“The New World of Mobility Management”

Written By: Maribel Lopez

March 2013
Mobile Provides New Opportunities And IT Challenges

Mobile technologies and cloud computing are changing what we connect, where corporate data lives, and how we transact business. Mobile subscribers now amount to more than 5 billion worldwide and smartphone users have surpassed the one billion mark. The mobile landscape has also expanded beyond laptops and smartphones to include billions of connected devices including tablets, cars, machinery, and medical equipment. This new world of connected devices is called the Internet of Things (IoT). Ericsson predicts there will be over 50 billion connected devices worldwide by 2020. Mobile and the IoT will require IT leaders to modify network connectivity models as well as prepare for a massive increase in real-time data. Today, CIOs must support multiple devices per person, secure the use of corporate and personally-owned devices, and deal with a tidal wave of new data. It’s no surprise that in our “Q/4 2012 Enterprise Mobility Benchmark,” IT leaders listed mobility, security, and big data analysis as their top concerns for 2013.

As smartphone and tablet ownership and usage grows, individuals are bringing personal devices into the workplace. In 2012, many CIOs responded to this demand by creating policies and deploying tools that enabled Bring Your Own Device (BYOD) programs. Over 67% of firms surveyed already allow or plan to allow employees to use personal devices to access corporate data. For example, retail giant Wal-Mart has recently enabled its store-level salaried management to gain access to company e-mail while off-site. Likewise, many of the companies that allowed BYOD in 2012 only offered access to email, contacts, and calendar applications. CIOs’ concerns over how to develop, manage, and secure enterprise applications has stalled the rapid deployment of mobile apps. In 2013, many companies plan to mobile-enable business applications and processes such as Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), and order management.

Businesses Evolve To Mobility In 3 Phases

Employees want existing workflows and applications to be accessible via mobile devices. However, IT can’t mobilize the business overnight. There are distinct phases that a company progresses through as it transforms itself into a mobile-enabled business, which include (see Figure 1):

1. Acceptance and extension. Today, most businesses have accepted the concept that business processes need to be mobilized and that the business must have a mobile strategy in order to interact with its customers. In this phase, a business will simply rework many of its existing solutions to allow it to operate in the mobile domain. Companies will seek out mobile versions of existing applications or adapt
these applications to operate on mobile devices. In many cases, firms start by replacing volumes of paper or paper-based processes with mobile apps. For example, Honeywell previously relied on printed sales materials in three-ring binders. This made information difficult to locate and access efficiently, and the data changed frequently requiring costly reprints to keep the binders current. Honeywell designed an iPad app to replace these binders. The mobile application ties directly into Honeywell’s CRM software and allows salespeople to capture customer information and product interests directly via the device. Then, this information is added in real-time directly into Salesforce for tracking and follow-up. The apps also provide a richer set of information including videos, brochures, images, and presentations. Other examples of business transitions to mobile include extending vacation approvals, inventory, and order entry to mobile devices.

In this phase, enterprises must define which employee roles will benefit from mobile. Applications that gain value from real-time data capture, such as product tracking and order processing, are a logical starting point. Business leaders should work with IT to define several “quick win” workflows within an overall app transition plan that can be deployed and changed quickly if necessary. It’s also critical that a company’s IT department builds an enterprise mobile management strategy. CXOs and IT must work together to design a mobile management strategy that secures corporate data, allows employees to partake in the BYOD trend, and which facilitates the distribution and management of apps and content. The software to support this must include mobile device management, security, and basic application management.

2. Enhancement. In the second phase, a business tries to add context from mobile sources to enhance an existing workflow or service. This could be adding location into customer relationship management or adding mobile point-of-sale in a retail environment. In 2012, home improvement retailer Lowe’s provided its employees with an app that gave access to product availability and inventory as well as enabling mobile checkout. If a product is out of stock, a store employee can locate inventory, order the product, and solve the customer’s problem. Southwest Airlines Cargo has also provided an example of how location and sensor data can improve an existing product. It recently updated its shipping service with mobile asset tracking devices that allow its customers to monitor the location, shock, light, temperature, pressure, and humidity of cargo during transit.

In the enhancement phase, CXOs will define how context such as location and sensor data could improve the experience for a mobile employee. CXOs will work with IT to add at least one contextual element to an existing process. IT should also build a strategy to support native and Web apps development and evaluate cross-platform design tools that are able to create hybrid apps molded toward
how rich of an experience the company desires to create and the connectivity requirements to achieve the end result desired.

3. Transformation.
During this phase, businesses create new experiences and build different business processes. Mobile apps will automate workflows, streamline content discovery, and build knowledge iteratively over time as employees and customers use an application. Groupama, a French insurance company, transformed its claims process by building a mobile app that ties into its contact center which then allows its customers to submit claims and get assistance at the accident site. The app sends all of the account data, including the user’s GPS location and photos from the user’s phone, to the agent. Tesco is using mobile to transform where its retail customers shop. Tesco is testing a "virtual grocery store" in the UK where customers can order products with their smartphones from interactive billboards in public spaces. An electronic billboard displays shelves stocked with products, each item with its own barcode. Using Tesco’s dedicated phone app, customers can scan the barcode, add it to their basket, and then select a delivery time of their choosing.

In this phase, business leaders should use big data and analytics tools to design business processes that can react to data in real-time. IT must deliver the authentication infrastructure to allow employees to access corporate services on any device (e.g. a desk phone in a client’s office or a screen at the hotel).
and at any location (e.g. hotel, home, client’s office). CXOs should plan for new business processes to be device-aware, location-aware, and network-aware.

**Management Evolves To Support Mobilizing The Business**

To successfully deploy mobile applications and support BYOD, IT leaders realize that they must create a mobile management strategy that defines how to manage and support an influx of devices, how to secure access to corporate data, and how to distribute and manage the wide range of enterprise applications the business plans to deploy. At the beginning of the mobile era, the tools for mobility management were basic, fragmented, and focused on devices. In fact, the market was called Mobile Device Management (MDM). At this time, there were separate tools and separate vendors for mobile device management, security, and expense management. Mobile application management (MAM) was practically non-existent. Today, the functions within mobility management have expanded to support these changing demands and many vendors are now players in this mobile landscape (see Figure 2). Many of these tools have been collapsed into suites or can be acquired from an ecosystem of partners that have collaborated to deliver a more comprehensive solution. For example, MDM vendors now offer at least basic applications management.

Mobility management will continue to evolve over the next several years as BYOD and mobile application deployments become more commonplace. The industry will evolve into a rich set of functions, called Enterprise Mobility Management, in at least three eras, which include:

1. **2007- 2012 Device-driven management.** MDM delivered inventory management, device status and health, and help desk support. It offered rich security at a device level such as preventing unauthorized access to: 1) the device and its data – including data on removable storage 2) data as it transits the network and 3) the corporate network. Basic security features such as password enforcement, remote lock, and remote wipe are found in MDM. Mobile device management and mobile security vendors dominated this era. The focus was on the device, not the application or data. In some cases, security vendors and MDM vendors merged to provide more comprehensive suites.

2. **2011- 2012 Application management and containerization.** In this era, MDM vendors offered centralized management for mass deployment of applications, Over-the-Air (OTA) updates, and certificate support. Mobile application management vendors entered the scene to focus on delivering enterprise application stores and managing the ability to add, configure, update, or remove apps. MAM vendors didn’t offer the detailed device management of MDM, but MDM vendors made attempts to offer richer MAM-like products. The focus in the industry shifted to how to secure
corporate data while enabling employees to maintain and use all of their personal data and applications. Virtualization vendors and MAM vendors offered new security solutions that are based on sandboxes, containers, and app wrapping to separate, secure, and manage corporate data, all without changing how employees use their personal devices. Industry consolidation accelerated as vendors came to understand the importance of EMM and looked to fill product gaps.

3. **2013 and beyond. Enterprise Mobility Management.** In 2013 and beyond, EMM will build on the solutions of the past but focus on delivering content protection with contextual management based on attributes such as location, role, time of day, and type of content. Security will be present at all layers from the device through the application. The corporation will select which functions the business wants in an EMM. Some will opt for an EMM that spans the device through the application while others will take a lighter approach that focuses on apps. Wireless LAN vendors will enter the market to link network context into application management. More partnerships will form between focused vendors such as MAM, MDM, and WLAN vendors. The market will experience further consolidation as IT looks to minimize the number of management consoles it uses. The focus of the EMM market will shift to managing employee interactions and applications over multiple devices.
Get Started By Evaluating Your Mobile Management Needs

There are numerous types of mobility management vendors and several deployment models including on-premise, cloud, and hybrid deployments. With such a complex landscape, how do you decide which solution is right for your company? IT leaders should ask the following questions as companies evaluate how to support mobile-workers.

**Figure 3. Questions To Ask Prospective Mobility Management Providers**

<table>
<thead>
<tr>
<th>Question</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What services can the provider manage?</td>
<td>Is it a combination of device and application management? Does it integrate with Active directory, PC management and/or Wireless LAN management?</td>
</tr>
<tr>
<td>2. How scalable is the solution?</td>
<td>Does it support all of the operating systems? What is the largest deployment the vendor has? Can it scale to support thousands of users across various countries?</td>
</tr>
<tr>
<td>3. What type of security does it enable?</td>
<td>Does the vendor support application wrapping, containerization of apps, and/or device protection? Will it support policies that use contextual attributes such as location, role, time of day and application type to secure the content?</td>
</tr>
<tr>
<td>4. What support does the provider offer for management and distribution of applications?</td>
<td>Is there an enterprise app store? How does it handle Apple-specific requirements?</td>
</tr>
<tr>
<td>5. Do they have customers like you?</td>
<td>Does the vendor have a solution that matches the regulatory and compliance standards for your industry?</td>
</tr>
<tr>
<td>6. What kind of support does the provider offer?</td>
<td></td>
</tr>
<tr>
<td>7. Who are the providers partners?</td>
<td>Does the vendor have partnerships that will enable you to deploy integrated EMM solutions that cover device management, application management, security and expense management?</td>
</tr>
<tr>
<td>8. What type of deployment model is offered?</td>
<td>Is it on-premise, cloud-based or both?</td>
</tr>
<tr>
<td>9. What certifications does the provider maintain?</td>
<td></td>
</tr>
<tr>
<td>10. Does the provider have a technical vision for the future?</td>
<td></td>
</tr>
</tbody>
</table>
Conclusion

Business leaders want to migrate workflow, processes, and apps to mobile devices to improve workforce productivity, allow for real-time decision-making, and to shorten sales cycles. However, this process will take time. There isn’t a “one size fits all” strategy for mobile-enabling the enterprise but certain items are required for all organizations. CIOs must offer access to the workflows and applications that employees need on both personal and corporate-owned devices, and a method to manage and secure corporate data and applications will also be required. IT needs to build an EMM foundation to reduce costs, minimize risk, and provide a migration path for technology changes. These EMM solutions have to help CIOs unobtrusively secure corporate data while maintaining employee privacy and device usability. Over the next two years, the industry will offer contextual management that allows IT to focus on delivering the right services to employees, at the point of need, and on their respective device of choice.

ALL RIGHTS RESERVED. LOPEZ RESEARCH LLC

The development, preparation, and publication of this work have been undertaken with great care. While we don’t anticipate any errors in this document, errors may occur. We’ll make every attempt to correct any errors that are found. The publisher is not responsible for consequences that may ensue from use of materials or information contained in this work. No part of this document may be reproduced in any manner without the express written consent of Lopez Research, except in the case of brief excerpts in critical reviews and articles. This document is available for reprints. To purchase syndicated research or reprints of the report please email or call us at: sales@lopezresearch.com or (866) 849-5750

About Lopez Research

Lopez Research, founded in 2008, is a market research and strategy consulting firm that specializes in how mobile technologies, big data, and cloud computing will create contextual “Right-time Experiences.” The company’s mission is to understand the evolution of these trends, provide thought leadership, and assist both enterprise and technology vendor clients in building winning market strategies. The company’s perceptions in the enterprise market are gained through direct industry involvement and client interaction. Lopez Research combines survey-based research and predictive analysis to gain insight into coming trends. With a background in emerging business and technology trends, voice and data networking technologies, and vendor and service provider selection, Lopez Research provides clients and readers with the bridge between business leadership and technology adoption.

www.lopezresearch.com