BUILD A MOBILE DEVICE ENVIRONMENT FOR INNOVATION

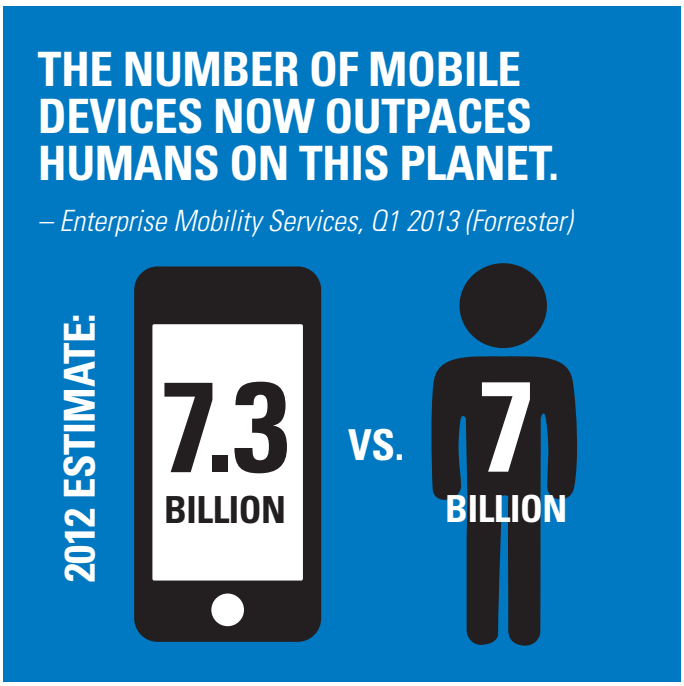
MAXIMIZE THE AVAILABILITY, PERFORMANCE AND VALUE OF BUSINESS-CRITICAL MOBILE DEVICES

EXECUTIVE SUMMARY

Enterprises in a broad cross section of industries are deploying an increasingly wide range of mobile devices and technologies. Business-critical mobile devices enable employees to perform essential tasks that drive revenue and deliver value to customers. As the adoption of mobile device-based applications accelerates and enterprises become more dependent on these computing assets, their operational readiness, defined by availability and performance, will have a growing impact on the bottom line.

THE NUMBER OF MOBILE DEVICES NOW OUTPACES HUMANS ON THIS PLANET.

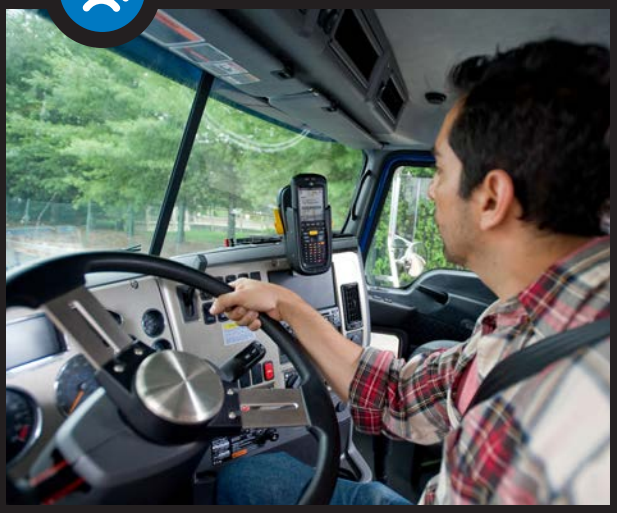
– Enterprise Mobility Services, Q1 2013 (Forrester)



Imagine the implications of your enterprise PC environment experiencing the kind of availability and performance problems perhaps common in your mobile operating environment today. Essentially, that could equate to 100 percent of the company's computers being sent in for repair annually, and more than half of help desk calls remaining unresolved after 24 hours. Would your company still be in business? These statistics are equally unacceptable for both the business computing environment and mobile device operations. Yet, most organizations have not matured mobile device operations support to the service levels necessary to achieve strategic business objectives.

On the flip side, imagine the potential business benefits, including enhanced customer interactions, if you could rely on sustained availability in your mobile environment. You would have the flexibility to advance your business model in ways that no longer need to be contingent upon unpredictable device performance.

> **"IN 2013, MOBILE PHONES WILL OVERTAKE PCS AS THE MOST COMMON WEB ACCESS DEVICE WORLDWIDE."**
>
> – Gartner's Top 10 Tech Trends for 2013, *Computerworld* (October 23, 2012)



EUROPEAN TRANSPORTATION AND LOGISTICS COMPANY

PROBLEM: The rate of mobile application implementation lagged behind the business demands of a large transportation company. Limited IT support for mobile device solutions service and management manifested in high return and lost device rates.

CHALLENGE: Inadequate application management expertise and limited IT support for mobile device solutions distracted from the core focus and resulted in an unpredictable spending profile and slow Line of Business application rollouts.

SOLUTION: A multi-year managed services contract to cover initial device staging, fast-track device replacement, battery maintenance, technical service desk, remote diagnostics and troubleshooting, asset control, enhanced device security, and software upgrade deployment.

IMPACT: The customer eliminated previous support issues and streamlined the rollout of new applications and devices. Early-stage application problems were quickly resolved with solution and process changes.

ONLY 18%

OF ORGANIZATIONS HAVE AN EFFECTIVE MOBILITY STRATEGY IN PLACE TO ADDRESS CURRENT CHANGES IN MOBILE TECHNOLOGY USE AND ADOPTION.

– LinkedIn CIO Forum Survey, IDG Research (2012)

Hidden costs and unanticipated challenges are many in the increasingly complex mobile device environment. To cite just one example, rising deployments of consumer devices, such as iOS tablets, in the enterprise are changing the dynamics of the once monolithic, ruggedized, primarily Windows-based business computing environment. While adding desirable functionality, such devices are not business ready in terms of durability, serviceability and security, and, prized by consumers, they also introduce an underlying threat of theft to the mix.

The scale of mobile device proliferation mandates a new management strategy. Hundreds of relatively homogeneous devices used by select groups within an organization are morphing into a mixed device pool comprised of thousands of enterprise and consumer-grade devices used on a daily basis by a large, diverse, and often geographically dispersed workforce. Savvy enterprises can harness the power of this profound shift to focus on the differentiation and strategic opportunities offered by mobility. CIOs, who are responsible for supporting effective enterprise deployments of mobile devices and applications, must work closely with CMOs, who strive to leverage mobile technology to enhance customer engagements and business performance. Organizations that wish to leverage mobility to boost productivity, enhance the customer experience, and improve business performance will need to pay special attention to the challenge of maintaining operational readiness of a large and increasingly complex mobile device environment.

> **"THE AVERAGE ANNUAL TCO FOR LINE-OF-BUSINESS, RUGGED HANDHELD, IN-PREMISE APPLICATION USE IS $1,833 AND FOR FIELD MOBILE APPLICATION USE IS $3,280."**
> – Total Cost of Ownership Models, VDC Research (2013)

MANAGING MOBILITY: A TASK MORE DIFFICULT THAN ANTICIPATED

There is mounting competitive pressure to deploy new mobile technologies faster while simultaneously minimizing risk. Organizations are faced with managing complex deployments, standardizing across regions, maintaining consistent processes, proactively identifying and solving problems … all while controlling costs. The fact is that many enterprises lack the expertise, specialized resources, infrastructure and capabilities to effectively manage, monitor and service devices. Today's enterprises are keenly focused on accelerating the pace of innovation in order to deliver best-in-class products and services that promise competitive advantage. It's easy to understand how they might be caught off guard by unanticipated mobility issues and lose sight of the magnitude of essential yet basic elements involved in daily operations management of thousands of mobile devices.

> **"OUT OF ELEVEN KEY CAPABILITIES, IT ORGANIZATIONS RATE THEMSELVES LOWEST ON THE REQUIRED SKILLS AND EXPERTISE TO DEVELOP, CUSTOMIZE AND MAINTAIN MOBILE APPLICATIONS AND PLATFORMS IN HOUSE."**
> – Mobile Survey, VDC Research (2011)

Many organizations turn to Mobile Device Management (MDM) to address this challenge. But MDM point solutions only scratch the surface. The MDM silo is comprised of a set of IT tools that may, in fact, introduce as many problems as it promises to solve. MDM can help you orchestrate some of the fundamental security aspects of the mobile operations equation. But, in order to address the bigger challenge of accomplishing your strategic objectives, MDM must be tightly integrated with all of the other people and process components that impact the availability, performance and value of your mobile portfolio.

This white paper poses a series of questions about your mobile device operations environment. It is possible you will not be able to answer many of these questions outright. However, we believe thinking about the pragmatic realities associated with each question and working with mobility experts to answer them will give you valuable insight that will empower you to successfully address current and future enterprise mobility challenges.

? Do you know where all of your enterprise-owned mobile devices are located and what percentage of them are currently in service?

Due to a lack of operational visibility, many companies have difficulty sorting out the very basics of asset management. It's a challenge to accurately articulate the percentage of devices in service at any given time. Clearly, there are direct business benefits to maintaining a high percentage of devices in service. Mobile devices are intended to help solve business problems and enable employees to do their jobs better, thereby driving efficiencies, increasing revenues, and improving profit margins. These results cannot be achieved when devices fail and are out of service.

? Do you know the likelihood of a business-critical mobile device being returned for repair within a 12-month period?

Benchmark data documents device return rates commonly over 50 percent and often up to a one-to-one ratio or higher. In other words, in many organizations, the equivalent of nearly *every* device will be returned at some point within a one-year time frame. The average return for a fast-track service requires 30 hours per device. So if an organization has 1,000 devices returned in a year, that's 30,000 hours of labor and the same number of hours the devices are unavailable. For a large company with a big device pool, the number of hours lost to devices unavailable as a result of being in the return loop can be substantial and significant. Best-practice device management can often reduce return rates by 25 percent or more.

Do you know what percentage of devices are returned unnecessarily?

What's particularly revealing about the high percentage of return statistics noted above is the "No Trouble Found" (NTF) rate. It is common that more than 20 percent of returned devices have no hardware defects, suggesting that many of the issues prompting returns (often application or battery related) can and should be triaged at the help desk level. However, when a company has a greater-than-30-percent turnover in help desk associates (not unusual), and it takes three to four months for new support employees to become proficient, that means about one-third of the help desk staff is always working at suboptimal performance levels.

Do you know what percentage of your mobile device users call the help desk every month?

Commonly, more than 10 percent of mobile users contact the IT help desk every month. With effective device support management, that number can be significantly reduced. While most companies can usually document the number of calls to the help desk, they are often uncertain about how many of those calls are related to mobile devices.

Do more than 50 percent of your mobile help desk calls remain unresolved after 24 hours?

Help desk personnel, especially when part of an outsourced group, often are advised to limit time spent on support calls, setting a maximum of 5-7 minutes per call, for example. Typically, that is not enough time for the user to adequately describe the problem, let alone allow support to determine the root cause and reboot and test the device after troubleshooting. Solving the problem during the first call eliminates repeat calls, but when employees don't get sufficient answers, they typically send their devices to the repair depot, unnecessarily boosting the return rate. Today's workers, who are also consumers, expect and depend on ease of use and maximum functionality from their mobile devices, and are frustrated when they don't perform due to unanticipated obstacles. The rate of first-call resolution can often be at least doubled with a new, structured approach to mobility management.

Will your next mobile device or technology deployment be successful? Are you concerned about your ability to meet deployment deadlines and achieve schedule compliance when rolling out new mobility initiatives and software updates?

Most organizations are now deploying second- or third-generation mobile devices and technologies. Slow rollouts cost companies precious time and money. Efficient on-time deployment involves numerous tedious steps, including customized configuration for various geographic locations. Assuming that device deployment is not part of your organization's core expertise, a next-generation device model or operating system may be available by the time you deploy a previous version, rendering your implementation as out of date on day one. Business needs drive the purchase of new devices and technology, so deployment immediacy is critical.

Are you aware of the total cost of ownership (TCO) associated with servicing and supporting your mobile device operations?

Despite the critical role mobility plays in today's organizations, many companies do not calculate, track or manage the real costs of mobile device operations support. The direct and indirect capital and operating costs associated with owning, designing, implementing, managing and maintaining mobile devices and infrastructure include: technology acquisition, device configuration, software upgrades, application management, help desk, tool licenses, firewall maintenance, engineering, troubleshooting, training (user and support), battery replacement, device returns and repairs. Understanding TCO and the differences between ruggedized and consumer devices helps organizations know where to reduce costs, enhance processes, boost productivity, and make tradeoffs that increase the value of their mobile investments.

How much are device availability and performance issues costing your business? Can you quantify the business impact of device unavailability and suboptimal performance?

There are a variety of opportunity costs associated with device availability and performance. For example, a limited number of your staff have a comprehensive understanding of the strategic issues associated with mobility management, yet they are repeatedly called upon to troubleshoot daily operational issues versus focus on strategic objectives. When higher-level engineers who should be focused on efforts to leverage mobility for competitive differentiation are frequently diverted from their mission and asked to address tactical device and software issues, revenue and customer satisfaction may suffer.

> **"MOBILE DEVICE MANAGEMENT (MDM) SOLUTIONS DO NOT OFFER BUSINESSES THE FULL RANGE OF SECURITY, POLICY AND COMPLIANCE FEATURES TO BE TRULY ABLE TO MANAGE MOBILE ASSETS BEING DEPLOYED IN THE CORPORATE ENVIRONMENT."**
>
> – *MDM Is Dead. Long Live EMM* (Enterprise Mobility Management), Yankee Group (June 2012)

U.S. DISCOUNT RETAILER OPERATING 1300+ DEPARTMENT STORES

PROBLEM: A large retailer required an efficient and consistent way to implement new business processes for rapid price markdowns and effective inventory management. The existing Wi-Fi and device infrastructure were not compatible with required process changes.

CHALLENGE: Fast implementation across the entire store footprint was key to meeting ROI and operational targets. Existing IT capability had to be supplemented to enable effective device and infrastructure management while ensuring that focus was maintained on the broader goals of improving in-store service, shopper choice and competitiveness.

SOLUTION: Infrastructure and Mobility Lifecycle Management services were applied to meeting customer-defined performance and availability targets for the in-store WLAN environment and chain-wide mobile device portfolio.

IMPACT: Rapid implementation satisfied operational and business case targets. Ongoing support ensures consistent operations and enables the broader goals of boosting sales and shopper satisfaction via fast markdowns.

MULTI-FORMAT GLOBAL RETAILER

PROBLEM: A retailer with a very large and complex mobile device footprint was experiencing numerous mobile device problems, escalating return and No Trouble Found rates, a high percentage of lost devices, and staff dissatisfaction with help desk support.

CHALLENGE: A lack of device management expertise and poor visibility on total cost of ownership impeded effective remediation.

SOLUTION: A Mobile Device Optimization study followed a Six Sigma DMAIC process and used help desk and repair statistics, as well as interviews and time motion studies, to identify the retailer's current device management capabilities and compare them to best practice. The major output was device-related TCO and recommendations on how to address device availability and performance issues.

IMPACT: The retailer has a consolidated view of device management and valuable insight for ongoing strategic investment. The company is executing many of the recommendations in order to improve overall TCO and device usage in its operational environment.

In addition, perhaps less obvious than the elements of TCO noted above, service components such as wireless infrastructure coverage and signal strength are among other factors that impact performance. Poor device implementation and mismanagement result in inefficiencies, lower productivity, decreased revenue, lost time, service disruptions, higher costs, frustrated customers, brand damage, and diminished return on investment.

Is your organization prepared to allocate the necessary resources, develop the core competencies, and make the significant investment required to support the complex operational infrastructure needed to maximize the availability and performance of the thousands of business-critical devices that are vital to your success?

Addressing the issues raised by the questions posed above and benchmarking current performance are important first steps toward assessing the effectiveness of your current device strategy or developing a plan in the absence of an existing strategy.

An effective strategy should be less focused on performing tasks associated with device management and more focused on whether all the necessary pieces are in place to deliver the business outcomes that devices can enable. Such a view demands a plan to address the myriad essential tasks that when complemented with device management assure the overall performance expectations for your mobile device portfolio. This more holistic approach can transform mobile devices from task tools into a platform for innovation in service delivery, customer engagement and business operations.

> **"FOR EVERY MONTH THAT I DON'T DEPLOY A NEW TECHNOLOGY, IT NEGATIVELY IMPACTS MY ROI BY $100,000."** – CIO, Major Retailer

IMPROVE AVAILABILITY AND PERFORMANCE WITH SLA-DRIVEN MOBILITY LIFECYCLE MANAGEMENT

Making your mobile device portfolio a platform for innovation means ensuring that its operation is predictable. Establishing predictability for mobile devices, especially for a large and heterogeneous portfolio, may require significant investment in tools, process, infrastructure and skilled resources. For many organizations, this may represent a diversion from a core focus. For such situations, a managed service in which performance requirements are defined by the user and delivered by a managed services provider based on appropriately defined Service Level Agreements (SLAs) may provide the perfect combination of functionality and value.

The Motorola Solutions Mobility Lifecycle Management (MLM) solution provides enterprises with a managed service option for maintaining business-critical mobile device environments. It integrates process and delivery capability to increase speed, reduce operational risk, and improve the manageability of large mobile device portfolios. The end-to-end, outcomes-focused MLM solution maximizes return on mobility investment by optimizing availability and assuring predictable performance throughout the mobile device lifecycle. Using predetermined performance targets, Motorola Solutions ensures that your customized mobile device strategy reliably delivers the capabilities you need to support your business goals.

Motorola Solutions MLM specifies and delivers on precisely defined service levels for owning and maintaining every operational element of the mobile ecosystem, including:

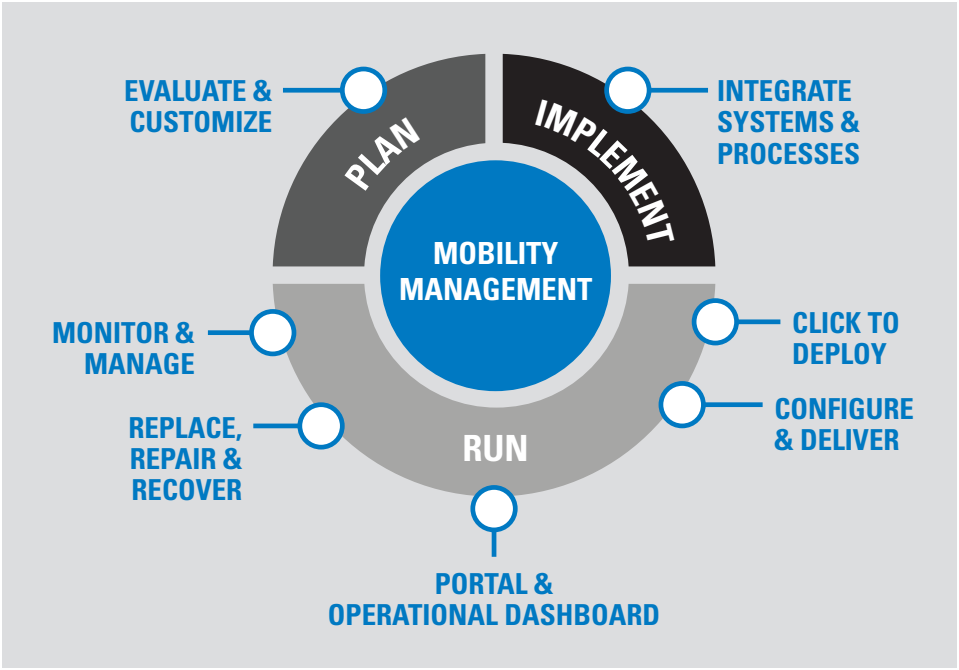
- Planning
- Implementation (initiation/configuration of architecture and tools, device images, service desk, business processes)
- Integration of Systems and Defined Processes
- Configuration and Delivery/Device Deployment
- Device Management
- Inventory Tracking
- Remote Software Updates and Upgrades/Version Control
- Statistics Monitoring/Analysis & Reporting
- Security/Registration/Remote Wipe, Lock
- Compliance and Policy Management
- Network Optimization
- Telecom Expense Management
- Training (End User, Help Desk and User Support)
- Integrated Mobility Service Desk and Support Program/ Remote Troubleshooting & Diagnostics
- Repair/Replacement/Spare Pool Logistics
- Asset Recovery and Preventative Maintenance
- Testing/Virtual Lab

MLM FEATURES DELIVER A HOLISTIC APPROACH TO MOBILITY MANAGEMENT

- Holistic mobility management platform with integrated architecture, processes and reporting
- Structured framework to address capability gaps
- Real-time view of mobile device environment via customer-branded lifecycle portal and management dashboard
- Dedicated mobile device expertise and engineering support
- Access to skilled resources, best-in-class processes, and the latest tools and technologies
- Baseline of current operations and benchmarks for ongoing performance improvements
- Detailed user profiles and use cases
- Comprehensive service desk and support program
- Single point of contact for service
- Proactive problem identification and resolution
- Support for strategic initiatives and business transformations
- Systematic approach that leverages risk management expertise
- Early identification of risks and rapid response to mitigate impact
- Governance reviews, analysis and recommendations

MOBILITY LIFECYCLE MANAGEMENT

Managed Service that assures performance and availability of a mobile device environment with an integrated approach to planning, deployment, performance optimization, support and day-to-day management.



CREATE STRATEGIC FLEXIBILITY

IMPROVE OPERATIONAL CAPABILITY

MANAGE RISK

MLM BENEFITS CONVERGE TO MAXIMIZE AVAILABILITY AND PERFORMANCE

- Strategic flexibility
- Business continuity
- Compliance to schedule and reduced risks associated with mobile device management
- Immediate operational proficiency and expertise that enables limited internal resources to focus on strategic priorities
- Enhanced customer experience and increased productivity leading to greater return on mobility investment
- Improved risk management with better operational visibility and control
- Improved inventory/asset management
- Predictable, measurable performance of mobile device portfolio
- Successful and accelerated deployment of mobile devices and transitions to new technologies
- Simplified proactive device management
- Rapid and controlled software updates
- Increased availability (target percent of devices in service) and optimized device utilization
- Avoidance of unplanned capital expenses (i.e., replacements)
- Total cost of ownership decreased by 30% or more
- No Trouble Found (NTF) rates of greater than 20% reduced by 10% or more and return rates lowered by 25% or more
- Number of lost or stolen devices/accessories reduced by more than 30%
- Increased efficiency and flexibility to meet escalating demands in service environment
- Improved service capability in constantly evolving technology environment
- Escalated competitive advantage in dynamic business environment

CONCLUSION

Given the business-critical role that mobile devices increasingly play in engagement, service delivery and business operations, today's enterprises cannot afford to take chances with the availability and performance of their mobile device environment.

Any organization that is currently using or planning to incorporate mobile device-based applications into key business processes needs to evaluate its ability to maintain operational readiness. When an organization anticipates deployment of consumer-based devices in a business application, the mandate to identify and anticipate potential issues that may affect device performance becomes even more critical.

The choice of devices and the implementation and ongoing management of devices have an impact on the overall TCO of the mobile portfolio. To ensure the best returns on mobile device investments, companies must anticipate the issues associated with keeping them up and running.

The Motorola Solutions Mobility Lifecycle Management solution offers a comprehensive service approach to planning, implementing and maintaining the operational readiness of mobile device environments. Leveraging specialized tools and resources, process design expertise, resilient infrastructure, and global support capability, Motorola Solutions can deliver the platform, structure, and adaptive business processes you need to sustain your daily operations and allow you to innovate and maintain focus on your business priorities.

Contact your Motorola Solutions representative for information about how a mobility operations assessment can help your organization get started on the path to achieving your business objectives. Visit **motorolasolutions.com.**

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