Applications and Implications of Cloud-Enabled Mobility

Overview and Guide

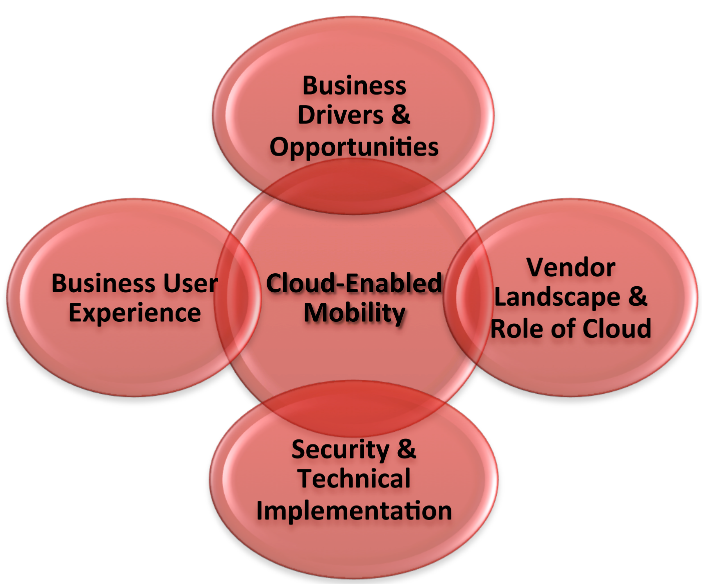
Mobility is a fact of business life. Employees are on the road and working from home. Business applications can receive continuous information from the field, including from any remote device that can sense conditions and transmit data. Mobile applications can better serve customers and coordinate with business partners, themselves often on the road. And the variety and functionality of mobile devices continue to explode.

Mobility adds new dimension to business, but most corporations are just scratching the surface of what mobile applications can do for productivity, performance, and innovation. Cloud computing will accelerate their progress by enabling a new generation of more information-rich, capable, cost-effective and secure mobile business applications, sourced both inside and outside the enterprise.

This Outcome Project explored the business drivers and potential of mobile applications, how cloud enables mobility, and what business and IT people can do to capitalize on the opportunities. Partnering in this project was Scott Burgess, Director, Office of the CTO, at EMC Consulting, an expert in applications of emerging technologies.

We divided this research effort into four tracks, as depicted in the figure. Together they comprise a comprehensive approach to understanding the challenges and opportunities of mobility, hence to refining your company's mobile strategy. The *Applications and Implications of Cloud-Enabled Mobility* report has a section corresponding to each track, published both individually for focused distribution and in consolidated format. Here is a brief overview with key points of each section.

Research Map



Business Drivers and Opportunities

Describes the drivers of demand for mobile, the rapid growth in device types and applications, the business opportunities and benefits, and how cloud services enable the basic classes of mobile applications.

- Pressures on corporations to support mobility and provide mobile applications are coming from every direction – employees, customers, business partners, and technology vendors. This is happening so rapidly that it's increasingly difficult for organizations to stay abreast of mobile technology and its business potential.

- Mobile applications create opportunities in the fundamental areas of employee productivity, business agility, revenue growth, process performance, and cost reduction.

- The cloud is a natural enabler and companion for mobile applications and services. For general productivity applications, cloud services offer scalability of existing apps and on-demand provisioning of new ones. For process workflow, the cloud can be the staging area for fast access to data and documents. For customer connection, cloud services can act as the "translator," enabling a company to build apps for one device platform and have them deployed to customers on all devices.

Vendor Landscape and Role of Cloud

Outlines the many categories of vendors offering products and services in the mobility and cloud markets; the distinctive capabilities of cloud computing; the specific ways the cloud enables mobile devices, applications, and users; and the challenges along the journey to capitalizing on cloud-enabled mobility.

- To realize the opportunities of mobile in a fast-moving market, corporations must integrate and deploy new combinations of technologies. They must understand what's available, make judicious selections, work with strong partners and leverage emerging technological capabilities – in particular, the cloud.

- The benefits of cloud computing – lower cost and greater business agility – are compelling, and adoption is growing fast, but there are still barriers, especially when it comes to control of assets in the public cloud.

- Mobility and the cloud are converging and complementing each other for very good reasons. Users are demanding ubiquitous access to robust applications on easy-to-use mobile devices.

Businesses and their IT organizations cannot satisfy this need and capitalize fully on the productivity of mobility by conventional means – but they can with the help of cloud services.

Security and Technical Implementation

Provides frameworks for evaluating risk and providing security with mobile technologies and applications, then discusses five sets of choices that form the basis for mobile device management practices and policies: device ownership, platform ecosystem, connectivity options, management tools, and applications.

- There's no "silver bullet," no integrated set of thoroughly reliable and secure technologies and techniques for safeguarding data, applications, and infrastructure while opening them to mobile use. Yet the demand for mobile continues its exponential growth. Corporations and their IT organizations must clarify their objectives with mobility and avoid the twin pitfalls of clamping down too tight and trying to accommodate everyone.

- A first step in providing acceptably secure mobile services is to evaluate the potential risks: identify them, quantify them insofar as possible, and prioritize those that need to be addressed. Any specific risk is a composite of three variables: probability of occurrence, impact on the organization and its resources, and the ease or difficulty of detecting occurrences.

- The ultimate goal of mobility is the three As – using *any device* from *any place* at *any time*. Provide employees the flexibility to access appropriate content, applications, and services when and how it is most convenient and productive for them. Productivity is maximized when the user has a consistent experience across devices, rather then having to cope with a variety of interfaces, formats, security mechanisms, and content available.

Business User Experience

Discusses techniques for making mobility work for employees, both individually and collectively, including driving adoption and effective use, segmenting users based on role and ability, streamlining provisioning and support, and adjusting policy to enable mobility.

- Any mobility initiative should have a clear view of how it plans to drive adoption and *effective* use. People who make effective use of mobile devices and other information technology make others more productive. Those who use the technology ineffectively add to information overload and reduce the productivity of others.

- More and more companies are investigating or implementing the option for employees to "bring your own device" (BYOD) to use on the job. The devices must, of course, meet published standards in terms of configuration and capability. In addition to giving employees the choice they desire, a BYOD program should save money. However, if your program is driven primarily by device and support cost savings, rethink your objectives. Chances are you are both overestimating the savings and leaving productivity and other business benefits on the table.

- "Old school" policy focuses on control and preventing employees from behaving inappropriately. "New school" focuses on informed self-regulation by responsible employees. The new school, of course, doesn't abandon necessary technological controls over security and business continuity. But it does represent profound shifts in expectations and responsibilities.