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Six Steps for Building a Long-Term Strategy for Mobile: Technical Considerations

Executive Overview

If your business is online and lacks integrated mobile commerce capabilities, you're missing out on sales. And even if you have a live mobile program, it may be time to re-evaluate. Organizations have worked fast to meet the demand for mobile and compete for the billions of dollars up for grabs, but many have rushed into mobile without realizing that success hinges on the right technology. Selecting a technology approach for your mobile goals will be critical to driving cross-channel activity, the user experience, and (ultimately) the profitability of your mobile initiative. The following pages describe the six steps every organization must take to make the best mobile technology decisions for its business.

Introduction

Smartphones have dramatically changed the commerce landscape. Far from being just a business research tool, mobile commerce has evolved from a lightly used, nice-to-have option for early adopters into a profit center for organizations early to the game. Millions of users are now engaging with companies via mobile devices. What's more, they're doing so with increasing frequency. Case in point: daily mobile Web access to commerce sites was up 300 percent year over year.¹

By 2014 more customers will be accessing the internet from mobile devices than from computers, which means that managing a mobile presence will be as critical as managing a core Website.² However, many businesses have taken a panicked approach to building a

¹ Nathan Safran, "Mobile E-Commerce Traffic Grew Threefold This Holiday Season." Conductor Blog, February 2011.

² Mary Meeker and Matt Murphy, KPCB Research, February 2011.

mobile presence. Instead of plotting out a strategy, these organizations have reacted to imperatives such as “We need an app” or “Our competitors are mobile; we need to be too.” What they need to do instead is come up with defined goals and a phased strategy for moving into the mobile space.

Many firms quick to market with haphazard solutions have scrapped and replaced their initial mobile offerings—learning lessons they weren’t able to anticipate but that you can benefit from. To avoid a similar fate, you need to focus (or refocus) your company’s mobile initiative—first selecting the infrastructure and resources needed to support your strategy and then developing a compelling experience that will drive usage and help you achieve your mobile goals.³ This paper presents six steps you can follow to determine your mobile strategy.

³ See the Oracle white paper “Ten Tips for Creating Engaging Mobile Experiences.”

Will You Be Ready?

Nielsen forecasts that smartphones will be the primary enablers of consumer shopping engagements in the next three years.⁴

1. Start with a Clear Strategy: Define Mobile's Purpose Within Your Organization

The first thing you need to do is define your organization's mobile goals so that you can guide the budget, internal efforts, and development timelines to support them. Is your primary goal to provide buyers with a research tool to assist them in the purchasing process, or are you looking to boost customer loyalty? Are you adding a channel to capture more sales? Do you want to attract sophisticated smartphone power users, or are you looking to provide a one-size-fits-all solution to reach a broader audience?

There's no right answer or single solution. Instead of adjusting your goals to what's available today, you need to build your mobile strategy around what's right for your business in the long term as well as where you expect mobile usage to be in the next 12 to 18 months. Regardless of your mobile objectives, you also need to define how your mobile presence will fit into your multichannel strategy as well as how it will improve the customer experience you are offering. To do so, you should ask the following questions:

- What role does mobile play in our overall strategy?
- What are our tiered priorities for mobile?
- How can mobile drive cross-channel activity?
- What is our timeline and internal readiness for mobile?
- How will we measure mobile success?

2. Select the Right Mobile Environment: Understand the Benefits of Mobile Sites Versus Mobile Applications

Once you've defined your goals, you need to gain an understanding of where and how your target audience is interacting with the mobile channel. There are two mobile environment options to choose from: sites and applications. Both have benefits, so you will need to align support according to the goals of your strategy and your audience's preferences.

- **Mobile sites** appear inside the browser on any internet-enabled mobile device. For example, the Apple iPhone uses the Safari browser. The advantage of mobile sites is that 99 percent of Web-

⁴ The Nielsen Company, September 2011.

enabled devices can access them. Mobile sites do not require the user to download anything, and if set up properly, they can detect the user's device and automatically format the content for optimal viewing on that platform. With the advent and adoption of HTML5, mobile Web sites will have more-applike capabilities.

- **Mobile applications** require a device-specific download from a marketplace, such as the Apple App Store or the Android Market. Because applications leverage native capabilities, they provide enhanced functionality such as GPS-enabled location services, scanning, and the ability to cache content for offline usage. Separate applications have to be built for each mobile platform, so you need to prioritize build-outs based on the device usage of your audience and the greater market.

So, should you develop a mobile Website or a mobile app? With traffic to retail mobile applications up 91 percent between 2009 and 2010 and mobile Web use for retail quadrupling during that same period, mobile sites and mobile applications are both likely to prove valuable to your long-term mobile strategy.⁵ For this reason, you may want to invest in both environments to ensure proper coverage.

3. Prioritize Devices: Study Usage Patterns to Drive Platform Support

Once you've selected the environment(s) you want to develop, you need to focus on which devices you intend to support. The first step here is to determine which platforms your target audience uses. Then you must reconcile that with the behaviors of the larger customer landscape to determine which device will bring the greatest impact. It should come as no surprise that in the United States, iOS (iPhone, iPad) device users have the highest engagement with the mobile channel. Android-based phones are a close second, followed distantly by Symbian, RIM BlackBerry, and Windows Mobile OS-based devices.⁶

The mobile device landscape is fragmented. Because of user adoption rates and the speed at which devices and capabilities change, platform-specific user engagement will fluctuate. However, at this time, here's some of what we know:

- **The iPhone is the safest starting point.** The iPhone presents the highest immediate likelihood for success. Research shows that iPhone users have the highest level of online engagement among users of all devices and are also the most likely to pay for their applications. What's more, iPhone users consume by far the most applications of all mobile users, averaging 48 applications per user.⁷ In addition, 85 percent of iPhone users access the mobile Web weekly—much higher than the 9 percent of all users in the total market who do the same.

⁵ "The State of Mobile Apps," The Nielsen Company, 2010.

⁶ Ibid.

⁷ Apple App Store via WebpageFX, September 2011.

- **Android is a massive hit—especially with men and the young.** Android is second in popularity only to the iPhone for users who actively engage with mobile content. What’s more, Android devices recently surpassed the Apple platform, with 29 percent of the overall mobile device market share.⁸ Males make up the majority of Android users, who also tend to be slightly younger than users of competing smartphones. According to Nielsen, Android users consume an average of 35 applications per user.⁹ After the iPhone, this is the platform to target for development efforts.
- **The BlackBerry is everywhere, but stay focused on the Web.** The BlackBerry comes in a distant fourth for user engagement. However, given its popularity (and the fact that executives continue to budget dollars for it), it remains in the discussion. BlackBerry users are represented evenly across age groups, tend to have higher-than-average incomes, and use the mobile Web frequently. But according to Nielsen, BlackBerry users own an average of only 14 applications and consume only 1/50 as much data as iPhone users.¹⁰ If you plan to design for the BlackBerry, it’s generally safer to develop a mobile Website that presents well in this environment over an app (at least at this time).

To ensure the highest adoption rates, do your research and carefully examine where and how your target market is engaging. If your budget does not allow you to build out a series of device-specific applications, choose one or two of the best-fit devices to support, thereby enabling other users to access your mobile storefront via a mobile-optimized Website.

4. Decide Whether to Own or Outsource Technology: Research Approaches for Building Your Offering

Technology will serve as the backbone of your mobile initiative, and you can choose from a variety of options. These range from fully outsourced to service-driven solutions and homegrown technologies built and managed internally.

Many organizations struggle with the technology decision. Will a low-cost, outsourced solution be able to support long-term growth? Will investing in a robust infrastructure cost too much up front? Available-to-hire people with mobile skill sets are scarce, which is why the vast majority of organizations have engaged providers. The following table presents four technology approaches to developing a mobile strategy, describing the pros and cons of each. Use this framework to determine the best approach to support your current needs and future growth. (For an overview of solution providers, see Forrester’s “Market Overview: Mobile Commerce Solutions for Retail.”¹¹)

⁸ “Who Is Winning the U.S. Smartphone Battle?” The Nielsen Company, March 2011.

⁹ Apple App Store via WebpageFX, September 2011.

¹⁰ Apple App Store via WebpageFX, September 2011.

¹¹ Peter Sheldon, “Market Overview: Mobile Commerce Solutions for Retail,” Forrester Research Inc., August 2011.

FOUR APPROACHES TO MOBILE

	ENGAGE A MOBILE SERVICES PROVIDER	ENGAGE A SOFTWARE PROVIDER	ENGAGE AN AGENCY	CREATE AND USE HOMEGROWN SOLUTIONS
DESCRIPTION	Engage a company that offers fully outsourced mobile solutions—including development and hosting of mobile sites for an up-front fee plus ongoing subscription costs. Choose among several small startup firms in the pure-play mobile space.	Engage an e-commerce software company that has expanded into mobile. Choices are typically established companies with long track records in e-commerce.	Engage a full-service design and implementation firm that hands management off to the customer or handles it for a fee. Choices are typically large, established interactive agencies that have expanded into mobile.	Build your own mobile sites and applications in-house with existing expertise, typically expanding on technology and skill sets currently owned.
PROS	<ul style="list-style-type: none"> • Short time to market • Relatively low up-front cost • Mobile-specific expertise 	<ul style="list-style-type: none"> • Tight integration with existing infrastructure • Robust capabilities and features • Leveraging of existing internal skill sets and tools • Ease of maintenance and support over long term 	<ul style="list-style-type: none"> • Advanced, custom-designed features • Rich environment • Integration with existing infrastructure 	<ul style="list-style-type: none"> • Tight control over features • Integration with existing infrastructure
CONS	<ul style="list-style-type: none"> • Limited features • Duplication of Website data and configuration • Typically, lack of integration with existing site infrastructure and design • High long-term TCO • Risk associated with small startups 	<ul style="list-style-type: none"> • Fact that mobile is only a portion of the provider's overall technology investment • Up-front cost 	<ul style="list-style-type: none"> • Higher-cost engagements • Lack of in-house control • Long lead times 	<ul style="list-style-type: none"> • Scarcity of mobile development skills • Significant upfront and ongoing maintenance costs • Internal resource ramp time, meaning longer time to market
BOTTOM LINE	These providers create "good enough" mobile environments quickly, but they fail to provide a consistent user experience with your primary Website or integrate with existing e-commerce technologies. Subscription model means lower cost to get started but higher cost over several years. Best as a short-term fix.	Using an established software provider guarantees quality, provides consistency, and utilizes existing skill sets, but some providers lack mobile expertise and charge more up front.	Custom engagements provide highly differentiated user experiences as well as integration with existing technologies. However, they often carry a hefty cost, are expensive to manage, and make it difficult to change the user experience.	Homegrown solutions ensure total control over features and the ability to develop to your needs. However, in-house development often fails to anticipate future needs and may prove inflexible in the face of changing market demands. To succeed, you need a dedicated team experienced in developing transactional mobile environments.

5. Determine What Technology You Can Repurpose: Identify Web Technologies to Leverage in Mobile

In most cases, you shouldn't have to make large investments in new technologies to support mobile expansion. If you have a Website, you can and should leverage its core technologies (e-commerce platform, merchandising tools, content management system (CMS) user reviews, product information) in the mobile channel.

Regardless of your strategy or approach, extend as much as possible of your existing technology into the mobile channel to maximize your investments and simplify management. If you need to go outside your existing e-commerce systems for pieces of your mobile offering, you should still strive to incorporate the tools used to manage your Website user experience. Forrester Research advocates this approach, advising organizations to leverage existing Web tools to control the mobile user experience, merchandising execution, and costs.¹² Your mobile storefront should be as actively analyzed and managed by your internal business users as your regular Website. Integrating these tools into your mobile offering will not only maximize the value of your existing technology investments but also ensure greater consistency of the user experience and branding efforts across all of your channels.

6. Align Your Technology with Short- and Long-Term Goals: Build a Tiered Roadmap to Support Your Strategy

To maximize your budget and get projects moving, you need to align the development of mobile services with your business strategy and then stage your mobile build-out accordingly. Chances are, you won't have the budget or resources to build out your entire mobile program up front. Instead, you'll likely require quick results to secure additional funds and future support. Make sure you're selecting the right technology to support your mobile goals and long-term strategy.

If your goal is to drive mobile sales, incorporating confidence-building user reviews or investing in a streamlined checkout process will prove more fruitful than barcode scanning. Rate what's most important to your strategy, adjust build-outs accordingly, and iterate based on how your customers are interacting. Keep re-evaluating, and revisit your roadmap every quarter.

¹² "Why Mobile's Time Has Come: Consumer-Facing Firms Must Develop, or Revive, Their Mobile Strategies," Ian Fogg, Forrester Research, July 2009.

Conclusion

To remain competitive, you will need to have a long-term mobile strategy and iterate often. For the greatest chance for success in the mobile channel, root your strategy in technology aligned with your mobile goals, the usage patterns of your target audience, and your budget. Build a phased mobile roadmap, and leverage as much as possible of your existing technology to get projects moving, maximize budget, and extend a consistent experience into the mobile channel.

Contact Us

For more information about Oracle Endeca Web commerce solutions, visit oracle.com/webcommerce or call +1.800.ORACLE1 to speak to an Oracle representative.



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Hardware and Software, Engineered to Work Together