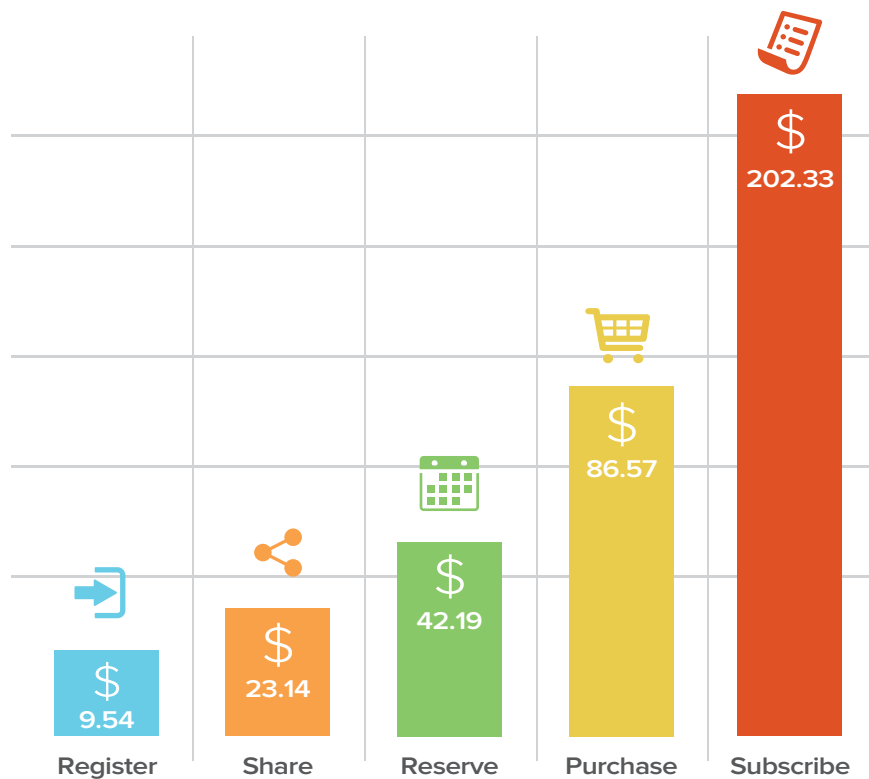
**Q1 2015 Mobile Cost per Action Index**
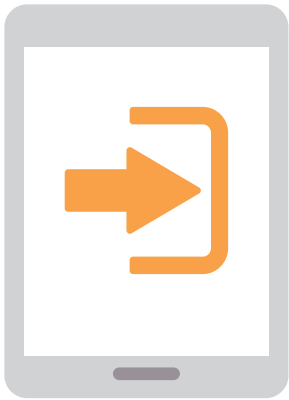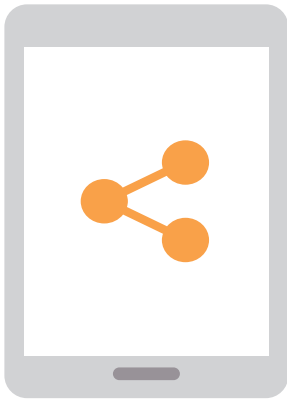
Mobile Indexes

Average Cost per **Registration**

The Registration Index measures the cost of acquiring a registered mobile user from a paid app install campaign. From Q4 2014 to Q1 2015, the monthly average cost per registered user decreased by 5.9%, partly due to a decrease in advertising spend and thus less competition in mobile inventory following the holiday season.

Register: a user installs an app and creates an account.

$12

$10.66

$9.98

$10

$9.58

$9.25

$9.43

$9.09

Oct-14   Nov-14   Dec-14   Jan-15   Feb-15   Mar-15
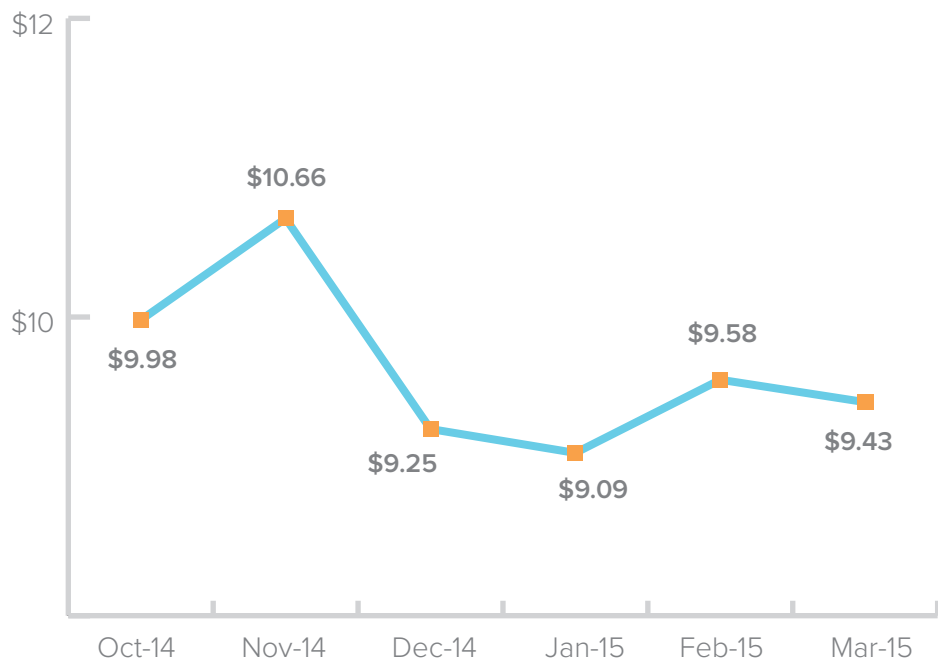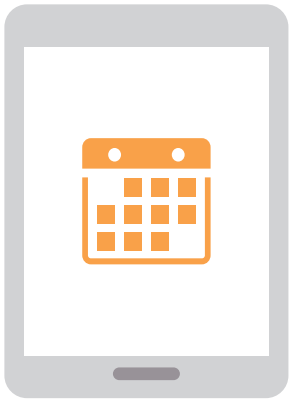
Average Cost per Registration

Mobile Cost per **Share Index**

The Sharing Index measures the cost of acquiring a mobile user that **shares content for the first time**, including a photo, video or message. The cost per share has remained relatively stable for all of Q1.

**Share:** a user installs an app and shares content for the first time, including a photo, video or message.

$30

$25.46

$24.30

$25

$23.12 $23.12 $23.14

$22.10

Oct-14   Nov-14   Dec-14   Jan-15   Feb-15   Mar-15
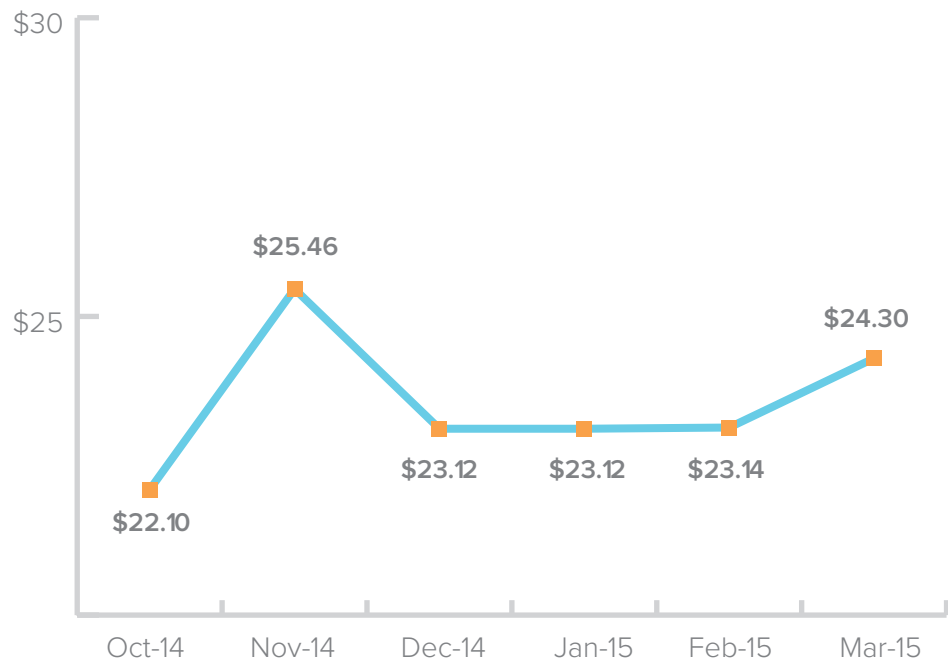
Average Cost per First Time Share

Mobile Cost
per **Reservation Index**

The Reservation Index measures the cost of acquiring a mobile user that makes a reservation, a hotel room for example. Between Q4 and Q1, 2015, the cost per reservation increased by 20%. CPAs in Q4 were lower than usual due to increased holiday travel bookings.

Reservation: a user installs an app and makes a reservation, including airlines, hotels and taxis.

$50

$40

$37.10

$31.90

$34.10

$37.05

$39.52

$43.85

Oct-14   Nov-14   Dec-14   Jan-15   Feb-15   Mar-15
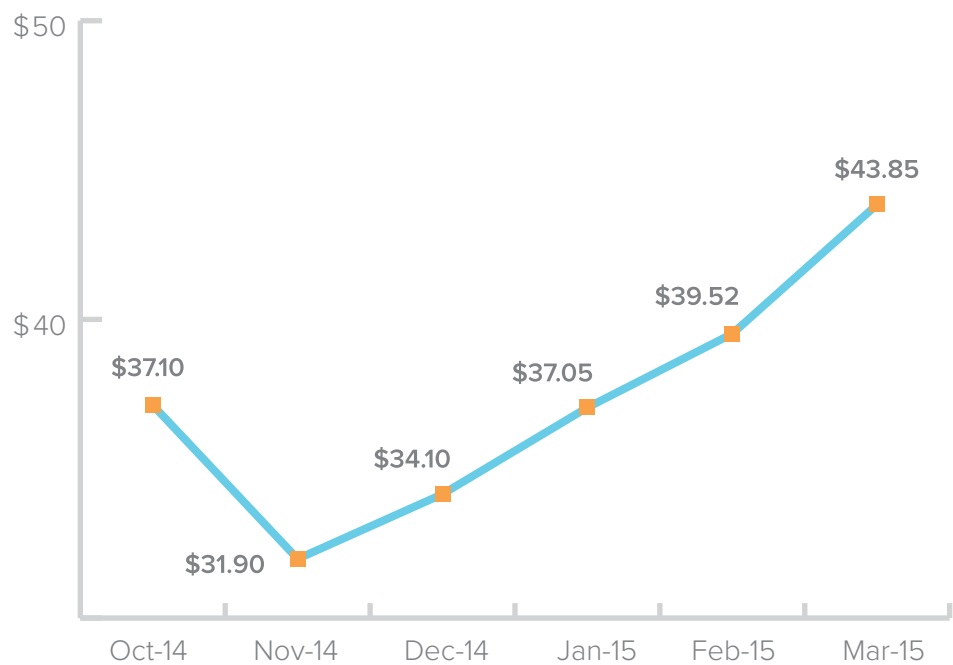
Cost per First Time Reservation

Mobile Cost
per **Purchase Index**

The Purchase Index measures the cost of acquiring a mobile user that makes a first time purchase. In December, the cost per purchase peaked at $104.45, mostly due to increased advertising costs during the holiday period. In Q1, the cost per purchase is down substantially, decreasing by 6%, a reflection of lower advertising costs.

Purchase: a user installs an app and makes a non in-app purchase.
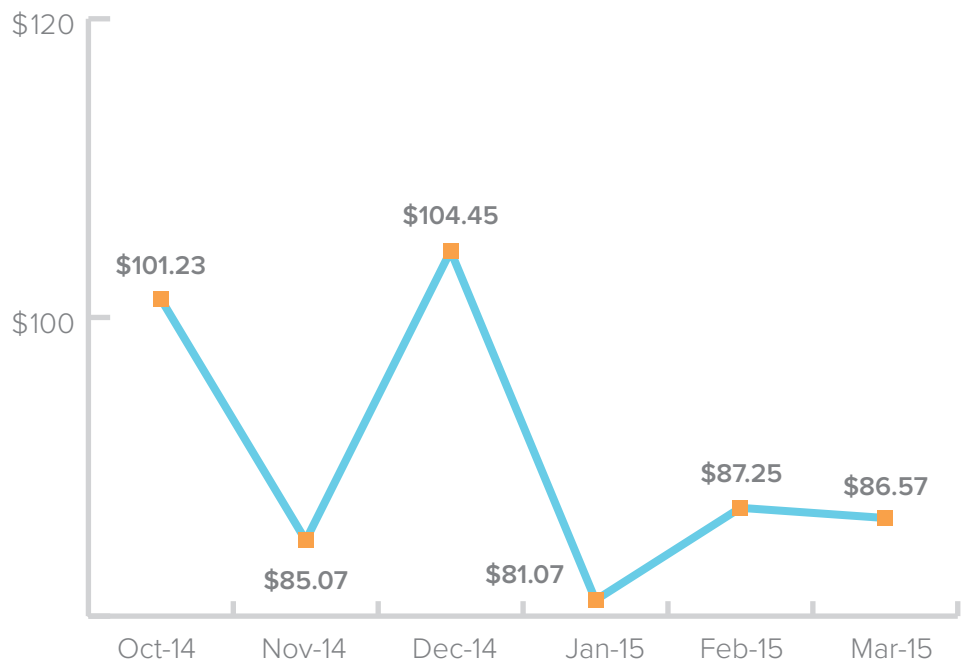
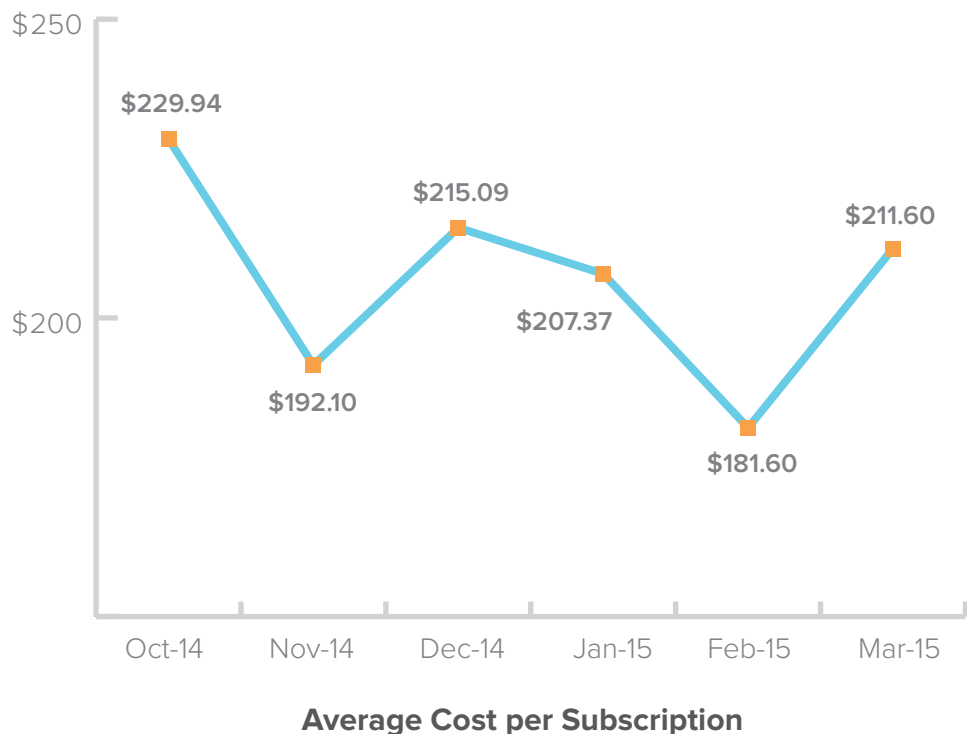**Average Cost per First Time Purchase**
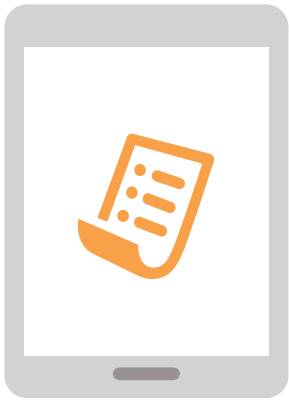
Mobile Cost
per **Subscription Index**

The Subscription Index measures the cost of acquiring a mobile user who subscribes to a paid service, including dating apps. Between Q4 2014 and Q1 2015, the average cost per subscription decreased by 5.0%, likely due to reduced ad inventory costs and increased interest in dating following the holiday season, especially around Valentine's day.

In addition, non-dating apps with a subscription event had much lower CPAs than dating apps, though dating apps have a higher lifetime value, justifying the higher CPA.

Subscription: a user installs an app and subscribes to a paid service including dating apps, business apps and other consumer-related apps.

$250

$229.94

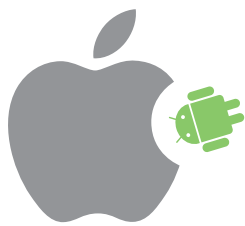**$215.09**

$211.60

$200

$207.37

$192.10

$181.60

Oct-14   Nov-14   Dec-14   Jan-15   Feb-15   Mar-15

Average Cost per Subscription

* Q4 subscription CPAs were revised to include all apps with a subscription event.

Engagement by Platform
iOS vs. Android

42%

The cost to **acquire a registered user** on Android was 42% less than iOS.

20%
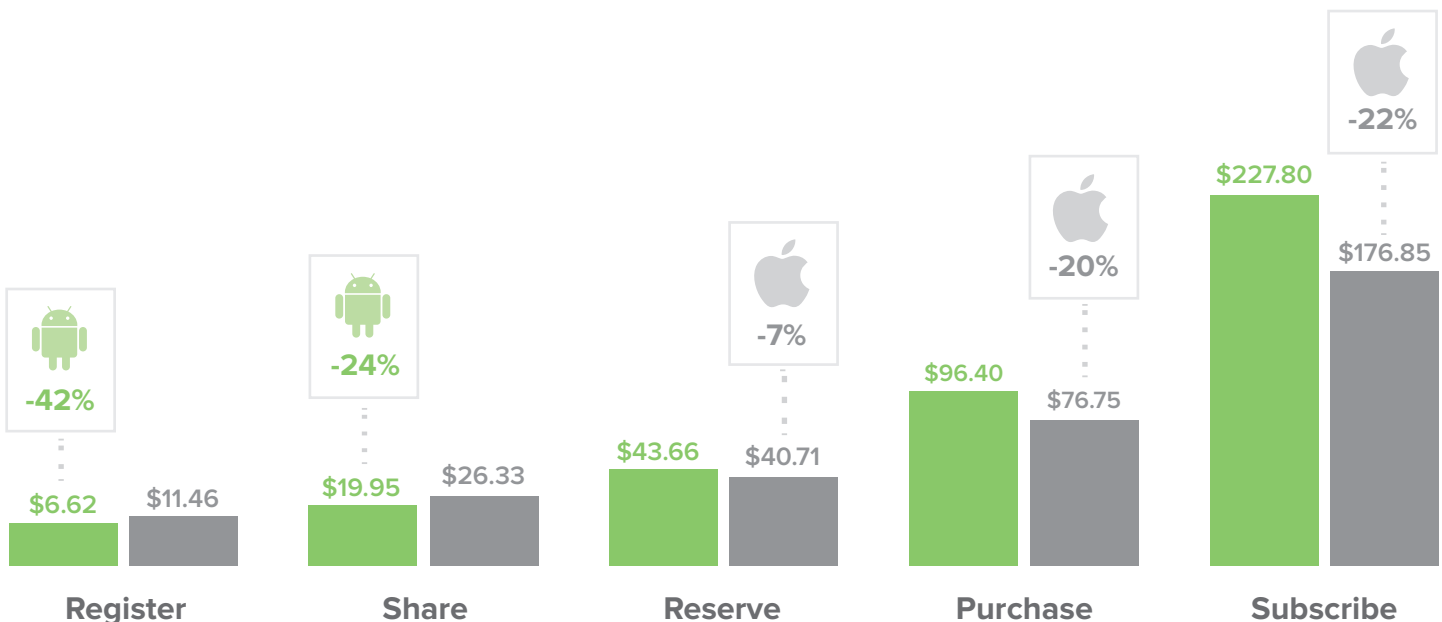
iOS was more cost effective in **acquiring a 1st time purchaser** (20% less).

In Q1 2015 we saw notable differences in mobile CPAs between iOS and Android. Android delivered the lowest CPAs on non transactional events including registering and sharing content. The gap is even more pronounced than in Q4 2014, when registered users on Android cost 19% less than iOS.

Yet iOS continues to be significantly more cost-effective on transactional events further down the funnel including reservations, purchases and subscriptions. Paid subscriptions on iOS are 22% lower than Android, likely because it's the event that requires a greater financial commitment, and hence is most affected by users' disposable income levels.

The differences between iOS and Android are consistent with Q4 findings and generally explained by two key factors: (1) high-performing mobile ad impressions are more expensive on iOS, resulting in higher cost-per-installs and cost-per-actions for top of funnel events; (2) iOS users are more affluent and therefore more inclined to transact.

	Register	Share	Reserve	Purchase	Subscribe
	-42%	-24%	-7%	-20%	-22%
Android	$6.62	$19.95	$43.66	$96.40	$227.80
iOS	$11.46	$26.33	$40.71	$76.75	$176.85

Cost per First Time Engagement by Platform

New to the Liftoff Mobile App Engagement Index is an evaluation of mobile CPAs and conversion rates by gender. Not surprisingly, differences exist between men and women in the apps they download and the events they engage in.
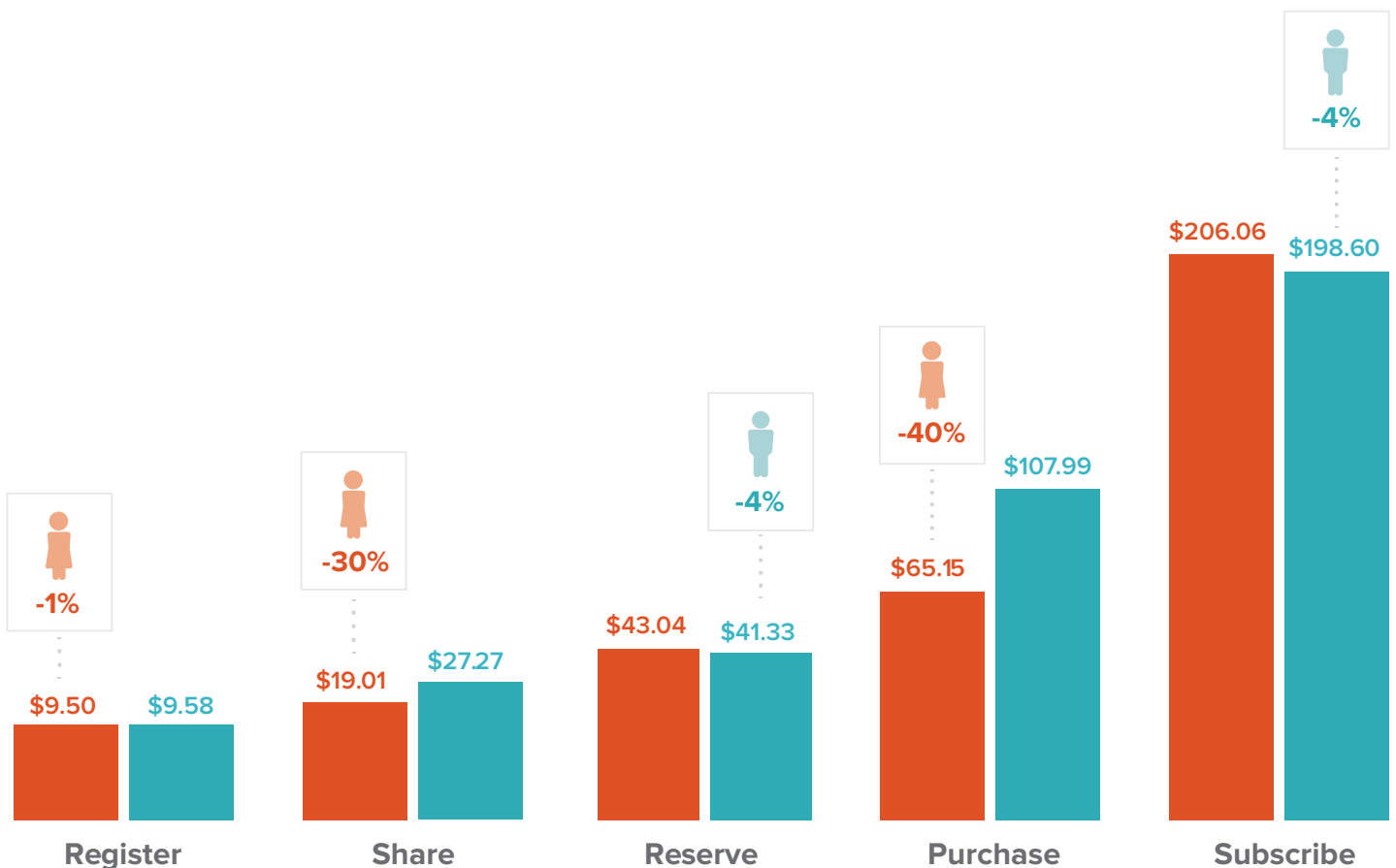
Engagement by Gender
Males vs. Females

The cost per registration is nearly identical between men and women. Given that registration is a common event across many apps, this is not a surprise. However, the cost per share and cost per purchase were significantly lower for women, suggesting women have a stronger interest in sharing and shopping than men do.

Men, however, demonstrate a slightly stronger interest in paid subscription services. The cost per subscription amongst men was 3.6% less than women. In addition, the cost per reservation was also lower amongst men by 4.0%.

Differences amongst the genders are even more striking when looking at individual app categories. See App Categories in the next pages.

	Register	Share	Reserve	Purchase	Subscribe
Male	$9.50	$19.01	$43.04	$65.15	$206.06
Female	$9.58	$27.27	$41.33	$107.99	$198.60
Difference	-1%	-30%	-4%	-40%	-4%

Cost per First Time Engagement by Platform
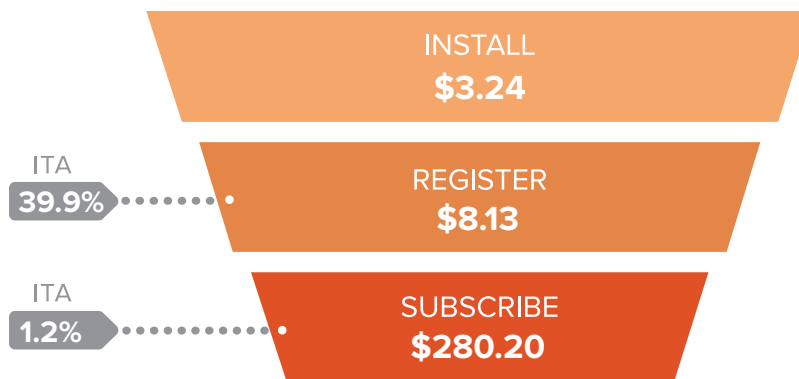
Engagement by App Category

♥ Dating

In Q1, the install-to-registration rate for new users of dating apps was 39.9% and the install-to-subscribe rate was 1.2%. The average cost per dating subscription was $280.20, with a range of $100 - $600.

Compared to Q4, the cost per subscription is down almost 10%, a result of increased interest in dating following the holidays and around Valentine's Day.
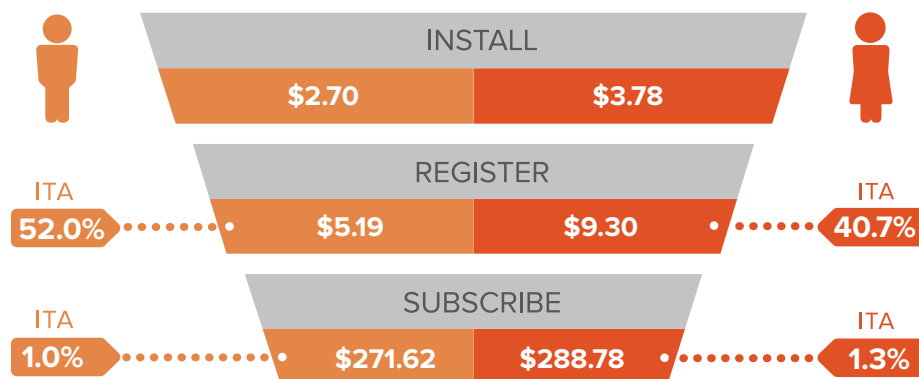
Looking at differences by gender, men have lower cost-per-installs, lower cost-per-registrations and higher install-to-registration rates, suggesting that men have a greater interest in dating than women.

Yet 6% more women converted to a paid subscription, suggesting that while men are browsers, women are more serious about using dating apps to find a mate.

Dating App Engagement Funnel

INSTALL
$3.24

ITA 39.9%
REGISTER
$8.13

ITA 1.2%
SUBSCRIBE
$280.20

Dating App Engagement Funnel by Gender

INSTALL
$2.70 $3.78

REGISTER
ITA 52.0% $5.19 $9.30   ITA 40.7%

SUBSCRIBE
ITA 1.0% $271.62 $288.78   ITA 1.3%

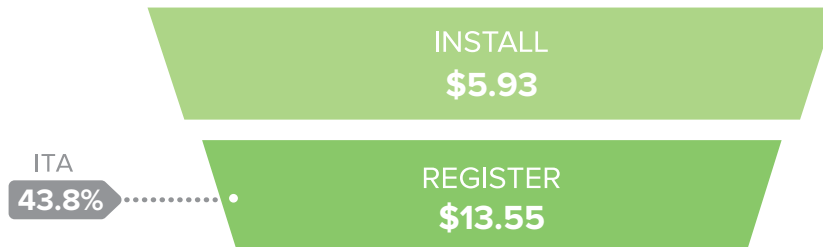*Install to action (ITA) is the % of users who install an app and convert in a post-install event.

Finance

The install-to-registration rate for new users of financial apps was 43.8%. The average cost per registration was $13.55, with a range of $7 to $30. CPIs were lower in Q1 though CPAs remained essentially unchanged from Q4.

Once again we see differences in performance by gender in both CPI and CPA, with men being significantly less expensive to acquire. The cost per install for men was 15.25% less than women.
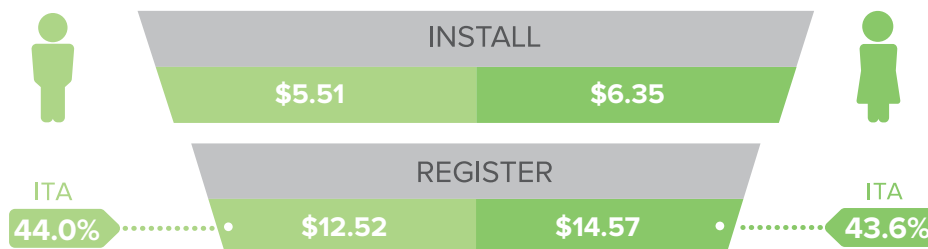
The cost per registration shows even greater disparity, with men averaging 16.3% less than women, reinforcing stereotypes that men have a greater interest in finance than women.

Given the wide range of financial services and business models offered by financial apps included in this report, no downstream transactional events are included in our analysis.

Finance App Engagement Funnel

INSTALL
$5.93

ITA
43.8%

REGISTER
$13.55

Finance App Engagement Funnel by Gender

INSTALL

$5.51   **$6.35**

REGISTER

ITA
44.0%

$12.52   **$14.57**

ITA
43.6%

*Install to action (ITA) is the % of users who install an app and convert in a post-install event.
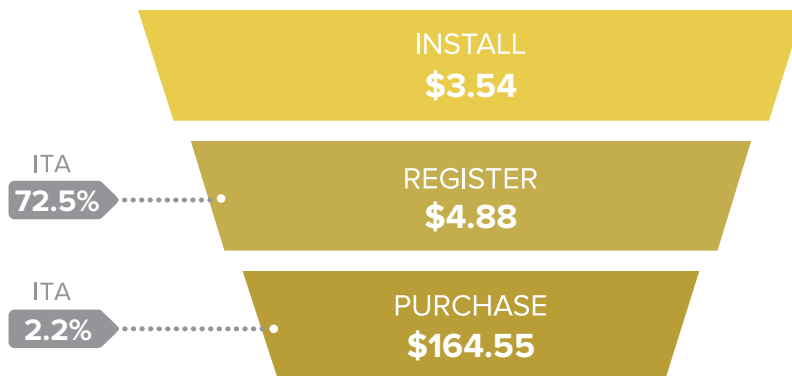
🛒 Shopping

The install-to-registration rate for new users of shopping apps was 72.5%, and the install-to-first-purchase rate was 2.2%.

The average cost to acquire a first time shopper from app install ads was $164.55, with a range of $30 to $400. CPAs were down slightly in Q1, due to increased ad spend during the holiday period.
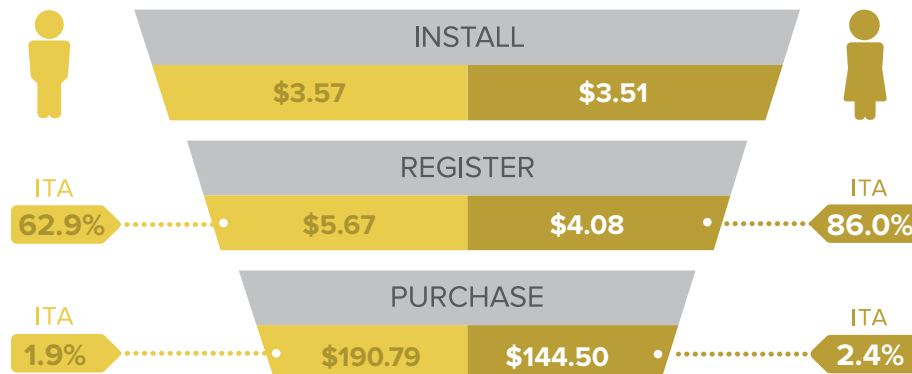
Given that the lifetime value of a shopper is greater than $165, ecommerce companies can support a large cost per first-time purchase.

Amongst shopping apps, women far outperformed men. Though men and women had a similar cost per install, women had a much higher install to first purchase rate, lower cost per purchase and a higher install to share rate, which helps boost organic user acquisition.

Shopping App Engagement Funnel

INSTALL
$3.54

ITA
72.5%
REGISTER
$4.88

ITA
2.2%
PURCHASE
$164.55

Shopping App Engagement Funnel by Gender

INSTALL
$3.57 $3.51

ITA
62.9%
REGISTER
$5.67 $4.08
ITA
86.0%

ITA
1.9%
PURCHASE
$190.79 $144.50
ITA
2.4%

*Install to action (ITA) is the % of users who install an app and convert in a post-install event.
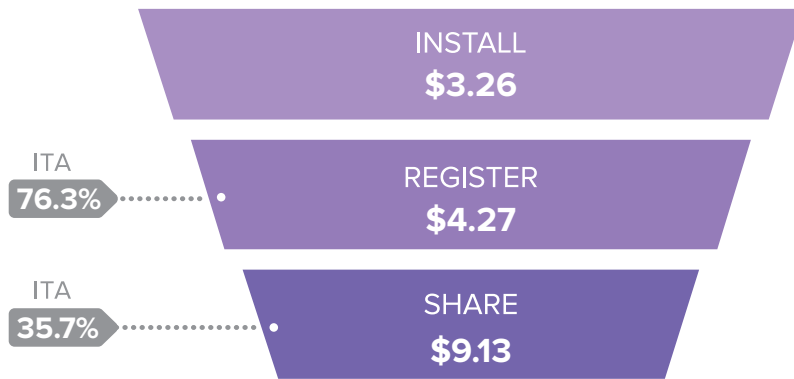
Social

Social apps continue to demonstrate the highest install-to-registration rate amongst the app categories at 76.3%, mostly due to heavily optimized registration flows.

The install to first time share rate was 35.7% and the average cost to acquire a new registered user was $4.27, with a range of $4.00 to $15.00. On average, new registered users shared 17 times within the first 30 days.
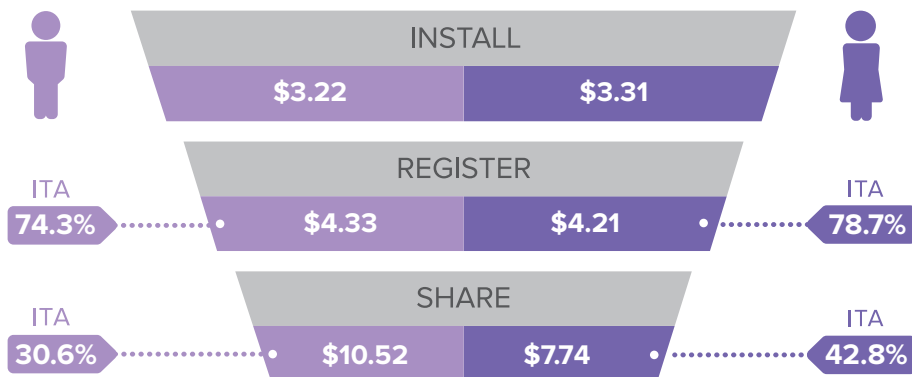
While both the cost per install and cost per registration decreased significantly in Q1, the cost per first share increased by 12.5%. This is largely attributable to increased content sharing levels during the holiday season.

Gender differences in post-install sharing were pronounced, with 36% more women sharing than men. This data correlates with multiple studies that show a higher percentage of women use social media, and that they use it more heavily than men.

Social App Engagement Funnel

INSTALL
$3.26

ITA
76.3%

REGISTER
$4.27

ITA
35.7%

SHARE
$9.13

Social App Engagement Funnel by Gender

INSTALL

$3.22 $3.31

REGISTER

ITA
74.3% $4.33 $4.21   ITA
78.7%

SHARE

ITA
30.6% $10.52 $7.74   ITA
42.8%

*Install to action (ITA) is the % of users who install an app and convert in a post-install event.
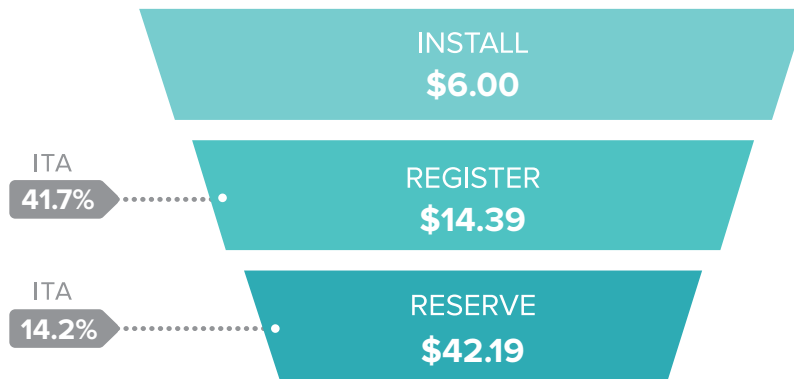
Travel

The install-to-registration rate amongst travel apps was 41.7%, an 18.8% improvement from Q4, while the cost per first time reservation increased by 7.7%. The average cost to acquire a new user who makes a first time reservation was $42.19, with a range of $20 to $400.

Amongst all app categories included in the index, travel apps have the highest cost-per-registration. This is likely due to most travel apps not requiring users to create an account until they are ready to make a purchase.
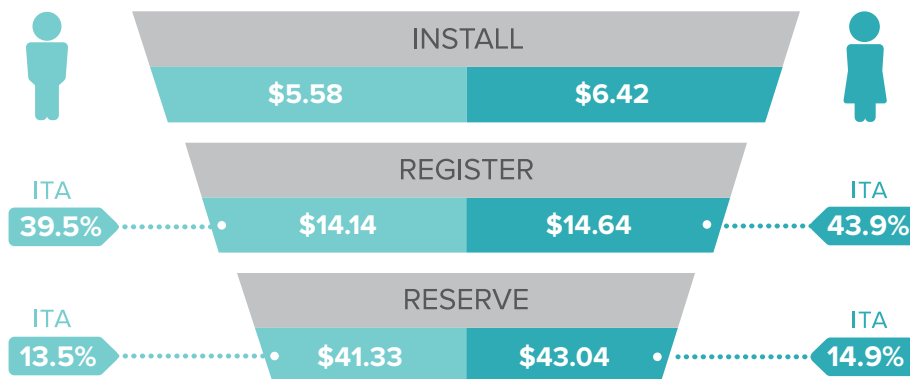
CPIs and CPAs were lower for men, but more women had higher conversion rates on both registration and making reservations.

Note that reservations within travel apps include booking flights, hotels and taxi-related services, accounting for the wide disparity in cost-per-reservation. The more immediate, short-term travel services demonstrated significantly lower CPA than those that require more planning ahead of time.

Travel App Engagement Funnel

INSTALL
$6.00

ITA
41.7%

REGISTER
$14.39

ITA
14.2%

RESERVE
$42.19

Travel App Engagement Funnel by Gender

INSTALL
$5.58 $6.42

ITA
39.5% $14.14 $14.64   ITA
43.9%

REGISTER

ITA
13.5% $41.33 $43.04   ITA
14.9%

RESERVE

*Install to action (ITA) is the % of users who install an app and convert in a post-install event.
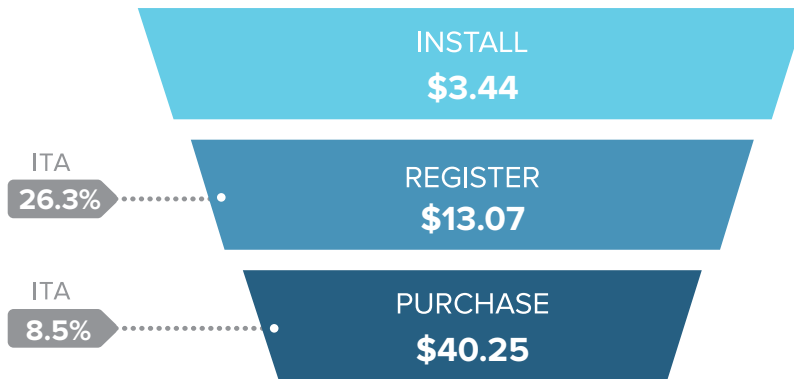
⚙ Utility

The install-to-registration rate amongst utility apps was 26.3%, an increase of 10.5% from Q4, and the install-to-first-purchase was 8.5%, an increase of 25%. The average cost to acquire a first purchase was $40.25, with a range of $30 to $200.

Utility apps again had the lowest install-to-registration rates at 26.3% and relatively high cost-per-registration at $13.07, a reflection of the fact that many utility apps do not 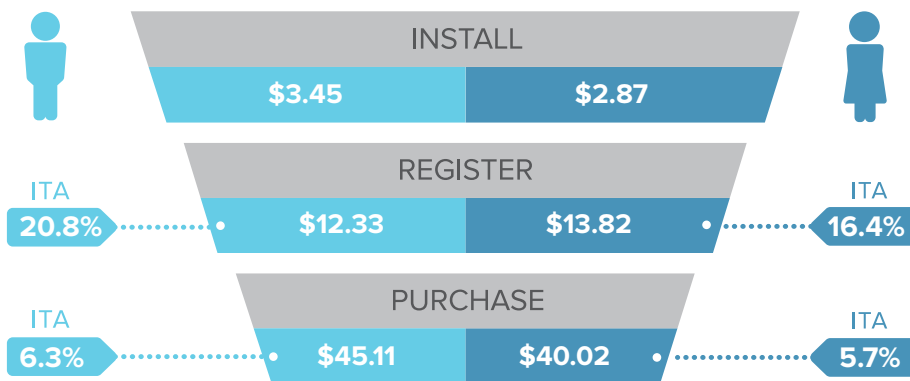require users to create an account in order to use the app. However, they also had the lowest cost-per-purchase, a quarter that of Shopping apps. This makes sense as Utility apps tend to have lighter-weight purchases that offer more instant gratification.

Because utility apps offer such a wide range of services, making it more challenging to establish meaningful benchmarks for this category, we recommend using this data for directional purposes only.

Utility App Engagement Funnel

INSTALL
$3.44

ITA
26.3%

REGISTER
$13.07

ITA
8.5%

PURCHASE
$40.25

Utility App Engagement Funnel by Gender

INSTALL

$3.45   **$2.87**

REGISTER

ITA
20.8%   **$12.33**   **$13.82**   ITA **16.4%**

PURCHASE

ITA
6.3%   **$45.11**   **$40.02**   ITA **5.7%**

*Install to action (ITA) is the % of users who install an app and convert in a post-install event.

The Bottom Line

Mobile CPA benchmarks and conversion rates continue to shift, impacted by gender, seasonality, OS platform, ad inventory and increasing competition. While Android succeeds in offering the lowest cost per non-transaction event, iOS continues to be the platform where business can generate the most revenue.

As it turns out, gender plays a big role in mobile engagement, corroborating other research on how men and women engage with media.

CPA values are heavily influenced by the revenue potential of a given app category, like Dating and Shopping, and the lifetime value that can be derived from engaged users. And with bigger advertisers investing more on mobile, improving their apps and spending more on paid user acquisition, this will only put added pressure of both CPIs and CPAs.

About Liftoff

Engaged users are the lifeblood of your mobile business. Yet most marketers are focused on acquiring app installs, hoping some users will convert into active customers. At Liftoff, we flip this model on its head. We start with the post-install events you care most about - like creating an account, making a purchase, or booking a hotel room - and set a target cost-per-action. We then build rich profiles of your most active customers and run campaigns targeting lookalike users across the major mobile ad networks and RTB exchanges.

As our platform gathers data, we automatically fine tune all aspects of your campaigns until we hit your target CPA. When we're done, we'll **switch you to a CPA pricing model** so you'll never again pay for an install that doesn't convert.

Liftoff. Go beyond the install.