



WHITE PAPER

# WHAT WILL MY ENTERPRISE MOBILE APP COST?

*The one thing about custom mobile development  
that everyone wants to know.*

Unfortunately, there is no simple formula from which to reliably derive an estimate—mobile application development is a distinctly complex undertaking where myriad decision points impact cost.

This guide presents foundational perspectives on mobile product development that will help you factor in key cost considerations required to develop a sound financial strategy that will be a match for your mobile aspirations.

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However, based on our experiences developing a variety of mobile apps for a wide cross-section of companies and industries, we believe that—while there's no magic eight-ball for estimation—there are seven starting strategic perspectives that will help you factor in key cost considerations.

## #1 – There's No Free Lunch (Expect to Invest)

Like any other significant upgrade to your business capabilities, building an effective enterprise mobile app will not be cheap. Yes, you can get an agency to build you a beautiful mobile app—but it will be built for a three-month campaign, not architected for enterprise integration or a product lifecycle. Yes, you may get some recent college grads in a garage to knock out a functional app, but it's unlikely these guys will be 22 year-old versions of Steve Jobs or Bill Gates. Finally, yes, you can get some offshore shop to build an app; however, it's hit or miss whether these developers will truly understand cultural context (or you), properly implement security or securely integrate your back office—and they might even sell the secret sauce in your code to a competitor.

**Takeaway:** Building a mobile asset of true value will require a commensurate investment of time and effort. There are no shortcuts that can sustain your investment given the chaotic nature of the mobile space.

## #2 – It's a Product, not a Project (Lifecycle Plan)

If you're looking at developing a mobile app as checking a box—"Hey, look we have an app!"—you might as well burn your money.

The reality is that successful mobile apps (where success is measured as driving business outcomes) are planned and managed as products, not projects. Thinking about your mobile initiative as a product with a lifecycle is much different—and critical to your success—than planning for a project! (See also Magenic's [Mobile Project vs. Mobile Product](#))

From a cost perspective, the implications of product lifecycle planning include:

- **Establishing a product roadmap to create progressive value.** Expect that you will incrementally implement product features over time, most likely starting with a “minimum viable product” (MVP) release (see also Magenic’s [Does an MVP Release Make Sense for Your Mobile Initiative?](#)).
- **Establishing a product release plan with a cadence to support a “test and learn” approach.** Your ideal release cadence will be dependent on many factors. A few principles are in play:
  - You will make mistakes of all sorts. No one gets it 100% right the first time or can afford to rest on their laurels. Users will generally forgive mistakes that are quickly addressed in a new release.
  - It’s much more effective to try a few new features that you can discretely evaluate than to roll out a ton of new features at once. This implies frequent, small releases.
  - The device landscape will change rapidly. New operating systems versions, new devices, security issues, as well as other changes will require you to update your app in order to remain operationally viable. (Yes, you will be subject to less flux due to these factors in a private enterprise mobile app where you control devices and deployment.)
  - The competitive and market landscape will change rapidly. Mobile is a key point of both competitive differentiation and innovation. Expect that both competitive pressures and technical innovations will require you to regularly re-prioritize your product roadmap and release plans.
- **Identifying and empowering a product owner.** This person must have the business and technical acumen—as well as the authority—to quickly make product decisions to direct the product development team’s work. Ideally, they have product P&L responsibility and report in to a product management organization or business unit, not IT.
- **Building and maintaining a product development team.** Teams that function at the highest levels of velocity and quality tend to be composed of long-term resources, especially in key leadership roles. Assume that success will require velocity (ability to frequently release product updates) and quality, both in terms of user experience and software quality attributes such as reliability, performance, and scalability.

**Takeaway:** Plan to invest in building a product development team that will remain significantly intact over the planned product’s lifecycle.

### #3 – Good Help is Hard to Find (Expertise: People and Partners)

Now that you're bringing together a product development team, what types of expertise are going to be required? While precise skills are technology-dependent, at minimum you will need core team members with the following skills:

- **Product Owner** / Product Manager with mobile product management skills (see also Magenic's **Product Owner or Product Manager?**)
- **Mobile Architect** with mobile application architecture and enterprise integration skills
- **Mobile Developers** with specific experience and expertise on your chosen development platform and technology stack, including the ability to integrate supporting systems
- **Mobile User Experience Designers** who understand mobile devices, mobile interaction design, your chosen platform's design guidelines, and mobile design/prototyping tools
- **Mobile QA Engineers** who with deep understanding of mobile device functionality, context and interaction models, mobile test strategies and tools, and an ability to test data at the code level

In addition to the core product development team, there may be also be extended team members from customer service, marketing, analytics/BI, back office systems' IT (and this may be a significant need), operations, legal, security/compliance or other groups, depending on your industry and focus.

A major decision at this point is determining whether to make a long-term investment in full in-house mobile expertise, bring in staff augmentation resources to form a blended team, or work with partners to outsource development on a long-term basis (or until you reach a point where it makes sense to bring development in house). In any case, locating, attracting and hiring resources with the right skills and experience—whether FT hires or through a partner—is a challenging task with many long-term implications. (See also Magenic's **Are You Ready to Bring in a Partner to Create a Mobile App?** and **Best-in-Class Consultants or Learning on Your Dime?**)

All staffing models can work; however, keep in mind that it will prove wise to work with mobile experts when building your mobile app's foundational releases or tackling a complex initiative.

**Takeaway:** A mobile product development team is composed of many specifically-skilled resources, many of whom are in short supply. Plan to invest the time and funding in identifying and composing the best team you can find—it will be a top indicator of impending failure or success.

## #4 – There's a New Delivery Ecosystem in Town (Processes, Tools, and Infrastructure)

### **Delivery Methodology as Cost/Risk Control**

As you're assembling your product delivery team understand that this team can't work efficiently or mitigate your considerable risks using a traditional waterfall-type delivery methodology. The timeline from initiation to delivery is too long for a big bang release, there's little room for re-prioritization, and your measurement of success will be totally different—you're shooting for a business outcome, not merely coming in on schedule and within budget. From a cost perspective, plan to embrace an Agile delivery methodology to reduce risks, increase flexibility, and best manage spend.

### **Mobile-Specific Tools Required**

If you hire internal resources, plan also to invest in mobile-specific product development tools for developers, designers, and quality assurance engineers. Additionally, you may need to also invest in enterprise mobile management (**MDM/MAM**) tools if you're also investing in devices and/or using a private enterprise app store. Furthermore, you may also need mobile analytics tools, mobile marketing tools—the list can go on.

Many mobile tools now are cloud-based and relatively inexpensive. That said, licensing or usage-based fees can add up. If you work with a partner and plan to bring development in house in the future, make sure that you own all tool licensing and subscriptions.

### **Infrastructure: The Long Pole in the Tent**

Believe it or not, updating your back office systems' ability to support mobile applications may be your largest expense. The integration architecture built to support web- or desktop client-based systems is poorly suited for serving mobile devices communicating over fragile (or offline) data connections with very high response, performance and scalability expectations.

In addition, your mobile app may require cloud-based services such as AWS, Azure, or Google Cloud—you will want to understand the various pricing models and available services.

In a recent [interview](#) with *Diginomica*, Kevin Benedict sums up the issue well:

*“What we’re learning is that creating the world’s coolest mobile app isn’t going to do any good if your infrastructure can’t support real time interactions with your ERPs, and other business solutions and processes on the back end. Mobile applications are driving this digital transformation back into the enterprise. CIOs are saying, ‘We have to do this in order to be competitive, because more and more of our business is being transacted through our mobile applications.’”*

**Takeaway:** New delivery processes, mobile-specific tooling, and potentially extensive (and expensive) infrastructure updates will be needed. Existing CapEx/OpEx financial cycles will be challenged to support an agile delivery team. Significant CapEx—and leading time to implement—may be required to update back office infrastructure.

## #5 – Expect Disruption (Competitive, Technology, and Market Pressures)

The harsh reality of the mobile world is that you can execute with all the prior strategic perspectives in mind and still be blindsided by an unexpected disruption or a competitive innovation that leaves you questioning your product’s enduring value proposition. While this is also true of other channels, in our experience the innovation cycle is much more rapid and compressed in the mobile apps space.

From a financial perspective, these unexpected events create a variety of impacts from the relatively simple, such as supporting a new device, to the complex—perhaps a competitor is now driving his mobile app experience using artificial intelligence (AI).

**Takeaway:** Plan to be financially flexible in order to quickly respond to the market. Again, your customers will forgive you for falling momentarily behind if you establish a track record of responsiveness. Better yet, plan to make the investment to be a mobile leader!

## #6 – It Takes a Village (Digital Transformation)

As indicated earlier, to work most effectively toward enabling your mobile app's capabilities to drive business outcomes you will need to form an extended team and socialize awareness so that all work in harmony to meet the same objectives.

For example, if your industry is retail and your app is customer facing, what do your sales associates know about your mobile app? Are there any promos in the store—or in promotional media—to advertise the app and its benefits? Is the app integrated with your loyalty program? What about integration with social media or coupon apps? Does your web site highlight the app? What happens if a customer calls Customer Service with a question about the app? Is there an operational opportunity to use the app to significantly improve customer satisfaction such as through Buy Online / Pickup in Store?

Whatever your industry, know that you will need to identify and rally all customer (this includes internal users!) touch points in the organization to create a cohesive and consistent user experience.

**Takeaway:** Plan to make the necessary investments of time and effort to raise internal awareness, make supporting roles and responsibilities clear, providing training or change management guidance, and communicate product plans and progress.

## #7 – Innovate and Disrupt (Separate from the Field)

Have you considered that simply having a cool mobile app won't be the engine to drive targeted business outcomes? Maybe everyone in your industry segment already has similar mobile apps. Now what? Can you afford to be a “me too” entry?

Depending on your market position and competitive pressures, you may need to consider investing in the necessary research to create an innovative new way of doing business that leverages customers' “mobile moments” (see also Magenic's **Capturing the Mobile Moment**) and fundamentally alters the value chain. Innovation is typically an expensive proposition—think about the capital required to launch AirBnB or Uber. Note that their mobile apps are only the tip of the iceberg in terms of technology and cost.

**Takeaway:** Consider the possibility that a mobile app may only be a small part of an innovative streamlining of your industry's existing value chain. Creating something of this magnitude will require a full range of investment, not just a mobile app.



## How Magenic Can Help

Embarking on a mobile product journey is exciting but also full of risks, not least of which is being unprepared to make the necessary financial moves to ensure your initial investment is not lost.

Magenic's mobile practice has a great deal of experience cost-effectively delivering innovative, effective mobile apps that are planned and delivered as mobile products within a lifecycle context. What's more, our focus on user experience design and quality solution engineering ensure that your product will be an outstanding representation of your brand and will delight customers.

Contact us and we'll help you understand the mobile ecosystem so that you can identify your unique set of "moving parts" required—and the associated costs—to successfully support your desired business outcomes.



## About Magenic

Founded in 1995 by the same technical minds that still run the company, Magenic delivers software results on the most complex modern application projects.

Visit us at [magenic.com](http://magenic.com) or call us at **877.277.1044** to learn more or to engage Magenic today.

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