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Mobile Applications on the Rise in the Enterprise

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The mobile sector is now an $850.8 billion global market, constituting 57% of the global telecom market. It is also the fastest-growing segment and accounted for 62% of the total telecom market in 2010. The market is driven by several exciting trends and developments that include the expanding demographic of smart devices and access to a stunning array of applications. Mobile workers, particularly those critical to the business, are increasingly dependent on their mobile devices to be as productive as possible. Enterprises, in turn, are giving workers more capabilities and lightening the management burden on IT by allowing users to download corporate apps directly to their mobile devices.

The following questions were posed by AT&T to Stephen Drake, program vice president for IDC's Mobility and Telecom research, on behalf of AT&T's small and medium-sized business (SMB) customers.

Q.   **What is driving enterprises to adopt mobile enterprise applications?**

A.   Organizations are looking at how they can deliver some key apps being used already at the server and desktop "down" to mobile workers. These workers, in fact, tend to be the most important group in organizations today. They're also growing in number. In the United States, for example, we're expecting that close to three-fourths of all workers will have some level of mobility associated with their jobs in 2011. So it's important for enterprises to get those applications out to mobile workers to enhance productivity, improve efficiency, and deliver better collaboration.

Another big driver has to do with consumer apps. We're seeing companies recognize the explosion of consumer applications across a number of mobile device types. These consumer apps are making IT departments ask themselves, "Why can't we deliver a nice, slick application on some of these devices that can work for our employees?"

There has been talk about the adoption of mobile enterprise applications for some time, but this new awareness from the consumer side has actually begun to push greater visibility and awareness into the organizations themselves.

Q.   **What are the benefits of deploying mobile enterprise applications?**

A.   Most organizations deploy mobile apps thinking about productivity as a key benefit, and it certainly is. We found that sales folks, for example, are able to do much more at the point of interaction with a mobile device rather than have to wait and do something later on. They can gather all the information they need and can provide that information faster to the customer or prospect. At the end of the day, they've gained back an hour or two; they're also able to update customer information on the fly.

So productivity is a huge benefit, but there are also tremendous cost savings for the deployment of a mobile enterprise app. We see tremendous savings around telecommunications, around device management, and around the use, number, and types of devices. For instance, in some cases, companies were actually able to get rid of their laptops and cell phones and leverage just smartphones. Workers had perhaps a desktop at work and a smartphone while they were out in the field — being more efficient and providing cost savings for companies.

Before smartphones, field workers would often have to either call back to check on emails or find a hotspot for their laptop. Eliminating simple things such as driving and calling back to check back-end systems for information provides huge savings in organizations.

Another benefit is improved workflow across the organization. Information entered into smartphones and other mobile devices is sent to a back-end system and in some cases where a data entry or analysis employee takes the information. The information gets there faster and more accurately, so there are fewer errors. Insurance agents, for example, can deliver policies to underwriters anywhere from 24 to 48 hours faster using mobile devices. Faster return of data and information can also mean increased revenue. Colleagues who are working on similar projects can see that information in real time, managers of particular groups in the field can also see what's happening with their groups, and top-level executives can see real-time sales and pipelines — all of which affects the whole workflow. Overall organizational efficiency is greatly improved.

Service providers that use a consultative approach can help organizations achieve these benefits by assessing the best business processes to mobilize and advising on appropriate applications to facilitate employee mobility.

Q. **Are enterprises adopting browser-based mobile apps?**

A. Yes, but with some challenges. Native applications exist first and foremost because they're typically more robust in terms of the technology, such as with local data storage and other capabilities that make sense for certain types of uses and locations. If you're in a place without cell service, for example, you still want access to what you need to work locally. On the other hand, native apps must support a growing number of operating systems. There are arguably 10 viable mobile operating systems available today — quite a lot for an organization to manage updates and upgrades.

The promise of browser-based apps is that they'll run on any device, with the browser being standard. However, the challenge has been the technology. Until recently, there weren't a lot of tools to write to browsers, and the browsers themselves were unsophisticated. The networks were a challenge as well, and mobile devices lacked screens big enough for a good experience with a browser.

Today we're seeing improved devices, bigger screens, and much better browsers. The trend is, in many cases, toward browser-based apps, which is an opportunity to make life easier on developers and on organizations managing those devices. But it's a slow move and more of a late-term opportunity going forward. In the end, there's still going to be a need for native applications because of certain applications, device types, and work environments.

Q. **How are consumer-based applications affecting the adoption of mobile enterprise apps?**

A. With the remarkable amount of activity relating to mobile applications in today's consumer space, it's hard to remember that there was very little app store activity prior to 2008. Apple's iPhone App Store was launched in 2008. RIM's BlackBerry App World was launched less than two years ago. Most of today's app stores also came into existence within the past two years.

Currently, 1.5 million applications are downloaded each day from RIM's BlackBerry App World. Nokia claims there are 3 million downloads from its Ovi Store each day. There are more than 250,000 apps for the iPhone and almost half as many apps for Android devices.

As a result of the popularity of consumer applications and the amount of time consumers spend on their smartphones, many organizations are eager to produce mobile enterprise applications that follow the same model as consumer browser-based mobile applications, including leveraging similar technologies and delivery models. Companies plan to build their own business applications and create their own private app stores. Before these enterprise apps can be distributed, organizations need to manage the way they distribute, update, control, and secure their applications. Once that is done, employees can download the mobile enterprise applications they need directly from the internal app store. Enterprise app stores can be federated so that only employees authorized to use certain applications can access them.

Q. **How do enterprise IT departments need to address the "consumerization" of IT?**

A. The consumerization of IT encompasses the emerging trend among businesses to save money and reduce the size of their communications budgets by having employees own and use their own mobile devices for business purposes. In addition, it permits organizations to expand their mobile population within an organization and demonstrate a level of progressiveness to give choice to their workforce by allowing workers to use their own devices. As it relates to the consumerization of IT, the smartphone is segmented in three ways:

- **Corporate liable.** Devices, phone numbers, and data plans are purchased, owned, and managed by the organization and distributed to a select group of employees.

- **Individual liable.** Employees own the device and phone number and typically pay for their own data plans, but they use the device for business purposes and to connect to corporate applications.

- **Consumer liable.** Devices are privately owned and used by individuals not accessing any corporate assets.

Corporations that have performed audits often discover that a large number of mobile devices issued to employees are not being used by the employee to whom they were assigned. Adopting individual-liable devices enables companies to potentially lower the number of corporate-liable devices and reduce their mobile costs. Corporate-liable devices were always meant to be used by a specific level of employees, usually executives, senior managers, or salespeople. Distribution of corporate-liable devices was often limited to or governed by security issues or other privacy concerns.

The use of individual-liable devices allows a greater number and different types of employees to have access to email, back-end applications, and other productivity applications to do their jobs more efficiently from any location. Organizations can identify a specific set or types of devices they will support. This gives workers a choice about the device they want to use. This policy also helps companies attract new employees — particularly younger people who can now use their personal smartphones for business purposes. But employees who opt in to this plan must agree to allow the organization to manage the corporate assets of that device as needed.

Indeed, the cost savings can come with undesirable consequences when organizations aren't fully prepared to handle what happens when an employee quits or is terminated. Organizations must have key policies and device management and security measures in place, as well as a way to remove critical business applications or components from the employee's mobile device to safeguard their corporate assets. Without this capability,

companies cannot retrieve their corporate assets when employees leave, which puts companies in jeopardy of not properly safeguarding themselves from the loss of corporate data and proprietary information and may leave them liable for misuse of such information.

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Stephen Drake is the program vice president for Mobility and Telecom research at IDC. In this position, he has responsibility for Mobile Enterprise, Mobile SMB, Mobile Device, and IP Communication Services coverage and also contributes to IDC's Unified Communication research. As part of the Mobile Enterprise coverage, Mr. Drake heads up market intelligence on mobile software technologies for enterprise and mobile operators, including mobile middleware, mobile enterprise applications, mobile device management, mobile security, mobile operating environments, mobile application development markets, and mobile user trends.