562 Part Four Building and Managing Systems

## INTERACTIVE SESSION: TECHNOLOGY

## WHAT DOES IT TAKE TO GO MOBILE?

"How should we go mobile?" Almost every company today is asking that question. In 2014, more people used their mobile phones than PCs to go online, and there is one mobile device for every person on earth in 2015. The number of Web searches performed on mobile devices has more than quadrupled since 2010. Customers expect, and even demand, to be able to use a mobile device of their choice to obtain information or perform a transaction anywhere and at any time. So if a company wants to stay connected to its customers, it needs some sort of mobile presence.

What do companies do, and where do they start? Developing mobile apps or a mobile Web site has some special challenges. The user experience on a mobile device is fundamentally different from that on a PC. There are special features on mobile devices such as location-based services that that give firms the potential to interact with customers in meaningful new ways. Firms need to be able to take advantage of those features while delivering an experience that is appropriate to a small screen. There are multiple mobile platforms to work with-iPhone, Android, Windows Phone, and possibly BlackBerry, and a firm may need a different version of an application to run on each of these. You can't just port a Web site or desktop application to a smartphone or tablet. It's a different systems development process.

It's important to understand how, why, and where customers use mobile devices and how these mobile experiences change business interactions and behavior. For example, do customers who use an app handle a greater number of transactions on their own and use the phone less? Do they spend more or less time researching products and shopping from a mobile device?

Deckers Outdoor Corporation, the parent company of brands such as UGG Australia, Teva, and Simple Shoes, spent considerable time studying its customers' mobile behavior. It looked at how customers use their mobile devices while shopping and researching brands to find out how consumers would connect with its brand through the mobile channel. When people use mobile devices, how do they research the products? What information do they want about brand? Are they looking for information about product features, product reviews, or retail store locations?

Decker's customer analysis showed that when consumers use mobile devices inside a Deckers store, what is most important is a seamless interaction. The customer wants to be able to look at a product on his or her mobile device and see the same information on that device as that person would obtain in the store, plus some additional information, such as consumer reviews.

A mobile strategy involves much more than selecting mobile devices, operating systems, and applications. It also involves changes to business processes, changing the way people work and the way a firm interacts with its customers. Mobile technology can streamline processes, make them more portable, and enhance them with capabilities such as touch interfaces, location and mapping features, alerts, texting, cameras, and video functionality. The technology can also create less efficient processes or fail to deliver benefits if the mobile application is not properly designed.

USAA, the giant financial services company serving members of the U.S. military and their families, is acutely aware of the need to ensure that mobile technology is aligned with its customer-facing business processes and leads to genuine improvements. The company is using mobile technology to refine its business processes and provide simpler and more powerful ways for customers to interact with the company.

USAA launched its Web site in 1997 and went mobile ten years later, with about 90 percent of its interactions with customers taking place on these two self-service channels. In 2011, USAA handled 183 million customer contacts through the mobile channel alone, and expects the mobile channel will be its primary point of contact with customers in the next two years. USAA has 100 dedicated mobile developers writing apps for devices using the iPhone, iPad, and Android operating systems, along with apps for the BlackBerry and Windows Phone 7.

USAA developed a smartphone accident report and claims app that enables customers to snap a photo and submit a claim directly from the site of an accident. The app is also able to send geographic information system (GIS) data to a towing service and display nearby car rental locations. Another mobile app supports photo deposits: a customer can capture an image of a check with

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a smartphone and automatically submit it to the bank. The money is instantly deposited in the customer's account. This system eliminates the labor and expense of processing paper checks, as well as the time required to mail the check and wait three days for the deposit to clear. In 2011, USAA Federal Savings Bank processed \$6.4 billion in deposits through this mobile app.

The mobile app also displays loan and credit card balances, shopping services, homeowners and auto insurance policy information, Home Circle and Auto Circle buying services, retirement products and information, ATM and taxi locators, and a communities feature that lets users see what others are posting about USAA on Twitter, Facebook, and YouTube.

A real estate company may want to display a completely different site to mobile users who are looking for house information after driving by a "For Sale" sign. The realtor may want to optimize the mobile interface to include specific listing and contact information to capture the lead immediately and keep the load time fast. If the mobile site is simply a more user-friendly version of the desktop site, the conversions may not be as high.

Ryland Homes, one of the top U.S. new home builders, has a conventional Web site, but it wanted to be able to engage customers using mobile technology as well. The company revamped its mobile Web site in March 2011 to increase sales leads by helping potential customers with mobile phones find its locations, look at its products, register with the company, and call directly. Ryland's development team made the site easier to read and capable of fitting on a smartphone or tablet screen without requiring users to pinch and zoom. It used jQuery Mobile software and responsive Web design to create variations of the site that were appropriate for different smartphone or tablet models employed by users. (The jQuery Mobile framework allows developers to design a single Web site or application that will work on all popular smartphone, tablet, and desktop platforms, eliminating the need to write unique apps for each mobile device or operating system.) Ryland focused on features such as location-based driving directions to nearby communities, clickable phone numbers, and brief online registrations to increase the chances of making a sale. The site shows nearby communities in order of distance, based on the location of the mobile device.

Sources: Samuel Greengard, "Mobility Transforms the Customer Relationship," Baseline, February 2012; William Atkinson, "How Deckers Used a Mobile Application to Build Customer Traffic," CIO Insight, November 9, 2011; "Going Mobile: A Portable Approach to Process Improvement," Business Agility Insights, June 2012; Google Inc., "Ryland Homes Opens Doors to Local Sales with Mobile Site for Home-Buyers," 2011.

## CASE STUDY QUESTIONS

- 1. What management, organization, and technology issues need to be addressed when building mobile applications?
- 2. How does user requirement definition for mobile applications differ from that in traditional systems analysis?
- Describe the business processes changed by USAA's mobile applications before and after the applications were deployed.