THE FUTURE OF RUGGED DEVICE MANAGEMENT
A Look at 5 Big Trends Poised to Make an Impact
Rugged Devices Are Mission-Critical

Staying connected to apps and information is a must for today’s workers—including many whose jobs don’t involve sitting at a desk. In industries from healthcare to retail to logistics, workers are continually on the move, and need rugged devices that can withstand all conditions without losing connectivity.

In fact, the number of use cases and possibilities for rugged devices is growing. It’s clear that rugged devices will only become more important in the coming years, as they become more powerful and embedded into a company’s core business processes.

If your IT organization currently manages rugged devices, or is considering implementing them, you’ll want to pay attention to five key trends poised to shape the future of rugged device management.

THE MANY UPSIDES OF RUGGED DEVICES
• Improves efficiency and accuracy for workers
• Delivers high performance in harsh conditions
• Enables immediate access to critical information
• Improves customer engagement
5 Trends Shaping the Future of Rugged Devices

As rugged devices continue to be used for mission-critical business operations, it’s crucial to ensure they’re being managed efficiently and securely. Emerging trends can help us determine what steps IT organizations can take to make that happen.

Keep your eyes on these 5 trends:

1. Consumerization will continue to drive rugged device requirements
2. Enhanced management capabilities will become a must-have
3. Android Enterprise will continue to gain prominence
4. Device and app analytics will be expected to deliver results at speed and scale
5. IT will need a thoughtful strategy for Workplace IoT
Trend #1
Consumerization Will Continue to Drive Rugged Device Requirements

Historically, the majority of rugged devices ran on Windows Embedded operating systems and were limited in terms of usability and functionality—but with support for the OS coming to an end soon—that’s changing. Today, as workers expect consumer-like experiences from IT that mirror their personal devices, the market is responding with lower costs and better options. Making these devices easy to use and operate helps to ensure that workers get the most out of them.

Today, rugged devices are expected to have:

• Standardized management capabilities across device manufacturers
• Increased security capabilities to prevent data leakage and enforce compliance
• Consistent and intuitive experience for users

As user expectations continue to drive changes in rugged hardware, software, and manageability, these products will keep evolving. Expect to see sleeker devices, intuitive line-of-business apps with graphics, along with streamlined and automated manageability and security. Not far behind is the ability to integrate with other devices, like peripherals and IoT endpoints, and advanced features such as inclinometers, accelerometers, and biometric security.
Trend #2
Enhanced Management Capabilities Will Become a Must-Have

With so many devices being accessed in so many places, IT organizations must stay in control at all times. You need a solution that allows you to manage, maintain, support, and troubleshoot devices—even from a remote location.

Essential management capabilities include:

- **Rapid, streamlined enrollment.** Rugged devices are often used in remote locations, or in environments where IT staff isn’t readily on hand. Having out-of-the-box enrollment, with applications and configurations already set, cuts down on the need for extra staff or assistance from IT. Even better, management can be enforced immediately, so any issues that may arise can be solved right away.

- **Simple check-in/check-out.** It’s important to give workers quick, easy access to the line-of-business apps they need to get their jobs done, without compromising data security. Once a device is checked out, the specific apps and settings for that user are deployed to the device. This is particularly relevant as many rugged devices change hands throughout the day, and different users may have different permissions, skill levels, and expertise.

- **Tools for automated actions.** Creating “Event Actions” boosts efficiency by enabling IT to run specific commands on devices when certain conditions occur. For instance, turning off non-vital apps when the battery power level dips below a certain threshold, or triggering an action on a recurring schedule.
Trend #3
Android Enterprise Will Continue to Gain Prominence

Over the past 10 years, Microsoft’s Windows CE and Windows Embedded Handheld (WEH) have been the most popular operating systems for rugged devices, thanks to their large selection of devices and development tools. That’s going to change, because starting in 2018, Microsoft will phase out support for WEH, and organizations will need to upgrade to Windows 10 or migrate to iOS or Android.

If your organization chooses to migrate, Android Enterprise has a lot to offer. It delivers a strong foundation for supporting mission-critical endpoints, and will be a leading operating system for rugged devices in the future.

Android brings a modern management approach that:

• Eliminates device fragmentation with standardized security and management capabilities
• Maintains a consistent native experience for end users, regardless of device manufacturer
• Offers a wide range of management APIs that enable IT to prevent data leakage and enforce compliance
• Provides the ability to support diverse work profiles and managed device modes

When migrating from a legacy OS or from Android’s existing legacy management approach, a comprehensive migration strategy is essential. This ensures that businesses maintain productivity and get the most out of Android’s modern management approach. A holistic migration strategy should take into account all hardware and software requirements and include a well-defined app strategy and unified endpoint management (UEM) solution that fully supports Android’s modern management approach.
Trend #4
Device and App Analytics Will Be Expected to Deliver Results at Speed and Scale

Workers rely on rugged devices to do their jobs, and if they go down, productivity suffers. Analytics are critical for rugged deployment, because they provide insights IT teams can use to maintain device uptime and deliver proactive management.

Equally important are the mission-critical apps that run on rugged devices. These apps are typically custom-made, expensive, and complex. Analytics provide the visibility IT needs to optimize app performance, quickly resolve issues, reduce escalations, and improve the user experience.

With robust analytics for both devices and apps, you can predict and solve for problems before they happen, providing reliability users can count on when they need it most.

Critical features for app analytics include the ability to:

- Monitor every aspect of app activity, including usage in the field across devices, networks, operating systems, geolocation, connectivity state or version of the app
- Gauge app adoption and engagement, so that you can easily quantify the ROI of app deployment
- Gain ongoing insight into user behavior to identify the most important flows or actions in your app, and connect them with critical business metrics
Trend #5
IT Will Need a Thoughtful Strategy for Workplace IoT

Workplace IoT endpoints or lightweight IoT-type devices like wearables and peripherals are increasingly being used in the same industrial environments as rugged devices. Just like any other device connected to your network, they should be managed alongside your existing device fleet via unified endpoint management (UEM) solution.

Examples of Workplace IoT devices:

- **Wearables**: smart glasses, smart watches, wearable scanners
- **Peripherals**: enterprise sleds, mobile printers, voice assistants
- **Single-purpose devices**: digital signage, interactive kiosks

Comprehensive management and security are just as important for these devices as they are for rugged devices, as they’re often used in tandem. Key UEM features include low-touch enrollment and asset tracking. For certain devices, such as smart glasses, app lifecycle management is also important. For mobile printers in particular, enhanced management can help IT determine where printers are being used most, what their life expectancy is, and when they’ll need more paper.
The VMware Approach to Rugged Device Management

As rugged devices continue to mature and operating systems evolve, it's important to maintain a consistent, integrated approach to management. You need a solution that can keep policies and performance on track—and is flexible enough to adapt to ongoing changes in the evolving digital landscape.

VMware Workspace ONE™ powered by VMware AirWatch® Unified Endpoint Management™ technology is an integrated solution that helps you manage and support any device, anytime, anywhere. From enrollment to retirement, Workspace ONE is designed to help you get the most out of your mobile investments—from laptops and smartphones to rugged and workplace IoT devices.

Workspace ONE supports your rugged device management with:

• Low-touch enrollment and configuration for fast, simple on boarding
• Complete application lifecycle management
• Robust analytics capabilities that enable you to track and collect critical information, for complete visibility across deployments
• Full integration with Android Enterprise, delivering scalable, comprehensive support for work profile and managed device modes
Empower Users with a Unified Platform

Today’s businesses are on the move—and so are your users, and their devices, apps, and data. A unified platform helps you support their mobility while centralizing management and security. VMware helps you build a digital workspace strategy that puts employees first while securing apps and data.

Workspace ONE provides the support you need to manage and secure all kinds of rugged devices. You can rapidly provision, stage, and manage them, without going over budget or eating up IT hours. And you can send your devices out into the field with confidence, knowing that they’re running at peak performance. Whatever the future holds, you can take it in stride with a rugged device strategy supported by VMware.

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