

16 metrics to ensure mobile app success

APPDYNAMICS

16 metrics to ensure mobile app success

Introduction	3
Performance metrics.....	4
User, usage & demographics metrics	5
Engagement metrics	6
Business metrics	7

Introduction

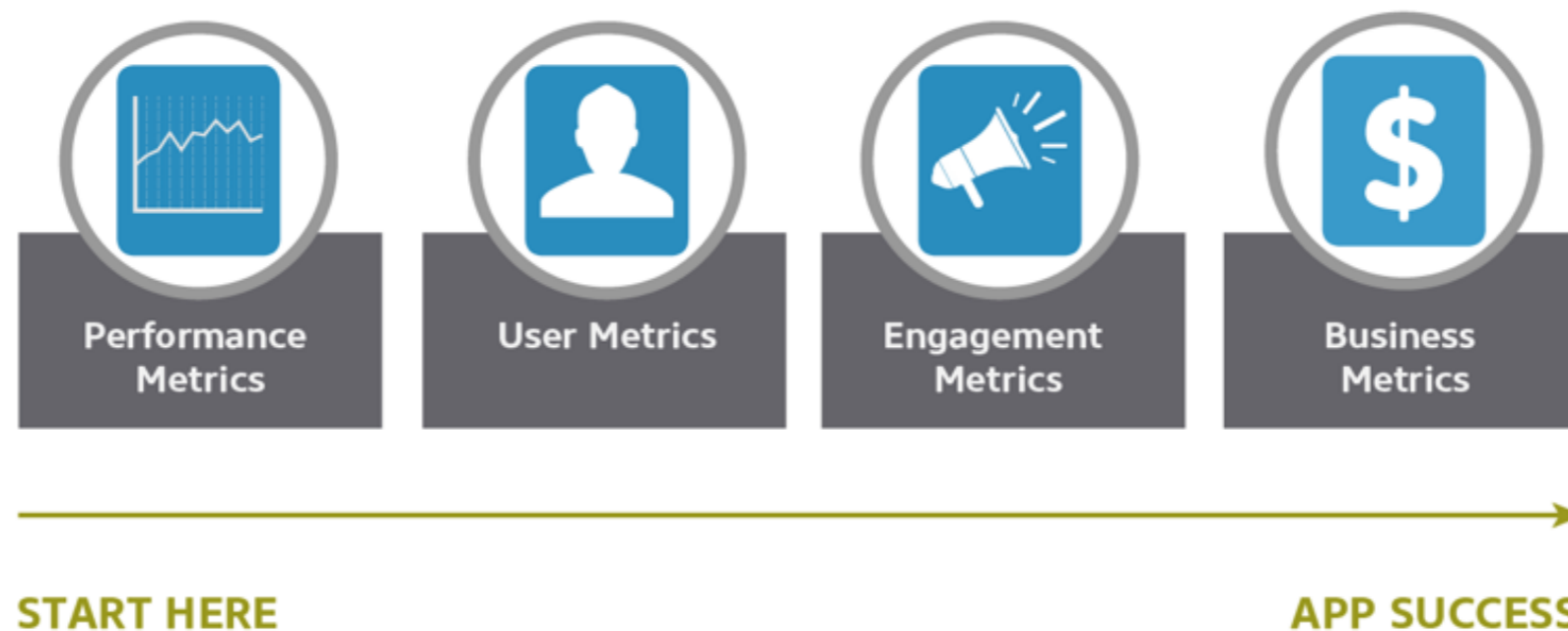
Smart mobile teams know that developing and releasing a mobile app is just the first step in the long journey to delivering a successful and 5-star mobile app. If you have to make your app successful (however you define success – improved brand, more money, more engagement), you need to measure the right metrics, and optimize and iterate your apps to your target goals.

In this eBook, we will explore the key app metrics to collect and analyze. But first, let's break these metrics down into consumable chunks.

At a high level, there are four broad buckets of metrics you need to track for any app.

- Performance metrics: These IT measures focus on how the user is experiencing the app.
- User and usage metrics: These data points provide visibility into the user and their demographics
- Engagement metrics: These metrics highlight how user are engaging with the app
- Business metrics: Focus on business (revenue etc.) flowing thru the app

If you are wondering - these are a lot of metrics, where do I start? The ideal place to start is to analyze the performance metrics. These are the highest value experience metrics - and if you don't get them right, the likelihood of finding a large set of users (and business success) will be challenging. After all, if the app doesn't work well, i.e. crashes a lot or is very slow or unresponsive, why would users download it in droves or engage with it? There is a very clear and direct correlation between your application's performance and achieving your desired business outcomes.



Performance metrics



1. App crashes

Everyone who uses mobile apps has experienced crashes at some point. Crash rate is the average crashes per app loads (an app load is the launch of an app). The typical crash rate is 1-2%, but this varies widely depending on the type of app, its usage, maturity, etc.

2. API latency

Apps of today leverage several API's or services. Latency refers to the round-trip time from a request to a response. The general rule of thumb is to optimize to around 1 second response time.

3. End-to-end application latency

It's not just enough to track API latencies; you also need end-to-end response time to applications that are powering the API's. Again, the general rule of thumb is to optimize to around 1 second response time. Users may have some tolerance for slower response times, but the data generally shows that anything over 3-4 seconds total response time and the majority of user (60% or greater) will abandon the transaction and may even delete your app altogether.

(Further reading: [The App Attention Span Report](#))

4. App load per period

This metric is related to the number of transactions or calls over a certain period of time. It is critical because you want to make sure that as the load increases, your application performance doesn't degrade. Load can be very spiky in nature for some apps, so you need to know that your app can handle sudden changes in load without slowing down.

5. Network errors

Network errors are typically the service provider or HTTP errors seen by the app when the app is interfacing to a networked service. Network errors can lead to crashes or slow response time (with multiple retries).

How to get these metrics?

The App Stores (iTunes and Google Play) provides basic performance metrics. However, the metrics are very limited - with crash data only - and not real-time enough for enterprises to quickly troubleshoot and fix the issues. A few free vendor tools also provide basic crashes reporting capabilities, but mobile team would do better by not settling for just crash monitoring. App teams should look for solutions that provide a comprehensive set of metrics (crashes, app latencies, API latencies and application latencies) to solve all issues affect app end-user experience.

User, usage & demographics metrics



6. MAU/DAU

The monthly active user (or daily active user) is a coarse metric that highlights the user base of the app. Keep track of your MAU's and its trends (is it growing/shrinking/stagnant?) This metric is particularly important if your revenue model depends on advertising for which a large user base is required in order to be successful.

7. Devices and OS metrics

Apps are consumed on a wide variety of devices. You need to know how/where your key users use your apps - what devices (smartphones, tablets, IoT devices) and what OS/version (iOS 8? iOS 8.x? iOS 7.x, etc.) to focus your efforts on where your users are.

8. Geo metrics

Don't ignore the geography aspect of app usage. Are your users in the US (or is it outside the US)? Where do you see the usage within the US? Which states? This kind of data will enable you to identify issues faster. For example, if you have an app that targets a broader geography but only gets regional traction, you can now start to dig into the reasons why.

How to track these metrics?

Again, App Stores provides basic download data but lack real-time view into the true usage of the app. Look for solutions that provide instrument apps to track this information in real-time and with detailed device, OS, geography granularity.

Engagement metrics



9. Session length

Session length is measured as the time period between app open and close. It indicates how much time your users are spending in your app per individual session. The more engaged the users are, the longer their session length.

10. Session interval

Session interval is the time between the user's first session and their 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.

11. Retention rate

We know that many apps are downloaded are never used more than once, but the value of the app or the experience wasn't what it should be. Retention is measured as the percentage of users who return to your app based on the date of their first visit. Retention, or "cohort," tracking highlights your most engaged – and valuable – users, creating better targeting opportunities and personalization of the app experience.

How to track these metrics?

Engagement metrics are provided by solutions that provide rich app analytics. Also, your notion of engagement may vary. Look for solutions that tracks these metrics out of the box, or can get these metrics with some customization.

Business metrics



12. Acquisition cost

Customers find your app through a wide variety of channels - organic search via the App Store, word-of-mouth, paid campaigns, or in-app referrals. This metric allows you see where users came from, but also how they behave once they start engaging with your app. The number of app downloads from a given source is important, but not as important as the value users drive when they're immersed in the app experience.

13. Transaction revenue

Transaction revenue is the value of transactions supported via the mobile app. While transaction revenue applies directly to apps that support mCommerce transactions (shopping, travel, financial services, etc.), it can also be approximated for non-commerce apps. For example, an app that supports a field service agent can be assumed to support \$X of transactions per use (where \$X is the cost of executing the transaction thru an alternate channel like phone call or a truck-roll).

14. Abandonment rate

Abandonment rate is the ratio of transactions annulled to transactions initiated. Transactions may be abandoned due to a wide variety of reasons: the performance and experience of the app were not up to the user expectation, the app crashed, the user changed their mind, etc. Whatever the reason, it behooves the app team to understand the user journey and analyze why the transaction was abandoned.

15. LTV

Lifetime value is your primary revenue metric, representing the value of the app and how much each app user is worth during their lifetime. LTV isn't limited by whether you consider revenue as a dollar amount or some other metric like social sharing or articles read, and can be split by average monthly value or value per customer across all channels.

How to track these metrics?

The business metrics an enterprise cares about could vary dramatically from company to company. Find a solution that can track all these metrics without extensive app code rework.



16. The mother of all metrics - the app star rating

A note about app metrics wouldn't be complete without paying homage to the most public of all metrics - the App Store ratings. No market provides such a public testament to an app and its effect on its customers. However flawed the system, users - prospective, existing, etc. - pay attention to this rating. A poorly rated app will bear consequences in the long run, so do all you can to improve your App Store rating.

APPDYNAMICS

appdynamics.com