



GUIDE TO PLANNING YOUR CUSTOM MOBILE APP

2020 Edition



1 Who This Guide Is For?

This guide is meant for anyone planning to create a custom mobile app for the first time. The intended audience are development managers, marketers, CEOs, and entrepreneurs that have never created any custom software applications in the past but are looking to get started. By using this guide, we hope to provide you with a comprehensive approach to planning your mobile app based on our observations over the years. The guide provides concrete examples of the steps to take to plan the development of your custom mobile app.

NOTE: if you are a municipality, association, art gallery or museum looking to build apps for community engagement, internal company communications, or events we offer a mobile app platform which allows you to skip most of the process described in this guide. You could have your app deployed in about 6 weeks! Contact us to learn more or visit <http://www.info-grove.com>

2 Introduction

Working in the App development field for the past 10 years, we have found that many of our customers come to us with an idea but struggle on where to start. We work to help them understand the process of developing their organization and their app. App development, as with most organizations, begins with an idea and an addressable audience for it. Taking that idea and turning it into an app can be a daunting task. If you follow some basic steps in the planning process, it can be significantly simplified and much more effective for your audience.

The planning process begins with the business model, moves through to establishing app requirements and a minimum viable product, and finishes with a phased plan for managing the project.



3 Business Model for Apps

We have many customers approach us with nothing more than an idea; most people don't consider a business plan for their app. You certainly do not need to have all the details (pricing, categories, options) sorted out, but when planning an app, you should consider how you intend to make money with it (if monetization is your objective).

You are more than welcome to create an app for philanthropic reasons, but we can't all be Bill Gates, so it's imperative you think about how to make money from your app as one of the planning steps. Is your app going to be free, a paid-for app, freemium, or a subscription service? There are multiple options to consider so let's explore them below.



3.1 Free App

There are many cases where the app serves a different purpose and you don't expect to directly make money from the app. It could be a companion to a product and the app serves as a way to provide more value from your product or service or to enable more sales. Think of this as meeting a certain “checkmark”. Examples of those apps are community engagement tools for cities and associations, utility apps for the construction industry, or apps for brands like McDonalds and Starbucks.

In other cases, the free app is a marketing tool to attract more customers/leads to your organization. You provide some free service via the app and in return, you hope users come back to your company for something else. A bit of a loss leader.

Finally, there are apps that are just free and where the developers are not expecting to make money. Likely a pet project of someone or just a philanthropic effort.

3.2 Mobile Apps Available for Purchase

A more straightforward model that is available in the various app stores is to provide apps for purchase. Users pay a one-time fee (ranging from \$0.99 to \$999) to purchase the app with the bulk of apps being at the lower end of the spectrum. Now with that being said, Apple probably didn't do anyone any favours by pushing the typical price of apps to be in the \$0.99 range compared to the more usual \$20 to \$50 range that is very common for desktop apps. Now in some rare cases like Angry Birds, the \$0.99 model worked like magic, but in general, selling apps for \$0.99 can be very difficult considering that developing an app for a smartphone can be just as time-consuming and costly as a desktop application. Moreover, with Apple and Google taking 30% of your proceeds, it makes getting a decent return on investment quite tricky.

To make a \$0.99 model work, your app idea must be earth-shattering or you must be prepared to spend a considerable amount of money on advertising to achieve global outreach and market-wide penetration. Viral apps exist out there but those

are few and far between and should not be counted on. That model is slowly eroding as developers are finding the 30% store taxes to be too high.

3.3 In-App Purchases / Freemium

A variation of the straight purchase model is to offer the app for free (or even a small price) and provide additional features in the app as “In-App purchases”. Perhaps your app is restricted to a few records, a few essential features, and the more elaborate capabilities are offered for purchase. That model allows customers to pay for exactly the features they need and can maximize your revenues. The one factor to consider is that it can make testing the app a bit more involved as you have to check for all the different combinations of features. Once again, with In-App purchases, you are subject to the 30% store taxes.

This model is a very cost-effective way to attract potential customers; however, be ready to expect somewhere in the 3% to 5% conversion rate for the paid features.



3.4 Membership/Subscription Model

With most apps requiring some form of cloud service, one of the most effective revenue models is the membership or subscription model. In this model, users are asked to pay a monthly, yearly, and/or per consumption fee to use your app. With this model, you have two choices.

1) You can rely on In-App purchases, allowing users to purchase items using the built-in In-App purchase mechanisms provided by Apple or Google to pay for their subscription, but again at the cost of 30% to your bottom line.

2) You can curb that “tax” by creating your own subscription service using one of the many payment providers (Stripe, Beanstream, Moneris). It does involve more work as you typically would need to include a website/user portal for users to manage their accounts and buy the service but that additional work/cost can quickly be recovered with the improved margins on your sales.

One thing that you must be aware of is that for an app to be approved by Apple using your own subscription payment service, there must not be a single way for users to learn about and proceed with payment within your app. If there is a way, **Apple will find it and your app will be rejected.** Apple is quite good at protecting their revenue sources, which seems obvious given their tremendous profits. Basically, your customers will need to learn about your service outside of the app. The one exception to this rule is if the content they are subscribing to is consumed outside of your app. For example, maybe you are selling a gym membership within your app. The app acts as a point of sale but in the end, you are not using your app to consume your membership.

3.5 Advertising in your mobile app

Another form of generating money from your app is advertising. Advertisers will pay to show their ads to your user base, and there are a few ways to approach this scenario. One option that is quite popular with startup apps is to have one or more ‘app sponsors.’ When the app is being developed some of the costs can be offset by selling sponsorship opportunities. Advertising in an app often means placing a

banner ad within a prominent place within the app. These sponsors can be transitioned into long term advertisers once the app is live.

A second approach to generating advertising revenue is to incorporate a third party advertising network into your app. These ad networks will automate the display of ads within your app, paying you for clicks or views of the ad depending on the arrangement. If your app is likely to generate lots of users and frequent use, this may be the optimal solution for you.

Some key factors when exploring Advertising Revenue Models are:

- App traffic – how many users and how often will they use your app
- Demographics – the more focused the demographics of your audience, the more targeted the ads are resulting in higher click through rates.

Ad revenue is a very effective method of generating money from your app; however, the rates for clicks or impressions are very low, so the traffic needs to be there for it to make sense.



4 Mobile App Requirements

After putting together your thoughts on the business model, the next thing to consider when planning out the app itself is the app's functionality.

Gathering requirements is a very important step. The more time you spend preparing your requirements now, the more time you will save down the line. Now, most development companies use agile development methodology (in one form or another) to develop app these days (we do too). In true agile fashion, you should develop stories or use cases and then start developing right away. That works well if money is not a problem and you are flexible enough to refactor some parts of your app halfway through; however, we find that defining a good chunk of the requirements upfront is useful even if you don't end up developing them all. Once your requirements are done, that's where the MVP comes in (more on that in section [4.3 Minimum Viable Product \(MVP\)](#)).

Creating a list of these requirements is very helpful in scoping the work involved in completing the app. Software development is often extremely complicated and what might appear to be small features could involve hours of research and development.

One example of this is time-based triggers on iOS. For example, if you want your app to perform a task every 15 minutes this would logically seem like a simple task. In reality, this is quite challenging to complete.

Here are some questions to ask when putting together your requirements list:

- What platforms will be supported? (iOS, Android etc..)
- What devices types will be supported? (Phone, Tablets, Phablets)
- Will users need to sign up and sign in?
- Will the app need to know the user's location? If so, how precise and how often?
- Will push notifications be required?
- Will payments be accepted inside the app?
- Will the project require a website?
- Will the project require an administration panel to manage users and the services?

4.1 Preparing the Requirements List

Preparing your list takes longer than 5 minutes. In general, if your list fits on one page, then your list is not complete enough.



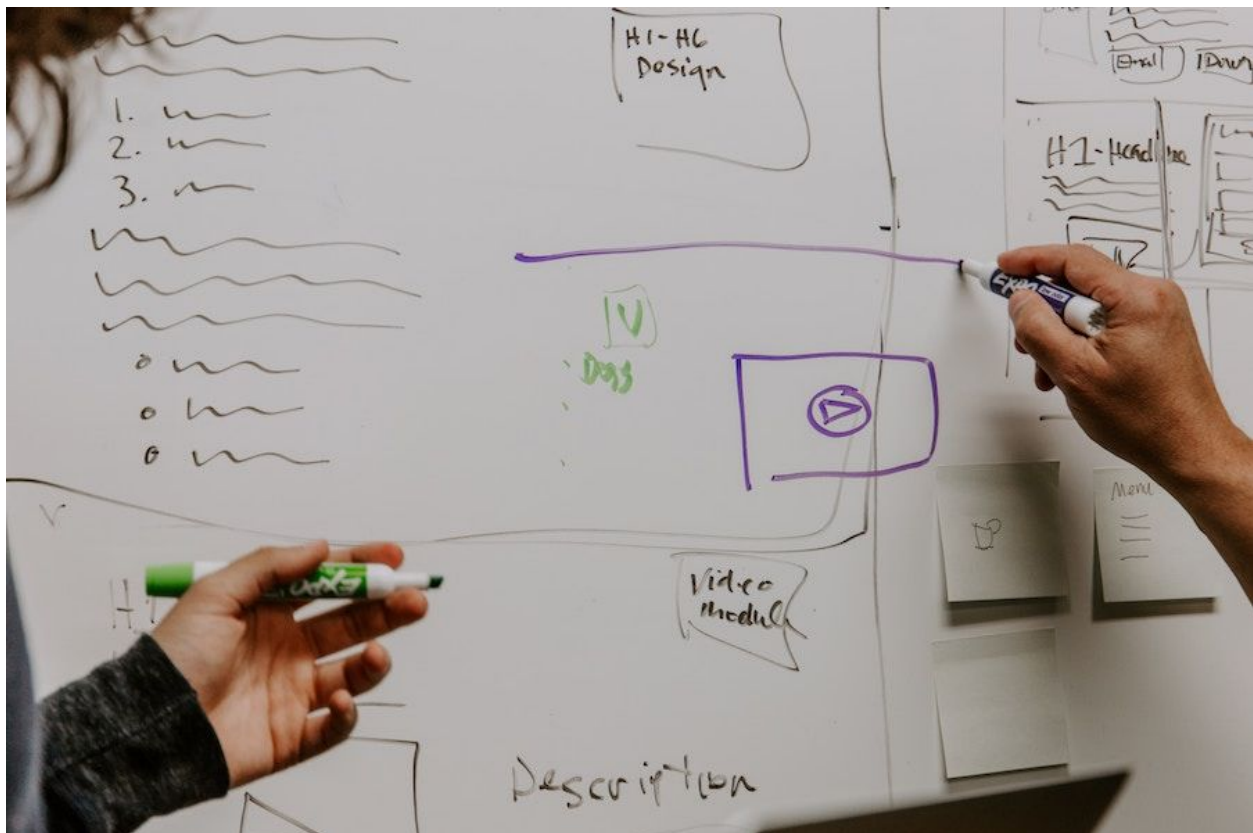
One approach is to first write down your list of features without organizing them. Just write them as they come. Once you have exhausted your list, try to organize them in some manner. Then go through each of them and try to visualize the elements on the screen and see if there are details there that you could capture. You can look at other apps with similar features to help here but usually there is quite a bit. For example, let's take a simple sign-in screen.

- Do you allow sign in with emails only or usernames or both?
- Do you have a "forgot password" mechanism? If so and you use usernames, did you capture their email in the sign-up process?
- How many times do you allow them to fail?
- Do you want the "show password" button for the password?
- What are the password requirements? Length, characters, so on.
- Do you want to have the password forced to be updated once in a while for enhanced security?
- What happens when internet is not available?

Basically try to think of all the scenarios. It helps to think of the error ones as usually that's where the details will come up. It helps to have others (colleagues, friends) review your requirements as they will likely find things missing in them (it happens to us too).

4.2 Mockups

If creating the list seems like too much of a daunting task to start with, you can start with simple mockups. Preparing a mockup first is a great way to capture your requirements without spending too much time with the details. Find a whiteboard, paper, chalkboard, whatever works for you. Be messy, draw lots of arrows and try to document everything.



Then when you think you have it all, try to capture it in a “clean” way. A tool like Visio, or Mockinbot can be used but if you don't have access to those, then just a piece of paper will suffice and then take a picture with your phone. Once that is

completed, go back and try to create your requirements list. It is highly possible that it is an iterative process between the two and you bounce back and forth.

4.3 Minimum Viable Product (MVP)

Once you have created the requirements list for all the possible features to complete your dream app, it is important to be pragmatic and break out the minimum requirements to take your app to market. Time and money are the key factors at play. First mover advantage is a significant factor in app rollout and defining a MVP allows you to get to market quickly while managing your costs.

Most apps, once distilled, focus on a single concept surrounded by nice to have features that help manage and utilize the concept. Approaching app development using a phased approach has a slew of advantages.

Budget management is the obvious first advantage of a phased approach. If you develop the MVP and take the app to the market, you could begin generating revenue which will then be reinvested to develop more features. Another advantage of a phased approach is the ability to build to your customer's wishes. You can poll your user base, review comments in the app stores, and build in the features your customers are asking for. Sometimes this will line up with your original concepts, but often users will ask for things your team had not even thought of which is a fantastic way to connect with your customer base and increase customer loyalty.

Adding features in a phased approach can also help with user engagement. Users should be notified of new features and that should bring them back into the app on a more steady basis.

5 Summary

Once you have worked your way through the planning process outlined above, you are ready to get started. Think about the business model, define your requirements, decide on an MVP and put a plan in place. Don't forget to reach out to your targeted customer base and ask them what features and ideas they want to see implemented in an app. Most app users would have some brilliant insight into your plan. If you follow this simple process, you will be ready to sit down with your development team and get the project underway.

If you need help or have questions during your app planning process, contact us, we would be happy to help. We even offer a free 30 minute app feasibility assessment so we can help to get the process started.

If this process seems too complicated and you need an app fast (and we mean fast), see if our [Info Grove](#) service is right for you.

