

COLUMNS

10 mobile metrics to measure engagement

March 11, 2016



Justin Bauer is head of product at Amplitude

By **Justin Bauer**

Subscribe to **Luxury Daily**
Plus: Just released
State of Luxury 2019 **Save \$246 ▶**

By definition, user engagement is exactly what the name suggests. For an application to succeed, users have to understand its core value and then continue to use it repeatedly, until it becomes an essential part of their lives.

Measuring engagement tells you how well you are succeeding at making an addicting product.

But no company is going to define engagement in the same way.

Facebook might measure engagement in terms of likes or shares. An ecommerce site might measure engagement purely in terms of placing orders. A mobile game company may look at how long users stay in-game or complete certain goals.

As Andrew Chen points out, there is no such thing as the "best" engagement metrics. Knowing the core value of your app should lead you to the best metric for you.

However, there are some baseline engagement metrics you should consider:

1. Active users: These numbers are great for giving you a baseline understanding of your app's growth, but it is not enough to rely on vanity metrics to gauge engagement.

Instead you should define what an active user is for your app. If you are going to use a ratio such as DAU/MAU as a measure of engagement, make sure to couple it with other more customized engagement metrics.

2. Session length: Session length is a measure of the time between the first activity and the last activity that a user performs in an app.

Developers typically set a timeout to indicate the end of a session when a user is idle for a certain period of time.

You can analyze whether certain features improve engagement by seeing if the session length changes significantly.

In combination with session frequency number of sessions a user has per day developers can identify "super users" who spend a lot of time in the app and analyze their behavior to improve the experience for less-engaged users.

3. Session interval: Session interval indicates the time between two consecutive sessions. This tells you how quickly, or not so quickly, users are returning to your app. Also, it is one way to measure addictiveness.

However, do not go overboard with this metric as some categories such as social apps are tailor-made for a short-session interval, while others including delivery apps are not.

4. Time in app: A function of session length and session frequency, time in app tells you how much time users are spending in your app on a daily, weekly or monthly basis.

5. User actions per session: Measure the critical actions that your users perform by session. What percentage of your new users completes those actions? How many times do they happen from the start to an end of a session?

Focusing on these metrics and measuring how they change over time will help ensure your product is moving in the right direction.

6. Stickiness: How many number of days does a user perform a critical activity in a week? In a month?

Stickiness is the metric that measures what activities are driving users back to your app. By looking at exactly which features of your app are making it sticky, you will know which parts of your app are key to driving engagement.

7. Retention: What percent of users come back to your app in the first 7, 30, 60 or 90 days?

Retention and stickiness go hand-in-hand for looking at how addicted users are to your app. Just getting those numbers may not be as useful as going one step further.

By analyzing the behavior of those who retain and those who do not, you can make key changes to your onboarding flow to get your users to their a-ha moment faster.

8. Conversion: Conversion rate describes the percentage of users who perform a specific goal or set of goals that you want them to perform in your app.

By defining a sequence of events such as a funnel and calculating conversion rate at each step, you can pinpoint exactly where in the conversion process your users are dropping off. Improve this, and you improve your overall engagement.

9. Churn: Churn can be described as the opposite of retention: What percent of your users close your app and never come back?

You can pinpoint when your users are churning by looking at the drop-off in retention, as well as looking at which step in your funnel is causing your users to not convert.

To understand why this is happening requires looking closely at the characteristics and behavior of cohorts that churn versus the cohorts that retain.

10. Lifetime value: At the end of the day, for many apps monetization is the most important engagement metric you have.

Lifetime value measures the cumulative revenue from a cohort of users over their expected lifetime frequently measured as 30-day, 60-day, 90-day or 180-day and is the foremost revenue metric for looking at how well you are monetizing.

LTV is most frequently calculated across your entire install base, but measuring the LTV of just your paying users can be helpful as well.

EACH OF THESE metrics warrants investigation, but as mentioned before, companies should not strive to measure every single one.

The most informative metric will be closely aligned with the app's core value.

Justin Bauer is head of product at [Amplitude](#), San Francisco. Reach him at justin@amplitude.com.