

TAKE ADVANTAGE OF APPLICATION DEVELOPMENT OPPORTUNITIES IN THE CHANGING LANDSCAPE OF ENTERPRISE MOBILITY WITH RHOMOBILE SUITE

INTRODUCTION: THE NEXT GENERATION OF BUSINESS MOBILITY

The business mobility landscape has changed — it is now a part of everyday life, deeply embedded in our personal lives and in the process of rapid adoption in the business world, where it helps users work faster and smarter. Fueling the rapid adoption in the business world is a new generation of mobile devices that give enterprises more types of devices to choose from — from smartphones to tablets — all with the power to run the most demanding enterprise applications.

But selecting different types of devices for different types of workers creates a pool of mobile devices with different screen sizes, different screen resolutions, different feature sets and even different operating systems. The result is the need for next generation business mobility applications that can accommodate this device disparity without requiring many versions of the same application.

Enter RhoMobile Suite, from Motorola Solutions. RhoMobile Suite allows developers to write an application once — and run it on any mobile device and any operating system. The applications can behave identically or differently on different devices — the choice is yours. Applications can take advantage of every feature on every mobile device. And since this HTML5 development platform is free from typical operating system application design constraints, you can design robust business applications that have the same elegant and intuitive interfaces found in consumer applications.

TAKE ADVANTAGE OF NEW BUSINESS OPPORTUNITIES WITH RHOMOBILE SUITE

Now that you can create applications that can cost-effectively address a heterogeneous mobile device pool, you need to determine where you want to focus your application development efforts to maximize application sales. Following is a discussion of some of today's most prevalent mobility trends and how RhoMobile Suite can help you take advantage of the related business opportunity.

OPPORTUNITY THE RISING NEED FOR THE HYBRID MOBILE APP — PART NATIVE, PART 'CLOUD'

While web-based mobile applications are a quick way to support multiple devices and platforms, they represent an older paradigm and as such, are not experiencing the traction of native apps. New powerful mobile devices and tablets have caused a shift away from the web to the "App Internet," a term coined by Forrester CEO George Colony.

According to Colony, two ways of computing have dominated over the past 20 years. The first I'll call the "Microsoft model" — where local personal computers do most of the work. The second model is the Web/Cloud model, in which most of the work happens on remote servers. Both are outmoded. The Microsoft model fails to leverage the economies of scale in the Cloud; Web/Cloud fail to leverage the exponential growth in the power of local storage and processors.

So what comes next? Something I call the "App Internet." In this model, powerful local devices (PCs, smartphones, tablets) run applications that simultaneously and seamlessly take advantage of resources in the Web/Cloud. If you want to see this model in action, check out iPhone and Android applications.

How RhoMobile Suite helps:

RhoMobile Suite makes it easy to create applications in this new paradigm. With RhoMobile Suite, your applications can leverage all the power of the features native on the mobile device — smartphone, mobile computer, tablet and more — yet still leverage back end business data,

regardless of whether users are connected to a wireless network. App interfaces can be written in HTML5. And with RhoConnect, part of the RhoMobile Suite, you can easily connect your applications to one or more backend data sources that reside back in the enterprise.

OPPORTUNITY THE 'BRING YOUR OWN DEVICE' (BYOD) MOVEMENT

Many of today's businesses are implementing BYOD initiatives, where users can bring their personal devices to work to use during the workday. There are advantages for businesses and users alike. Businesses do not need to purchase so many devices, driving capital expenditures down. And since workers are already familiar with their own devices, training is virtually eliminated.

The biggest issue becomes the business applications. Users are bringing devices with non-standard operating systems to work — including smartphones and tablets with the Apple® iOS or Google's Android®. The enterprise faces the need to develop and maintain multiple versions of an application — one for each operating system.

How RhoMobile Suite helps:

RhoMobile Suite addresses this issue by streamlining the creation of true OS-agnostic applications, allowing you to cost-effectively develop business applications that can run on virtually any mobile device in the

enterprise, allowing your customers to embrace BYOD programs without an increase in application-related costs. The result is a win-win for everyone. For businesses, application development and maintenance costs won't spiral out of control. Workers get the comfort of using familiar devices during process 'makeovers' that strip time and errors out of everyday tasks. And you, the developer, can increase sales and maximize profit margins through the cost-effective creation of OS-agnostic applications that enable the new BYOD trend.

OPPORTUNITY THE MOBILE POINT OF SALE (MPOS) BOOM

Numerous vertical markets are embracing the power of the mobile POS — the ability to process a sale right on the spot with a smartphone, mobile computer or tablet. Retailers and restaurants are shedding the costs and inflexibility of their wired checkout stands, allowing workers to ring up purchases in the aisles of a store or tableside at a restaurant, at any time. Out in the field, workers can bill and accept payment right in the customer's location — home or business — allowing contractors, plumbers, electricians and more to improve the efficiency and length of time of the billing cycle.

One of the major technologies gaining ground in mobile payment solutions is the use of Near Field Communications (NFC) for convenient contactless mobile

Which of the following changes is your company considering in how it manages mobile services/devices?

Considering reducing corporate liable	54%
Considering reducing individual liable devices	13%
Allowing employees to buy/select their own devices	42%
Allowing employees to use their own devices	67%
Limit employee capability to send emails (internal, blocks)	13%

Over 67 percent of the companies surveyed are considering BYOD programs, creating a need for true OS-agnostic enterprise applications that can run on enterprise-owned and employee-owned mobile devices — regardless of operating system or display size.

payments, where customers can just wave their card or even their smartphone over the NFC reader to authorize payment. The payment card or payment information never leaves the customer's hands, improving security and eliminating the opportunity for a customer to inadvertently leave a card behind.

With the introduction of full read-write NFC support in Android 3.0, NFC is poised to experience huge growth. As shown in the figure below, iSuppli Research is predicting a 43 percent increase in NFC-equipped smartphone shipments alone from 2010 to 2014. And NFC tags are more frequently embedded in everyday objects, allowing consumers to interact with objects with their smartphones.

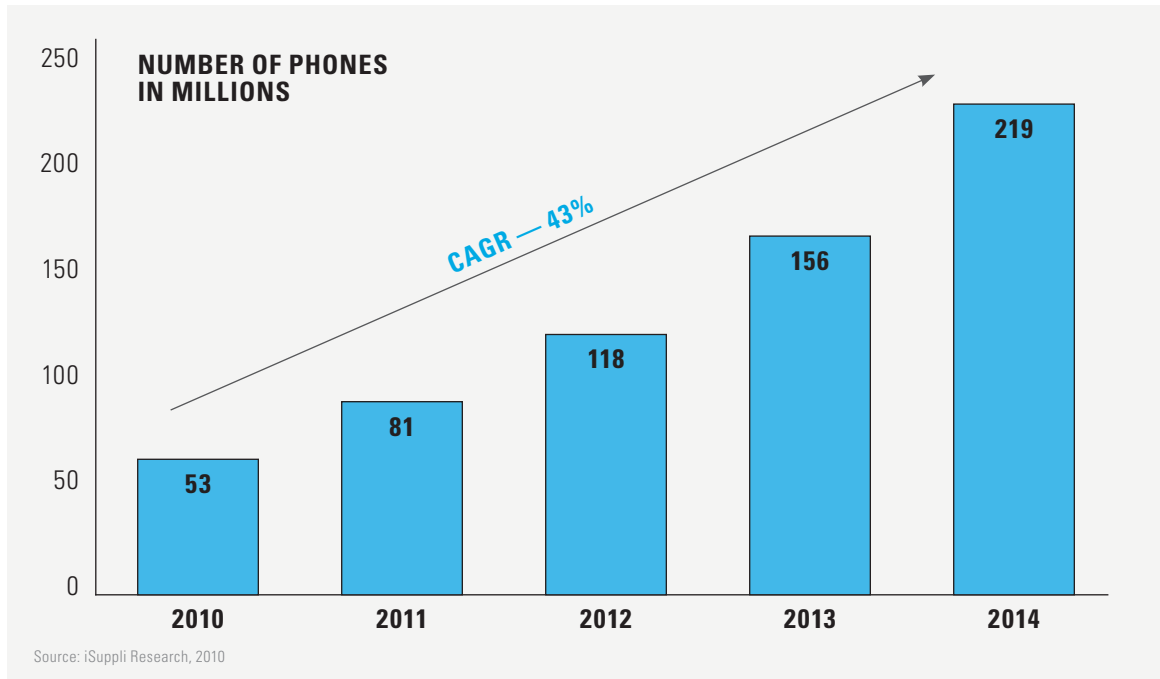
However, from a developer's perspective, NFC brings numerous logistical challenges. There is no single standard utilized to interface with all the various NFC chips and external accessories on the market.

Over the next few years, there will be at least ten smartphone operating systems and there are numerous ways of accessing accessories and purchasing objects: RFID, NFC ECMA 340, NFC ECMA 342, along with devices such as the Square credit card reader. In short, there are hundreds of ways to program the same logistical process.

How RhoMobile Suite helps:

Frameworks like RhoMobile Suite that expose common ways of doing the same logical tasks provide a simpler approach to writing applications that work across different operating systems and with different accessories. RhoMobile Suite offers a unified application programming interface (API) that supports NFC and other external devices to address this challenge in a way that individual device software developer kits (SDKs) cannot. With RhoMobile Suite, you can help make the potential of mobile payment applications a reality for enterprises all over the world.

Projected Growth in NFC-Equipped Smartphone Shipments



The huge boom in the anticipated volume of NFC-equipped smartphones presents an opportunity for developers to turn smartphones as well as other mobile devices into a mobile POS, ready to accept payments from NFC-enabled cards or NFC-enabled smartphones. And as more consumers carry NFC-enabled smartphones, retailers need to be ready for shoppers who will expect to be able to use their NFC-enabled smartphones to make contactless payments in the store.

OPPORTUNITY **COST-EFFECTIVE BUSINESS** **DOCUMENTATION AND COMPLIANCE**

In a variety of industries, business activities need to be recorded for numerous reasons: to capture billable time and to comply with legal regulations that require the documentation. This often requires recording of phone calls, the capture of video, document capture and more. These requirements can make it difficult for businesses to deploy mobile devices in the workforce – or if they are presently able to capture what they need on mobile devices, to migrate to newer devices with non-standard enterprise operating systems such as Android smartphones and tablets.

But with RhoMobile Suite, you can create applications that not only work on different operating systems, but can also take advantage of whatever features are on the various types of mobile devices. The result is the creation of applications that allow businesses to fully utilize the devices they have deployed today, yet easily migrate to the devices of tomorrow — complete with the ability to leverage any new technologies that may be on new devices, from biometrics to chemical sensors.

CONCLUSION

As smartphones, tablets and other mobile devices grow in sophistication and power, they will continue to play a larger role in the enterprise by helping businesses work better, smarter and faster. From BYOD and NFC to the “App Internet,” many of today’s key trends will shape the look and feel of mobile business applications over the next few years. Modern app development frameworks like RhoMobile Suite will help developers take advantage of these trends and compete more efficiently by enabling the development of applications that meet the needs of this next generation of business mobility.

For information on how Motorola Solutions can help you create next-generation OS-agnostic mobile applications, please visit www.motorolasolutions.com/RhoMobileSuite.

ABOUT RHOMOBILE SUITE

RhoMobile Suite from Motorola Solutions provides all the features you need to build next generation mobile applications for the enterprise. This HTML5 cross-platform development framework brings together a consumer-style application experience with an enterprise-grade feature set. The RhoMobile Suite supports all of today's popular mobile operating systems, including Android®, Apple® iOS, BlackBerry® OS, Windows® Embedded Handheld, Windows® CE and Windows® Phone 7 and operating systems and you can easily create one version of the application that works on all these devices.