

OUTSOURCING THE MOVE TO MOBILE

Service Providers Managing Tools and Strategies for Enterprise Mobility

Technology and market trends are driving organizations to use service providers to manage their mobile deployments. We examine the economic and strategic reasons why IT departments will look for external help to deal with the challenges of mobility. We also profile key managed service providers, spanning systems integrators, network service providers and hardware vendors.

ESP | ENTERPRISE
SECURITY
PRACTICE

KEY FINDINGS

- IT departments must either develop competency in mobility or outsource mobile deployments to a managed service provider, which is a strategic decision regarding a company's money, time and other resources. At a time when IT budgets are stagnant and there is pressure to do more with less, outsourcing becomes increasingly attractive.
- The use of cloud services means that service providers can essentially 'plug and play' management tools. Service providers can also multi-source technologies so that exposure to an individual vendor's economic health is less of a concern. This is particularly significant given that many EMM vendors are rather young companies.
- This era of austerity for IT budgets comes at a time when the demands to support employees are at an all-time high. The continued invasion of new applications and devices creates a need to scale mobile deployments. A managed service can be treated like a simple utility, allowing IT to turn services on and off as needed.
- Buyers have thus far been making quick, tactical decisions to support mobility, and it will be another year or so before organizations begin to think more strategically about mobile deployment and business innovation. As deployments become more strategic, IT departments will face increased pressure to make critical decisions around mobility management.

DECEMBER 2013

ABOUT 451 RESEARCH

451 Research is a leading global analyst and data company focused on the business of enterprise IT innovation. Clients of the company — at end-user, service-provider, vendor and investor organizations — rely on 451 Research's insight through a range of syndicated research and advisory services to support both strategic and tactical decision-making.

© 2013 451 Research, LLC and/or its Affiliates. All Rights Reserved. Reproduction and distribution of this publication, in whole or in part, in any form without prior written permission is forbidden. The terms of use regarding distribution, both internally and externally, shall be governed by the terms laid out in your Service Agreement with 451 Research and/or its Affiliates. The information contained herein has been obtained from sources believed to be reliable. 451 Research disclaims all warranties as to the accuracy, completeness or adequacy of such information. Although 451 Research may discuss legal issues related to the information technology business, 451 Research does not provide legal advice or services and their research should not be construed or used as such. 451 Research shall have no liability for errors, omissions or inadequacies in the information contained herein or for interpretations thereof. The reader assumes sole responsibility for the selection of these materials to achieve its intended results. The opinions expressed herein are subject to change without notice.



New York

20 West 37th Street, 6th Floor
New York, NY 10018
Phone: 212.505.3030
Fax: 212.505.2630

San Francisco

140 Geary Street, 9th Floor
San Francisco, CA 94108
Phone: 415.989.1555
Fax: 415.989.1558

London

37-41 Gower Street
London, UK WC1E 6HH
Phone: +44 (0)20.7299.7765
Fax: +44 (0)20.7299.7799

Boston

125 Broad Street, 4th Floor
Boston, MA 02109
Phone: 617.275.8818
Fax: 617.261.0688

TABLE OF CONTENTS

| | |
|---|-----------|
| SECTION 1: EXECUTIVE OVERVIEW | 1 |
| 1.1 KEY FINDINGS | 1 |
| 1.2 METHODOLOGY AND RESPONDENT DETAILS | 2 |
| | |
| SECTION 2: DEFINITIONS | 4 |
| | |
| SECTION 3: DRIVERS AND CHALLENGES FOR MANAGED MOBILITY | 6 |
| 3.1 DRIVERS FOR ADOPTING MANAGED MOBILITY | 6 |
| 3.1.1 <i>Pressure to Do More With Less</i> | 6 |
| 3.1.2 <i>Keeping Up With Advancements in EMM</i> | 6 |
| 3.1.3 <i>The Evolving Device Landscape</i> | 7 |
| 3.1.4 <i>Predictable Cost for Mobility</i> | 7 |
| <i>Figure 1: Projected IT Spending</i> | 8 |
| 3.1.5 <i>Complexity</i> | 8 |
| 3.1.6 <i>Managed Services That Scale</i> | 9 |
| 3.1.7 <i>Flexibility and Range of Services</i> | 9 |
| 3.2 CHALLENGES TO ADOPTING MANAGED MOBILITY | 10 |
| 3.2.1 <i>Mobility Is Core to Business</i> | 10 |
| 3.2.2 <i>Vendor Lock-in, Vendor Abstraction</i> | 10 |
| | |
| SECTION 4: VENDOR ASSESSMENTS | 11 |
| 4.1 SYSTEMS INTEGRATORS | 11 |
| <i>Atos</i> | 11 |
| <i>HCL</i> | 12 |
| <i>Infosys</i> | 13 |
| <i>Logicalis</i> | 14 |
| <i>Stratix</i> | 15 |
| 4.2 NETWORK SERVICE PROVIDERS | 16 |
| <i>AT&T</i> | 16 |
| <i>BT Global Services</i> | 17 |

| | |
|---|-----------|
| <i>Cisco</i> | .18 |
| <i>Telefónica</i> | .19 |
| <i>Verizon Enterprise</i> | .20 |
| 4.3 PC-HERITAGE VENDORS | 21 |
| <i>CompuCom</i> | .21 |
| <i>Computacenter.</i> | .22 |
| <i>Dell</i> | .23 |
| 4.4 IT OUTSOURCING VENDORS. | 24 |
| CSC | .24 |
| <i>Unisys</i> | .25 |
| | |
| SECTION 5: CONCLUSIONS AND RECOMMENDATIONS | 26 |
| 5.1 WHERE THE MARKET IS GOING – FROM KNEE-JERK REACTION TO SERVICE OPPORTUNITY | . 26 |
| 5.1.1 <i>Mobility Is ‘Siloed’ From Workplace Strategy</i> | .26 |
| 5.1.2 <i>Enterprise Mobility Is a Classic Service-Provider Opportunity.</i> | .27 |
| 5.2 STAGES OF MOBILE ADOPTION | 27 |
| <i>Figure 2: Stages of Mobile Adoption</i> | .28 |
| 5.3 LOOKING AHEAD IN MANAGED MOBILITY | 29 |
| | |
| INDEX OF COMPANIES | 30 |

SECTION 1

Executive Overview

1.1 KEY FINDINGS

- IT departments must either develop competency in mobility or outsource mobile deployments to a managed service provider, which is a strategic decision regarding a company's money, time and other resources. At a time when IT budgets are stagnant and there is pressure to do more with less, outsourcing becomes increasingly attractive.
- The use of cloud services means that service providers can essentially 'plug and play' management tools. Service providers can also multi-source technologies so that exposure to an individual vendor's economic health is not as much of a concern.
- We are in an era of austerity for IT budgets. In 19 of the past 24 quarters, more IT shops have planned to decrease spending than increase it, compared with only five quarters where a majority of IT shops planned to increase spending. This downward pressure on IT budgets comes at a time when the demands to support employees are at an all-time high.
- The continued invasion of new applications and devices creates a need to scale mobile deployments. A managed service can be treated like a simple utility, allowing IT to turn services on and off as needed.
- Focusing on a managed service provider could, however, limit an organization's ability to test the market in a bake-off to see which enterprise mobility management (EMM) vendors and tools could most directly meet their needs. .
- IT organizations are often architected to support company-owned assets. A managed service provider can help organizations design and implement a secure BYOD policy.
- IT departments are responsible for the end-to-end experience of delivering mobility for employees, but do not generally have the skills or network reach to own the end-to-end experience – and this creates a significant managed services opportunity.
- In 2013 buyers have largely been making quick, tactical decisions to support mobility, and it will be another year or so before organizations begin to think more strategically about mobile deployment and business innovation.
- As deployments become more strategic, IT departments will face increased pressure to make critical decisions around mobility management – whether and how to develop internal competency around it or outsource for this capability.
- Given the rapidly developing and fragmented nature of the mobile technology supplier landscape, service providers have an advantage in that they can more easily multi-source technology and invest in skills development than the typical buyer can.
- EMM vendors are targeting the enterprise directly, so managed service providers need to demonstrate value in ways that pure-play EMM vendors cannot.

1.2 METHODOLOGY AND RESPONDENT DETAILS

This report contains both qualitative and quantitative research from 451 Research's Mobile Enterprise research team, as well as from fellow 451 Group subsidiary the Yankee Group. 451 Research's qualitative insight is based on dozens of interviews with enterprise mobility management vendors, as well as several strategic consulting discussions with leading CIOs and senior IT managers. Our interviews with vendors provide insight into key value propositions for each mobile management method. Our frequent engagements with large-scale IT leaders give us insight on how these managers plan to deal with large populations of enterprise mobile users.

Reports such as this one represent a holistic perspective on key emerging markets in the enterprise IT space. These markets evolve quickly, though, so 451 Research offers additional services that provide critical marketplace updates. These updated reports and perspectives are presented on a daily basis via the company's core intelligence service – 451 Market Insight. Forward-looking M&A analysis and perspectives on strategic acquisitions and the liquidity environment for technology companies are also updated regularly via 451 Market Insight, which is backed by the industry-leading 451 M&A KnowledgeBase.

Emerging technologies and markets are also covered in additional 451 practices, including our CloudScape, Datacenter Technologies (DCT), Enterprise Security, Information Management, Infrastructure Computing for the Enterprise (ICE) and 451 Market Monitor services. All of these 451 services, which are accessible via the Web, provide critical and timely analysis specifically focused on the business of enterprise IT innovation.

This report was coauthored by Chris Hazelton, Research Director for Mobile and Wireless, and Katy Ring, Research Director for IT Services.

Chris Hazelton – Research Director, Mobile & Wireless

Chris runs the Mobile and Wireless research practice, which covers hardware, software, and services for both enterprise and consumer mobility markets. His research focuses on enterprise mobility management supporting smartphones and tablets in business. He is primarily interested in the shift in enterprise computing from desktop to mobile. Prior to joining 451 Research, Chris covered worldwide smartphone trends for IDC. He focused on the convergence of mobile air interface technologies and advances in device component technologies, which impacted the designs and capabilities of smartphones in both consumer and enterprise markets. Chris has been quoted on mobile technology issues by publications such as the Wall Street Journal, Bloomberg, CBS, ComputerWorld, Fox Business, InformationWeek, Investors Business Daily, MacWorld, TheStreet, Reuters and Wired. He sits on the Editorial Advisory Board for Mobile Enterprise Magazine. Chris has presented and moderated panels at numerous events such as CES, CTIA, venture capital tech days, as well as serving as director for 451 Research's Client Conference.

Katy Ring – Research Director, IT Services

Dr. Katy Ring has more than 25 years of experience in the IT industry, providing strategic advice to C-level executives at vendor and end-user organizations. She has developed strong research-based expertise and has focused on areas where the global IT service delivery model is changing, including cloud services, the evolving CIO role, innovation, sustainability and global sourcing of labor. Most recently, Katy led K2 Advisory, a research resource for CIOs, their senior colleagues, and suppliers. Before K2, she spent 12 years at Ovum Research, leading research in emerging software and services markets, and developing the company's Outsourcing Practice. Before her tenure as a Principal Analyst and Practice Leader at Ovum, Dr. Ring was a journalist with publications, including Computer Weekly and Computergram International, and was a founding editor of Software Futures.

Any questions about the methodology of this report should be addressed to Chris Hazelton at: chris.hazelton@451research.com

For more information about 451 Research, please go to: www.451research.com

SECTION 2

Definitions

Here we define the products and services that managed service providers (MSPs) offer. These are the primary offerings that underpin managed mobility services. Key differentiators for these MSPs are which of these offerings they provide, and of those, which represent their core focus.

Managed Mobility Service – Outsourcing of day-to-day and direct management of IT activities that support the use of mobile devices. These activities span the entire lifecycle of a mobile device, including hardware acquisition, provisioning of the device with applications and services, and also controlling the cost of device connectivity.

Enterprise Mobility Management – EMM is the overarching category for all tools that support mobility in the enterprise. EMM tools and vendors provide IT with the means to manage mobile devices, applications, content and costs. As mobile management tools wax and wane in an ever-evolving market, EMM vendors are building portfolios of management tools to remain relevant to customer demands around supporting their mobile workers.

Device Lifecycle Management – This aspect of managed mobility focuses on the acquisition, provisioning and eventual de-provisioning of mobile devices. These services aim to put devices in the hands of users that will run ‘out of the box’ without issue. Traditional services manually provisioned devices with apps, but this is being replaced by over-the-air (OTA) app management.

Mobile Application Management – MAM focuses on providing detailed control of enterprise applications on smartphones and tablets. Basic levels of MAM include an app catalog, provisioning and update management. Custom, in-house or third-party applications can be recompiled by the developer with a software development kit (SDK). An alternative is for an IT admin to wrap custom, in-house or third-party applications with a management layer. In both cases, with SDKs or app wrapping, the developer must make a version of the app available for recompiling or post-compile wrapping. This means that apps in public app stores cannot be fully managed using MAM, which focuses on distribution of applications and managing their use, licensing, policies and removal. Security and management policies can be added, particularly where app developers have not provided this capability natively. Policies include encryption of data, preventing the cutting or copying of data, use of app-level VPNs, and checks for device integrity.

Secure Containers – These applications provide an encrypted silo that offers a secure messaging and personal information management service, and in some cases, a separate environment for mobile applications. Secure containers can provide a third-party email client that is encrypted and separate from the native email client on the device, and can be provisioned and de-provisioned over the air by IT admins. While the secure container space had been limited to a few vendors, in the past year it has been expanding as several vendors have already or will soon be moving into this market. Containers provide a consistent UI that IT

can manage across iOS as well as several flavors of Android. As the market increasingly focuses on mobile applications, container vendors are centering their efforts on applications. Similar to MAM vendors, they are leveraging both SDKs and app wrapping to allow custom, in-house or third-party applications to run within their encrypted container. To manage files and content used by these applications, mobile file-sharing and synchronization platform vendors have partnered with container vendors (and other mobile management vendors) to ensure that their applications can live within these environments.

Mobile Content Management – The need to secure enterprise data that is used by applications on a mobile device has driven the need for mobile content management (MCM). The lack of a file and folder system in iOS has created a market for vendors to provide mobile file-sync services. The primary value for both organizations and users is the ability to view content from any device at any time. These tools also act as local repositories for data on devices, allowing for versioning control when a single user is working across devices or the user is collaborating with others. Benefits of MCM include the ability for IT to apply security and usage policies to specific file and data types, to push data to appropriate users, and to get alerts when individual files are accessed.

Mobile Device Management – MDM leverages an installed client on the device, or semi-private APIs on iOS, to provision, manage and de-provision mobile devices over the air. To be effective, MDM must support more than one mobile OS to be relevant to IT departments that are increasingly unable to prescribe or standardize on one mobile platform. MDM allows IT to on-board large populations of devices by pushing the client or profile to the device via email, SMS or a website. During the provisioning process, MDM sets up corporate email, PIN/password access to the device, Wi-Fi access point credentials and VPNs. Increasingly, MDM vendors are pushing private app catalogs and content containers to devices. During the life of the device, MDM allows IT to track the device location, inventory installed applications and monitor health statistics. In the case of a lost or stolen device, IT is able to remotely wipe the device, removing both corporate and personal data. In the case of employee-owned devices, IT is able to remove corporate email and applications installed through a corporate app store (part of MAM) when necessary.

Telecom Expense Management – TEM involves a set of software and services focused on managing an organization's access to telecom operator services. TEM services are designed to centralize all telecom data into a single repository to control costs. For mobility, TEM software and services plug directly into the acquisition and billing systems of mobile network operators. Benefits include the ability to pool the organization's users to achieve economies of scale for buying devices, as well as for voice and data services. TEM capabilities for mobile are increasingly being baked into other EMM offerings.

SECTION 3

Drivers and Challenges for Managed Mobility

3.1 DRIVERS FOR ADOPTING MANAGED MOBILITY

Managing enterprise mobility is not easy. Determining the appropriate policies and tools for the use of mobile devices and applications within an organization requires significant expertise, flexibility, time and capital. Not all organizations are willing to invest in mobility management and would rather outsource these efforts, particularly as organizations must support an increasing number of mobile users.

3.1.1 PRESSURE TO DO MORE WITH LESS

As the technologies that are used to empower employees and make them more productive continue to evolve, IT must decide whether it will buy or outsource them. It is a decision about where and when to invest a company's time, money and other resources in products. IT departments have finite amounts of these resources, so the opportunity to save this capital via outsourcing can be highly attractive. The other side of the coin is the ability to tightly control the use of technology by owning and running products on premises. The main argument against outsourcing is that IT departments may have built a strong competency around certain technologies that support a company's core business.

Few IT departments have built a strong competency in mobility, and even fewer view mobility as core to their business. While mobility is starting to become a necessity for business activities, many companies are really just beginning to develop a mobile strategy. For this reason, as employees are demanding support for their mobile devices, IT is at a crossroads: either develop competency in mobility or outsource it to an MSP. At a time when IT budgets are stagnant and there is pressure to do more with less, outsourcing becomes increasingly attractive.

3.1.2 KEEPING UP WITH ADVANCEMENTS IN EMM

In the fast-paced world of mobility, the decision to leverage an MSP is also driven by the ability to remain agnostic with regard to EMM vendors' evolving approaches to managing mobility. For example, MDM has gone from 'en vogue' to being viewed as too heavy-handed by some in the short few years that it has been on the main stage.

Outsourcing mobility management can provide a level of abstraction as service providers are also evolving their offerings. The use of cloud services means that service providers can plug and play management tools. Service providers can also multi-source technologies so that exposure to an individual vendor's economic health is less of an issue. This is particularly significant given that many EMM vendors in the market are rather young companies. At a time when the EMM space is going through a significant amount of M&A activity, service providers can offer some stability.

3.1.3 THE EVOLVING DEVICE LANDSCAPE

The typical lifespan of a mobile device is just 18 months. By comparison, laptops or desktops are commonly used for three or more years. This shorter lifespan is driven largely by device-vendor advances, and for employee-liable devices, by mobile-operator subsidies in exchange for a service contract. Mobile device vendors are hard-pressed to launch innovative new devices at a rapid pace. This means that IT departments face an influx of new devices nearly every month. And the fragmented evolution of Android only compounds this issue, where IT must not only deal with new devices, but also new versions of operating systems.

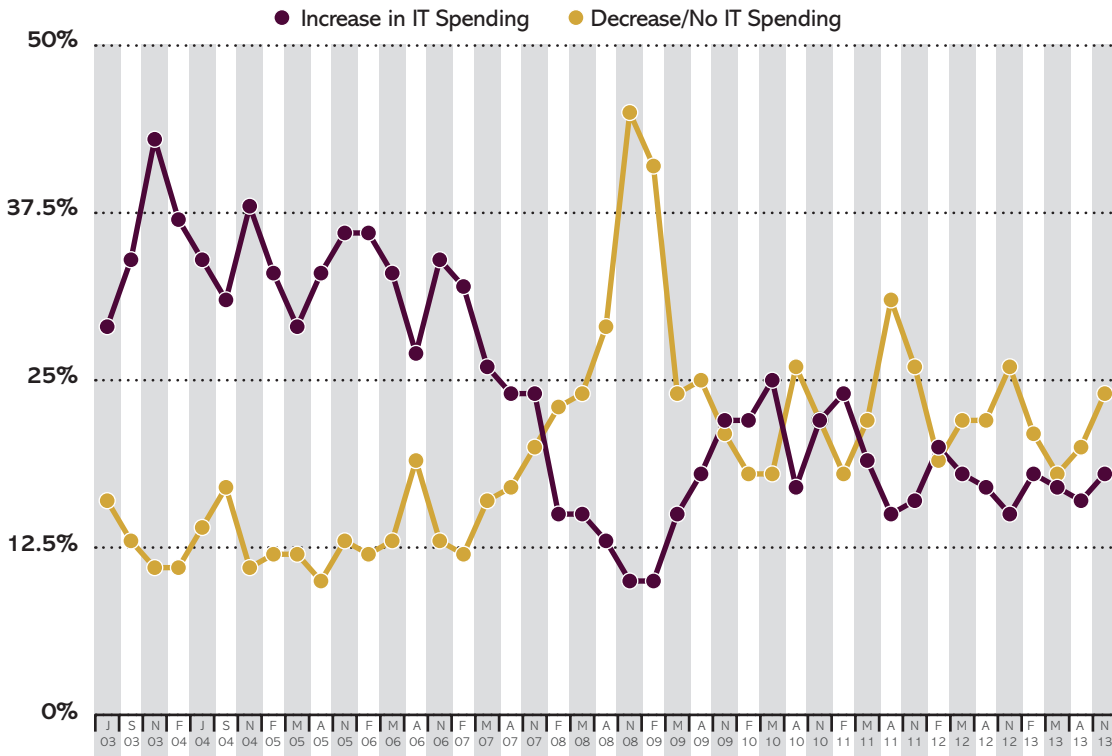
3.1.4 PREDICTABLE COST FOR MOBILITY

The biggest challenge that IT departments must contend with is not the technology demands of their users, but the budgetary demands of their CFOs. According to ChangeWave Research, a service of 451 Research, from November 2007 to November 2013, IT departments have overwhelmingly more often projected a decrease in future quarterly spending than an increase. This illustrates an era of austerity within IT. In 19 of the past 24 quarters, more IT shops have planned to decrease spending than increase it, compared with only five quarters where a majority of IT shops planned to increase spending.

This downward pressure on IT budgets comes at a time when the demands to support employees are at an all-time high. IT is forced to support deployments both on-premises and in the cloud. IT is also forced to support a growing number of devices, which is only going to get more complicated with the growth of M2M, the 'Internet of Things' and wearable computing. Requirements and skills needed to manage mobility are going up, while IT budgets are stagnating.

FIGURE 1: PROJECTED IT SPENDING

Regarding your own company's IT budget, do you think you'll see an increase, decrease, or will IT spending remain the same for quarter vs the current quarter?



Managed mobility can provide a more consistent and budget-friendly experience for IT shops. There is no guarantee that a managed mobility service will be cheaper, but its cost can be more consistent. IT can more easily plan for adding users when it doesn't need to worry about the back-end infrastructure to support them. Instead of making capital investments in infrastructure, IT departments need only commit operational budget to support changes in the user base. Managed mobility can mean more predictable costs than if IT were to handle mobility on its own.

3.1.5 COMPLEXITY

The number and range of tools available to employees today continues to grow at a pace that IT departments may have trouble keeping up with – or even want to keep up with. While technology advances, so too, does the role of IT as technology is becoming more important to business performance. Mobile applications are becoming more common in organizations, and IT, whether it wants to or not, will become increasingly responsible for these applications and the data that goes through them. The tools to develop and manage mobility are facing some growing pains as the market matures.

In terms of app development, organizations must be increasingly responsive to the need for change due to the growing number of mobile devices and users, leading to more agile, collaborative 'devops' implementations. Mobile tools and frameworks, particularly

HTML5 and JavaScript, are facilitating faster iteration and greater interaction and responsiveness in deploying mobile apps and devices. Mobilization of employees is forcing organizations to support new technology to avoid losing time, money and customers.

For applications built internally or outsourced, it is important that organizations are able to enforce company policies. The methods for managing and securing mobile applications represent an area where there is significant transition as the industry battles between pre-compile (using an SDK) and post-compile (app wrapping) services to apply policies to mobile apps. While we see app wrapping gaining significant ground due to scalability, there are several hurdles for this approach to overcome – namely, Apple’s reluctance to allow app wrapping of applications in the App Store.

3.1.6 MANAGED SERVICES THAT SCALE

As mobility gains traction in the enterprise, it can be difficult for IT to forecast demand for mobile services. The ongoing invasion of applications and new devices highlights a need to scale mobile deployments. A managed service can be treated like a utility, allowing IT to turn services on and off as needed. Large-scale growth has less of an impact on organizations with managed services. Particularly for organizations that are rapidly growing, whether organically or through M&A, a managed service will help IT avoid the stepped capital costs that can be painful to bear and take several years to pay back.

Business units are often at the forefront of mobile strategy within an organization, looking at mobile technologies to serve specific needs before engaging IT. Large sales divisions may want to shift computing from laptops to tablets, upending the current skill-set of IT in supporting traditional computing. At times these decisions are made without considering the impact on IT and a company’s current infrastructure. A managed mobility service can reduce the impact of large-scale directional shifts made by business units around mobility.

3.1.7 FLEXIBILITY AND RANGE OF SERVICES

While the EMM space is expanding rapidly, there are only so many services that EMM vendors provide. When it comes to dealing with the entire lifecycle of a mobile device, IT must engage with carriers, EMM vendors and developers to on-board a device. Carriers may only support their subscribers. Device vendors can only support their own devices. And EMM vendors don’t provide deep-enough services. A managed mobile service can be that one-stop shop for IT to deliver devices, applications and connectivity. This would allow IT to shift its focus from being a reactive agent supporting users’ near-term needs to being an agent for business transformation.

In a world that is increasingly a mix of BYOD and corporate-liable devices, managed service providers are evolving to address this complexity. IT organizations are often architected to support company-owned assets, while a managed service can help organizations design and implement a secure BYOD policy.

3.2 CHALLENGES TO ADOPTING MANAGED MOBILITY

A managed service is not a panacea for all of an organization's mobile challenges. Many companies can manage and support their mobile needs, having built competency within their own IT shops.

3.2.1 MOBILITY IS CORE TO BUSINESS

For organizations that have put a strong emphasis on mobility, outsourcing the management and security of these tools does not make much sense. If mobility is core to an organization's value proposition for its customers, moving the control of these assets outside the organization does not make much sense either. Outsourcing technologies means giving up several degrees of control – in day-to-day operations and also in the future direction of investments.

If mobility is truly core to a organization's value proposition, there is likely a strong interest in leading the market in terms of the use of mobile technology. A managed service provider whose goal is to support a wide range of customers will not move as rapidly as an organization that lives and dies by its mobile services.

3.2.2 VENDOR LOCK-IN, VENDOR ABSTRACTION

While most managed service providers are able to multi-source with regard to EMM vendors, there is still a certain amount of vendor lock-in. An MSP could choose a partner vendor based on more than outright capability, as business priorities and margins come into play. This means that the priorities of the MSP could come before the needs of customers who are depending on those EMM tools to support their business.

Focusing on an MSP can also limit an organization's ability to test the market in a bake-off to see which EMM vendors and tools could most directly meet their needs. When exploring the use of a managed service, IT should also look to see if buying directly from an EMM vendor makes sense, and can still meet their needs.

SECTION 4

Vendor Assessments

The opportunity in enterprise managed mobility services is attracting providers from various market sectors, since every buyer organization is having to adjust to a world that is using mobile technology for a growing variety of interactions. The main types of providers coming to market with EMM services are systems integrators, network service providers, PC-heritage providers and IT outsourcing vendors.

What follows is not intended as an exhaustive representation of all EMM service providers. Rather, it should be considered as an overview of the different types of providers and their capabilities.

4.1 SYSTEMS INTEGRATORS

For the systems integrators, enterprise managed mobility is typically viewed as a natural development of the infrastructure services they offer. This is because it is seen as an evolution of their workplace productivity portfolios. As the market matures, the focus will shift to management of corporate data and ‘mobilizing’ the application estate, which will play more naturally to systems integrators’ strengths, especially for players with a stronger application services capability.

ATOS

In the past, as part of the workplace services that European SI Atos provided, mobility management was all about managing BlackBerry and Windows mobile devices, whereas now it is about offerings managing any type of device across the infrastructure estate. Atos manages both applications and devices by putting business policies around tools. Its offerings are modular, based on customer requirements. The company’s Anytime Workplace and Anytime Mobile Device offerings are cloud-based services, whereas Managed Mobile Device is an on-premises approach. Buyers select the relevant modules as part of an Atos response to an RFP.

The company’s systems integration practice has mobility offerings in a wide range of business-related functions – from machine-to-machine (M2M) telematics services in manufacturing and insurance, as well as patient services and clinical records in health-care, to field workforce management solutions. Delivery of these offerings might encompass Web, native applications and hybrid applications, which utilize differing end-user environments over reusable component services. This could include the Context Broker Platform (real-time analytics and content provision); the enablement of a private application store (Atos My Market) into which a customer can put their own applications; or the delivery of a single application to multiple devices through virtualization or mobile enterprise application platforms (MEAPs). Customers may also choose whether to implement on-premises, via cloud services or with the Atos Canopy elastic cloud platform.

SWOT Analysis

| | |
|---|---|
| <p>STRENGTHS</p> <p>Atos has the pedigree and expertise in managed workplace services to offer existing outsourcing clients and new prospects credible on-premises and cloud-delivered managed mobility services.</p> | <p>WEAKNESSES</p> <p>Buyers for managed mobility services are also looking for help in managing telecom expenses as part of the attraction of a low-cost outsourced offering, which Atos does not yet offer. However, it is planning to add this capability to its portfolio at some point.</p> |
| <p>OPPORTUNITIES</p> <p>Managed mobility services offer growth opportunities for all MSPs, since IT buyers are keen to outsource this enterprise requirement. However, Atos is also in a position to win higher-value contracts via its Smart Mobility systems integration business.</p> | <p>THREATS</p> <p>With the entry into the managed mobility market of IT vendors such as Cisco, it remains to be seen whether managed mobility contracts will continue to be dominated by managed workplace service vendors such as Atos, or buyers will begin to look to other types of disruptive new entrants for device and data management</p> |

HCL

Within HCL's end-user computing portfolio, mobile workplace services enable operating system heterogeneity, including iOS, Android and Windows XP, 7 and 8; the provisioning of app stores; variable ownership models; and new-user support models.

Key partners for the company in the MDM area include SAP, MobileIron, AirWatch and GoodCloud. HCL also offers consulting services, spanning assessment, migration, build and design, deployment, application rationalization and proof of concept. Its application support and management model for mobility is typically facility-based, because the environment is changing rather than the application itself. It is often simply a case of upgrading applications and applying new features (e.g., voice-enabling applications).

As part of its assessment and testing consultancy offering, HCL often gets involved with pre-tool evaluation, where the current and planned service-consumption model is considered. It then generates a recommendation report for the client, advising on cloud deployment vs. on-premises deployment. Consulting engagements are typically conducted with the IT department, which often does not have a mobile specialist. Sometimes the customer may have already acquired an MDM platform but needs help with policy development and management in whitelisting and blacklisting applications, for example. Clients often need help with working out support – deciding whether there should be a separate service desk for mobile devices, say. This all forms part of the operations-optimization services that HCL provides.

HCL's Enterprise Application Services division has recently extended its overall partnership with SAP by signing a new global managed mobility agreement, which will now permit HCL to resell, implement and host SAP offerings, including the SAP Mobile Platform, the SAP Afaria MDM offering and SAP mobile apps.

SWOT Analysis

| | |
|--|--|
| <p>STRENGTHS</p> <p>Of all the Indian-heritage vendors, HCL probably has the longest track record in providing end-user computing services to blue-chip companies in the West. So its managed mobility offerings are a natural extension of this capability and should be well received by clients, especially since its go-to-market strategy is pitched at mainstream market requirements around MDM.</p> | <p>WEAKNESSES</p> <p>HCL is not a product vendor, which means that its end-user support and its device-procurement offerings rely on careful growth and management of its partner ecosystem. In a fast-growing and heavily vendor-populated service opportunity, ensuring that it has good deals throughout its supply chain means it must deliver accounts of scale to remain significant to partners. The recent agreement with SAP suggests it is on track so far.</p> |
| <p>OPPORTUNITIES</p> <p>HCL has only penetrated roughly a third of its existing end-user computing accounts with its managed mobility offering, so it has strong growth opportunities within its own account base, as well as the opportunity to work with new prospects.</p> | <p>THREATS</p> <p>The entry of more technology-product vendors directly into the market as service providers themselves will create a disruptive commodifying effect in managed mobility services, which HCL will need counteract with higher-value services. To do this, it will need to accentuate its differentiators in the market.</p> |

INFOSYS

Infosys set up its enterprise mobility practice in 2011 as a growth engine. Infosys Managed Mobility brings together mobile application consulting, application development and management, mobile device management, and mobile infrastructure management within a comprehensive offering.

Infosys has capabilities to integrate the MDM dashboard with existing systems management tools. The challenge is that interoperable provisioning and policy enablement is not currently part of most end-to-end MDM platforms. The company is working on devising an offering using Microsoft Active Directory policy to design a solution, and is also evaluating CA Technologies in this area. Infosys extends the security framework used in the organization in conjunction with the capabilities of the MDM platform to create a certificate-based process. The company enforces security policies – e.g., data encryption of the device. It also uses identity and access management offerings recommended by its security team that can support data classification for mobile distribution.

Infosys also has a new offering in the form of mobile application management (MAM) – to manage different instances of mobile applications across operating systems, devices, enterprise policies and versions – which it offers in conjunction with its white-label mobile application marketplace, Flypp. This provides a digital ecosystem for enterprises and mobile operators to improve customer stickiness by providing operators with access to a repository of applications, an application store-front and third-party partnerships for application programming. It is designed to support more than 4,000 makes and models of mobile devices, ranging from basic feature phones to smartphones and tablets. The idea is that Flypp connects consumers, enterprises, retail brands, media companies and advertisers. The Flypp ecosystem provides roughly 250,000 applications and content services spanning global, cross-sector items, as well as local and industry-specific applications.

SWOT Analysis

| | |
|---|--|
| <p>STRENGTHS</p> <p>Infosys has the capability to develop a strong managed mobility business in the medium term, especially as enterprise buyers start to look more to investment in mobile application development and management, because application services is an area where it is better known as a service provider.</p> | <p>WEAKNESSES</p> <p>The company's main differentiator in this market lies with its app store ecosystem, Flypp, and this fulfills a longer-term strategic enterprise-buyer requirement. In the meantime, Infosys needs to appeal to buyers looking for low-cost BYOD offerings, and in order to do this, it needs to move more quickly to an annuity-based pricing model, more in line with most competitors.</p> |
| <p>OPPORTUNITIES</p> <p>The stronger enterprise opportunity for Infosys is in mobile application management, but in order to be in a good position to take market share in this embryonic area, it needs to appeal to the more tactical enterprise-buyer requirements that currently exist around enterprise BYOD plans. Its Flypp marketplace can be deployed as an enterprise app store, and also offers white-label growth potential with mobile operators in the telecom supply chain.</p> | <p>THREATS</p> <p>Among Western buyers, Infosys is not a company readily associated with infrastructure services or mobility services right now, so it may miss out on many RFPs that it could respond to. This could mean that it falls behind other service providers in carving out market share in this important part of the infrastructure services market.</p> |

LOGICALIS

As part of its consultancy service, UK-headquartered international IT integration and managed service provider Logicalis provides its Mobility Experience Framework to enable organizations to design and implement a BYOD and mobility strategy best suited to their individual corporate requirements. If the client requires, Logicalis can then manage the service, too. This framework has been launched in 20 countries.

For EMM, Logicalis primarily offers management of the on-premises, fixed mobile infrastructure for large, complex office environments or for specific vertical-sector requirements. It offers cloud-based services for virtual desktop and mobile applications, and it has cloud portals to support this operated in Latin America, Europe and the US.

Logicalis does not get involved with endpoint device management (with the exception of Apple devices in South America, where it is an Apple Enterprise Partner), so it is agnostic about operating systems. The company works with third-party service providers to manage the devices and offer break/fix services, etc. Logicalis operates in the market for management of the corporate-owned device, managing the infrastructure provided and wrapping this up with a device management service provided by partners.

SWOT Analysis

| | |
|---|--|
| <p>STRENGTHS</p> <p>Logicalis is offering services that draw on the company’s long heritage in managed communication services, and is providing an easily understood portfolio to address the requirements of the mainstream market. It is also making investments to ensure that it is developing and strengthening the portfolio in order to keep pace with market requirements.</p> | <p>WEAKNESSES</p> <p>Logicalis does not provide any expense management capabilities as part of its offering, and this may be something to consider adding within its partner ecosystem because it’s an area where many buyers are looking for help.</p> |
| <p>OPPORTUNITIES</p> <p>There are further opportunities in developing anchor clients within specific vertical-sector areas, which can then open up those sectors for the company. A larger ‘horizontal’ opportunity lies in transitioning a customer organization’s corporate infrastructure into the new wireless spectrum – an area that Logicalis is already assessing.</p> | <p>THREATS</p> <p>There is a danger that Logicalis (along with many other vendors that are not consulting-led) will respond to ‘point’ engagements for EMM services now, and then lose the larger, higher-value service opportunity to a competitor in a year or two when the point offering it provided at the request of the customer is seen to have shortcomings.</p> |

STRATIX

An MSP targeting the Fortune 1000, Stratix is 20-year-old company that is moving with the mobility market, having first focused on ruggedized devices and now supporting a wide range of mobile devices. With 175 employees and over \$125m in revenue, Stratix has more than 250 customers. While 65 of these customers are mobile-only, all 250 have more than 1,000 mobile users, and some customers are in excess of 20,000 users.

For a customer with 5,000-10,000 devices, Stratix says it can be up and running within 90 days. The company provides device lifecycle management, which involves hardware and firmware – even going so far as to box up all the cables a user will need – essentially providing everything required to be up and running ‘out of the box.’ One of Stratix’s larger customers is American Airlines, which is using the MSP to support its deployment of over 16,000 Samsung devices for in-flight services. Providing cradle-to-grave support for mobile devices, Stratix works with HR, finance and IT departments to support end users.

One of Stratix’s main value propositions is its capability for reverse logistics. In the initial stages of a customer engagement, Stratix helps to build use cases for deployment – understanding what each business unit’s mobility needs are, running blueprint sessions, validating use cases, and then formalizing requirements for mobile management. MDM partners include AirWatch, MobileIron, SAP and SOTI. As an MSP, another goal for Stratix is to “prevent the swivel chair” by offering a single pane of glass for IT.

Stratix has been a longtime supporter of Windows Mobile devices, but in the last couple of years, it claims to be one of the top five suppliers for iPhones in the enterprise, and it is also a major supplier for Samsung devices in the enterprise. The emphasis today is on device lifecycle management; Stratix does not help build or design mobile apps, but it will pre-install software packages on devices. Down the road, it may look to integrate MAM services.

SWOT Analysis

| | |
|---|--|
| <p>STRENGTHS</p> <p>Stratix was an early player in the managed mobility market, and it is now one of the largest suppliers for managed iPhones and Samsung devices in the enterprise.</p> | <p>WEAKNESSES</p> <p>The company's managed services are only available in the US, so it misses out on larger multinational opportunities.</p> |
| <p>OPPORTUNITIES</p> <p>As Stratix's large customers are migrating away from Windows Mobile, there is a significant opportunity to extend those relationships with iOS and Android management.</p> | <p>THREATS</p> <p>As the number of companies that support BYOD continues to grow, there is a risk to Stratix's value proposition around end-to-end device lifecycle management.</p> |

4.2 NETWORK SERVICE PROVIDERS

Mobile network operators such as AT&T are clearly in a very strong position to deliver managed mobility services for the enterprise. But, more generally, network service providers such as BT and Cisco also have opportunities because the network infrastructure is so critical to the performance of enterprise applications that are accessed via mobile devices.

AT&T

Central to AT&T's managed service offering is the ability to deliver devices and applications – built or bought, hosted in AT&T datacenters, and all powered by its own nationwide network. Using AT&T's APIs, services running on AT&T's 3G and LTE networks can provide greater network visibility for organizations looking to manage their mobile workforce. On the device side, AT&T has strong relationships with device vendors as a major channel partner for sales to both consumers and the enterprise, which means it can provide large-scale device lifecycle management.

AT&T has built its own prepackaged apps for fleet management, as well as field service and sales force automation. For organizations that want to build or customize apps, AT&T offers app development tools that provide easier, repeatable processes for getting apps out the door. Whether custom or out of the box, these applications can be hosted by AT&T. As a managed service, AT&T is able to supplement or replace an organization's helpdesk by providing tier-two to tier-four support for all of these offerings.

AT&T has a strong list of partners in providing its managed mobility services, including MDM vendors AirWatch, Good Technology, McAfee, MobileIron and OpenPeak. On the app development side, Antenna Software, Kony Solutions and Verivo provide tools for AT&T customers. For mobile Web development, AT&T also supports PhoneGap and Sencha.

SWOT Analysis

| | |
|---|---|
| <p>STRENGTHS</p> <p>A very large base of customers allows the mobile operator to cross-sell a number of business services – 75% of customers buy two or more services.</p> | <p>WEAKNESSES</p> <p>The perception is that AT&T is ‘voice and data.’ It does not get enough recognition that it is an MSP with strong enterprise credentials, which could hamper its efforts.</p> |
| <p>OPPORTUNITIES</p> <p>Despite the high attachment rate for multiple service sales to its customers, there is still significant opportunity to sell managed services to its existing customers.</p> | <p>THREATS</p> <p>As other mobile operators are seeing pricing pressure on traditional voice and data networks, they are also moving into managed services with a strong emphasis on mobility.</p> |

BT GLOBAL SERVICES

BT’s portfolio has built-in Cisco Identity Services Engine and Prime reporting to provide granular management of mobile devices. To this it has added BT Mobile Application Management, which is a new service that enables customers to authenticate and secure applications via a portal, providing security policy requirements ranging from passcode access to a full VPN wrap. BT has also enhanced its Assure capabilities by adding Assure Secure Web, which provides additional security such as content inspection and malware/virus detection. MobileXpress Cloud Secure is a cloud version so that more users can be added quickly and securely with predictable costs.

Included in the portfolio is BT’s One Voice Anywhere app, which runs on BlackBerry, Apple or Android phones, enabling calls to be routed via the office, meaning that international dialing charges are lower or are added to the corporate bill. This saves on high roaming charges and means that business travelers can work as they would normally without a big mobile bill at the end of the month.

The telco has also added to its BYOD Advise Quick Start consulting capabilities. For BYOD beginners, BT already offers BYOD Strategy & Planning Quick Start, but has now added BYOD Ready Infrastructure Network Assessment Quick Start for more advanced buyers.

SWOT Analysis

| | |
|---|---|
| <p>STRENGTHS</p> <p>BT Global Services is addressing a key issue in BYOD head-on with its strategy of providing a portfolio that clearly targets cost reduction as well as offering transformational business change. Managed enterprise mobility is an area where having an international telecom brand such as BT provides credibility.</p> | <p>WEAKNESSES</p> <p>The weakness of BT's portfolio for many buyers will be that the company does not itself provide managed desktop services beyond the UK, and thus choosing BT for BYOD may well mean adding to the number of suppliers that the IT department has to manage, where BT is not already a managed network supplier.</p> |
| <p>OPPORTUNITIES</p> <p>BT clearly views BYOD as an international market play, with the intention that the portfolio offered can expand the number of non-UK customers that the company has. There may also be partnership opportunities in working with established workplace service providers to offer expense management capabilities for managed enterprise mobility.</p> | <p>THREATS</p> <p>The fact that Cisco itself has entered this market, albeit with a simpler offering that is only delivered from the cloud, suggests that BT will face increased competition in this space from the very technology vendors upon which it builds its own portfolio.</p> |

CISCO

Not widely known for its IT services capabilities, Cisco continues to grow this part of its business, and has recently launched Mobile Collaboration Management Services (MCMS) to its portfolio. Of course Cisco has been in the wireless LAN and collaborative products business for 20-25 years, but the MCMS offering has been incubating for two years, and was launched at the beginning of 2013 to help customers migrate to this type of workplace deployment as they roll out BYOD strategies.

The new MCMS offering is delivered from the cloud. It is designed to provide a platform to integrate with other Cisco collaboration and networking offerings. It is provided as either a stand-alone offering or as part of broader Cisco services. It has three main features:

- Basic device management of mobile endpoints (Cisco manages 45-50 million IP phones), but not of the devices when they are not connected physically, since this remains an internal IT management function. Cisco on-boards devices, manages security policies, reports on the mobility environment and enforces compliance actions.
- Application management, including distribution of in-house and public mobile apps to mobile handsets with appropriate policies.
- Content management and distribution from the cloud.

SWOT Analysis

| | |
|---|--|
| <p>STRENGTHS</p> <p>Cisco has the WLAN expertise and mobile endpoint management knowledge to be a highly credible player in this rapidly developing segment of the IT services market. The cloud delivery model it has chosen is also well matched with current market requirements.</p> | <p>WEAKNESSES</p> <p>As the market begins to mature, buyers may look for more of a mixed on-premises/cloud delivery model, which could mean that early wins may not translate into long-term, higher-value contracts for Cisco unless the offering expands to accommodate this.</p> |
| <p>OPPORTUNITIES</p> <p>There are many opportunities to develop offerings in this market, and Cisco is already thinking about the potential of machine-to-machine mobile management services, as well as the ability to create ‘smart’ capabilities by using network analytics to collect data from the mobile devices to improve BYOD strategies for enterprises.</p> | <p>THREATS</p> <p>With Cisco, one of the ever-present threats when it launches a new service directly to the market is managing its channel. The more services it offers directly, the more difficult the company makes it for channel partners to add value to their own services.</p> |

TELEFÓNICA

Managed services are a significant focus for Telefónica, and the European mobile operator is seeing healthy growth here. Its focus is to support large multinational corporations (MNCs) with mobile management products like app stores and MDM. The goal is to directly help customers with BYOD strategies, multi-OS support, and wireless services for multi-country environments. The MNC business has been prioritized, and the head of Telefónica Global Solutions now reports directly to Telefónica’s COO.

Telefónica’s MNC business has seen 6% revenue growth over the past year. It has completed 132 multimillion-euro deals, which are worth €6.2m on average. The main challenge for Telefónica is working in the US market, but it acknowledges this and states that it will not compete directly with US domestic carriers. That said, 25% of Telefónica’s MNC revenues come from US-based companies that are invoiced by their international divisions.

The main components of Telefónica’s MNC business are WAN management, mobility, security, UCC and cloud services. The future opportunity for Telefónica Global Services will be moving from supporting off-the-shelf apps to creating services for custom mobile apps. The operator admits it needs to expand its brand awareness outside of Europe and Latin America, where it is a dominant carrier. Its future focus on the US market will see Telefónica work closely with AT&T and Verizon. Also of interest is the Asian market, where it has a partnership with SingTel and a planned office in Japan. In Europe, Telefónica will work with a number of partners with the aspiration to lead the enterprise ecosystem for MNCs.

SWOT Analysis

| | |
|---|---|
| <p>STRENGTHS</p> <p>With over 320 million subscribers, Telefónica has a significant worldwide footprint with which it can expand its managed services.</p> | <p>WEAKNESSES</p> <p>Telefónica is unable to lead many large MNC accounts with companies that are headquartered in the US – an issue it addresses with partnerships.</p> |
| <p>OPPORTUNITIES</p> <p>With strong brand awareness in Latin America, Telefónica has a significant opportunity to support MNC expansion into emerging markets.</p> | <p>THREATS</p> <p>As MSPs do expand into emerging markets, Telefónica's MNC business will face more direct competition.</p> |

VERIZON ENTERPRISE

As a key part of its parent company's direct-to-business approach, Verizon Enterprise Services makes up 25% of Verizon's revenue, which was \$115.8bn in 2012. Verizon Enterprise Services has customers in over 80 countries and provides services to 98% of the Fortune 1000. It is able to leverage the billions of dollars Verizon has invested around LTE infrastructure, data-centers, cloud computing and security, all powered by a massive global network.

Verizon's managed services for mobility focus on five main areas: professional services, applications, devices, security, and financing. As a large mobile operator, Verizon is able to offer personal financing for a customer's employees in BYOD deployments. One of the mobile operator's largest customers has over 75,000 devices worldwide.

Part of its managed services play is the Verizon Enterprise Center, an online console for IT to manage services and devices. This console allows IT to dynamically monitor service performance, manage critical business functions, and enable quick access to account or service information. In terms of delivery, Verizon has both on-premises and hosted offerings. Only its hosted offerings come as a managed service. Its on-premises services leverage BlackBerry, BoxTone, Good Technology and VMware. Managed services in the cloud are MDM and mobile app development tools by SAP. It also has a self-service hosted offering with Divide's secure container to support Verizon's own cross-carrier EMaaS service.

SWOT Analysis

| | |
|--|---|
| <p>STRENGTHS</p> <p>Verizon Enterprise can leverage its advanced network infrastructure, datacenter infrastructure and device-vendor relationships to deliver targeted services to large enterprises.</p> | <p>WEAKNESSES</p> <p>While it is rapidly deploying LTE service in the US, the inconsistent use of spectrum frequencies for LTE around the world will require that, for several years, devices running on Verizon's network support both CDMA and UMTS in order to be used worldwide.</p> |
| <p>OPPORTUNITIES</p> <p>With a large base of customers and subscribers, and an equally sizeable direct sales force, Verizon is able to provide a strong channel for enterprise mobility partners.</p> | <p>THREATS</p> <p>Smaller MSPs and EMM vendors that provide carrier-agnostic services pose a threat even to a large operator like Verizon.</p> |

4.3 PC-HERITAGE VENDORS

For the manufacturers of PCs and their service-provider resellers, the trigger for EMM offerings is having a large desktop installed base into which such offerings can be sold. And there is a strong market logic for these players to enter this market since it is often the desktop support staff that are on the frontline when mobile devices are added to the technology estate. These players are mostly targeting the midmarket opportunity, with several hundred to several thousand end users, although Computacenter is focused on larger enterprises.

COMPUCOM

CompuCom does full lifecycle management for mobile devices through to their retirement. It provides mobile device management, mobile application management, mobile information management, mobile virtualization and mobile security via four service offerings:

- Enterprise mobile management – which includes two key components: mobile lifecycle services (providing acquisition and provisioning, mobile desk support, and desktside and depot support) and MDM (providing policy enforcement, management and reporting using products such as MobileIron, AirWatch, Zenprise, BlackBerry and MaaS360 by Fiberlink).
- Managed connectivity – which is an extension of network management for authentication, etc.
- Carrier services and expense management – an area the company is currently rewriting to address how it manages telecom expenses, especially around Wi-Fi.
- Mobile application management – this is an extension of application management capability on the PC side to the mobile space, especially around app stores and end-user requirements. The company provides application-development capability around iOS and Android devices by tying this into the client’s business goals.

SWOT Analysis

| | |
|---|--|
| <p>STRENGTHS</p> <p>CompuCom has a healthy heritage in end-user computing, which dates back to its origins as a PC VAR in the late 1980s. It has proved itself adept at providing IT services around end-user computing over the past decade or so, and has already developed a thoughtful consulting-led approach to assisting buyers with BYOD strategies.</p> | <p>WEAKNESSES</p> <p>A weakness of CompuCom’s sophisticated approach to managed mobility is that it is currently ahead of many buyer requirements. This gives other service providers time to play catch-up, which means it must continue to innovate to retain differentiation.</p> |
| <p>OPPORTUNITIES</p> <p>For CompuCom, the services it already offers in managed mobility offer good growth opportunity. It is also already exploring more vertical-sector capabilities for managed mobility in finance and retail around point-of-sale devices.</p> | <p>THREATS</p> <p>One threat to CompuCom’s flexible, vendor-neutral approach to the managed mobility market is that competitors with more standardized offerings that are designed to suit buyers looking for a commodity service may look more attractive to the mainstream market in the near term.</p> |

COMPUTACENTER

UK-headquartered European IT infrastructure services provider Computacenter sees EMM as an additive sale to its workplace services rather than as a separate business line.

'Contemporary Workplace' is the company's marketing and solution framework that was developed two years ago to support the Windows upgrade market because there is a lot of legacy catch-up taking place among customers. The idea behind the framework is to enable customers to keep moving as they evolve their contemporary workplace via a five-stage process: operating systems and apps; virtualization; communication; mobility; and collaboration tools. Customers are at different stages, and Computacenter offers this framework in a modular format so that their workplaces can be transformed in whatever sequence they require from the five stages offered.

Computacenter provides mobile email and collaboration around MS Exchange, Office 365 and Windows 8, and it supports endpoint access for iOS, MacOS and Android. It provides endpoint recovery services (both swap and break/fix services), as well as remote and self-service portals, and Windows 8 assessments.

SWOT Analysis

| | |
|---|---|
| STRENGTHS Computacenter has a strong heritage in providing workplace services and is well respected by the majority of its clients in this area. Consequently, it is in a strong position to add EMM services to its engagements when its clients are ready to address this requirement more strategically. | WEAKNESSES By focusing on Windows investment and by not yet packaging services in the EMM area, Computacenter may appear to be failing to address this fast-growing part of the workplace services market. While its current customers may be well aware of its capabilities to address EMM, it will be losing some new BYOD business because of its lack of clear market positioning in this area. |
| OPPORTUNITIES A greater market opportunity in the medium term lies beyond mobile device management with the ability to address mobile application management and the security of data accessed on the move. These are areas that Computacenter is currently assessing in its roadmap, with a view to making investments this year and next. | THREATS The main threat for Computacenter is that its marketing and portfolio development do not do its capabilities in the EMM area justice and that this makes it easier for competitors to win business against the company. However, because the majority of enterprise mobility services contracts it wins are not tendered in a competitive bid situation, this may be viewed as a limited threat by the company. |

DELL

The focus for any future transformation at Dell will be on services supporting the enterprise. As the enterprise becomes more dependent on mobility, there is an opportunity for the company to expand on its software offerings with mobile enterprise services. Within the Services Group, Dell focuses on mobile application enablement. The division includes a mobility consulting practice with subject-matter experts that will evaluate organizations to understand their mobility needs.

From there, Dell’s own team of developers builds mobile apps that are native or HTML5-based using agile software development methods. These developers also provide advanced user experience/user interface (UX/UI) work to ensure that applications meet expectations. Dell offers mobile app testing to ensure reliability and security across devices. From there, these apps are integrated into mobile app management from Dell’s Software Group to ensure that they are distributed to appropriate users, and that data running through these apps is secure. The company can manage the entire process to integrate these apps within existing IT infrastructure – as well as help determine proper monitoring and governance.

This is a growing area for Dell as the company puts more focus on services. The app development team within the Dell Services unit can provide validation for work done by an organization, or it can offer pure custom development, from design to implementation. This team is OS-agnostic, having worked to port BlackBerry apps to iOS as companies shift their mobile strategies. Dell Services has a strong focus on mobilizing SAP applications to support field workers that need access to business applications – including access to apps powered by SAP’s HANA.

SWOT Analysis

| | |
|--|--|
| <p>STRENGTHS</p> <p>Dell is one of the primary hardware providers for the enterprise, which means it has existing relationships with a large population of IT buyers that could consider it a key partner for future managed services.</p> | <p>WEAKNESSES</p> <p>The company’s hardware business does not yet have an answer to the growing percentage of computing that is moving to mobile operating systems. Awareness of Dell’s expertise in traditional computing does not automatically translate to awareness of its mobile expertise.</p> |
| <p>OPPORTUNITIES</p> <p>IT shops that are seeking continuity between the desktop and mobile worlds could look to Dell to provide controls for all hardware and software across the expanding range of devices coming into the enterprise.</p> | <p>THREATS</p> <p>The PC is under threat from mobile devices, so the revenue from Dell’s End-User Computing Group will not be an endless fountain of cash. Dell needs to transform its business quickly to support growth areas like mobile.</p> |

4.4 IT OUTSOURCING VENDORS

IT outsourcing (ITO) vendors are offering managed mobility as part of their end-user outsourcing services, since this is a technology tower that is contracted for separately under multi-sourcing agreements. They tend to be offering capabilities that are focused on added-value security services and are also more focused on management of existing BlackBerry estates than many other market players.

CSC

Managed mobility services for enterprises are a component within CSC's current workplace services portfolio, and have been offered for more than 10 years by the company. These services were driven originally by demand for BlackBerry device management from customers in the company's federal and private commercial business base. Management of BlackBerry devices remains an important component of CSC's strategy going forward.

CSC uses MobileIron as its MDM platform. The MobileIron VSP environment can be deployed as a physical hardware appliance or as a virtual appliance using VMware ESX. This environment interfaces with MobileIron enterprise and application resources, and is secured with firewalls. This means that clients have a controlled Wi-Fi environment within which to receive updates and policy control. CSC is currently working to align VSP views with system management views in the CSC datacenter tooling.

CSC is undertaking a transformation of the workplace services it offers and the 200,000 mobile devices managed in these services. Over the next two years, it will be significantly enhancing services in the areas of unified communications, desktop management and mobility managed services around end-user work styles.

SWOT Analysis

| | |
|--|--|
| <p>STRENGTHS</p> <p>CSC has significant experience in management of workplace services for clients, and it has pioneered outsourcing contracts using Google and Microsoft 'as a service' delivery for applications. This has provided it with a useful learning curve for offering new types of workplace services for enterprises.</p> | <p>WEAKNESSES</p> <p>In terms of the company's managed mobility services strategy, CSC seems to be adopting an approach reliant on one or two key technology vendor partners, thereby moving away from its pure vendor-neutral heritage. It could be argued that this makes sense as the industry moves to a new services model where technology vendors are themselves becoming service providers, and where cloud delivery renders vendor technology choices largely irrelevant. However, in a sector as dynamic as mobility, there is a weakness in locking yourself in with any single technology approach.</p> |
| <p>OPPORTUNITIES</p> <p>The new services that CSC plans to offer should enable it to viably cater to a broader buyer market, since standardized services should enable it to more comfortably provide services to the high end of the midmarket. The company's commitment to BlackBerry should also play well with large swathes of its existing customer base.</p> | <p>THREATS</p> <p>A big challenge the company faces is to bring its existing customers on its transformational journey while also attracting new buyers. The question is whether buyers will give CSC the benefit of the doubt and continue to sign up for services as the company transforms itself.</p> |

UNISYS

End-user outsourcing and support services form one of Unisys’ four main business areas, along with security, datacenter transformation and outsourcing, and application modernization. Unisys is now moving toward consolidating major initiatives across the entire company. Mobility and managed application services are the first two areas to receive this emphasis. Mobility services span the company’s end-user outsourcing business, as well as drawing on its consulting and integration services.

The Unisys Mobility Solutions offering has five main components:

1. Mobile environment management
2. Mobile application development
3. Mobile infrastructure
4. Mobile security
5. Mobile assessments and consulting.

This is an integrated offering, and Unisys does not go to market with just device management, application management or telecom expense management; it goes to market with an offering that manages the whole mobile environment. It provides end-to-end lifecycle management and support services for devices and applications, as well as the monitoring and enablement of devices. This is supported from the company’s three centers of excellence for mobility, located in India, Spain and the US. The offering is modular, so customers do not have to sign up for the whole package, but the company reports that IT departments are increasingly doing so.

SWOT Analysis

| | |
|---|--|
| <p>STRENGTHS</p> <p>Unisys has traditional strengths in workplace services, and its investment in developing its comprehensive managed mobility offering will help it retain its good reputation in end-user computing services.</p> | <p>WEAKNESSES</p> <p>The challenge with a comprehensive, integrated offering is that it may be too complex to appeal to buyers looking for commodity services. Unisys is able to offer modular components from the portfolio to better suit such customers, though, and they are the majority of Unisys clients for this service today.</p> |
| <p>OPPORTUNITIES</p> <p>Unisys has persevered with the development of its security services over the past decade, and this strategy is now bearing fruit within its managed mobility services, where it has a good market advantage in addressing the financial services, healthcare and government sectors.</p> | <p>THREATS</p> <p>While Unisys’ modular approach to managed mobility services spans the entire spectrum of client sophistication and provides an end-to-end approach, it is possibly too sophisticated for the mainstream buyer looking for low-cost device management.</p> |

SECTION 5

Conclusions and Recommendations

5.1 WHERE THE MARKET IS GOING – FROM KNEE-JERK REACTION TO SERVICE OPPORTUNITY

Sales and marketing departments, along with senior management teams within buyer organizations, typically drive business requirements for mobile applications. However, the activity for ensuring that an enterprise offers employees IT mobility typically rests with the IT department itself. This creates a dilemma as IT departments feel they no longer own the end-to-end experience of delivering mobile capability while remaining responsible for it.

Often this leads to a situation where IT departments are being exhorted to provide mobile enterprise services and to support BYOD policies when they do not feel confident about the outcome they can provide, and often do not have the time to think about staging proper pilot projects. This is why the most common response to such mobile support requests today is to invest in an MDM platform while introducing BYOD to a targeted end-user group. The assumption is that the MDM platform will help manage enterprise and personal data, as well as applying security controls for content access and downloads.

The typical decision lifecycle for IT service provision in EMM is that an IT department implements MDM and then finds that MDM is more difficult than anticipated and that if the platform goes down, life is hell. The business spotlight is on the IT department, and it can't deliver. It is more often than not at this stage, after the MDM platform has been procured, that buyers begin to consider procuring the help of an IT services provider. They are looking for help with integration and the provision of a service that means that devices work in specified network coverage areas, that software downloads can be made securely, and that missing devices can be locked down. Consequently, the service provider is usually entering a contract with an existing MDM investment in place.

This is why a large part of the current opportunity is for on-premises services rather than cloud delivery, since the MDM investment has often already been made. Our research suggests that take-up of cloud delivery is currently happening mainly among smaller companies and in the retail sector, particularly where projects with ePoS systems are popular.

5.1.1 MOBILITY IS 'SILOED' FROM WORKPLACE STRATEGY

The vast majority of organizations are currently dealing with the desktop upgrade from Windows XP. A significant proportion are moving to a shared virtual desktop, and a minority are looking to exploit their infrastructure to mobilize it for enterprise application needs, using apps such as Office 365. The service providers that 451 Research has spoken with agree that the majority of projects are for the implementation of point MDM solutions, with very few being for broad workplace services.

However, in the medium to long term, MDM platform services need to form part of a strategic workplace policy. They need to be ‘plugged into’ the enterprise applications so that the management of content for personal mode and enterprise mode can be enabled, as well as the deployment of security processes to measure this and manage changes.

Furthermore, end-user communities need to be segmented so that their different requirements can be met. For example, field workers and sales reps need SLAs around the provision of the productivity applications on which they rely while on the move, but back-office workers may simply need to access applications via new devices. Field-service workforces have different device requirements, for example, needing a stylus for signing documents, and a real keyboard if working outside or in cold conditions because it is very hard to use a touchscreen keyboard with gloves on.

5.1.2 ENTERPRISE MOBILITY IS A CLASSIC SERVICE-PROVIDER OPPORTUNITY

A challenge that both buyers and IT service providers face is that most enterprise IT departments do not have a mobile specialist, but have gone ahead and deployed an MDM platform. Then there is an internal skills gap because it is not clear how to go about developing internal policy management for the whitelisting and blacklisting of applications, nor have support issues been properly considered. For example, should there be a separate service desk for mobile users? Enterprise mobility is a classic service-provider opportunity because IT departments cannot simply deploy a single MDM product and expect a successful BYOD outcome. Buyers need to also look at their infrastructure and the network to enhance end-user access and experience, so this is a services play.

The majority of development teams within organizations are not used to creating applications that are easy and interesting to use on the move, and this development challenge is exacerbated by the needs of the existing application estate as BYOD policies drive up bandwidth demands and degrade application performance. For this reason, services around application performance management will be the next growth area after MDM deployment. These services help customers understand where applications are performing and what applications are being used for, so that they can be enhanced or changed. For mobile applications in particular, the provision of baseline-level user performance metrics – as well as performance views by time, place, carrier and transaction – can help the IT department understand both transaction popularity and response times.

5.2 STAGES OF MOBILE ADOPTION

As illustrated in Figure 2, the mainstream market is currently at the ‘opportunistic’ stage of mobile adoption, and that stage does not require an IT services investment. The current phase of the market *should* provide opportunities for subscription-based cloud services, although at this stage in adoption many midsized to large organizations are investing in on-premises MDM platforms. The opportunity is also *not* for transformational workplace service contracts. Consequently, a lot of the service-provider capabilities available are way too sophisticated for most buyers. Providers should therefore focus on the modularity and incremental deployment of their services for buyers.

We believe that it won't be until the latter half of 2014 and beyond that many organizations will begin to think more strategically about mobility, and it is at that point that the IT services opportunity will become more relevant, in terms of consulting, integration and management capabilities. In particular, the development of a common architecture for mobility and a policy-driven approach are areas where service providers have expertise that can help the IT department and the business it supports. This is the capability that many service providers have already developed, but it will likely be a couple of years before this type of service contract becomes more commonplace.

Most buyer companies are several years away (if they are even headed that way) from adopting a true 'mobile first' strategy, where there is an organization-wide approach focusing on the business innovation that mobility can bring. Such a strategy will probably be introduced in external customer-facing areas of the business. Indeed, it is entirely plausible that for many organizations, their customers will be better served by mobile technology than their own employees are. Consequently, the IT services opportunity for such mobile-first adoption will probably grow out from the retail sector (and retail banking sector), in which case IT service providers with expertise in these areas will benefit first.

FIGURE 2: STAGES OF MOBILE ADOPTION

| | OPPORTUNISTIC | STRATEGIC | MOBILE-FIRST |
|------------------------------------|---|---|--|
| Proportion of Companies | The majority of companies | A small minority of companies | Very few, if any, companies |
| Mobile strategy center of gravity | A reactive IT department | Mobility Center of Excellence: C-level attention, self-empowered lines of business, a responsive IT department | Organization-wide strategic focus |
| Level of business model innovation | Low | Medium | High |
| Users | Siloed employee classes, typically field and sales forces and applications addressing basic customer interactions | Addresses large subsets of both dedicatedly and occasional mobile workers and more sophisticated offerings to customers | Affects all mobile workers and internal activities and sophisticated customer engagement |
| Architecture | Limited extendibility of architecture | Common architecture for mobility | Common architecture for mobility and integrated into most IT business processes |
| Technologies | Siloed point solutions | Sophisticated administration and management tools; voice, data and integrated communications services | Integrated platform capabilities and ubiquitous connectivity |
| Policies | Few formal policies with decisions heavily user-influenced | Policy-driven approach for management, security and compliance | Policy-driven and "factory" approach to mobile innovation, re-casting business workflows |

Source: Yankee Group

5.3 LOOKING AHEAD IN MANAGED MOBILITY

Mobility continues to chip away at the traditional computing market, and as companies advance their mobile strategies, there is a significant opportunity for managed service providers to step in. As mobile technology advances, there will be a segment of the market that remains stagnant, choosing to outsource their mobile strategies.

Standing in the way of this opportunity are EMM vendors that are looking to streamline their services in order to attract an ever-larger number of customers, particularly given the competitive pressure on the pricing of their services. Managed service providers will need to move beyond hand-holding of their customers in an era where employees are ready to support a large portion of their own IT needs.

Managed service providers will also need to more effectively and quickly stitch together complementary mobile management tools. This requirement is driven by the rise of EMM ecosystems, where larger-scale EMM vendors are looking to 'bolt on' any additional mobile tools of value in order to differentiate themselves.

INDEX OF COMPANIES

AirWatch 12, 15, 16, 21
Antenna Software 16
Apple 9, 14, 17
Atos 11, 12
AT&T 16, 17, 19
BlackBerry 11, 17, 20, 21, 23, 24
BoxTone 20
BT 16, 17, 18
CA Technologies 13
Cisco 12, 16, 17, 18, 19
CompuCom 21
Computacenter 21, 22
CSC 24
Dell 23
Divide 20
Fiberlink 21
GoodCloud 12
Good Technology 16, 20
Google 24
HCL 12, 13
Infosys 13, 14
Kony Solutions 16
Logicalis 14, 15
McAfee 16
Microsoft 13, 24
MobileIron 12, 15, 16, 21, 24
OpenPeak 16
Samsung 15, 16
SAP 12, 13, 15, 20, 23
Sencha 16
SingTel 19
SOTI 15
Stratix 15, 16
Telefónica 19, 20
Unisys 25
Verivo 16
Verizon 19, 20
VMware 20, 24
Zenprise 21