

SOTI®

ONE PLATFORM CONNECTING EVERYTHING

White Paper



Don't Come Last in a Mobile-First Future

The era of desktop computing has ended. Smart companies know that business mobility is critical to their long-term success. They are accelerating their investment in mobile technology — more devices, apps, content and back-end systems. They are turning into 'Mobile-first' companies. However, this new philosophy does not come without challenges. Dealing with scale, diversity, interoperability and remote support for all the new devices and endpoints are just a few of them. Mobile-first companies are looking for mobile-first solutions to help them address these new challenges.

Don't Come Last in a Mobile-First Future

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The Rapid Rise of Business Mobility

“By 2020 mobile devices will outsell PC's by a factor of ten.*”



Business mobility is changing fast. Not too long ago companies only equipped workers in select departments with mobile devices. Even then, the market saw equal sales of mobile devices (smartphones and tablets) and personal computers (desktops and laptops). But now, with more workers on the road and away from their desk, companies are deploying more smartphones and tablets. By 2020 mobile devices will outsell PC's by a factor of ten.* Even when you limit the scope to the business market, companies are buying two to three times as many mobile devices as desktops and laptops.

Another example of the ascendance of mobile technology is where and how internet data is being generated. Just a couple of years ago, the clear majority of internet IP traffic was created by PCs (59%) as opposed to smartphones (8%). By 2020, the volume of data will be roughly equal; PCs (29%) and smartphones (30%), while tablets, smart TV's and IoT devices will generate a rapidly increasing share.**

What is driving this revolution in business mobility? Smart companies are doubling down on mobile technology and the IoT to reinvent their business and crush the competition. They are embracing the concept of 'Mobile-first' beyond its legacy consumer focus into a core business strategy. It is simple; they see mobile technology as critical to the success of their business.

* Statista, 2016

** Cisco - June 2016

How Companies Use Mobile Technology

Why companies deploy mobile technology is relatively straightforward and consistent. They want to empower their workers, improve customer engagement, and streamline their operations. How they go about it is much more complicated. During its two decades of mobility management experience, SOTI has identified six common business mobility strategies that mobile-first companies are adopting.

Drive Business Transformation	The term 'Business transformation' is over-used, and not always understood. In some cases, it describes a company that completely changes their line of business, think Netflix™. But another, equally valid definition is when a company fundamentally changes the way they operate their business through the use of mobile technology.
Differentiate the Customer Experience	A company cannot succeed without loyal customers. In this era of pervasive digital technology and always-on social media, it is more important than ever to distinguish yourself from your competitors. One way to do this is to use mobile technology to tap into the growing buying power of the Millennials, the "Digital Natives."
Focus on Business-critical Mobility	Some business solutions are mission-critical, when they go down, they can bring the company to a standstill. Other solutions can be classified as business-critical: their absence can significantly affect the performance of the company, and its ability to execute its core business. For some companies, business mobility has become business critical - their day-to-day operations depend on mobile technology and associated back-end systems.
Deliver Smart Insights	Figuring out how your customer thinks, and influencing their behavior, is a key to business success. There are two common approaches to getting this data: you can dig deep or sample widely. Customer surveys and focus groups are used to dig deep. Extract detailed data from a suitable sample size and extrapolate the findings to your customer base. The 'wide' strategy is to extract smaller amounts of data from a larger sample size to interpolate and forecast more specific customer behavior.
Create a Disruptive Market	New technology empowers companies to create completely new, disruptive markets. Uber™ is a perfect example — they used low cost mobile devices and applications to create an entirely new approach to the age-old 'livery' business. Uber's business model is so compelling that businesses all around the world are using mobile devices and applications, and trying to emulate its success.
Offer Mobility as a Service (MaaS)	Software as a service (SaaS) is a popular cloud-computing model that delivers pay-for-play business solutions. In the SaaS model, a solution provider hosts hardware and software on its own infrastructure and delivers functionality it to customers as a service. Mobility as a Service (MaaS) is similar — delivering all elements of a turnkey mobility solution to the customer, including: devices and mobile apps as well as hosting back-end systems, data storage, device management and support.

Different Mobility Goals — Similar Mobility Challenges

At a high level, it doesn't really matter what a company's mobility strategy is, or how they intend to execute it. The more mobile users, devices, applications and content they adopt, the more challenges they will have to deal with.

The Mobility Management Challenge

The explosive growth of smartphones and tablets has made business mobility more complicated. There are many more makes and models of mobile devices: smartphones, tablets, and special-purposes devices. They run on different operating systems, and offer a broad range of capabilities and features. However, these new devices have one thing in common, they are all powerful computing platforms that let companies empower their remote workers with mobile applications and content. All of these new variables, feature diversity, operating systems, applications and content, have increased the mobility management challenge exponentially.

The New Technology Challenge

Securing and managing the multitude of devices that companies are deploying is challenging, but the Internet of Things (IoT) is going to make it even more difficult. Analysts predict that the global installed based of IoT devices will grow to 30 billion in 2020, and over 75 billion by 2025*. Companies that are managing hundreds of smartphones and tablets could soon be managing thousands, or tens of thousands of endpoints. But, the challenge is not just about the numbers — the IoT will introduce billions of "things" with a diverse range of capabilities. Simple endpoints like sensors for temperature and motion, more complicated devices like digital signs as well as health and wellness wearables, all the way up to expensive, complex systems like robots (UAVs and UGVs), connected cars and smart machines. The IoT presents business with many management challenges, but a few of the most significant are: the raw number of endpoints, their functional diversity, and how they can connect, communicate and collaborate to create complex systems.

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* HIS – March 2016

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The App Development Challenge

Smart companies rely on mobile applications to drive the success of their business. They are using mobile office productivity apps, e.g. MS Office 365, and mobile versions of enterprise solutions, i.e. ERP, CRM, and SFA, but the real game-changer is closer to home. Businesses are starved for custom apps to help them streamline their line of business (LOB) workflows. Historically, LOB apps were developed internally or outsourced to third party app developers, but this is expensive and time consuming. Recent studies have shown that organizations require more than 6 months to spec out, design and develop a single mobile app and the average cost can be up to \$140k*. When you multiply this by ten to twenty, the number of mobile LOB apps an average business needs, the task quickly becomes unmanageable.

The Remote Support Challenge

Another rapidly growing challenge for mobile-first companies is dealing with remote worker device and application issues. These companies are often supporting more smartphones and tablets than desktops or laptops, and device issues are serious. Malfunctioning mobile devices have an immediate impact on employee downtime and business productivity, but can have an indirect affect on customer satisfaction, market perception and/or even create legal problems. Gartner™ predicts that in 2017, approximately 50% of all Level One support requests will be related to mobile devices**. Companies that are aggressively pursuing the IoT will see an even greater demand for efficient and effective remote support for their endpoints, sensors and devices.

The Mobile Business Data and Analytics Challenge

The growth of business mobility and the arrival of the IoT are creating massive amounts of new data — both structured and unstructured data and its meta-data. By 2021, an average smartphone will generate almost 7Gb of internet data per month, almost equal to a conventional PC . Companies are hoping to tap into this wealth of data and learn from it to improve their customer's experience and streamline strategic workflows. Not just the core data from mobile LOB solutions, but also the metadata about the user, their mobile device or an IoT endpoint (sensors & actuators). Having access to all relevant metadata makes analysis easier and improves your chances of successfully changing your mobile LOB workflows.



** VDC Research, Jan. 2016

**Gartner - October 2016

*** Cisco - March 2017

Meet Mobility Challenges Head On

Each of these challenges is easy to deal with on its own — enterprise mobility management and help desk solutions have been around years. But, dealing with all of them simultaneously, is much more difficult. If you don't address all of the challenges, you compromise the benefits of the ones you do. A business mobility strategy is only as strong as its weakest link. For example, any advantage to building mobile LOB apps quickly is mitigated by remote workers suffering from frequent, extensive periods of downtime. Today's mobile-first companies need a full complement of mobile-first solutions.

Rapid Mobile Application Development

Mobile applications, especially custom LOB apps, are a critical component of business mobility. Unfortunately, these high impact apps are often the most costly and time consuming to build. Companies are looking for short cuts, and one possibility is the application of a tried and true application development paradigm into the mobile space. Rapid Application Development (RAD), and its mobile version RMAD, focus on the rapid creation of working prototypes. This often means breaking a mega project into smaller bite-sized pieces, building quick working models, testing, fixing and repeating. An RMAD approach can eliminate the IT bottleneck for mobile app development. Gartner estimates that by 2020, 70% of enterprise mobile apps used in enterprises will be developed or adopted without IT involvement*.

Future-Proof Mobility Management

Mobility management is evolving. A few years ago companies wanted mobile device management (MDM) solutions to secure and manage devices. Then, as device capabilities grew, and mobile applications and content became more important, the focus expanded to enterprise mobility management (EMM). Now with the arrival of IoT, the market is changing yet again. In a few years, we can expect to see billions of new, connected devices, "things" and endpoints. There may be dozens of new categories of endpoints, but they all need to be secured and managed from a single, unified mobility management solution*.

Mobile Optimized Help Desk

Keeping your workforce working is important for any mobility strategy. A key aspect of this is fixing mobile device and application problems quickly, and reducing worker downtime. Unfortunately, a lack of 'mobile optimized' solutions has made the remote support of mobile devices much more difficult than traditional IT support. To date, help desk technicians have not had the tools to expedite support - No remote view, remote control, file-sync and forced updates/restart. A purpose-built mobile help desk solution will solve mobile device problems faster, often on the first contact.

“By 2020, 70% of enterprise mobile apps used in enterprises will be developed or adopted without IT involvement*”

* Radicati - April 2017

** Gartner - July 2016

Security is More Important than Ever

“The 2014 over 2 million phones were stolen in the U.S., and another 3.1 million were lost*.”

A decade ago, when smartphones started to become popular in business, it didn't take long for companies to figure out that mobile security was essential. Empowering employees with powerful, mobile computers and applications delivered amazing productivity benefits, but it also created a lot of risk. The risks include: the costs and inconvenience of physically losing a device, the legal liability of compromised corporate data, and the potential exposure due to unauthorized network access. In 2014, over 2 million phones were stolen in the U.S., and another 3.1 million were lost*.

Now take that legacy risk, multiply it by ten or a hundred based on the raw numbers of devices and endpoints you are deploying. Add in the fact that mobile devices have become ripe targets of opportunity for malicious attacks and hacks. Then consider the fact that many of these new IoT devices and endpoints were never designed with security in mind. What does this all add up to? A potential mess. In the mobile-first world end-to-end security is more important than ever. It needs to be designed and built into your business mobility from the beginning, not bolted on at the end.



Together is Better

By 2020 mobile workers will account

for nearly three-quarters

nearly three-quarters

(72.3 %) of the U.S.

workforce.*

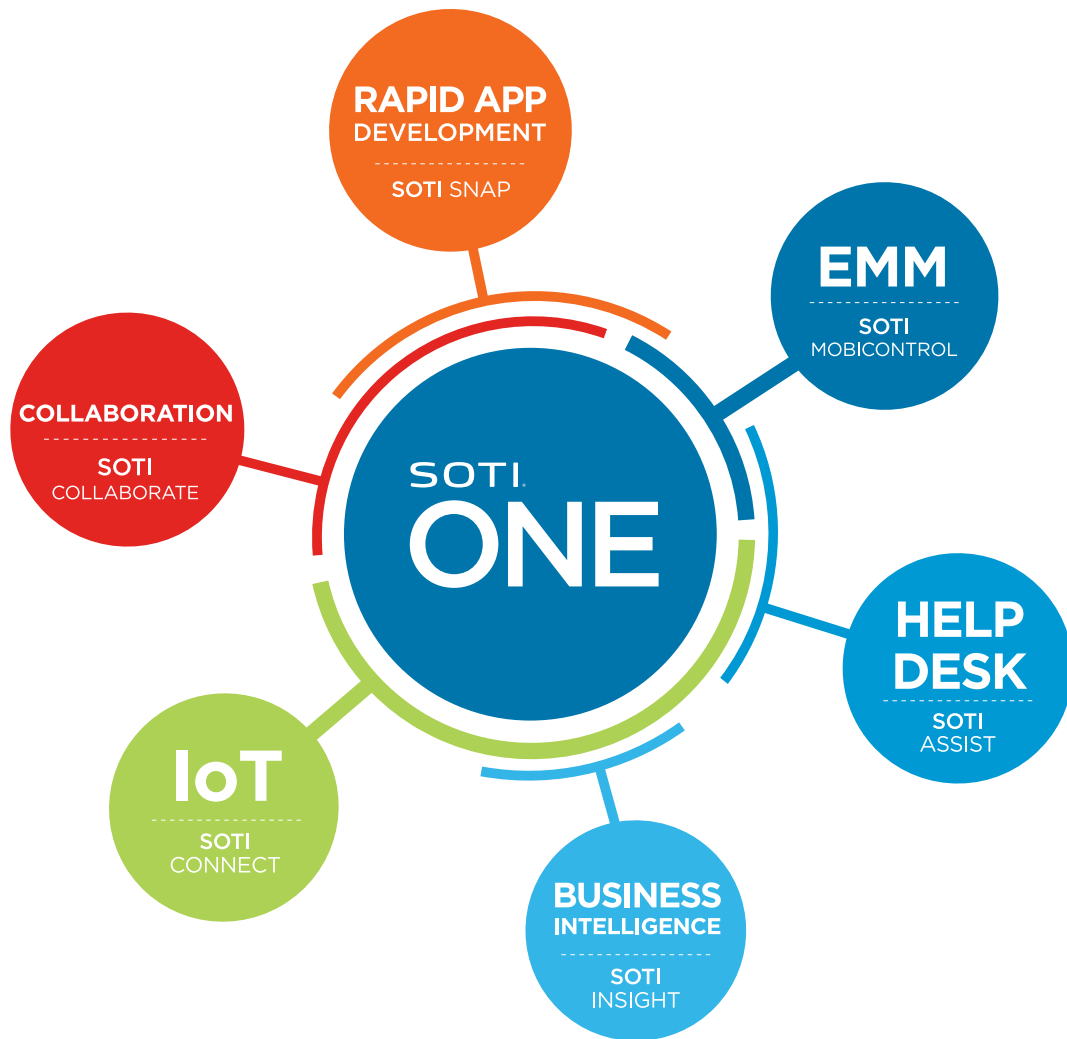
A comprehensive approach to solving business mobility challenges will pay off in many ways. Firstly, you are not just shifting problems around; you are addressing their root causes. A Pareto (80/20) approach may solve the biggest issue initially, but it can also make it harder to solve the next challenge. Another benefit is that by adopting an integrated solution, you make it easier to adjust to changing market conditions, or retargeting your company's mobility strategy. The mobile technology market is changing quickly, and you need to be able to assess, adapt and overcome any and all new challenges, whether they are externally or internally driven. Lastly, there are efficiency issues and economies of scale. Fixing one mobility challenge at a time, will cost more over time.



* IDC - June 2015

One Platform, Connecting Everything

SOTI ONE is an integrated suite of mobility solutions. Each solution works on its own to solve one of today's toughest mobility challenges. But working together, SOTI ONE tears down mobility silos and connects everything; mobile devices, IoT endpoints, apps and back-office systems. Then, when everything is connected, the integration, analytics and intelligence help you reinvent your business to meet the challenges of tomorrow. SOTI ONE keeps your workers working, builds your apps faster, and makes it easy to secure and manage your mobile devices.



SOTI Delivers Innovative Mobility Solutions

SOTI is a proven innovator and industry leader for business mobility solutions. Thousands of companies around the world depend on SOTI to simplify their business mobility, and make it smarter, faster and more reliable. After two decades of success, SOTI has attained a thorough understanding of customer verticals and built strong partnerships with device manufacturers. This provide unparalleled insight into new technology and industry trends. Clear vision and a strong focus on R&D enabled SOTI to lead the EMM and create new, cutting-edge business mobility solutions. SOTI helps businesses take mobility to endless possibilities.