Enable devices and device management for your mobility/BYOD program

Best practices for choosing the right devices and solutions

Abstract

Is your organization considering implementing a mobility program? You likely understand the benefits you stand to gain: increased employee productivity, faster response to customers and suppliers, enhanced employee satisfaction and more. But how can you implement such a program effectively, efficiently and securely?

This paper details best practices for selecting the right devices for your users and implementing the most effective management solutions. It also surveys Dell devices that meet a range of user, business and IT needs, highlighting the Dell Enterprise Mobility Management (EMM) solution, which can help address your current and future requirements for efficiently managing and securing mobile devices.

Introduction

Enterprise initiatives designed to facilitate mobile productivity can deliver important benefits to your organization and your employees. Employees can respond faster to colleagues, partners, suppliers and customers when you enable them to stay connected. Mobile productivity programs that let employees choose from enterprise-issued mobile devices or use preferred personal devices also can help enhance flexibility and increase job satisfaction. At the same time, bring-your-own-device (BYOD) programs can help your organization reduce or avoid the costs of buying mobile devices for employees.

To maximize mobile productivity, your employees need the right devices — devices that not only match employee preferences but also meet both business and IT requirements.

The first step in selecting devices should be a careful assessment of user requirements and preferences.

While some users might need only a smartphone or tablet with email, calendar, contacts and a browser for their jobs, others may require a full desktop environment for running enterprise applications. You can boost mobile productivity and avoid problems by determining which BYO devices to allow, which devices to recommend to employees who request recommendations and which devices to offer as part of a choose-your-own-device (CYOD) or member purchase program (MPP).

You must also select the right management solutions. IT complexity can increase quickly as you support a greater variety of devices, operating systems, ownership models, use cases and user preferences. Your IT group needs a comprehensive solution that can provide efficient, centralized management and security for a full range of mobility and BYOD options. In addition, you need a solution that can support new technologies that might emerge in the future.

Select the right devices for your CYOD program

Which mobile devices should you offer as part of your CYOD program?

Assess user requirements

The first step in selecting devices should be a careful assessment of user requirements and preferences. Begin by identifying the primary software applications needed by employees in each job function. A salesperson might need a distinct business phone service, content collaboration capabilities, and the ability to use spreadsheets, PDFs and browser-based applications. By contrast, a graphic designer working remotely would likely require photo editing, illustration and desktop publishing software. Both employees need email, calendaring and contact software as well. The designer might require a thin or zero client, or a laptop or desktop with a powerful processor and plenty of memory; by contrast, the salesperson could use a smartphone and tablet.

Take into account how and where employees use these devices. Some employees choose to work remotely from a single location (like home), and others are continuously on the move. Some need lightweight devices that can be carried along with other materials, while others need more rugged devices that can withstand drops or dusty environments. Consider too whether employees must do extensive typing, which might require a full keyboard, or whether they can conduct most functions through a touch screen.

Offer platforms and form factors that are appealing to employees. Users are more productive if they are familiar and comfortable with the technology. Employees might prefer a tablet based on Google® Android™, a smartphone running Apple® iOS, or a more traditional laptop with Windows 8 or Mac OS® X.

Define IT requirements

Define IT requirements early on in your decision-making process by asking and answering key questions. Do you plan to provide enterprise applications in a virtualized environment? If so, you must determine and meet the minimum performance specifications for running that environment on each device you offer. Do you intend to use remote management functionality? You might have to select processors that offer hardware-assisted management capabilities, such as out-of-band management.

Whether you allow data to be stored locally also affects your device selections. For example, you might decide to run applications and store data entirely in the data center, in which case you do not need to offer large-capacity hard drives.

Select the right devices for your BYOD program

BYOD programs require you to identify allowed devices and clearly define the minimum specifications for those devices.

Assess user requirements

As with a CYOD program, you must understand the applications and use cases for each job function to determine which devices to allow as part of your BYOD program. Not all devices that employees like and want to use are appropriate for their job functions. For example, employees cannot use an Apple iPad® for work if they need to use Windows applications that do not currently run on the iOS platform.

In some cases, you might allow a particular device but need to set a minimum requirement for the operating system, processor, memory, storage capacity or other component. For instance, you might allow smartphones but must specify a minimum version of Android, iOS or Microsoft® Windows Phone® to accommodate particular enterprise apps.

Define IT requirements

Establish the minimum device requirements for delivering a responsive user experience while running all necessary management, security and enterprise workspace solutions. For example, if you implement a secure enterprise workspace approach (which separates enterprise applications and data from personal applications and data on the same device), employees need systems with higher-performance processors and more memory than if you implement a desktop virtualization solution or Secure Sockets Layer (SSL) virtual private network (VPN) client. By contrast, bandwidth and latency are the primary considerations in a desktop virtualization solution.

Beyond establishing minimum requirements, you must effectively communicate those requirements to employees. In many cases, IT benefits from working with the human resources (HR) department and the legal department to ensure BYOD requirements are communicated to new hires or employees who want to begin using personal devices for work. Through a website or another channel, HR can provide key information, including device specifications, recommended wireless carriers, corporate discount programs and more.

If you have an employee base that stretches across countries and global regions, be prepared for potential cultural barriers, geographic challenges and tax issues. Work with your HR and legal departments to overcome these and other possible barriers that you might face with a BYOD program.

Set expectations for BYOD support

IT must also set expectations for BYOD support by answering questions such as the following:

- Who is responsible for updating the operating system and apps on a tablet?
- Who covers the ongoing device costs, including calling and data charges? Does the company provide a stipend?
- How is data stored, backed up and protected?
- If a personally owned smartphone stops working, whose responsibility is it to get it fixed?
- Are employees required to purchase extended warranties for their devices?
- Does the company provide a spare laptop while a personally owned system is being repaired?
- If a device stops working, how many hours or days is an employee allowed to be without that device before the employee must purchase a new one?

You should also implement effective management and security solutions.

Implement effective management and security solutions

As you decide which devices to offer or allow, define minimum requirements and set expectations for IT support, you should also implement effective management and security solutions. Be sure to select solutions with specific capabilities and attributes best suited for your unique environment so you can successfully enable mobile productivity, protect enterprise data and networks, and control administrative complexity. The following are key factors to consider.

Comprehensive management
You need solutions that allow you to manage a wide variety of device types, form factors and operating systems, including:

- Smartphones and tablets based on iOS, Android and Windows 8
- Laptops and desktops running Mac OS X, Windows and Linux® operating systems
- Cloud clients, including thin and zero clients
- Emerging technology

Flexibility
Your solution should be able to adapt to change. You need to be sure you can provision devices, manage endpoints and workspaces, secure enterprise data and applications, and handle other functions — no matter what enablement/ownership models and device types you decide to support tomorrow.

Streamlined security provisioning
Neither new employees who intend to use personally owned devices for work nor existing employees adding new mobile devices should have to go through an extensive setup process for each device to gain secure remote access and to protect enterprise data. IT should select solutions that enable a simple, quick one-time setup, automatically providing the appropriate capabilities and policies for each new device based on the user's identity.

At the same time, the solution should allow IT to fine-tune access options and security capabilities based on the platform. For example, IT might want to implement more restrictive policies for a smartphone, which might be more easily lost than a laptop and which might not enable employees to use certain desktop applications. Select a comprehensive management solution that maximizes flexibility, minimizes complexity and provides a full range of security capabilities.

Embedded security
Embedded security solutions, which cannot be modified or worked around by users, can help ensure strong protection, even as devices, work habits and security threats change. With embedded security solutions, IT can protect data, apply the right profiles and policies to users, and secure the network.

Secure enterprise workspaces
Adopt enterprise workspace solutions to help prevent security problems even as devices and personal operating environments change. The workspace separates enterprise data and applications from personal ones on the same physical device, which prevents personal applications, data and threats from commingling with or capturing corporate information while protecting user privacy.

Enterprise workspace solutions can also supplement a virtualized desktop approach, which enables users to work offline without compromising security. In addition, enterprise workspace solutions can simplify the processes of on-boarding new employees and removing enterprise data from a device if an employee leaves the company — IT can simply wipe the workspace of all corporate data when an individual's employment ends.

A design that minimizes complexity
Select solutions designed to control complexity in order to address current requirements, prepare for the future and work within your resource limitations. End-to-end solutions with integrated management consoles can help significantly diminish management complexity through consolidation. Appliance- and cloud-based solutions can also help cut deployment complexity and help achieve fast time to value. Choose app-based solutions to help facilitate user adoption and streamline access to corporate information. Many employees are already familiar with the process of downloading and installing a mobile app.

A single, end-to-end solution vendor
To reduce costs, ensure integration of capabilities and management consoles, and simplify support, select a single vendor that offers end-to-end solutions.

Meet the full breadth of device requirements with Dell systems

Dell offers a broad portfolio of business-ready laptops, tablets and cloud clients to meet employee, business and IT requirements.

Dell Latitude laptops, tablets and Ultrabook systems
Dell Latitude laptops, tablets, Ultrabook™ and Ultrabook 2 in 1 systems can help keep your mobile workforce running smoothly by combining best-in-class business performance and durability with scalability for growing businesses. With designs that range from small and lightweight to real-world rugged, Dell Latitude systems can help keep employees connected and data protected while providing IT staff with high levels of security, manageability and reliability.

Dell XPS laptops
Dell XPS laptops offer thin, lightweight systems that combine outstanding performance, IT-friendly features and elegant design for an uncompromised user experience. Every material was selected to enhance their performance, and every design decision was made with purpose. Dell XPS laptops, which are available in multiple screen sizes, include Ultrabook and Ultrabook 2 in 1 models, plus touch-enabled and non-touch-enabled laptops.

Dell Venue tablets
Dell Venue tablets are offered in a wide selection of sizes and options to fulfill a variety of user needs and preferences. Venue tablets based on Windows 8.1 enable organizations to support a full breadth of existing corporate applications, while Venue tablets based on the Android operating system offer a cost-effective, feature-rich alternative for mobile users.

Dell cloud clients
The Dell cloud client portfolio includes a wide range of thin, zero and cloud desktop clients to help enable access to any user and any app from anywhere.

- **Dell ThinOS–based thin clients** offer a flexible, secure way to connect employees to corporate resources. Dell Linux and Windows Embedded–based thin clients provide a strong platform for local and legacy application access, and for future client software developments.
- **Dell cloud desktops** combine local performance with server-based OS and application management.
- **Dell zero clients** are dedicated virtual desktop access devices that are extremely secure and easy to deploy and manage. Choose from zero clients dedicated to support desktop infrastructures from Citrix, Microsoft or VMware.

Dell offers a broad portfolio of business-ready laptops, tablets and cloud clients to meet employee, business and IT requirements.

Dell EMM is a comprehensive mobile enablement solution for smartphones, tablets, laptops and desktops.

Dell Cloud Client-Computing
Along with management software and services, Dell Cloud Client-Computing solutions complement existing desktop virtualization platforms/protocols and Dell endpoints to improve the user experience, increase performance and allow for easy scaling from initial or smaller deployments into many thousands of client devices.

Dell Member Purchase Program
The Dell Member Purchase Program (MPP) lets you offer employees, students and other members of your organization an easy, cost-effective way to buy the devices you prefer. Dell MPP members receive discounted pricing on tablets and laptops, Dell Loyalty Rewards Program rebates and shipping offers, and exclusive sales opportunities (such as a pre–Black Friday sale).

Members also gain access to outstanding chat and phone support, plus options for Tech Concierge service, Dell ProSupport and executive sales support. In addition, member organizations can opt for a range of specialized services, from subsidies and BYOD program management to payroll deduction and financing, as well as dedicated account manager support.

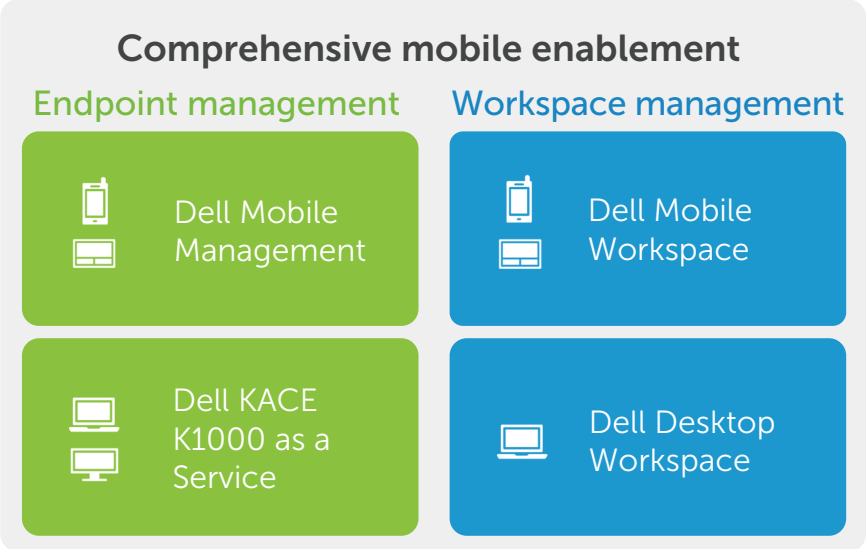
Control management complexity with Dell EMM

Dell EMM is a comprehensive mobile enablement solution for smartphones, tablets, laptops and desktops. Built from industry-leading technology, Dell EMM enables you to secure and manage devices and enterprise workspaces — regardless of who owns the devices.

This comprehensive solution integrates multiple common functions:

- Mobile device management (MDM)
- Mobile application management (MAM)
- Mobile content management (MCM)
- Endpoint systems management (ESM)
- Secure access to corporate resources
- Consolidated management
- User self-service
- Real-time, consolidated reporting and alerts
- Automatic backups of user data

Dell EMM offers management options for both corporate-managed and personally owned devices (*see figure*).



Dell EMM is a comprehensive mobile enablement solution built with industry-leading management and security technology to support a variety of devices and secure workspaces.

Corporate-managed devices
Dell EMM provides software-as-a-service (SaaS) offerings that deliver efficient mobile device and systems management:

- **Dell Mobile Management** simplifies control and management of smartphones and tablets with a single solution and management console for all your mobile devices, apps and content. Data is protected with encryption, policy management and secure mobile access capabilities.
- **Dell KACE K1000 as a Service** provides comprehensive systems management capabilities for servers, desktops and laptops across multiple operating systems and hardware platforms. Simplify a full range of administrative functions, from initial deployment to ongoing management, security and retirement.

Personally owned devices
To enable full IT management and control on BYO devices, Dell EMM provides a secure enterprise workspace on the device. The workspace — which includes managed encryption, secure mobile access, configuration and policy management, and data-loss protection (DLP) — separates enterprise data and apps from personal data and apps. Employees can be assured that your organization is not accessing or potentially deleting any personal information.

- **Dell Mobile Workspace** delivers an application-based secure enterprise workspace on personal smartphones and tablets. It provides several key productivity apps in the secure workspace, including email, contacts, a secure browser and a secure file manager, plus an optional business phone service and enterprise content collaboration capabilities.
- **Dell Desktop Workspace** enables your IT group to create and deliver a Windows corporate image, with all necessary applications, on the laptops in your environment.

Dell EMM services
Dell offers a range of additional services to help facilitate implementation and ongoing support for Dell EMM:

- **Dell EMM migration:** Dell mobility experts can help with strategy, requirements definition, Dell EMM configuration and user migration.
- **Mobile Center of Excellence:** For enterprise customers, the Dell Mobile Center of Excellence (COE) can build an overall mobile app strategy, typically with multiple applications planned. Dell provides subject-matter expertise and guides the overall strategy and process. Because IT and business priorities often differ, the COE helps brings all parties together to form ideas and develop and deliver solutions that meet the needs of the entire business.
- **Support:** Dell offers 12x5 or 24x7 support as an upgrade to the standard support included with Dell EMM.

Conclusion

To maximize the benefits of your mobile or BYOD program, it is critical to select the right devices and implement effective management solutions. Dell offers a full range of devices to accommodate user preferences and meet business and IT requirements.

In addition, the Dell EMM solution can help your IT group control the complexity of managing a wide range of devices, workspaces, and multiple enablement and ownership models while helping to ensure security throughout your organization. Dell EMM offers security and management capabilities for a full array of corporate-issued and BYO devices, including smartphones, tablets, laptops and desktops.

To enable full IT management and control on BYO devices, Dell EMM provides a secure enterprise workspace on the device.

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Dell Software
5 Polaris Way
Aliso Viejo, CA 92656
www.dellsoftware.com

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