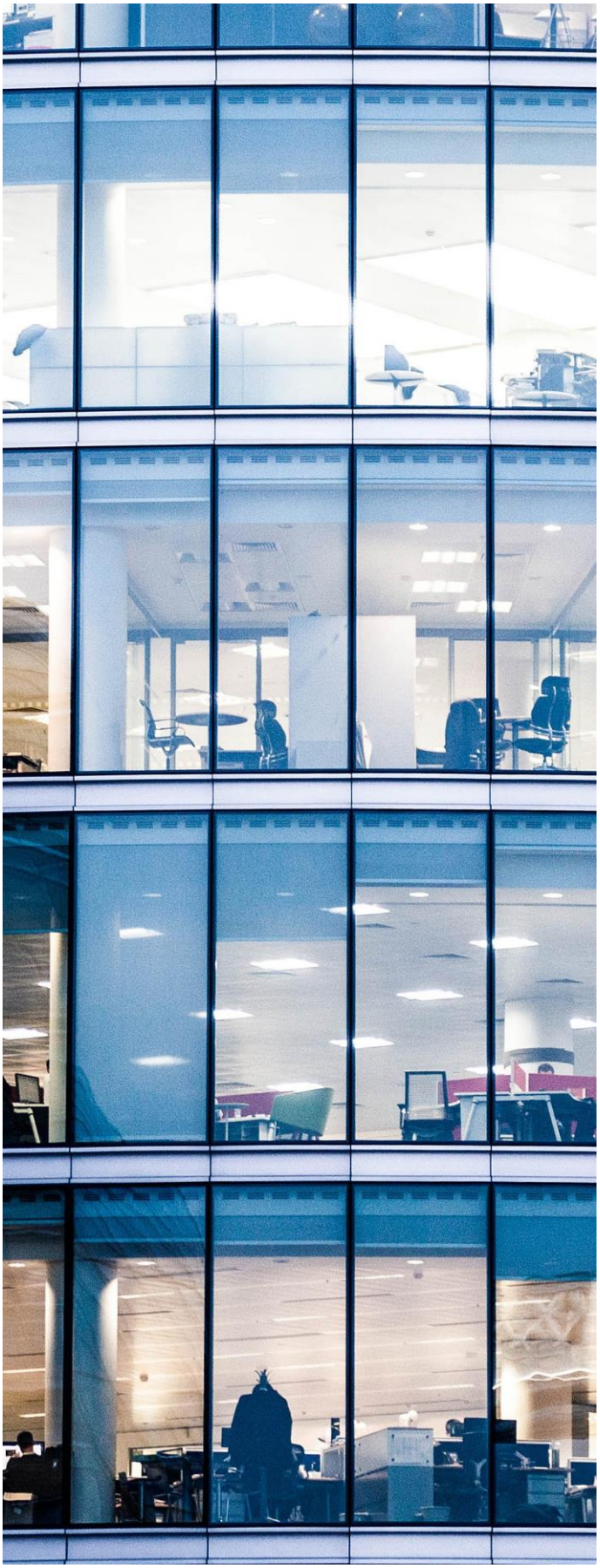
# Gaining Visibility into Mobile Assets and Performance

Enterprise-wide, real-time visibility critical to delivering on the promise of mobility

stratix



This white paper explains how visibility into device performance helps enterprises leverage mobile to achieve digital transformation goals and know if the performance goals set during the mobile planning phase are being met. As mobility is a key part of enterprises' digital transformation, understanding how mobility is performing against goals is a critical part of this transformation. Despite that, most enterprises struggle to gain these insights.

With hundreds and, often, thousands of mobile devices in play, enterprises want to know how effective mobile is at boosting operational efficiency, improving customer service and helping employees be more productive. Asset management and device performance statistics, viewed across the enterprise, can help answer these pivotal questions.

However, enterprises struggle to consolidate separate performance reports from multiple device manufacturers, manufacturers' repair centers, help desk ticketing systems, spare pool inventories and mobile operators. Often this data can be 30 days old when it's received. Working with a Managed Mobile Services (MMS) provider capable of aggregating data, regardless of its origination, into a single real-time enterprise-wide visibility portal offers an easy-to-use approach to managing mobile performance across the enterprise.

## Multiple factors complicate asset visibility

Three related factors have added complexity to asset visibility: a proliferation of mobile devices across the enterprise, a diversity of device types and a lack of standards. Years ago, mobility was limited to a single device aligned to a user's single job. Today, mobility touches virtually everyone in the enterprise, with users having as many as 5.8 mobile devices.[1] These devices include a complex mix of corporate-owned, BYOD, consumer and rugged mobile device types, as well as multiple operating systems, device management platforms and application management systems. On "Day 2" of mobile support, a complicated array of device types,

Working exclusively in mobile for 34 years has given Stratix a "front row seat" to mobile's evolution – one of technology's most rapidly advancing innovations. Today, Stratix' unique perspective combines an understanding of the past with the accumulated expertise needed to anticipate the future.

In the past few weeks, Stratix has published a best practices-based informational series on how working with a MMS provider can solve mobile's toughest challenges – including the need to support mobile users 24x7x365, while lowering mobile's total cost of ownership.

multiple types of users and various management data bombard internal support teams.

Internal IT teams depend on standards to codify technology performance at the enterprise level. For example, networking protocols such as SNMP, a common language virtually all network devices support for management, provides visibility back to a common device/asset management system. This standard ensures real-time visibility across the entire networked enterprise. Unfortunately, there is no industry standard that dictates how to provide device-level visibility across these different mobile device types.

In mobility's non-standard world, internal teams find themselves supporting a widely diverse mix of device types, operating systems and proprietary management/visibility platforms – each with its own asset visibility and performance reporting approach.

This unfortunate result is the exact opposite of what internal teams need – a single, consolidated view of enterprise mobility in its totality.

## Mobile device management: it takes services, tools and systems

Today, enterprises use three kinds of software tools to construct a detailed picture of the mobile ecosystem's device universe. The first of these, asset visibility tools, is provided by each device manufacturer, while the second, telecom expense management systems (TEMS), offers information about the administrative and cost sides of device use. The third and most comprehensive, enterprise visibility systems, looks across all devices and users to deliver the information that leads to timely intervention of issues and, ultimately, enterprise insights.

To distinguish among these three approaches to mobile performance management, consider these definitions:

1. Asset visibility tools allow enterprises to determine how well mobile devices are performing. Most tools in this category are proprietary and provided by individual device manufacturers to manage their devices. Because of the number of different device manufacturers in use across the enterprise, it's common for an enterprise to use multiple asset visibility tools, which makes easy consolidation of information from all devices into a single view virtually impossible.

2. Telecom expense management systems (TEMS) monitor and report on the administrative and financial aspects of enterprise mobile. This software typically works directly with mobile operators' invoices to track usage, data overages and roaming charges as well as which devices are assigned to which users. Typically, TEMS monitor mobile's total cost of ownership by ensuring all users are complying with contracted usage rates, and no active devices are "stranded" and being paid for without anyone actually using the device.

3. Enterprise-wide visibility systems take an acquisition-to-disposal approach to managing all devices in the enterprise regardless of manufacturer. These comprehensive systems facilitate device management and asset visibility by reporting on key performance metrics; RMA, replacement and repair status; warranty compliance; and spare pool management and replenishment. These systems typically integrate help desk and trouble ticket incident data as well, ensuring that any inquiries about individual devices or groups of devices provide a holistic view of how well the devices are performing. These enterprise-wide systems, which are rare, consolidate asset visibility information fin real-timeor all devices and provide an optimal view of enterprise-wide mobile performance.

## Asset visibility tools: Detailed device-specific view

Most asset visibility tools provide answers to key questions about individual devices, such as:

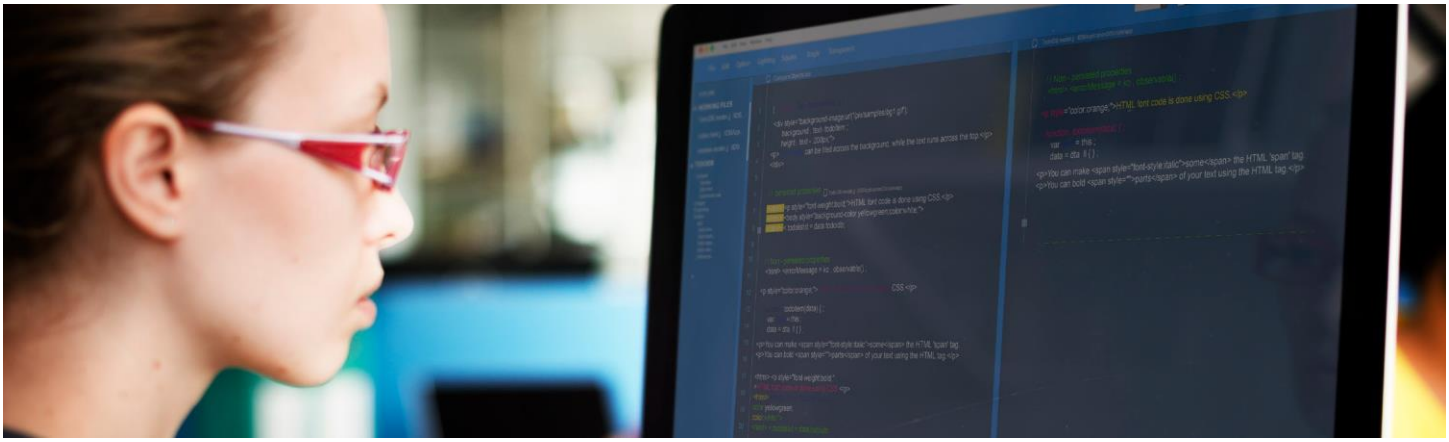
- Which mobile assets have been deployed to which locations and to which end users?
- How many of those devices are operational?
- Which devices have been returned for repair?
- What is deployment history and warranty and repair status for each mobile device?
- What is the RMA status for any device? Which devices due back for repair have not yet been returned?
- What is the age of each device in deployment?

The answers to these questions hold the key to improving user productivity by keeping mobile devices up and running. Consider that a single device failure can result in 170 to 200 lost minutes of productivity as the affected mobile-worker and internal support person attempt to resolve the issue.[2] As discussed in "Support: Mobile's Most Daunting Challenge," keeping these users and devices up and running is a key factor in controlling the cost of mobile. However, when devices need repair, managing the RMA process effectively and having the asset visibility tools to see all status, RMA history, and spare-pool inventory levels is critical to controlling the costs of replacement and repair.

## Multiple, disparate tools hinder asset visibility

Too often, the IT team charged with maintaining visibility into deployed mobile devices is forced to use multiple tools and consult several reporting systems to verify device performance by type, manufacturer and OS. In most cases, these "snapshots" of performance data are limited to each device manufacturer and hide the enterprise-wide insights needed to fine-tune mobile performance for optimal business transformation.

To make life even more complicated for those in charge of mobile, the tools used to track help desk calls and trouble tickets are usually not tied into the device management systems provided by the device manufacturers. This disconnect results in a fragmented view of enterprise mobility, with each software solution providing incomplete information about the asset. In this scenario, no easy way exists to associate help desk and trouble ticket data to a specific asset.



This siloed performance reporting requires many IT teams to aggregate data from multiple sources on their own, delaying the reporting of performance data needed to assure timely intervention and resolution of technical issues and user problems. For example, an IT team may need to consolidate RMA data from one vendor tool with their own internal help desk tickets and repair history from a third-party repair center. This cumbersome, expensive and time-consuming process provides a tactical view of historical asset performance when a strategic, enterprise-wide view, delivered in real time, is what is needed.

## Working with an MMS provider to gain expertise and enterprise-wide visibility

To better see and manage how mobile is contributing to business transformation, many best-in-class companies contract with a Managed Mobile Services (MMS) provider to monitor and manage the health of the entire mobile ecosystem and the devices in its universe. Specifically, MMS providers offer Lifecycle Management (LCM) services, 24x7x365 support services and the enterprise software systems needed to capture performance, repair and warranty histories across time – from device acquisition through disposal.

The previously mentioned complexities of mobile performance, such as the proliferation of devices and device types, the plethora of data reporting sources and the need to intervene to resolve issues before they have an enterprise-wide effect, all underscore the value of partnering with an MMS company. An MMS provider can consolidate data streaming from disparate asset management sources into a clear enterprise-wide view while preserving the drill down capability needed to reach individual device performance records.

To assure accountability and transparency, some MMS providers will offer their customers open access to the mobile device monitoring and reporting systems they use – ideally in real-time. When an enterprise operates in lock-step with an MMS, performance issues can be resolved quickly and efficiently – with minimal impact to the mobile ecosystem.

MMS providers can leverage their long-standing relationships with OEMs and mobile operators to fast-track issue resolution. An MMS provider overseeing millions of devices has more clout with third parties than a single enterprise does. Additionally, OEM-authorized device repair services offered through MMS providers, eliminate the need to send devices back to the manufacturer and speeds their return to customers' spare pool inventories. With more devices ready for redeployment, spare pool inventories can "run lean" and preserve precious capital for other enterprise needs.

Finally, MMS providers have a unique perspective to provide an enterprise-wide approach to help enterprises better gain visibility into and measure the performance of enterprise mobile. Because MMS providers typically work with all leading OEMs and operators, these enterprise mobile partners have the necessary processes and systems

to consolidate data streams and provide a single "pane of glass" into enterprise performance. Enterprise-wide systems from MMS partners provide performance, repair and warranty statistics for every mobile asset in the fleet, and then combine this data with detailed history about help desk/support calls for issues with mobile devices and applications to provide a rich history for how well enterprise mobile is performing against stated goals.

Through a combined enterprise-wide visibility system, IT teams can gain a view into mobile performance at the enterprise level – quickly, efficiently and in real time. Consolidated device performance information, delivered in real-time, allows IT teams to intervene in mobile performance issues before they have an enterprise-wide impact.

For example, enterprise-wide visibility systems trend data across all devices and users to answer "big picture" questions such as:

- What is the call volume from end users, and which user issues are most frequently seen across all devices and applications?
- What is the overall failure rate and which specific devices, device types and operating systems fail most often?
- What is the enterprise-wide rate of returned devices that test as NFF (no fault found)?
- How many failed devices due to be returned for repair were never received by the MMS provider?
- Has the spare pool been adequate to meet the demand for replacement devices? If not, what adjustments to the current inventory are needed? If spare devices are languishing without use, which types can be reduced in the inventory?
- How are OEM providers performing against their stated SLAs for repair and warranty claims?

The enterprise-wide visibility system can function as the equivalent of the proverbial canary in the mine shaft. Monitor the health of the mobile ecosystem effectively and you'll know which devices are prone to breakdown, which carrier networks go down most

## How itrac360™ provides enterprise-wide asset visibility in real-time

To help our customers monitor and evaluate how enterprise mobile is performing against their stated business goals, Stratix created itrac360™, a unique portal that delivers consolidated performance data for the entire mobile ecosystem in real time. Based on 35 years' experience in enterprise mobile, Stratix designed itrac360 to address each of the key components needed to manage asset visibility from an enterprise perspective.

Itrac360's capabilities, which were designed with input from Stratix' enterprise mobile customers, provides:

- Enterprise-wide visibility, delivered in real time, into all aspects of the mobile ecosystem performance
- The ability to manage deployments by assigning devices to locations, groups and users
- Performance data on all mobile assets regardless of manufacturer
- RMAs and support call history for each mobile asset in the enterprise
- Standard and custom reports to reveal trend data crucial to the identification and timely resolution of issues before they become enterprise-wide problems
- A "single pane of glass" through which customers can view performance data for enterprise mobile assets and managed mobile services

For more information about itrac360, Mobile Asset Visibility and Analytics, click here.

often, which user populations need the most help resolving their issues and even which operating systems have the most issues – before they bring enterprise mobile down. You'll also be able to identify and correct weaknesses in mobile support and intervene to decrease their impact on the enterprise.

MMS providers can also provide telecom expense management systems (TEMS), which process telecom invoices, review carrier contracts, resolve billing disputes, recommend optimal carrier plans and allocate telecom expenses to the appropriate cost centers. In addition, TEMS track cost factors, such as roaming charges, unused devices and excessive data usage, contributing to mobile's total cost of ownership (TCO). IT teams can use TEMS' financial data to determine if the enterprise has an optimal mix of carrier plans based on global users' needs, if carriers are honoring service level agreements and if it's time to retire older devices.

Without enterprise-wide visibility, the hidden opportunities in today's complex mobile ecosystems will likely remain undiscovered. Seen on an individual basis, connectivity, user and network issues represent incidents in need of swift, corrective intervention. But, viewed from an enterprise perspective, these issues can be early warnings of more serious trouble down the road.

## Conclusions

Visibility into mobile device performance helps enterprises achieve their digital transformation goals. Device performance statistics can help enterprises determine how effective mobile is at boosting operational efficiency, improving customer service and helping employees be more productive. However, device management, especially when there are hundreds and, sometimes, thousands of disparate mobile devices in play across the enterprise, is a complicated endeavor, often providing siloed views, or consolidated data which is dated due to the manual effort of consolidating information from disparate asset visibility sources.

Lifecycle Management and Support Services from an MMS provider can monitor and report on asset performance both in its totality and down to the individual device. MMS providers aggregate this performance data as well as data streaming from each siloed manufacturer, repair center and carrier reports into a single enterprise-wide asset management view. This consolidated view, which extends beyond a single mobile asset to span all devices in the enterprise, uniquely qualifies MMS providers to provide enterprise-wide visibility critical to delivering on the promise of mobility as an enabler of digital transformation.

Sources: [1]Mearian, L. (2017). How to Develop a mobile device or repair strategy. [2]Computerworld, Kyocera Survey Finds Mobile-Device Failures Are Costing Businesses Big Bucks in Lost Productivity and Replacement Fees. (2015).