

5 KEY PHASES

IN CREATING A SUCCESSFUL MOBILE APP



DEVELOPING A PLAN FOR SUCCESS
IN A COMPETITIVE ENVIRONMENT

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The mobile market is white hot. By 2016, Gartner has predicted there will be 310 billion downloaded apps reaching \$74 billion in revenue.¹ With nearly 2 million apps in general distribution, competition to stand out is fierce. There are over 900,000 apps in the Apple app store alone, combined with 750,00 apps for Google Play, 120,000 for Blackberry and another 80,000 for Windows 8.² Deciding to create a mobile app is easy, but developing a high quality app is hard work. There are no guarantees in the crowded mobile app marketplace. German research firm Adeven reports that two thirds of apps in the Apple store never get downloaded once.³ Building a well-crafted product development plan that addresses market research, strategy, design and development will provide the greatest chance for success.

What does success look like? For the purposes of this white paper, 'success' means an app that fulfills 4 definitive goals:

- The app achieves the sales or adoption objectives set by the publisher.
- The app attracts a large audience to meet the first criteria.

- The app meets the needs and fulfills the expectations of its audience.
- The app entices audience members to continue its use, install upgrades to future versions, and become evangelists for the app.

There are 5 key phases of mobile app creation that can ensure these goals are met successfully. Each phase is critical to the app's overall success and feeds into the next step of the process of product development for the app.

An understanding of each phase increases the likelihood that a mobile app will succeed.

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THE 5 KEY PHASES OF SUCCESSFUL MOBILE APP CREATION ARE:

STRATEGY - Why are we doing this?

DESIGN - How are we doing this?

DEVELOPMENT - Let's create this.

MARKETING - Let's sell this.

MAINTENANCE - Let's keep people using this.

In this paper, we'll take a look at each of the phases to understand how they work together to help create a successful mobile app.

PHASE 1 – STRATEGY

To get where you are going, you have to know where you are. This initial phase is to determine and refine what success for your app looks like to your organization and to create a roadmap of the process that you will take to achieve those goals. The decisions you make in choosing an app strategy will have a significant impact on the remaining phases of your project. There are many platform decisions to make for your app, for example, smartphone or tablet dominant; iOS or Android-centric; and single-platform or cross-platform development. Being thorough and accurate about the reasons behind your decisions provides you with the best opportunity for success.

When starting a project, ask the following questions: Is the purpose of the app to build revenue for your company through mobile sales? Is it to serve as the beginning, middle or conclusion of a series of apps? Will it drive traffic to your company’s web site or physical location for retail sales by increasing brand awareness? Does the app exist to provide customer service

to an existing base of users for your organization’s products or services? Your answers to any of these questions will lay a foundation on which to build your app; each will have a distinct set of features, functions and requirements to consider.

Strategizing the primary purpose of an app will, in turn, determine user interface (UI) design needs. A tablet-first app will have a different UI than one designed primarily for smartphones. Apps that exist to “push” users to a brick-and-mortar location will have functions different from those designed to sell goods or services directly. The key is to understand very early on why your organization wants to create the app, in order to determine and streamline the best features and functions for the app.

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It's also important to know your space and your competition, so do a complete competitive analysis on other apps in your space. Study what they are doing. Learn from their mistakes and strengthen your app where they are weak. You do not have to reinvent the wheel - if they are doing something that works, you can do that, too.

There are 3 important deliverables from this phase of the process. Make sure each has been thoroughly explored to ensure that the proper foundation is set.

Deliverable 1: High Level Goals

Determine the best business model. Compose a clear statement of what the business sees as the goals of the app. Be clear about definitions of success. Make sure that the goals are not so numerous and so diverse that two or more become contradictory.

Deliverable 2: Problem and Solution Statement from the Audience's Point of View

Create a statement of the problem(s) or need(s) the app will solve for its audience. Define the problem/need and solution properly so that you can

provide valuable guidance to the development team in subsequent phases of the process.

Deliverable 3: Audience Definition

Do your due diligence on customer development. Describe who will download or buy your app. Create personas of your customers based on actual research and real customer feedback.

PHASE 2 - DESIGN

After establishing the strategic foundation of an app, your organization can move on to developing the app. In this phase, the most important point is to focus on the user experience - i.e., the interface, functions and application performance that your users will have in the palms of their hands. Part of that is keeping in mind which device will be in those hands: When you're designing the app, are you designing primarily for the small screen of a smartphone or a tablet display?



Determining how many multiscreens your app will be used on will be a jumping off point for design. You may have to design different interfaces for different screen sizes or limit your app availability to a specific screen size. Remember your overall goal: 'Awesome' is the word you want users to think of when asked to describe your app. All of that critical market research on your customers has given you insight into what features are most important to develop.

Within this phase, ask and answer these 3 critical questions:

- What type of experience – shopping, information gathering, instructional, entertainment, or some combination of two or more of these – do your users need and want?
- What are the key functional elements of your app?
- How will you define quality performance for your app?

Once the app scope has been spec'd, you will have a better idea of what your budget is and what resources you will need to put it together. This brings up the issue of internal expertise

and external consulting. Does developing your app in-house offer intrinsic advantages? Or, are you better served by working with an external mobile development firm? Whether designing a mobile app with your own talent or the help of a third-party, it's important to follow best practices in the design phase.

Some recognized best practices are:

Stop rushing. It's natural to want to begin coding as soon as possible. Make sure not to skip design steps that might save time and effort later. Spend extra time documenting requirements analysis, object abstraction, user interface design and so on.

Remember the overall IT design and architecture. Mobile apps need to fit within the architecture of your organization. Ignoring the strengths (and limitations) of your existing systems can set an app up for performance issues in production.

Study, learn and adapt from other apps. Don't let your ego stop you from studying what's already been done. Learn lessons from existing designs and adapt your app based on what you've learned.

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Cut the fat. Anything in your mobile app that doesn't contribute to a positive user experience, or has no major performance impact, should be jettisoned.

Don't neglect the developer. Make sure the development team is involved as early on as possible. They can provide valuable insights from start to finish that can eliminate problems for both the publisher and users later.

At the completion of the design phase, you should have a set of screen designs, control functions and operational features that can be handed off to the development team for conversion into an app.

PHASE 3 – DEVELOPMENT

When starting the development stage, you need to make two critical decisions: First, do you develop to a specific platform or to a cross-platform framework? Second, which set of tools do you use to develop your mobile app? Each of these choices brings with it advantages and challenges for the development and product support teams.

Deciding which development environment to use has the greatest impact on your users. It's critical that publishers weigh their decisions carefully. Platform-specific development can take advantage of the native features and functions unique to each platform (e.g. geolocation, camera). Native apps also tend to be much faster than apps that are rendered using HTML5. Facebook, for instance, switched its iOS app from HTML5 to a native app (built using Xcode), and saw vast improvements in speed – the app opens faster, scrolling is smoother and photos upload instantly. In addition, native-platform apps can take advantage of the marketing and distribution capabilities of the various platform-specific app sites.



But consider those advantages against the significantly greater cost associated with separate development efforts for each platform and the near-certainty that an app associated with one will be released first – potentially alienating owners of devices on other platforms.

HTML5 can provide an option for a single cross-platform development effort. Web-based apps developed in HTML5 offer publishers a great deal of control over how the app will appear across different operating systems and screen sizes. An even greater advantage is that updates to the app can be applied to the publisher's servers and then invoked automatically when the user next accesses the app (similar to the immediacy of web app deployments), rather than having to go through the development, app submission and update process required by platform-specific apps. However, even HTML5 proponents will admit the current state of HTML5 is most charitably described as 'in progress.' Users may well love the idea of an HTML5-based application, but they love the idea of a fully functional mobile app that ships today even more.

Here's where cross-platform development frameworks that produce platform-specific native apps (like Appcelerator and Xamarin) might actually work to your advantage in terms of time, cost and functionality. The research firm Gartner predicts that half of all mobile apps will be HTML5/native hybrids by 2016.⁴

In addition to these issues, there are other decisions made in development that will have a significant impact on phases four and five of the process. Mobile app users will not tolerate poor performance on their handheld devices. Developers must keep the user experience top of mind, and develop code in a way that allows performance to be monitored throughout the app's deployment and use. This will be critical when it's time to make the app sticky – a phase we'll discuss later on in the paper. And, if you are developing an enterprise-specific app that you want to keep internal to your organization, consider the internal app stores (like Apple's enterprise developer program), which allow users to privately develop, and securely host and distribute in-house apps to their employees.

Take into consideration the entire mobile app ecosystem – from the device level to the backend services that support your app – and how your development team will implement and support this.



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Whether the tools under discussion are platform-specific, such as iOS or Android; cross-platform frameworks, such as Appcelerator, Windows Azure Mobile Services or HTML5; or backend services, such as StackMob or Parse, the toolset will have an impact on your feature set and development process. Take into consideration the entire mobile app ecosystem - from the device level to the backend services that support your app - and how your development team will implement and support this.

PHASE 4 - MARKETING

There are nearly 2 million mobile apps on the market. So, how do you make yours stand out? One of the greatest factors in marketing your app successfully is making sure that potential users know the app exists, like it and share it with friends.

Here are some of the steps to make your app stand out from the crowd:

Billboard words: Make sure the app's name, its keywords and its descriptions are as broadly appealing as possible. The larger the market in which it appears, the more critical this step.

Social works: Make sure your app has an account on every social network with the same name. Keep updating content regularly, and respond and engage users. Take care of any customer service issues head-on with grace and humility.

Blog outreach: Reviewers matter - especially for new apps or new publishers. Keep the reviewers busy and do your best to make sure they have a positive experience with your app. After that, prepare to respond to whatever they may write on social networks.

Email outreach: Engage users and update them on news, promotions and sales through targeted email blasts. Remind users you are there. Email newsletters that contain social media buttons for sharing and that lead back to stories on the company blog.

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Other directories: The app stores aren't the only places your app can find an audience. Understand which directories are important to the customers you want to attract and be sure that your app appears in a positive light in them.

More sources: The rules regarding best practices for app marketing shift frequently. Scan online sources for success stories and 'rules of engagement' from the experts who have learned what people are doing this year, this month and this week. Don't depend on last year's marketing advice for today's mobile app success.

PHASE 5 – MAINTENANCE & MANAGEMENT – 'MAKING IT STICKY'

Keep your customers engaged and coming back by delivering a seamless experience that makes your app stick, and your users will make in-app purchases and/or download additional apps from you in the future.

There are some common questions customers may have about an app before purchase including:

1. **Function.** What does the app do? Customers are interested in what your app does differently than other apps. Specifically, how does your app do things in a new and novel way?
2. **Security.** Users want to know how your app collects, processes and stores data, and how it might interact with other apps and services as part of an application ecosystem.
3. **Speed.** How slow is it? A slow app is an app that won't find a significant market.
4. **Stability.** Does the app keep crashing? Does it lose information? Is the experience consistent?

Don't wait for bad reviews and low ratings to find out that your app is having functional issues.



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Keep your app sticky by:

- **Finding and fixing issues.** Make sure your developers monitor the end-to-end performance of your app and understand where issues are occurring before they become major problems for users. Don't wait for bad reviews and low ratings to find out that your app is having functional issues.
- **Communicate with users.** Let your users know what you are doing and why, and most importantly, why everything you do is aimed at making their experience better and more rewarding.
- **Make it count.** You have one opportunity to gain a customer. But every interaction between your users and your mobile app from then on is an opportunity to lose them. Maintain a healthy sense of paranoia about app performance and work to ensure that every time your customers use the app, they continue to be sold on the product's value.

CONCLUSION

Mobile apps are changing the way we interact with our technology and the app market continues to grow at a rapid clip. It is an exciting time to be an app developer. Ensure the success of your app by applying these 5 principles in your development process and you will find yourself on the road to app success.



¹<http://www.gartner.com/id=2126015>

²<http://www.pureoxygenmobile.com/how-many-apps-in-each-app-store/>

³<http://www.bbc.co.uk/news/technology-23240971>

⁴<http://www.idownloadblog.com/2013/02/04/gartner-mobile-apps-2016/>

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