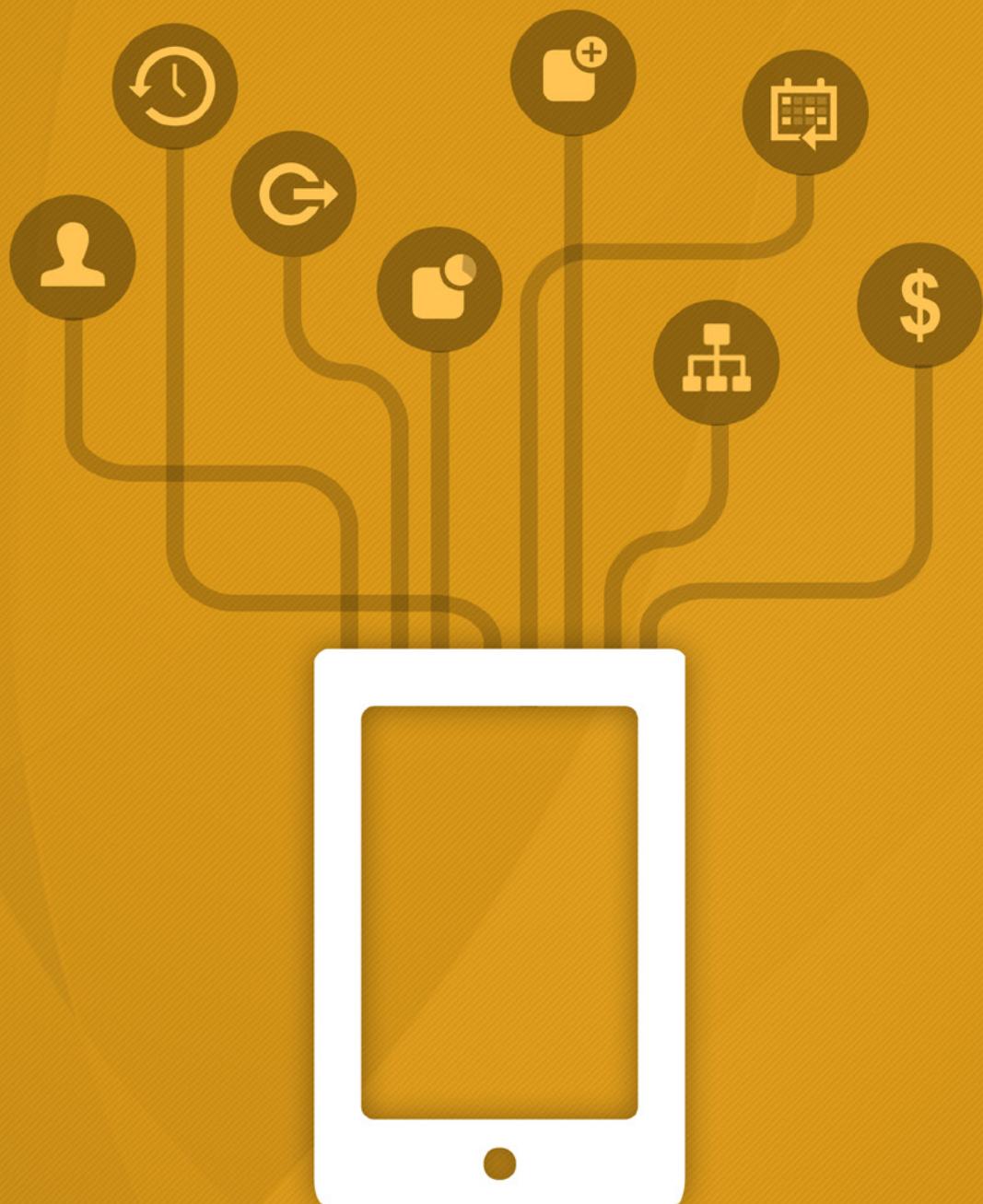


# 8 CRITICAL METRICS FOR MEASURING APP USER ENGAGEMENT



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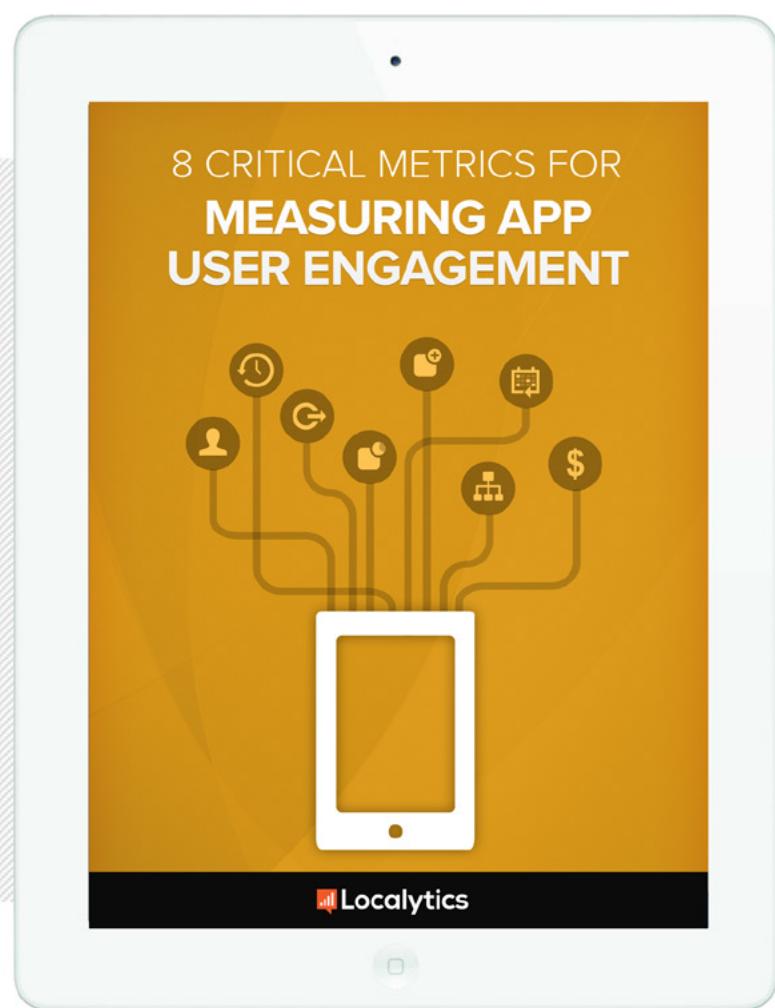
# MEASURING THE SUCCESS OF YOUR MOBILE APP

How do you measure the success of your mobile app? This is the question marketers struggle with today. You've convinced the brand they need an app; you've invested in development and initial testing; and you've launched in the app marketplace. That's a great start, but what comes next is even more important: the measurement, analysis and iterations. The truth is nearly 22% of apps downloaded are never used more than once. The problem? Engagement. Users are easily impressed by the promise of new apps, but their high expectations are often unmet during the app experience.

**Measuring and optimizing for the right engagement metrics is the key to attaining and keeping users.** And whether your business model is driven by in-app advertising, purchases, or paid subscriptions, driving your revenue is fundamentally dependent on personalization and engagement.

The metrics are available, but identifying which are the most important for tracking engagement and are the most actionable can be tricky.

In this guide, we outline for you the eight engagement metrics critical to app success, including **suggestions for running marketing campaigns** and **boosting ROI**.





## 1. USERS



# 1. USERS

## Why it's a critical metric

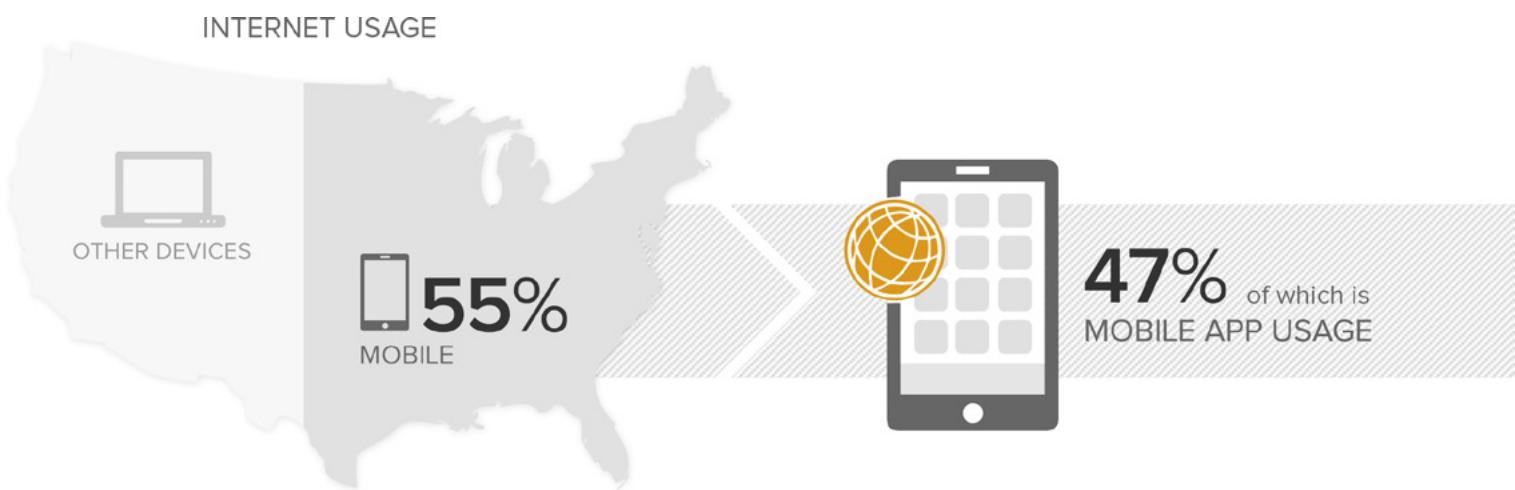
Understanding usage is fundamentally important to the app iteration process. After all, what's more essential than knowing how many users are actually opening and interacting with your app? Typically measured as monthly average users (MAUs), weekly average users (WAUs) or daily average users (DAUs), user metrics can be broken out by day, device, country, time of day, and more to identify how, when, and from where your users are accessing your app. With advanced analytics, you can split user reports by retention, and highlight your most active users, or your "super fans."

## What you gain from it

Once you know your user base and current active users, you have a baseline for improving engagement to increase users across channels, know those who have dropped out of a desired funnel, or know those within your market space who haven't yet downloaded your app. You also gain greater insight into the monetization behavior of users, including the degree of usage, who makes in-app purchases, and who clicks through to ads. By breaking users out into segments, you can also dynamically test those segments for further optimization.

## Notable Numbers

For the first time ever, [mobile devices accounted for 55% of Internet usage](#) in the US, with mobile apps making up 47% of that total, surpassing PCs.





## 2. SESSION LENGTH



## 2. SESSION LENGTH

### Why it's a critical metric

Session length is the period of time between app open and close, or when the app times out after 15 seconds. It indicates how much time your users are spending in your app per individual session, and gives you an idea of how long they are engaged in one sitting. You can track the growth in session length over time to identify spikes in long sessions or dips in usage. And by segmenting out your users, you can see which audiences are spending the most time in your app and why. Session length typically varies greatly across vertical, with social and gaming apps often clocking in longer times than mCommerce.

### What you gain from it

Tracking the length of user sessions is critical to unlocking revenue potential in your app flows. If you've got a mCommerce app, how long does your checkout flow time take? If the average session length is five minutes and your checkout flow takes six, you need to either encourage users to stay in the app longer or simplify the checkout process to meet average session length. Similarly, you can measure the session length of purchasing vs. non-purchasing users to gain deeper insight into visitor flow.

### Notable Numbers

From January to December 2013, average session length in Europe jumped by over 2 minutes; a **51% increase**. Conversely, the average session length in the U.S. wavered, increasing only 12%, and ending the year trending downwards.





### **3. SESSION INTERVAL**



## 3. SESSION INTERVAL

### Why it's a critical metric

Session interval is the time between the user's first session and his or her next one, showing the frequency with which your users open the app. This can signal the immediate value gained from downloading and running the app; if the user doesn't revisit soon, he or she probably didn't get as much value out of it as expected. On the flip side, some apps are inherently prone to longer session intervals. Medical apps, for example, might have 48+ hour session intervals, as people don't always have medical concerns each day.

### What you gain from it

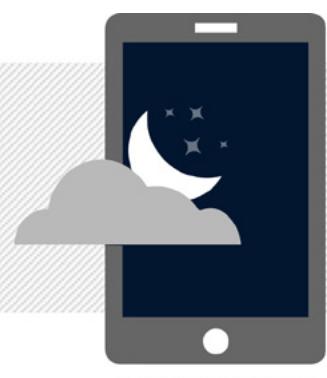
When you know the typical time lapse between sessions per user segment, you can better optimize the user experience to prompt regular opens. For example, if you notice that tablet users have longer session intervals than smartphone users, it might be that you need to improve screen flow or design in your tablet app. **That could lead to a positive change in terms of shortening the interval between sessions for those tablet users.** It could also be an indication that you should consider adding contextual [in-app or push messaging](#) to prompt more immersive and frequent interaction.

### Notable Numbers

27% of Americans say their phone is the first and last thing they look at every day.



**27% OF AMERICANS**  
BOOKEND THEIR DAYS BY CHECKING  
THEIR PHONES





## 4. TIME IN APP

## 4. TIME IN APP

### Why it's a critical metric

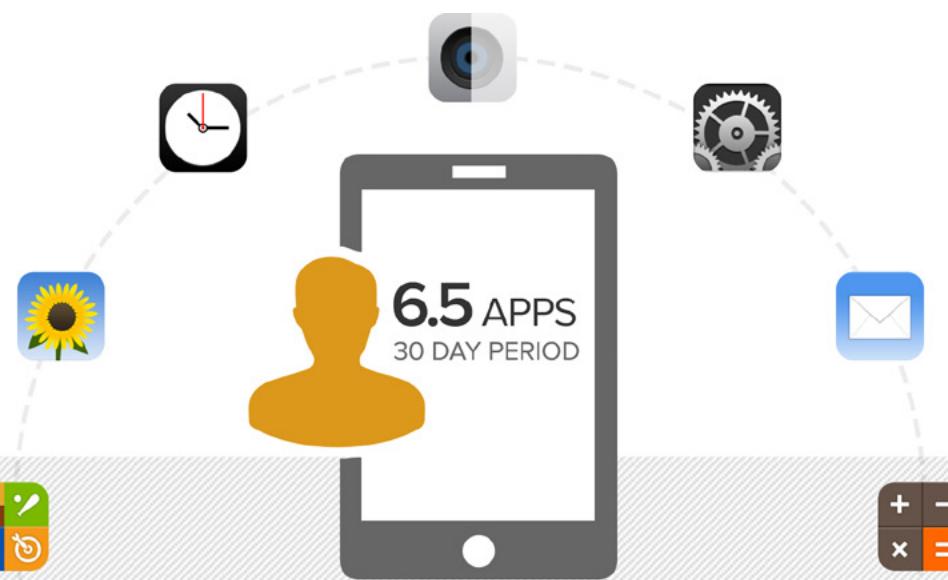
Time in app tracks how long users spend in your app over a period of time, e.g. users spend an average of 15 minutes per month in the app. It's another metric for identifying how often your app is being used, and is an indicator of how valuable your app is to users. Similar to session length and interval, this engagement metric measures behavior over time to give you a clear view of user patterns, allowing you to easily identify how often users are engaging with your app. Much like session length, users typically spend more time in social apps within a set period of time, checking for new posts and fresh content that they might not see otherwise.

### What you gain from it

If a certain segment of your users is consistently opening your app for long periods of time, you need to dig into the “why?” Are they all following a similar screen flow? Are they making more purchases, or doing research? If yours is a gaming app, does their time in app increase each day around a certain time? Drill deeper to understand why your user is in-app for that period of time, especially if your time in app is longer than the average. If you have a short time in app, use that to inform ongoing optimization. If users are opening the app frequently but for short periods of time, what screens are they visiting within that time period, and how can you leverage that to encourage other interactions?

### Notable Numbers

The average consumer [actively uses 6.5 apps](#) throughout a 30-day period.





## 5. ACQUISITIONS



## 5. ACQUISITIONS

### Why it's a critical metric

Acquisitions represent the number of users who download and install your app from a certain location, through organic search, word-of-mouth, paid campaigns or in-app referrals.

This metric is especially important to track when you run campaigns through paid partners like Facebook to promote app downloads. **Acquisitions reports track how much money you're spending to acquire these users, their app downloads and what they're doing when they get into your app.** If your campaign is not driving downloads, pump the brakes. If it is, you can take your analysis to the next level by evaluating how users are coming in from your acquisition campaign and how they compare to the organically acquired users in terms of usage and conversions.

### What you gain from it

Running paid campaigns comes down to ROI, and not just in terms of downloads per campaign, but in terms customer lifetime value (LTV). You can analyze the long-term value of acquired users against organic users, and segment audiences to A/B test or promote conversions through different app messaging campaigns. Also, keep the ongoing benefit of acquisition tracking in mind. For example, in running multiple campaigns, Ad Network 1 might result in more downloads, but over time Ad Network 2, while it may have resulted in fewer acquisitions, might bring users with higher LTV.

### Notable Numbers

The [cost to acquire](#) a loyal user – or one that opens an app three times – grew from \$1.30 in 2012 to \$1.62 in 2013.





## 6. SCREEN FLOW



## 6. SCREEN FLOW

### Why it's a critical metric

Screen flow tracks exits by screen, flow between screens, and total occurrences of visits to screens, visualizing the typical visitor interactions in your app. With screen flows, you can look at a particular screen in your app and see both what users did while on screen and where they went afterwards. Screen flow tracks from the start of a user session to every page he or she visits, giving you a complete step-by-step view of how both purchasing and non-purchasing users naturally navigate your app.

### What you gain from it

In looking at how users navigate your app, you can get a clear sense of problem areas, conversion road bumps, and drop off screens. Do you have multi-step conversion processes or single-step? Is your app confusing to users, who cycle back and forth between some of the pages? Where do visitors in a funnel go instead of converting or purchasing? **Screen flow analytics show you exactly what those users who didn't complete a stage did instead, enabling you to fine-tune your app's flow to increase conversions.** With this data in mind, you can implement redesigns to the UX to create clearer funnels, or create in-app marketing campaigns to re-engage dropped users, [like Localytics customer Voxy did in their screen flow analysis](#).

### Notable Numbers

After Voxy launched a redesign based on screen flow analysis, they saw that the percentage of users reaching their registration dashboard rose from 10-20% to 80-90%.





## 7. RETENTION



## 7. RETENTION

### Why it's a critical metric

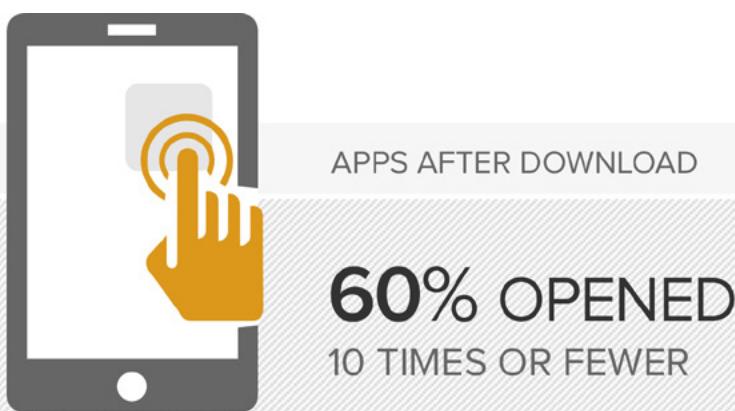
Retention is measured as the percentage of users who return to your app based on the date of their first visit. Essentially, when they came in and if they're still using it. **Also referred to as cohorts, retention tracking highlights your most engaged – and valuable – users, creating better targeting capabilities and allowing you to track in-app purchasing by level of engagement.** Splitting out retention rate based on device, segment and campaign, or by custom dimensions like purchase frequency, you can experiment with marketing campaigns or personalize user experience to test engagement and improve your app.

### What you gain from it

Analyzing retention allows you to determine what's working and what isn't in your app over time as updates occur. If you released a new version, one of the first things you should identify is whether or not your retention has changed. Building long-term retention is key to funneling primed users to conversions and purchases, as creating a highly-engaged user base is the best way to boost LTV and revenue. Investing in retention will steadily improve the value of each user, increasing overall revenue potential.

### Notable Numbers

60% of apps are opened [10 times or fewer](#) or fewer after being downloaded.





## 8. LIFETIME VALUE

## 8. LIFETIME VALUE

### Why it's a critical metric

Lifetime value is your primary revenue metric, representing the financial value of the app and how much each app user or customer is worth in his or her lifetime. It can be split out by average monthly value or value per customer, capturing worth over time financially and also in terms of loyalty and evangelism. It can also be tracked as revenue per customer, a slightly different formula that correlates directly to purchases, in-app and across other channels for overall spend. LTV can show growth over time for different segments, i.e. by acquisition channel or monthly cohorts. LTV can also have [non-monetary measures](#), depending on your goals, such as articles viewed over time (in a media app) or levels won (in a game app).

### What you gain from it

Your LTV signals how much more can you spend toward acquisition to gain more of these users and still turn a profit. Plus, it's a metric representing the value of mobile vs. non-mobile customers; which user segment spends more, is more loyal, and is a bigger brand evangelist. It's also the best indicator of overall app ROI, and contributes to the brand's bigger picture. When comparing revenue per channel, LTV is the app success metric to bring to the table.

### Notable Numbers

Global app revenues [hit \\$26 billion](#) in 2013.



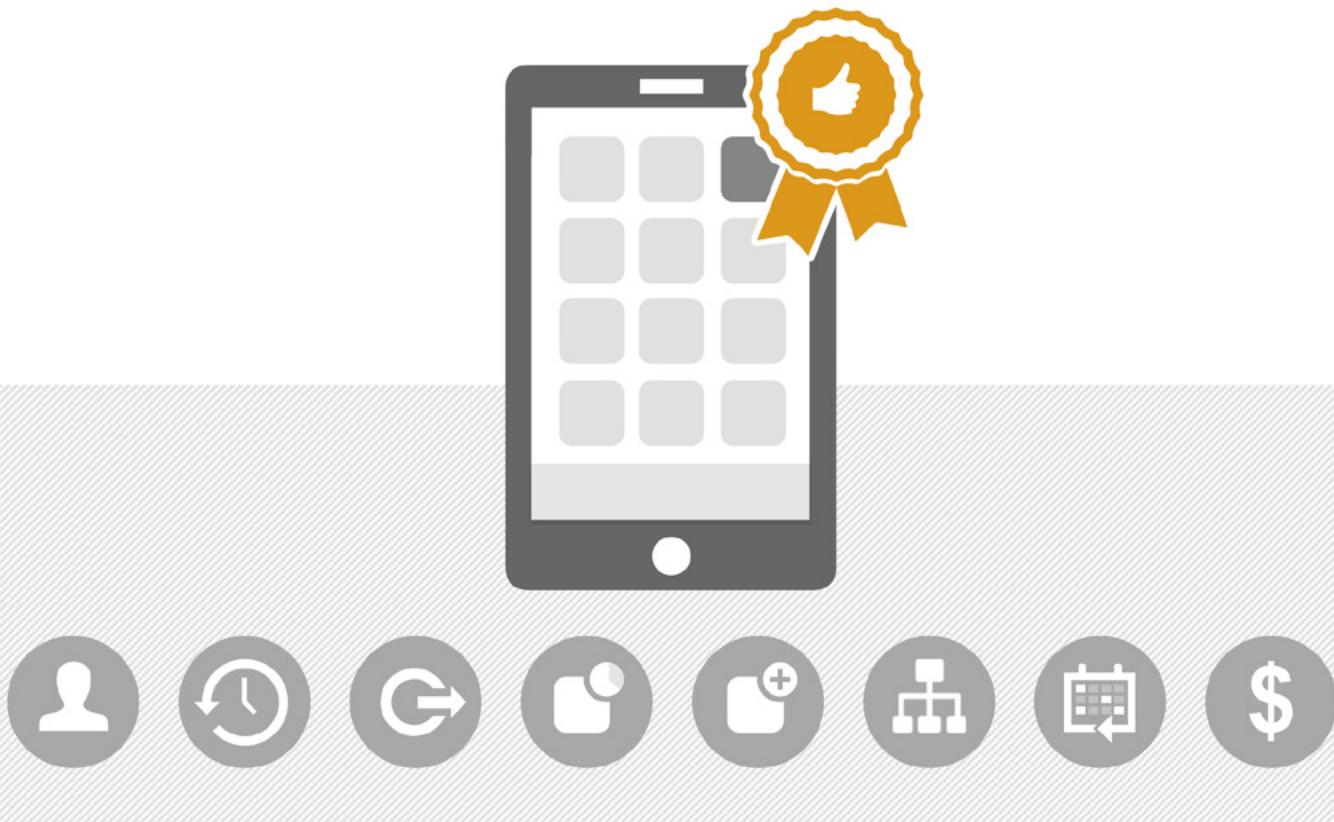


**ALWAYS BE TESTING,  
ITERATING AND OPTIMIZING**



## ALWAYS BE TESTING, ITERATING AND OPTIMIZING

You can launch an app that was designed based on research, best practices, and web user behavior, but the truth is, that could all fall flat with your mobile audience. The only way to create a profitable app isn't to launch and rely on downloads, but to use informed data to iterate and improve.



By analyzing usage, retention, and flow for engagement, you can create a model for conversions, funneling users from acquisition (paid or organic) to conversion to monetization. An informed process that includes app analytics, messaging campaigns, and user feedback is necessary to success.



# THE KEY TO GETTING STARTED



# THE KEY TO GETTING STARTED

Diving into these metrics can seem overwhelming, but in truth, there are easy steps you can take to gain insight and boost engagement.

1

**Measure how your highly-engaged (valuable) vs. less engaged (non-valuable) users are behaving.** When it comes to your already engaged users, what are they doing differently from less engaged users?

2

**Split out your desired user segments.** Segmenting by device, retention, location, purchase frequency and other key attributes gives you targeted audiences to watch. This way, in addition to a dashboard of overall app metrics, you can see how your most important or least engaged segments are tracking.

3

**Slice and dice your data to identify trends.** You can measure each of these metrics across a variety of dimensions to uncover commonalities and high-level reflections of overall app value.

4

**Customize your funnels.** For example, creating a funnel for your in-app shopping process that includes “category viewed,” “product viewed,” “added to cart,” and “completed purchase” is a basic but essential way to analyze how engaged your users are when it comes to the most important actions.

5

**Tap into the natural behavior patterns of your super fans.** This is a holistic starting point for creating effective funnels and marketing campaigns for other users moving forward, as you already know the behavior that pays off.

Getting started with app analytics also requires choosing the right tools. While Google Analytics offers some insights, it's not meant to primarily serve apps, so investing in an app-specific tool is recommended. Good analytics tools allow you to effectively do everything highlighted in this guide, and include Mixpanel, Flurry, and, of course, Localytics.



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