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AN INTRODUCTION TO MOBILSENSE AND MOBILSENTRY™:
Real–Time, "Enhanced" Mobile Management That Contributes to Business Outcomes

Kelly Teal
Senior Research Analyst
AOTMP® Research & Advisory

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INTRODUCTION

As mobility gains greater traction within enterprises, employees have more resources than ever to do their jobs well. For instance, retrieving company files from the field as easily as if one were in the office has done wonders for productivity. Yet, at the same time, the ubiquity of mobile access gives employees more opportunity to waste time. Organizations of all kinds are losing work hours to mobile apps, social media, and video and audio streaming, all of which is easier to do on the sly from a smartphone or tablet than on a desktop computer. And while enterprises can block desktop-based internet surfing easily, that has not historically been the case for mobility. For enterprises with corporate-liable mobility programs, the problem surpasses soft-dollar downtime losses and creates hard-dollar financial issues. That is because employees can – and do – eat gigabytes' worth of data on non-work-related activities that can add up to thousands of dollars a month in unexpected data charges. Of course, the cost of excessive employee usage does not always appear as data overage charges. Many times, it can fit in with legitimate business consumption, acting more like an irrigation leak than a broken pipe.

There are, of course, myriad management platforms for administering mobility permissions and settings. Most of those allow users to adjust consumption after the fact – which does nothing to address any ongoing, real-time infractions. And few can see which sites employees are using. Indeed, while some activity on sites such as Facebook and YouTube may legitimately tie to work, it's easy for people to take advantage of access to such content. As a result, organizations face a two-pronged challenge: Difficulty controlling employees' cellular data consumption and difficulty controlling cellular-based access to, and time spent on, internet sites from corporate mobile devices. Given that mobile data consumption does not stand to reverse course, the traditional lack of visibility and controls no longer suffices for enterprises concerned with fiscal responsibility, corporate governance and employee productivity.

Enter MobilSense and its take on "enhanced" enterprise mobility management (EMM).

ABOUT MOBILSENSE AND "ENHANCED EMM"

As one of the first in the wireless expense management vendors, MobilSense created MobilSentry™ to help companies control mobility management. It then bolstered MobilSentry's™ capabilities in early 2018 with the acquisition of MobilePhire. That deal added real-time visibility and controls to MobilSentry™. With MobilePhire's unique technology embedded, MobilSentry™ manages cellular data connectivity regardless of endpoint type – all without having to install apps on the associated smartphones, tablets, routers and so on, or refer to the carrier invoice. Simply put, that means administrators may see which websites corporate-device users are accessing, at what time of day, for how long and whether they are streaming expensive data. MobilSentry™ sends alerts to users encroaching on their data thresholds and, if they breach that allotment, cuts off their access for the month or adjusts their pooling amounts, depending on individual client preference.

All this information is critical for organizations to know because user behavior over company-paid cell connectivity affects productivity, efficiency and finances – key domains to keep operating at peak levels. With MobilePhire integrated, MobilSentry™ gives enterprises complete visibility into, and control over, their corporate-liable cellular usage, including non-business consumption. One of MobilSense's favorite anecdotes relates to a client's employee who was discovered to be streaming an excessive amount of data in the evenings. When asked to explain that consumption, the employee claimed to be working at home. However, with MobilSentry™, the organization, with the click of a button, found that the staffer was watching a premium movie channel at the time in question.

"Companies are frustrated and don't know how to address the mobile data consumption problem," said Dave Stevens, president and CEO of MobilSense.

"A lot of companies will look at the top data users and engage, over the course of the month, in a conversation with them about their excess usage. That can take a lot of time and yield minimal results. And enterprises can't tackle the problem when the conversations often are met with denials. They have to have irrefutable details."

In the case of the employee watching a premium movie channel while purportedly on the job, and over company-paid data, irrefutable information in the form of analytics from MobilSentry™ solved the problem. Traditional MDM platforms cannot provide this level of insight, truly real-time alerts or usage controls.

This real-time, graphical insight into the activity on corporate devices, and the corresponding ability to cut off users' data or add to their monthly pools, is what MobilSense means by "enhanced EMM." AOTMP Research & Advisory finds MobilSense's capabilities to be essential to next-generation mobility management, and to ensuring that mobility contributes to business outcomes including increased revenue and competitive advantage.

THE MOBILITY MANAGEMENT ECOSYSTEM: WHAT MAKES MOBILSENTRY™ DIFFERENT

MobilSense sees mobility management as an ecosystem comprised of three key areas:

• Mobile expense management
• Mobile device management
• Mobile data management

While AOTMP Research & Advisory holds different definitions for mobility management and its various intricacies, analysts view MobilSense's interpretation as accurate and effective. Expense management seeks to understand and control the costs associated with corporate-liable mobility.

Device management oversees system administration, security configuration, notification services and remote device support. Data management is a relatively newer idea born of real-time insights and actions such as those provided by MobilSentry™ and a small handful of other vendors.

To be clear, MobilSense does not consider itself an MDM provider. Rather, MobilSentry™ serves as a mobile expense and data management system that works with MDM platforms for seamless deployment on mobile devices.

Overall, the ability to manage data contributes to expense management proficiency, and helps enterprises decide which employees may have which devices. Therefore, managed together, expense, device and data management comprise a holistic approach to enterprise mobility.

MORE ON REAL-TIME MOBILE DATA MANAGEMENT

With the above in mind, it is important to understand MobilSentry™'s "Four Pillars" that, combined, create effective mobile data management, according to MobilSense.

PILLAR 1:
Usage Insights

This capability illuminates everything happening with data consumption, including websites visited, categories of websites and how much time spent on them – in aggregate for the company and in detail for individual users. Whatever an enterprise needs to know, whether for compliance purposes, frequency of business-applications used, and the like, MobilSentry™ provides the reporting and analytics that translate data into actionable information. However, it is important to understand that MobilSentry™ does not read text or email conversations, and does not see actions taken on websites or know exactly what content is viewed. Rather, the platform reports the proxy domain that was visited, indicating time spent there and total data used. Enterprises may restrict access to this level of detail by administrative role.

PILLAR 2:
Real-Time Alerts

Visibility is meaningless if it does not spur an action. But many enterprises also want to encourage responsible data consumption with a nuanced approach, rather than in a heavy-handed manner. Thus, MobilSentry™ sends a notification when a user nears – and reaches – a pre-specified threshold. The key, according to MobilSense, is that the messages must come in real-time. If they are delivered days or weeks after the fact, the potency evaporates.

That is one reason why MobilSentry™ lets administrators set and deploy multiple notification thresholds in a bill cycle.

PILLAR 3:
Data Usage Controls

Speaking of potency, a message is only as effective as the actions it enforces. To that point, administrators may restrict usage by limiting access to certain categories such as streaming video, audio or social media, enforcing hard caps, or even blocking access to cellular data during certain days and times. Data usage caps also can be used as temporary impediments and reminders to the user, who must reach out to admins to request more data for the remainder of the month.

PILLAR 4:
Financial Harmonization

Linking mobile data usage to overall costs is paramount. MobilSentry™ does this by merging information from the invoice with real-time data collection. Enterprises gain unique advantages when they can see where user consumption falls in the billing cycle and convert that usage into financial implications by knowing what a gigabyte costs for that user. In other words, enterprises must be able to translate consumption into dollars, and see how that contributes to the top and bottom lines. MobilSentry™ facilitates that capability by showing organizations where they can save money and lets them tweak data consumption on the fly.

GAINING BUSINESS VALUE FROM "ENHANCED EMM"

The best way to grasp how MobilSentry™ manages mobile data and contributes to business objectives comes from actual use cases; here are a few select samples.

CASE STUDY: PROVING NON-WORK-RELATED DATA STREAMING
Problem

An electric and gas utility was struggling to accommodate all the mobile data its users were devouring – the expense was adding up quickly. Its way of dealing with the issue was to talk, one-on-one, with the people eating the most data each month.

Cause

Without the ability to see exactly what employees were doing and when, the utility could do little more than ask users to curtail consumption. In the absence of definitive proof, employees were able to say that they were conducting legitimate business and the utility was powerless to prove otherwise.

Solution

With MobilSentry™ in place, administrators now can see specific activity, and when and where it is taking place. In one instance, an employee said he was doing business training at home via YouTube; however, with MobilSentry™, administrators now could see the staffer was watching a premium movie channel. Once the telecom/mobility/IT management department could prove the mobile data consumption was not work-related, the employee's overall data usage was reduced dramatically.

CASE STUDY: CREATING AWARENESS
Problem

Another energy utility was watching high data usage increase its mobility budget month over month. The lack of an enforceable usage policy left the enterprise with no way to impose consequences for excessive consumption.

Cause

Most users were not acting maliciously but did not realize the extent to which their data consumption impacted company costs.

Solution

Using MobilSentry™, the organization created greater awareness by sending notifications when users reached specific thresholds. The new and enforceable expectation of prudent usage for audio and video streaming, and social media usage, changed most employees' behavior resulting in immediate reductions in mobility costs.

CASE STUDY: PROTECTING MOBILE ASSETS
Problem

An oil and gas company used routers embedded with SIM cards on pipelines throughout Texas and Oklahoma. These routers provided cellular data access to sensors on the pipelines. Suddenly, data usage on the endpoints increased from the usual 50MB per month per router to 50GB per month per router.

Cause

The IT staff had been using carrier-provided, public static IP addresses, which are accessible on the internet. Hackers found those addresses and launched DDOS attacks on the routers.

Solution

MobilSentry™ was able, via white-listing capability, to limit access to an IoT device to a small set or even a single IP address for communication. Choosing private addresses, rather than public, is a common-sense action but not sufficient. The solution lies in the ability to limit access to a finite list of IP addresses, thereby preventing malicious access.

MobilSense assigned private IP addresses to the routers and the oil and gas company now tracks the routers via MobilSentry™. Real-time analytics offer insight into data usage and MobilSentry™ sends alerts if any routers surpass usage thresholds. The platform also allows the organization to blacklist and whitelist routers as needed. This has led to reduced data costs and improved security measures.

CASE STUDY: ENCOURAGING EMPLOYEE PRODUCTIVITY

Problem

A regional fast food chain installed cellular-based routers that provided WWAN connectivity intended only for business email, VoIP calling and point-of-sale transactions. However, employees were logging on to the network for social media and video streaming.

Cause

The chain's IT department could not analyze and control cellular data usage on these routers, even though they had cellular connectivity.

Solution

MobilSentry's™ Data Manager function allows the organization to block access to entire categories of websites, including social media and audio and video streaming. Meanwhile, business traffic remains free to traverse the network. With protections in place, IT staff are buying significantly smaller data plans.

CONCLUSION

Effectively managing and controlling mobile data usage requires following some best practices. Here is what MobilSense recommends:

1. Identify, assess and quantify the magnitude of any data usage waste by comparing usage to industry norms; MobilSense is able to perform this type of analysis quickly.

2. Take advantage of MobilSentry's™ ability to identify how all users consume mobile data. This is a step above typical methods that just discern who uses the most or least data. Much of the challenge today surrounds the absence of tools from carriers and MDM providers that reveal data usage details. MobilSentry™ shows every corporate-liable user, which lets enterprises adjust pooling allotments and/or make real-time corrections before a billing cycle ends.

3. Vet and update the organization's mobility policy to delineate acceptable use, including websites that may or may not be visited. Many enterprises are still operating on old mobile policies that have not kept pace with the times. AOTMP Research & Advisory has found that having employees sign plain-language, up-to-date policy agreements at least once a year is an essential component to effective mobility management.

4. Customize notifications that explain data consumption to users. When employees understand limits and rationale, they are more likely to comply with requests and requirements. Educating employees is crucial to evolving an enterprise's culture and bringing usage into compliance.

5. Initiate caps and quotas on repetitive policy violators. These controls may block access to categories such as streaming video or may institute an overall usage cap after a certain number of prior alert notifications.

6. Continue to measure return on investment, collect detailed analytics and refine policy alert thresholds and caps.

Enterprises relying on MobilSentry™ and acting on recommended best practices will take their mobility management to new heights. Organizations will streamline data consumption, promote employee productivity and, often, reduce mobile data expenses – outcomes leaders throughout the business will value.

The problem of excessive data consumption is only going to worsen, especially with the advent of 5G. Enterprises cannot expect carriers to help them curb usage; therefore, they must implement real-time mobility management tools. MobilSense's MobilSentry™ stands out as one of the top solutions to consider.

ABOUT MOBILSENSE

MobilSense Technologies Inc, based in Agoura Hills, Calif., was founded in 2001. As one of the first wireless TEM solutions in the industry, MobilSense has remained focused on serving enterprise mobile management needs by delivering constant innovation through automation. Remaining singularly focused has been important in the mobility sector that is rapidly evolving. Its flexible architecture not only accommodates continually changing requirements but has been a strength in delivering tailored customized solutions matching divergent client needs.

The marketplace is still reacting to the exponential increase in data consumption and the carrier billing change from voice to data pooling. In understanding the forces moving the industry, MobilSense saw the necessity for deep data use pattern analytics and the need for a clearer understanding of applications driving mobile data consumption. The growth from maturing mobile use practices and the ubiquitous access to video streaming led MobilSense, in the spring of 2018, to acquire MobilePhire, a mobile data management company possessing the ability to capture information on application and website usage of individual corporate mobile devices. In addition to unique analytics, MobilePhire provides automated capabilities for controlling high data use, an increasingly important component of expense management. In just a few short months, the technologies of these two companies have merged the power of data control with the wireless invoice analytics of MobilSentry™.

MobilSense is determined to meet and exceed customer needs through a combination of powerful technology and proven business processes. Through the architectural flexibility of its option-driven design, providing tailored implementation versions that solve unique company requirements is achieved quickly because it only requires minimal software engineering. The MobilSense client-first company culture is epitomized by this statement from a top 15 energy utility: "MobilSense is most responsive technology vendor we work with." With more than 700 installations, MobilSense has earned unprecedented loyalty with many of its clients continuing to benefit from improved productivity and return on investment for more than a decade.

With the acquisition and integration of MobilePhire as a Mobile Data Management (MoDM) solution, MobilSense is the first and only company to integrate classic mobile TEM capabilities with MoDM technology. Other companies that partner with MoDM providers are not able to align the real-time data collected with carrier invoice cycles. Integrating data permits better real-time optimization and enables the ability to assign financial costs to employee data usage, thereby making quantifying return on investment quick and easy.

There are many companies in the industry today that profess to have a full mobile expense, asset, data management, procurement, help desk and lifecycle solution. Its long history of excellence in solution delivery, now combined with the industry's only solution integrating wireless expense management with enhanced data management control, makes MobilSense the right solution for companies facing the challenge of escalating mobile data costs.

Check out the MobilSense website https://www.mobilsense.com or call 888.870.4250.

ABOUT THE AUTHOR

KELLY TEAL
Senior Research Analyst

Kelly Teal authors many of AOTMP Research & Advisory's reports, from Analyst Perspectives and Market Landscapes to vendor whitepapers, Anatomy of a Decision insights and more. Thanks to a background diverse in technology journalism, Kelly is able to write with versatility across AOTMP Research & Advisory's practice areas. This has cultivated a skillset that allows her to speak to the range of issues enterprises and vendors face amid the ever-changing telecom, mobility and IT management climate.

ABOUT AOTMP RESEARCH & ADVISORY

AOTMP Research & Advisory supports enterprise and vendor telecom, mobility and technology management initiatives and objectives with actionable data and insight. To that end, AOTMP Research & Advisory focuses on the management of multiple practice areas, including IoT, cybersecurity, enterprise mobility, telecom expense, mobile application development, BI/ data analytics, enterprise telecom/mobility/technology environments, telecom/mobility/technology ecosystem and IT services.

Enterprises take advantage of AOTMP Research & Advisory's targeted research, analysis and advisory services to boost telecom/mobility/technology management efficiency, performance and productivity. This brings greater value and impact to the overall business – including reducing costs. For vendors that impact the performance, productivity and efficiency of an enterprise's telecom, mobility or technology environment, following AOTMP Research & Advisory's proven approach leads to higher revenue, more market share, competitive differentiation and happier customers.

One key distinction about AOTMP Research & Advisory stems from our extensive reach and relationships with telecom, mobility and technology management business professionals. Thanks to a variety of sources and advanced statistical methods, we extract information from end users that helps enterprises measure themselves against their peers and gives vendors unprecedented views into their clients' and prospects' business pains and goals.

Overall, AOTMP Research & Advisory sets the standard for telecom/mobility/technology management expertise, guiding enterprises and vendors alike to positive, measurable outcomes.

ABOUT AOTMP®

Telecom/Mobility/IT Management Best Practices and Industry Standards

AOTMP is a leading global information, services and advisory firm for next generation Telecom / Mobility / IT Management best practices and industry standards for organizations and the vendors who support them. Best practices cover network services, carrier services, mobility and IoT solutions, cloud solutions, software, hardware, and emerging technologies that impact the performance and business value of technology. Using information, data and compiled analytics from thousands of enterprise environments worldwide, AOTMP solutions help enterprises drive performance, efficiency and productivity while significantly reducing costs and help vendors provide a new level of value to their customers. AOTMP's solutions are based on its patented Efficiency First® Framework methodology and are the foundation for Telecom / Mobility / IT Management Centers of Excellence being built across the globe.

AOTMP Business Units include:

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- **AOTMP Tools** – tools portal and certified vendor directory
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- **AOTMP Analytics** – scoring, measurements, analytics and recommendations
- **AOTMP Services** – services for enterprises and vendors
- **AOTMP Events & Program**s – annual conferences, webinars and the AOTMP Industry Council