Mobile App Development

DEFINED, DESIGNED AND BUILT FOR SUCCESS
(WITH LESS RISK AND 40% COST SAVINGS)
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Mobile apps are not just for mega brands and retail giants. They are your customer’s preferred method of brand interaction, making them a business standard as necessary as your website.

Mobile has long since overtaken fixed internet access, and app usage dominates over 80% of mobile browsers’ time. According to Google’s latest path to purchase report, consumers are researching with the smartphones, with an increasing number of people starting their search from within a branded app. Perhaps most striking is that 93% of people who started their path-to-purchase on mobile will go on to buy.

Add to this Gartner’s prediction that by 2016 there will be 310 billion downloaded apps generating over $70 billion in revenue. It just goes to show: The present- and future-belongs to apps.

Even in light of these numbers, many companies still fall into the comfortable trap of thinking a mobile-friendly version of their desktop site will suffice. You need an app at the center of your mobile strategy to create a direct marketing and engagement channel that can deliver real value to people, and generate connection and loyalty.

If your company has delayed building a mobile app—or if you have an app that fails to excite, connect, or serve—you are letting your competitors have all the valuable visibility and screen time without so much as a fight.
Think of your mobile app as a one-to-one content marketing channel for your company—a channel that users want to return to again and again. Your brand can repeatedly and continually have an individual’s attention, or, at the very least, your branded app icon will be visible to them every time they scroll through their smartphone.

**There are many advantages to deploying a quality mobile app for your company. Here are some of the top benefits:**

- **You will gain a one-to-one content marketing channel—right at customer’s fingertips.**
- **Increase brand recognition by planting your very own mini billboard on customers’ mobile phone real-estate, reaching effective frequency every day.**
- **Generate customer loyalty by meaningfully engaging users every time they open your app.**
- **Navigating an app is an immersive experience;** You will cut out the distractions that come with browsing a desktop or mobile website.
- **Give value to customers,** not just information, with rewards, games, interactivity, social features, time-saving features, or other useful functions.

Mobile apps bring brands closer to customers than ever before and obliterate the digital and physical divide. They pave the way for the Internet of Things revolution that will soon transform the role of companies in our daily, personal lives.
BECOME A HOME-SCREEN APP

The average American spends close to *three hours a day* on their mobile phone.

*That’s more screen time than we give the television, and that time is only continuing to expand.*

At the same time, it’s becoming increasingly difficult to earn even a minute of mobile users’ attention. Most people will spend a bulk of their time within the native apps they like best--the apps that are useful, meaningful, valuable, entertaining, and interactive.

Think about the apps that make it to the home screen of your phone. They tend to serve an important function, like a weather app or GPS, connect you to others, like Twitter or Facebook, or be addictively fun, like the latest flavor of Angry Birds.
For a native enterprise app to make the home screen cut, let alone even be downloaded, it has to cut through the noise of the App store, connect with the individual, and offer some combination of the following benefits:

**Interactivity or Game Design:** Fun, entertainment, and the satisfaction of challenge and progress are powerful.

**Useful Service:** A function that makes life easier for the user, with convenience they grow to depend on.

**Offline Access to Content:** Connect users to your service, game, or content without eating data or needing Wi-Fi.

**Personalization:** Driven by user preferences and targeted to the individual’s needs and interests.

**Native Functionality or Processing:** Accessing mobile-specific functions, like the in-phone speakers or camera.

Now that you understand why you need a mobile app, we are ready to answer your burning question: How do I make one?
There are currently close to 1 million apps in the Apple store—the most popular app marketplace. Yet, according to Adevem research, two thirds of these apps will not be downloaded a single time.

With this sobering statistic in mind, there is a lot to consider when planning your mobile app development and deployment strategy.

Don’t get overwhelmed; we are about to break down a step-by-step process for planning, designing, and building a mobile app that can thrive in even the most crowded marketplace.
PHASE ONE: PLANNING YOUR MOBILE BUILD

A clear and purposeful understanding of why you’re building an app is the cornerstone of mobile success.

Define Your Purpose:

Preparing to build a mobile app means defining your budget, target market, user personas, project timeframe, desired platforms and app functionality. But before you even begin to talk about those things, determine the business purpose of your app, whether it is to drive revenue through mobile sales, drive traffic to a website or brick and mortar store, enhance customer service, or position you brand for the coming digital advancements. Your business purpose is the foundation of your mobile strategy, and serves as a beacon guiding each following decision.

Define Your Strategy:

Armed with your business purpose, answer the following questions to define your mobile strategy:

- Who is my user?
- What problem can I solve for my user?
- What experience do I want my user to have?
- What is my desired outcome of the user experience? (This ties back to the business purpose of your app!)
With the answers to these questions, create a roadmap that will guide you to the app you envision. Your big-picture roadmap will be shaped by your answers to many more questions, all of which are important:

- Will your app be smartphone or tablet centric, or both?
- Are you building for iOS or Android users? Why not both?
- What are your user interface (UI) design needs?
- What are the primary functions that must be built into the app?
- What other apps exist in this space?

**Define Your Process:**

When you know why you want to create your app, who you want to create it for, and what features and functions it needs, and you can now define your development process.

You want to choose the most streamlined, efficient mobile app development process possible without compromising your purpose and goals. Though a mobile app is well worth the business investment, there are few companies who have the luxury of unlimited IT and marketing budgets.

The key to is determine a process that balances cutting-edge, future proof platforms, technology, and integrations and an experienced and talented team on the one side, with an efficient time table and lean budget on the other. We find the combination of an Agile Development Process with a Hybrid Nearshore Model is the best way to reduce costs and eliminate risks without sacrificing quality and innovation. We will dive into both in much greater detail soon, so read on.
Design for User Experience:

With your strategy firmly in place, begin designing your app. Focus on the user experience, which is largely defined by the mobile app interface, features, functions, and performance. For example, if you want to give your users an interactive, content discovery experience, define what it will take to deliver this, and deliver it well.

What word will your users use to describe your app? How about "helpful", "smart", "amazing", "addicting", or "essential".

Design for User Experience:

What are the key functional elements at the core of your app?
Do you need to design more than one interface to suit different platforms and screen sizes?
How will your app be consistent with--and connected to--your brand and other digital properties?
Is there anything in your design that isn’t absolutely necessary, or doesn’t directly contribute to an amazing user experience?
Is this app going to have a subset of features (a “light” version) of an existing web app?
Does complexity need to be reduced because of the smaller “real estate”?
How will people discover your app?

Design an interface that so easy and intuitive anyone can use it, yet unique and compelling enough to keep active mobile users interested. Determine what will set you apart from the other content-driven apps and make your users say “Wow!”
**Design for Interaction:**

Interaction is what drives engagement, gives users a sense of accomplishment and reward, and keeps people coming back. Familiarize yourself with the principles of interaction design, and build each of them into your mobile app:

- **Goal-Driven:** Know the specific goals of your target users and refine the app’s workflow to drive them almost instinctively toward this goal.

- **Patterns:** Design patterns help user quickly understand how an app functions. Part of this means staying consistent with patterns we are already familiar with, such as touch, swipe, double-tap, pinch and zoom gestures.

- **Signifiers:** A signifier is a design element that hints at a function, just like blue underlined text signifies a link. Use signifiers to again make using the app feel instinctive.

- **Feedback:** Let the user know when they’ve done something right. It’s as simple as a “swoosh” sound when they’ve swiped to a new screen.
Design for The Future:

Designing for the future means designing a mobile app that can weather technological advances and evolve alongside your business goals and user desires. Designing thoughtfully at this stage will save you time and resources in the development phase and beyond, when you inevitably need to upgrade features and integrations. Here are several questions that can help you determine if your mobile app design is future proof:

How does the app fit within your overall IT architecture?
Your existing systems may limit the performance capabilities of your app. But this doesn’t have to be a negative; it’s one more way to help you hone in on a design that is best suited to your enterprise.

What existing apps can you learn from?
If other apps have successfully—or unsuccessfully—done what you would like to do, learn from their missteps and good fortune. Then look at what they are lacking to decide how you can differentiate your app from the pack.

Will this app be poised to take advantage of emerging screens and yet unknown opportunities?
Mobile is rapidly evolving, and exploding onto a proliferation of new screens. Will your app be able to adapt to a smart watch, wearable, digital dashboard of a car, and other connected devices when the moment is right?

What does your development team think of your design?
Remember to include your development team in the design process from as early on as possible. They can help you optimize your design for a smooth build and lasting product.

When your design is ready, you will have a user interface, screen designs, functions, and features that can be given to your development team. And you will already have run into the next phase of mobile app development: gathering your tools and assembling your teams, whether internal, external, or a combination of both.
Build your mobile app right the first time, so you can fix it again and again.

**Build For Longevity:**

The toolset you choose will impact your feature set and development process. Take into consideration the entire mobile app eco-system – from the device level to the back-end services that support your app – and how your development team will implement and support this.

HTML5 is a widely used cross-platform development framework. However, it is not without flaws, and may not be the best framework for developing an efficiently-built, fully functional mobile app. There are many other cross-platform development frameworks for native apps that can help your team build a robust app quickly, and cost effectively. In fact, Gartner has pronounced that half of all mobile apps will be HTML5/native hybrids by 2016.

There are many tools that will allow you to write once and deploy to both iOS and Android platforms. The best tool to use will depend on your unique mobile app needs, and should be chosen in consultation with your development team.

### Some proven tools to consider are:

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<thead>
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<tr>
<td>InVision</td>
<td>A prototyping, collaboration &amp; workflow platform (<a href="http://www.invisionapp.com">www.invisionapp.com</a>)</td>
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<tr>
<td>Justinmind</td>
<td>Free wireframe tool for mobile, if you need to show logic in your prototype (<a href="http://www.justinmind.com/free">www.justinmind.com/free</a>)</td>
</tr>
<tr>
<td>AppCelerator</td>
<td>For natively-deployed apps, mobile APIs, and real-time analytics (<a href="http://www.appcelerator.com">www.appcelerator.com</a>)</td>
</tr>
<tr>
<td>Apache Cordova</td>
<td>A platform for building mobile applications using HTML, CSS and JavaScript (cordova.apache.org)</td>
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<tr>
<td>Xamarin</td>
<td>Cross-platform development software based on MS .NET (xamarin.com/)</td>
</tr>
<tr>
<td>Parse</td>
<td>Build an app on any platform and add a cloud database, push notification services, and analytics tracking (<a href="http://www.parse.com">www.parse.com</a>)</td>
</tr>
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Tools aren’t all you need. An experienced and knowledgeable development team is crucial to your high-performance build.

We recommend a Hybrid Nearshore Development Model to gather a talented, outsourced team while minimizing risk and remaining cost effective.

Read on for more insight into the Hybrid Nearshore methodology.
Build for Lasting Performance:

Now that you know the platform(s) you are building for and the tools you plan to use, and have assembled your dream team of mobile developers, you are ready to build your app.

Keep in mind that mobile app performance and user experience are the most important elements of your build. A sluggish app, or one that crashes repeatedly, will frustrate and alienate users, leaving them with a negative memory of your brand.

To make sure your users are frustration free, develop code with ongoing performance monitoring in mind. You want to be able to review and optimize performance after testing and deployment; in fact, you should never stop.

To ensure optimal performance and easy long-term maintenance, make sure the following key concerns are top of mind in every development decision.
Build with 3 Key Concerns in Mind:

A single code base allows your new mobile app to run on both iOS and Android. This is also known cross-platform coding.

The goal is to write the code once, the run or adapt it everywhere. Though Apple and Google will urge you to develop two code bases for the different platforms--with different tools, APIs, languages, and more--there’s actually a better way.

When done correctly, a single native code base can be compiled to run on almost any platform, with only occasional tweaking required and no negative impact on performance.

Mobile Optimized APIs: As you test your new mobile app, pay close attention to user behavior, frustrations, and feedback as you rethink your design patterns.

Flexible app development is essential so you can avoid the major downtime and delays of repeatedly reformatting your app data. Application Programming Interfaces (APIs) give developers the easy access to data and services they need to build resilient apps, and continually make them better.

Mobile-optimized APIs will accelerate the pace of app development and improvement.

Code maintenance is a given. But just because you will have to do it doesn’t mean it has to be time-intensive or convoluted.

When you develop code that easy and efficient to run on multiple platforms, it is better able to cope with changes in the platform environment.

Code that can be efficiently maintained will extend the life of your mobile app, and represent greater value for your business in the long run.
Bringing an app to market can seem daunting and out of reach, especially for the startup or SMB. The truth is, the mobile app development processes can turn into a costly, drawn out, drain on your time and resources.

Some first-time mobile app ventures lead to a product that is full of bugs, difficult to maintain, and late to market. That’s why it is important to follow a proven development methodology and gather an experienced, efficient team that you can trust to communicate and meet deliverables.

To ensure a smooth mobile build and high-quality product, we recommend an Agile process combined with a location independent Hybrid Nearshore Model, or what we call Agile Offshore Development.

This method brings you the benefits of offshoring much of the mobile app development process while negating the risk with an adaptive, highly communicative, and efficient managed team of developers.
AGILE OFFSHORE DEVELOPMENT

To understand the agile offshore development model, take a deeper look at its two core components: the Agile development process, and the Hybrid Nearshore Development Model.

The Agile Development Process:

The Agile mobile development process is built on collaboration between self-motivated, cross-functional teams who employ a rapid, flexible, and adaptive workflow to create the best possible product.

An Agile development team is constantly measuring and evaluating its own progress against the performance of its prototypes, APIs and working code. **Tasks are broken into small increments with short-term milestones**—called “sprints”—across all aspects of development, from planning, to design, coding, unit testing, and more. At the end of each sprint, the working product is shared and assessed before setting the next milestone, ensuring that developers are always devoting their energy to the most important tasks.

The Agile development process has been proven to minimize risk and enable projects to adapt quickly. The goal is always to reach mobile app release on an efficient timetable, without compromising performance. This methodology is an ideal complement to the Hybrid Nearshore Development Model.
The Hybrid Nearshore Development Model:

Venice Consulting Group created the Hybrid Nearshore Model in direct response to the frustrations we were seeing in the marketplace. Increasing competitive pressures require that companies leverage lower cost outsourcing as part of their strategy, but companies can’t afford to compromise quality or overextend their timelines.

The Hybrid Nearshore Model lets you take advantage of location independent development services without the risks of traditional outsourcing by combining our own full in-house development team with thoroughly vetted nearshore talent. The crucial difference between nearshore teams and offshore teams is that your nearshore developers are in the same time zone, fluent in English, and share the North American business culture.

You save 40% in cost compared to US-only resources, with much, much less risk.
Your Hybrid Nearshore Team:

Venice Consulting Group will assemble a qualified, scaled-down team at an affordable rate. This small, customized group is handpicked to deliver a quick and efficient workflow.

The Nearshore Mobile Developer
Carefully vetted nearshore developers with expertise that is a best-fit for your project needs. Guaranteed to be fluent in English and experienced with nearshore working relationships. A Nearshore developer will be assigned to manage your project and lead development efforts.

The U.S. Based Engagement Manager
VCG’s own stateside Engagement Manager will personally manage your development project, and maintain a direct relationship with your Nearshore team in order to minimize misunderstandings and delays.

The Nearshore Quality Assurance Manager
A Nearshore QA Manager can be assigned to assist with testing your mobile app and validating and documenting the development processes. They will catch and resolve any problems before the product’s release.
The Hybrid Nearshore Model has 3 Key Benefits:

- **Less Pain:** The Hybrid Nearshore Model delivers synchronized teams of experienced and motivated professionals in the same time zone.
  
  *No more midnight calls*, crippling email delays, or broken video conferencing with teams halfway around the world.

- **Reduced Costs:** Nearshore firms offer reduced rate structures when compared with US-based resources.

  *Using our Hybrid Nearshore Model, businesses may save up to 40% of what they would spend in-country.*

  And when compared to an offshore model, companies can *avoid the costs travel expenses*, midnight conference calls, and re-work arising from missed milestones.

- **Eliminated Risks and Frustrations:** Differences in culture can lead to misunderstandings that negatively impact your deliverables.

  *Certain business cultures avoid confrontation by agreeing to everything while masking over problems*, leading to missed milestones and increased costs.

  The shared business culture of the Hybrid Nearshore model means fewer misunderstandings and more on-time and on target deliverables—with a dedicated U.S. based project manager to provide personalized oversight.
START DEVELOPING YOUR DREAM MOBILE APP TODAY
Venice Consulting Group is an interactive web portal consulting and development company specializing in user experience and process optimization. With a valuable combination of regulated industry experience and technical expertise, VCG applies the latest proven technologies to meet our clients’ current objectives and improve their bottom line. VCG offers high-value through its design, and low-risk cost savings through its Hybrid Nearshore approach.

We create powerful and entertaining iOS products and corporate applications that manage your business and interact with your customers. We are experts in developing software products that harness the promise of community and the power of collaboration using the latest technology.
Contact VCG today to learn how we can help you design and fulfill your mobile app concept on a lean budget, without risk.

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