

# APP DYNAMICS

An AppDynamics Business White Paper

## 5 Key Steps to Building a Successful Mobile App

In this white paper, I'm going to take a look at the major steps involved in bringing a mobile application to market.

There are several trends contributing to the urgency many enterprises have about creating mobile applications.

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*“...independent of your particular market segment, customers are increasingly accessing your products and services through software applications.”*

The first trend is that all businesses, regardless of industry, are increasingly becoming what is frequently referred to as software-defined businesses (SDBs). If you're unfamiliar, this term means that independent of your particular market segment, customers are increasingly accessing your products and services through software applications. Think Netflix vs. Blockbuster or Uber vs. the taxi industry. Whether you are in banking/finance, retail, healthcare, insurance etc., all of your stakeholders are interacting with you through software applications rather than in person or on the phone.

The second trend is that customers are also increasingly doing business with companies on via their mobile devices. I'm not going to belabor you with tons of stats about the growth of ownership of smartphones or the amount of time the consumers are spending on their phones or how they are actually interacting across channel for different parts of the customer journey and even frequently engaging on multiple channels simultaneously.

As more and more consumers shift their attention to their mobile devices, there is an increasing demand for businesses to engage their customers where they are spending their time, through mobile applications. Enterprise business apps are a fast-growing area. [The Global State of Enterprise Mobility report](#) found that 62.5% of businesses invested in apps last year and this trend is set to continue to rise into 2015. According to a study by [ChannellInsider](#), A full 85% of enterprises have a mobile application development backlog of one to 20 apps; 50% have a backlog of 10 to 20 mobile apps.

So, given there is such pent up demand for companies to create mobile apps, what is the process they should go through to take these apps to market? Let's take a look.

### **Step 1. Deciding on the Value Proposition for Your Mobile Application**

This first step seems deceptively simple since everyone has very distinct ideas for what mobile applications they would like to build. A significant portion of the mobile app industry seems to be build on what is commonly referred to as the Field of Dreams Model, which is shorthand for the notion that “If you build it they, will come.”

But the landscape of mobile applications is littered with examples of apps that were designed and built on a whim and never achieved a significant user base or accomplished the goals for they intended.

Of course, the type of app you are going to build will be highly dependent on the type of business and industry you are in. For example, a gaming company most likely will be building very different types of apps than an automotive company. Or so one might be inclined to think, but every company will have different objectives and goals where a mobile app would come in handy.

If we consider the car company example above, you might first think an app idea would be centered around giving information about their cars and models or

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helping consumers find the nearest dealer, service center, or parts and accessories. But what about increasing brand awareness or engagement with the brand among devoted fans? This could be served through an app like a racing game where the players race in virtual models of the company’s cars or classics from their past.

It’s important to think through all aspects of a company’s goals and objectives as part of your overall digital strategy determining how mobile applications will contribute to furthering these goals. It’s likely several companies will have more app ideas than they have time, budget, or resources to build. It then becomes a matter of prioritizing which ideas to pursue first depending on which goals are most important. The same type of project analysis techniques that are used in other parts of the business can apply to mobile application development prioritization.

### **Step 2. Determining your Monetization Strategy**

The process of deciding on your monetization strategy is directly related to the strategic process of determining your mobile applications value proposition. Monetization strategies are as varied as the types of mobile applications and the companies that build them.

According to a study by [Gartner](#), less than 0.01% of consumer mobile apps would be considered a financial success by developers through 2018. While the vast majority of consumer applications may never turn a profit, there are a small number of successful apps such as Supercell’s Clash of Clans, which is estimated to rake in more than \$1 million per day. ([Data from AppAnnie](#))

As described in step one, the monetization strategy for a game company like Supercell will be very different from a finance company. The strategy may not even depend on making money from the app itself at all since the value may come in some other completely different way. Apps could reduce costs elsewhere in the business by making it easier for customers to self-service their accounts, or improving efficiencies by reducing cycle times on a business process, or greater capital efficiency by reducing inventory requirements as a result of better demand forecasting.

As you can see, there are all kinds of ways a company could benefit its business via a mobile application. The key thing is determining how you’re going to measure the ROI of your mobile application development. It’s vital to measure the costs of developing and maintaining an enterprise-class mobile application.

### **Step 3. Building a High-Quality Mobile Application**

Once you’ve nailed down the value proposition of the app and your organization’s

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strategy for monetizing it, the next step is building a high-quality application. There are many different criteria to judge app quality, but when it comes down to it, the ultimate arbiter of quality is how good is the end-user experience of the application.

There have been volumes written about what constitutes a good end-user experience, and it’s far beyond the scope of this white paper to discuss competing theories of visual design and user interaction models. However, there is one characteristic of good user experience that is universal across all applications – performance.

If your application doesn’t perform well from the end-user’s perspective, then it doesn’t matter how cool it looks, how slick the design, how clever the user interactions. If the application isn’t responsive, if it doesn’t go fast, if it’s buggy, or constantly throwing errors, then the users will simply delete it. All of the time and effort you put into conceiving it, designing it, and building it will go to waste.

You will hear a lot of contradictory recommendations in the app development community. The big buzzword at the moment is MVP or minimal viable product. The basic idea is to put out the simplest product as quickly as possible and then take advantage of user feedback to refine the idea.

While this approach may be applicable to small dedicated app development houses and start-ups, it’s not practicable or advisable for enterprise-class mobile applications where your brand value is on the line. They can’t afford to accrue negative app reviews while they collect feedback.

One advantage of the MVP approach is it help you to get something out the door quickly, rather than wait through a lengthy development cycle. The downside of the MVP philosophy is if you push out the minimal product, there’s a good chance you could receive poor app store ratings, which could damage your brand. Consumers are reluctant to download apps with ratings below 3.5.

Regardless of whether you go the MVP route or take your time to roll out a fully-fledged version of your app, it’s imperative you make the end-user experience of the performance of your app is exceptional. This is important not only for your dev/test environment, but also and especially in production once you’ve published your app. No test environment can fully capture the millions of factors that affect your apps performance once it is out in the wild on thousands of different devices running many versions of OSs, across hundreds of carriers, and tens of different type of networks from all geographies around the world.

In order to make sure your mobile app performs well, you need robust tools that will allow you to monitor, manage, and optimize all aspects of your mobile app performance. Naturally, that’s exactly what AppDynamics’ Mobile Real User Monitoring help you do.

#### **Step 4. User Acquisition**

Ok, so you’ve conceived and built your app, made sure it performs well, and

*“There are over a million apps in each of the respective app stores, so how are you going to make sure users are aware of your app?”*

published it to the world through the app stores. Now your work is just beginning.

The next logical step is to get users to download and start using your app. There are over a million apps in each of the respective app stores, so how are you going to make sure users are aware of your app?

If you are incredibly lucky, it's possible your app could be selected by one of the major app stores to be an elusive featured app. This would get your app in front of hundreds of millions of users whenever they open the app store on their device. Unfortunately, given the numbers of apps competing, the likelihood of your app getting selected is vanishingly small. It's kind of like winning the lottery. Almost as good is if your app gets reviewed by a popular mobile app industry luminary like a David Pogue, Walt Mossberg, Kara Swisher, Robert Scoble or any other number of people with a large following. Again, good luck with that, as the competition is fierce, and the chances are slim. Even expensive PR agencies can guarantee anything.

Fortunately for you, there is a whole industry that has evolved around helping you to promote your mobile apps to your target audiences. For most enterprise companies, your efforts will piggyback off of your existing customer outreach and engagement efforts such as your website, emails, newsletters, social media, and other channels.

In addition, you can drive app installs through dedicated mobile app advertising mechanism that have been introduced by companies like Facebook and Twitter. Similarly, many digital agencies now have specialized services to run campaigns through on-line and mobile-specific advertising, SEO, ASO, PPC, and there are other specialized services.

In order to measure the ROI of all of these activities, you also need to make sure you have a way of assessing the Lifetime Value (LTV) of the customers you do acquire. After all, if you are spending more money to acquire users than you are getting value out of your acquired users, then your ROI will be negative.

#### **Step 5. User Retention and Ongoing Engagement**

Once you've acquired a user, the next step is to retain that user and maintain a relationship with them through ongoing engagement between the user and the application. As described in the previous section, in order to have a positive ROI on that effort, you need the user to engage with your app consistently in order for your investment to pay off.

The models for user retention and engagement also will vary with the types of applications. For a consumer game app, user retention could be addressed by frequently introducing new game levels, challenges, puzzles, equipment, or characters.

For an enterprise retail application, it could be driven by specials on merchandise or regular new product line launches. In the case of a finance institution, it could be

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*“Most users engage with between 14-28 apps on a regular basis and as few as 5-10 on a daily basis.”*

through notification about activity on an account. In an insurance case, it could be via occasional reminders about possible changes or new offers.

Your goals for your user retention and engagement strategy will be directly related to your monetization strategy. For many free applications, for example, monetization is achieved through advertising. In these cases, the number of daily and monthly active users is a key engagement metric along with the number of screens they viewed since each screen view represents a possible ad impression opportunity. These metrics are critical given the economics of the mobile app market. [A Distimo report](#) found that 85% of iPhone apps and 78.6% of iPad apps are free with in-app purchases. That figure is even higher for Android. Similarly, the mobile analytics firm [Swrve found](#) that only 1.5% of players in their network spent any money at all, and a full 50% of freemium in-app purchases came from only 0.15% of players. Given those types of statistics, you can see how important it is to retain a very large and engaged user base.

In order to achieve your goals, you need a plan for how you are going to try and retain users and get them regularly engaging with the app. [Industry data suggests](#) most users engage with between 14-28 apps on a regular basis and as few as 5-10 on a daily basis. Therefore, it should be every team's goal to become one of those trusted and frequently used apps. Especially considering most apps are only ever opened once after initial download and fewer than [10% are ever opened more than three times](#).

One of the biggest indicators of retention and ongoing engagement is your initial sign-up or registration process. You may be tempted to encourage the user to sign-up right away because once they have an account you can now reach out to them with notifications or emails to try to get them to re-engage with the app. On the other hand, many users will also be turned off by registering before they have had an opportunity to check out the app and see if they want an account. They may just stop immediately and delete it right away or simply abandon it to the app wasteland.

This process is frequently described as a conversion funnel because you are trying to convert people who have downloaded your app into registered users with whom you can engage on a regular basis. Marketers, in particular, focus on what drives users to register and stay engaged.

There are many commercial tools available that will help you track user downloads and attribute them to various campaigns so you can accurately measure campaign efficacy. Similarly, these types of tools also have features that allow you to understand the demographics of users -- such as location, device, and OS they're using. These features will also identify cohorts of similar users who may have followed a similar path based on time, location or other factors. These metrics will allow teams to understand their conversion funnel and identify bounce rates to optimize engagement and user conversion.

Another option is to experiment with when and how you try to convert users. For example, many app developers prefer to start with a tutorial so users can learn

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about the features and functions of your app before you try and get them to register. Other apps will go even further to let you use the app all the way up until you are ready to perform a transaction before requiring you to register.

You might need to experiment with different approaches to see what works best for your type of app and your target audience. You can try these types of experiments manually, or take advantage of a variety of tools to help you automate these experiments through A/B testing.

Regardless of the approach you decide to take, it will be advantageous for you to also have a strategy for measuring and monitoring how real users behave and interact with your application and provides you with analytics to understand how all aspects of your app are performing and helping to drive your business’ key performance indicators.

#### **Summary**

In conclusion, the key takeaway is it’s critical for an enterprise creating mobile apps to ensure these apps provide your users with an excellent experience. In order to deliver a high-quality experience to keep your users satisfied and engaged, you need to be able to track, analyze, research, and optimize the performance of your mobile application from the perspective perceived by the end user.

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