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### Cyber adAPT:

Balancing the BYOD-Security Equation

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## Rethinking Smartphones for the Enterprise: Why Consumer Smartphones Aren't So Smart?

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T leaders across all industries are being tasked with providing a consistent, always-on employee communication experience. In today's workplace, deskbound workers can typically leverage email, instant messaging, and personal video apps communicate and collaborate. But what about the mobile worker who doesn't spend all day at a desk, but still needs to stay connected? Nurses, retail store clerks, hospitality workers and equipment operators are prime examples of critical "mobile knowledge workers" who need to stay connected while moving throughout the workplace to do their jobs.

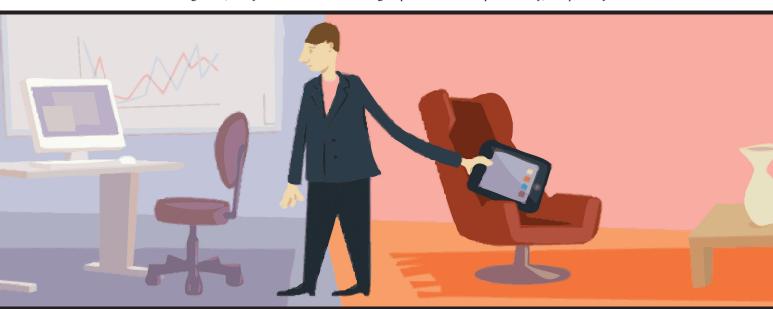
Under pressure to increase employee productivity and customer satisfaction while reducing costs, many IT leaders are evaluating



bring-your-own-device (BYOD) policies or furnishing mobile employees with corporate-owned Smartphones. However, within certain enterprises, deploying consumer-grade Smartphones can produce the opposite effect. Poor reliability and inconsistent call quality negatively impact employee productivity and customer satisfaction, while security risks and management costs weaken an organization's bottom line.

Mobile knowledge workers perform their job functions while roaming around a building or campus, so connectivity to an in-building wireless network like Wi-Fi is critical, as cellular coverage may be spotty or nonexistent. Reliable and ubiquitous communication is

essential for these workers to perform their roles effectively. Interruptions in call quality or availability can impact their performance and productivity, and possibly customer satisfaction.



Mobile knowledge workers also require extensive battery life from their devices. They often share duties with others across multiple shifts where devices may be used 24/7 among multiple employees. Rather than wait for their devices to charge, they need to easily swap out batteries.

Finally, these employees often work in harsh environments where they are exposed to wet or dusty conditions, or unforgiving floor surfaces. They also rely on strong solutions to clean and sterilize their phones. In most cases, consumer Smartphones can't stand up to this type of daily usage and extreme conditions.



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### The Need for Enterprise-grade Smartphones

Fortunately, enterprise-grade Smartphone devices are available to meet the application needs of the mobile knowledge worker. Enterprise-grade Smartphones provide the durability and battery management features to support 24/7 usage in all kinds of environments, and utilize enhanced Wi-Fi and management features to provide reliable, consistent, and secure communication throughout the workplace.

Nearly all consumer Smartphones are capable of working over a corporate Wi-Fi network. But they are designed with the expectation that the user is staying within the coverage area of a single Wi-Fi access point such as at a desk, in the home, or in a hotspot at a coffee shop. Enterprise Wi-Fi networks utilize multiple access points to provide coverage throughout the facility, which lets the mobile device reconnect to different access points as the user moves in and out of range. Consumer devices will not initiate a connection to a different access point until the signal quality degrades enough to lose network connectivity. Enterprisegrade Smartphones use proactive roaming algorithms to determine when to switch to another access point without affecting network connectivity. This is critical for real-time mobile applications using voice or video. As an example, it is unacceptable for a nurse to have a call interrupted or dropped as she walks down a hallway to respond to patient needs, which is often the case with consumer Smartphones.

### **Considering the Real Cost of Ownership**

Buying consumer Smartphones and handing them out to employees is often viewed as the most cost-effective solution; however, when you consider the total cost of ownership, there is a significant advantage to enterprise-grade devices. CIOs and IT managers are well aware of the higher acquisition costs of enterprise-grade networking equipment and user devices. PCs, telephone systems, and even office furniture are differentiated between home and office use, so mobile communications devices should be, too. An enterprise-grade device that will be used through the entire workday, shared between different shift employees, and relied upon as a critical job support tool. It has to be designed differently than a personal, cellular consumer device.

Enterprise-grade Smartphones have unique design attributes for these kinds of applications. Battery management is a key issue for mobile workplace environments to support 24/7 usage. Enterprise-grade Smartphones have interchangeable battery packs that allow the batteries to be charged separately from the device so that a fully charged battery can be installed at the start of a shift. Since the battery packs are swapped out two or three times a day, the charging mechanism has to be simple and robust.

It's not surprising that some organizations report up to 60 percent replacement of consumer Smartphones per year due to damage or other failures. They just aren't built to withstand the kind of use that a mobile knowledge worker requires. Enterprisegrade Smartphones are designed from the ground up to support many years of non-stop usage. The type of materials used for the enclosure and display has to stand up to frequent cleaning and resist damage from liquids and dust. Even the carrying accessories have to be designed to meet unique workplace environments.

### Applications for the Mobile Worker

Smartphones aren't just used to make phone calls—access to other communication and data applications drive much of their value to the mobile worker. The ability to use off-the-shelf or internally developed applications is critical, so it is important that an enterprise-grade Smartphone supports the same applications available for consumer devices. Enterprise-grade devices utilizing the Android operating system have access to an enormous ecosystem of applications, including security and management systems to prevent unauthorized or inadvertent access to applications that are not suitable for the workplace. The same mobile device management tools that are used to secure BYOD or corporate-provided Smartphones can be used to manage the on-site mobile workers using enterprise-grade Smartphones.

As BYOD expands its presence into the workplace, IT teams need to consider the costs and drawbacks of utilizing personal devices. For organizations with large, in-house mobile workforces, the benefits of enterprise-grade devices easily outweigh those of personal Smartphones. CR