



White Paper

Five Simple Strategies to Help Enable a More Productive Mobile Workforce

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The Quest for Efficiency, Productivity, and Mobility

In today’s dynamic business environment where applications and data are accessed outside of traditional corporate boundaries, IT must embrace the needs of both the business and an ever present mobile workforce. From business agility to employee efficiency, the never-ending quest for improved productivity is found in organizations across industries. And throughout it all, IT is charged with maintaining an organization’s infrastructure, and security and access, while working to support initiatives that keep the business agile and growing, and employees productive.

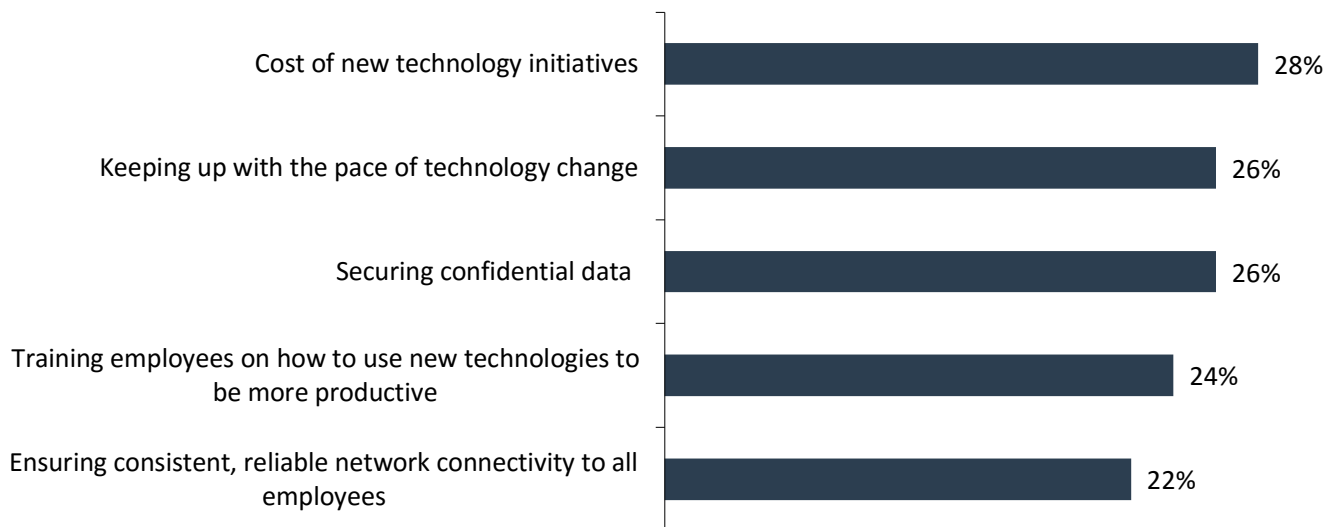
Highly Successful Companies Constantly Strive for High Productivity

Inside a highly successful company lies a myriad of efficiencies that enable the company to operate effectively, with an ideal balance of people producing the necessary business results to maintain high productivity. In many organizations, the IT organization is an IT department of one. In those IT departments with more than one employee, most personnel are generalists who must maximize their ability to deliver IT services to the business. Essentially, IT must strive to strike and maintain a balance between time, expenses, and risk in order to keep the business running, and contribute to a highly efficient and productive business environment.

According to ESG’s 2015 Global SMB Technology and Business Trends research survey, increasing productivity is one of the top five business priorities cited by IT professionals.¹ With productivity as a top priority, IT is constantly challenged to not only maintain, but also continue to improve business productivity (see Figure 1).²

Figure 1. Top Five IT Challenges Related to Increasing Productivity

What are the most significant IT-related challenges related with your organization’s efforts to increase productivity? (Percent of respondents, N=600, five responses accepted)



Source: Enterprise Strategy Group, 2016.

Moreover, as IT balances challenges with employee productivity, IT must also explore potential investments that will help contribute to overall improved employee productivity. Alas, there is no silver bullet, so IT must explore which investments (think management tools, and infrastructure and mobility solutions) will be part of a comprehensive platform to support the business (see Figure 2).³

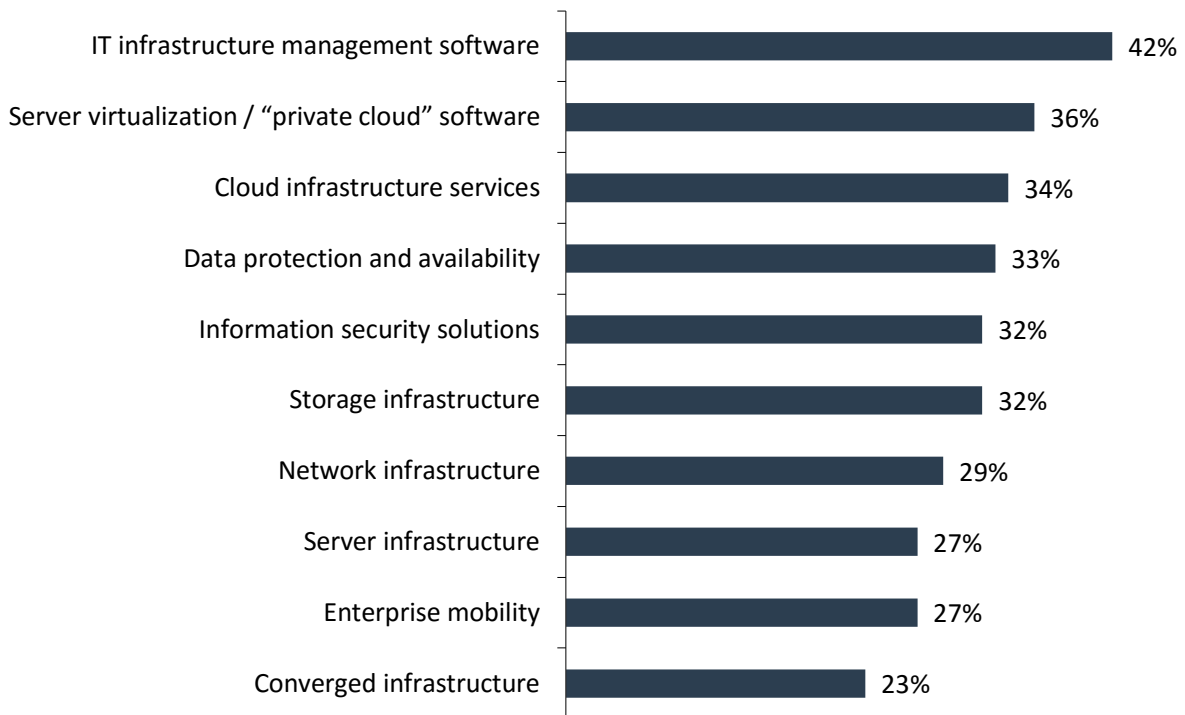
¹ Source: ESG Research, *Global SMB Technology and Business Trends Survey*, August 2015.

² Ibid

³ Ibid

Figure 2. Technologies Organizations Will Purchase Over the Next 12 to 24 Months to Support Increasing Productivity

Please review the following list of IT infrastructure technologies. Which of these technologies do you expect your organization will purchase over the next 12-24 months in order to support efforts to increase productivity? (Percent of respondents, N=302, multiple responses accepted)



Source: Enterprise Strategy Group, 2016.

As IT aligns with business strategies to help achieve increased productivity, it acts as a catalyst for providing the means for business to embrace mobility strategies throughout the organization—deploying modernized communication and collaboration tools; providing employees with application access across multiple device types and networks; and contributing to an improved and enhanced means of productivity for a growing mobile workforce. Mobility initiatives are an opportune time to recognize significant productivity gains and improve how employees work.

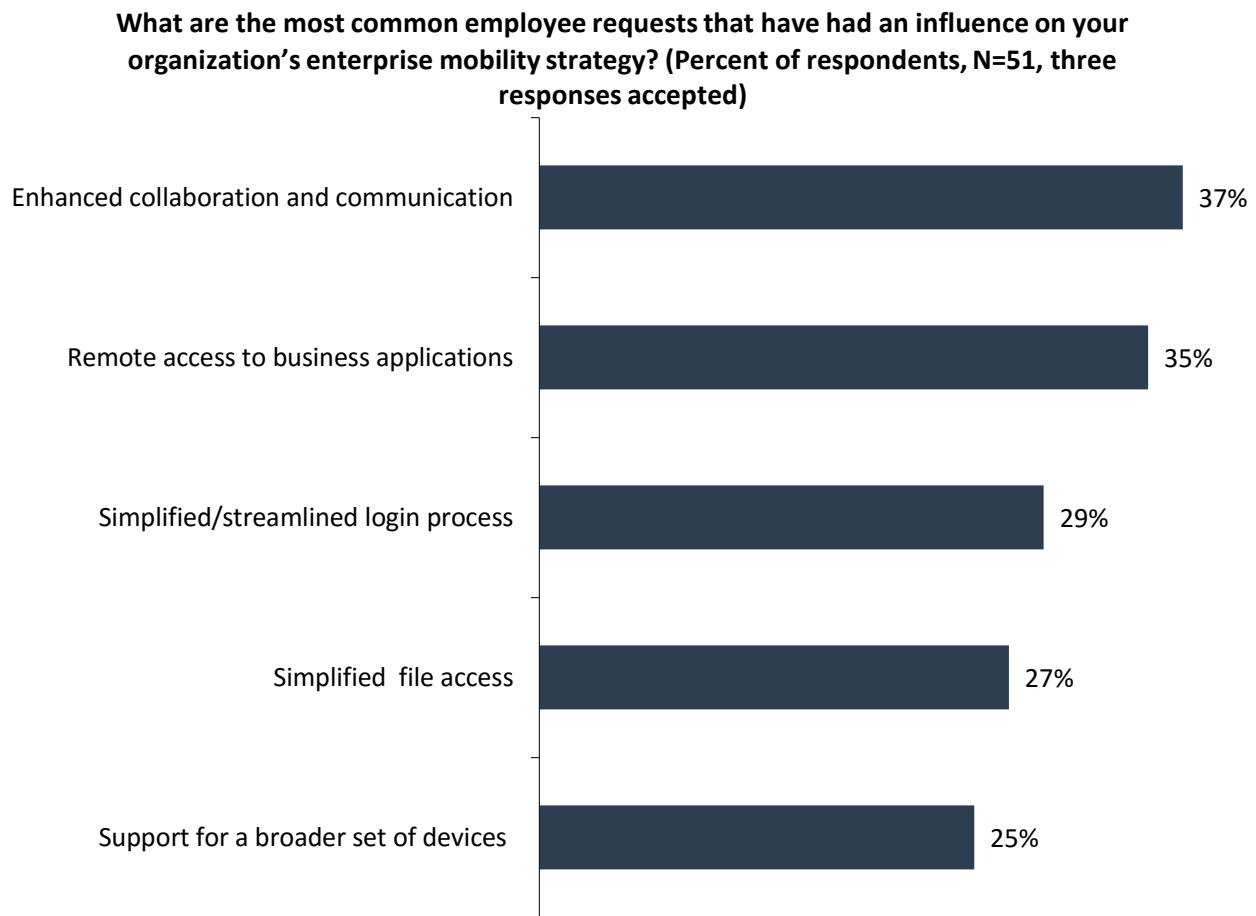
Striking a Balance: Employee Requests and IT Mobility Challenges

Employees are having a significant impact on shaping organizational mobility strategies—requesting enhanced communication abilities, easy access to business applications, and simplified logins—so they can work smarter and be more productive (see Figure 3).⁴ In addition, ESG research shows that it's critical for IT to be able to fulfill these employee requests so that employees are able to perform their primary functions, today and within the next 18 months.⁵

⁴ Source: ESG Research Report, *Security, Productivity, and Collaboration: Trends in Workforce Mobility*, to be published.

⁵ Ibid.

Figure 3. Top Five Common Employee Requests that Influence Mobility Strategy



Source: Enterprise Strategy Group, 2016.

IT Challenges Affecting the Business, Technology, and the Workforce

While IT faces a number of challenges (especially while trying to do more with less staff and resources), according to ESG research, several top challenges affecting business, technology, and the workforce include: security of endpoints and applications, proactive threat detection/prevention, network limitations, and improved employee collaboration and communication.⁶ While security is clearly top of mind, organizations still must focus on additional initiatives, including the following:

Bring your own device (BYOD). Based on ESG research, 34% of organizations surveyed have a formal BYOD policy in place that allows employees to use their own devices.⁷ These policies enable employees to gain improved access to applications and data from a variety of employee-owned and corporate-owned devices. The usage of these devices is also extending quickly beyond corporate e-mail, calendar, and contacts as employees use devices to gain improved insight and intelligence into daily business activities.

Employee experience. ESG has witnessed well-intended IT mobility initiatives fail due to poor user experience. *How could that happen?* Challenges have ranged from poor network latency and bandwidth bottlenecks, to infrastructure unable to handle a load at scale, and poor application experiences in environments that require video playback or graphic-intensive applications.

⁶ Source: ESG Research Report, *Security, Productivity, and Collaboration: Trends in Workplace Mobility*, to be published.

⁷ Source: ESG Research Report, [2015 IT Spending Intentions Survey](#), February 2015.

IT control. As IT launches workforce mobility initiatives throughout the organization, IT has an opportunity to improve the control they have over data and applications—but must also be mindful of balancing restrictions and limitations. IT may limit user access to certain applications based on the user's role and responsibilities—this contextual awareness can help make a dramatic difference in the way employees securely access applications from a variety of devices.⁸

Legacy infrastructure. As IT evaluates its existing infrastructure with potential investments (e.g., management tools, and infrastructure and mobility solutions), it's always possible (if not probable) that combining modernized infrastructure choices with existing legacy systems can give rise to complexity. While IT can most likely avoid disposing of existing investments, they will have to plan for the peaceful coexistence of the existing footprint with a modernized architecture.

Best Practices for a Productive Workforce

With all of the challenges IT faces while trying to keep the organization productive, in order to be competitive in today's marketplace, it's essential for organizations to subscribe to a number of best practices.

Establish business goals for mobility. ESG research finds that CEOs and top executives are having the biggest influence on the mobility strategy, so eliciting their feedback early on and often is a critical step.⁹ Understanding their business challenges and how they relate to improved productivity and an enhanced user experience are critical, as well as understanding overarching security challenges, including the ability to protect against threats, and mitigate risk. This step includes the ability to clearly define and align your current business plans with mobility goals.

Understanding and articulating attainable business plans will help determine which solutions and information your employees require to be more connected and more productive. Business goals will also help determine which employees require access to certain applications and associated information. It is also valuable to consider the bigger picture, and discover if and how cloud computing and big data services could integrate into your mobile plans.

Determine if you have the right IT for mobility. IT pros can leverage this opportunity as an ideal time to explore modern architectures, management tools, and enhanced network connectivity. Take a moment to assess your current IT environment. Does it deliver the performance mobile applications require? Mobility requires modern servers, scalable storage, and high-bandwidth, low-latency networking. Mobile applications like unified communication and collaboration (UCC), and CRM are data-intensive, requiring a modernized IT infrastructure to provide high-quality services to the end-user. Use this opportunity to evaluate current investments, identifying connectivity, core infrastructure, and management tools that will ensure success.

Decide on those business behaviors you want to support. Do you plan to allow employees to use their own devices at work (BYOD), company-owned devices, or a combination of both? In any case, you will need automated processes for the support, provisioning, management, and securing of employee devices. If your organization embraces BYOD, identify which applications on user-owned devices are most popular and useful, and help enhance productivity. Determine those devices and operating systems you will support and secure. Corporate-owned devices may be easier to support since the company can regulate and preconfigure user applications for employee productivity, but they may also block personal usage. Whether BYOD or corporate-owned devices, you will need effective mobile device management and a simple, cost-effective way to connect and secure users and devices.

Establish a security plan as a key element for mobility. You will need a plan to establish and enforce effective security policies, access privileges, and mobile applications security. Now is the time to test your current applications on mobile devices to ensure they are secure. Security will be enhanced with a platform that automates mobile device on-boarding, provides device visibility, automates and simplifies the provisioning of network access for guests, and keeps business traffic separate from guest traffic.

⁸ Source: ESG Research Report, *Security, Productivity, and Collaboration: Trends in Workplace Mobility*, to be published.

⁹ Ibid.

Create an effective applications strategy. Applications are front and center in a comprehensive mobility strategy, and, ultimately, what employees use to improve productivity. You will need a strategy that provides end-users with those applications that will make their jobs easier and sprout new means of productivity. An effective applications strategy should articulate those mobile applications that must be developed and/or acquired, and explain how to make existing business applications available as mobile applications. Modernizing current business applications can motivate the workforce, and enable increased productivity.

Leverage professional and technical services. While some of these best practices may play into your objectives, others may require the knowledge of those who have had the experience you're missing. Identify areas that may require professional services assistance while assessing your businesses, applications, employees, and modern consumption models. Then, during the implementation phase, consider leveraging technical services. Be proactive and know when and where to get the help you require.

Five Simple Steps to Prepare and Execute Mobility Strategies to Achieve Improved Productivity

Embrace BYOD

According to ESG research, organizations that have implemented formal BYOD policies are much more likely to see increased productivity among their employees and reduced support calls.¹⁰ Among those organizations with some type of BYOD program in place, more than two-thirds (67%) report that the program has had a positive impact in terms of both employee productivity and IT efficiency. Interestingly, there is a strong link between the degree to which organizations allow employees to supply their own computing devices, and the type of impact this flexibility has yielded.¹¹ In essence, organizations with a formal BYOD policy in place are more than four times likelier than those that approve the usage of personal devices on a one-off basis (30% versus 7%), to indicate this approach has had a significant positive impact for both employees and IT.¹²

Enabling employees to choose from a variety of approved devices (and ensuring they understand that those corporate-sanctioned devices will work with corporate applications, enterprise mobile management systems, security tools and policies, and workspace delivery models) is an important step in increasing employee productivity and satisfaction, while simultaneously reducing support calls to IT.

Beware: Potential Pitfalls. *Taking a "Wild West" approach in which employees choose any device regardless of how it operates within the corporate environment may yield some short-term benefits (think increased employee satisfaction), but this also has the potential to cause long-term workspace delivery issues and an increased volume of support calls—negating the potential productivity gains associated with BYOD for both end-users and IT.*

IT Checklist: BYOD

- ✓ Identify device types and associated IT policies.
- ✓ Determine employee enrollment procedure.
- ✓ Stage applications and enable access.
- ✓ Share BYOD policy.

Optimize Your Network

Existing legacy wired and wireless networks were not designed to handle the bandwidth and provide the reliability required for initiatives like modern unified communication platforms and mobile access to applications and data, so it's essential to identify switches, routers, and wireless access points that can plug-and-play into existing networks without a major upgrade. A dedicated mobility infrastructure and corresponding policies can help IT proactively mitigate many of the risks that arise when extending device, application, and data access. Look for solutions with integrated wireless intrusion protection to address threat protection and mitigation.

¹⁰ Source: ESG Brief, [BYOD: Increased Investment Leads to Increased Productivity](#), May 2015.

¹¹ Ibid.

¹² Ibid.

Beware: Potential Pitfalls. *If your wireless IT is not updated or planned properly, growth in mobile usage will impact WLAN performance and productivity will suffer. Additionally, network challenges center on process problems and organizational overlap. Unfortunately, network access and security often conflict with IT initiatives if they're adopted without proper network security oversight or controls. Other common challenges include non-cohesive network security policies and access controls, which must be implemented across many networking and security technologies (with too many overlapping controls and technologies), and a lack of time for network security training, planning, or strategy stemming from constant alerts. These challenges reiterate the need for more integrated network access and security architecture that addresses existing complexities, redundancies, and operational overhead.*

Enhance Security

Security should be an integral part of each step you take to enable a more productive business environment. Security perimeters evaporate as mobility initiatives pour into businesses, leading to significant challenges for protecting endpoints and preventing security breaches. IT organizations are shaping mobility strategies directly around proactive threat detection, and are seeking experienced IT pros to lead these initiatives.

Beware Potential Pitfalls. *Many organizations believe continuous monitoring is a primary network security objective. Of course, this information goes hand in hand with network access control decisions—another area of high activity—that require a thorough understanding of network nodes, user identities, and who wants to connect to what. To accomplish this, organizations must have comprehensive visibility into everything connected to the network, such as PCs, mobile devices, printers, servers, IoT sensors/actuators, etc. This information should be current, readily available, and retained in a security analytics repository for historical investigations. Collecting, analyzing, and storing this data can help improve risk management, create/enforce granular access policies, and accelerate, or even automate, incident response.*

Simplify IT Infrastructure (Server and Storage)

Visibility and automation should be top of mind as IT evaluates an infrastructure solution that provides improved management capabilities including the abilities to increase visibility, proactively detect potential problems, and automate routine IT tasks. Integrated (or what may be referred to as converged) systems are quickly becoming a leading choice for IT organizations that are looking to simplify infrastructure. These solutions are also available in configurations designed for specific workloads, including mobility solutions such as VDI. Since the solutions are engineered for a specific purpose, they tend to have a simplified implementation process, reducing daily IT operational tasks while delivering the quality of experience required for the workforce. Productivity gains can come in two forms as IT invests in modern IT infrastructure: 1) IT is able to take a more hands-off approach; and 2) by using management and automation tools, they can save more time.

IT Checklist: Network

- ✓ Test and verify existing LAN and WLAN infrastructure for potential negative impact to productivity.
- ✓ Establish access points for BYOD devices, and ensure optimization for wireless communications.
- ✓ Establish baseline experience when using collaboration and communication tools including VOIP and video.
- ✓ Verify security policies and access controls.

IT Checklist: Security

- ✓ Automate device on-boarding with the appropriate security policies.
- ✓ Keep guest traffic separate from corporate traffic.
- ✓ Test current applications on approved mobile platforms.
- ✓ Identify tools and solutions that help predict and protect vulnerabilities.

Beware: Potential Pitfalls. Due to inadequate planning, end-users can suffer from *infrastructure bottleneck restrictions during peak access times, often leading to a poor quality user experience. Additionally, complex architectures or solutions glued together from multiple vendors can be difficult to deploy and maintain.*

Server and storage components must be able to support the performance and capacity demands of unified collaboration and communications, e-mail, and workspace delivery platforms. By investing in high-quality components, thereby ensuring high reliability and availability, IT can confidently support VDI deployments at scale, and provide an enhanced user experience. Additionally, given the streamlined nature of many IT staffs, simple-to-deploy and easy-to-manage identity solutions are desirable.

Improve Collaboration and Communication

As previously mentioned, employees and business leaders require communication and collaboration tools to connect with colleagues, partners, and customers to create a more productive experience. File-sharing and e-mail tools like Microsoft Exchange, and UCC applications like Microsoft Lync are needed to promote reliable and efficient communications that will improve productivity. However, small and mid-sized businesses must have modern, dependable, and affordable IT in place to support these UCC applications and video. It's also important to understand that these applications require high bandwidth, which current networking IT may not be able to provide.

Beware: Potential Pitfalls. *It's essential to verify the quality of the connection—both bandwidth and latency. Without a high-quality connection, productivity will likely be impeded due to high latency. Given that, organizations must design and invest in infrastructure that can accommodate today's needs, while also planning for the future.*

Once you have the appropriate tools and solutions in place, it's essential to promote their effectiveness and ease of use throughout the organization. (Ideally, this message will come from senior executive leaders.) Additionally, IT teams must make a concerted effort to not only collaborate more often, but also identify new ways to work together more efficiently.

IT Checklist: Server and Storage

- ✓ Determine if existing infrastructure can meet new requirements, and invest accordingly.
- ✓ Identify IT infrastructure that is easy to manage and maintain while delivering predictable performance, reliability, and an enhanced user experience.
- ✓ Target integrated solutions that simplify deployment and deliver predictable results.
- ✓ Embrace management tools that simplify IT processes and automate tasks.

IT Checklist: Collaboration and Communication

- ✓ Evaluate tools with leading users who will embrace and promote collaboration.
- ✓ Deploy infrastructure that can meet performance demands of the business.
- ✓ Test various network access scenarios to ensure compatibility, and detect potential security issues.
- ✓ Test 1-to-1, and 1-to-many connection scenarios, including out-of-network connections.

The Bigger Truth

Today, IT faces ongoing challenges regarding how to balance employee requests, business goals, and optimal IT services delivery. From providing users with anywhere, anytime access, and a simple streamlined approach to secure access and collaboration, to deploying new solutions quickly and seamlessly, while maintaining the infrastructure and IT operational efficiency, IT is tasked with ensuring that the business remains competitive, productivity is enhanced, and user satisfaction remains high.

Now is an ideal time to embrace modern infrastructure, optimize the management of IT systems, promote automation, and empower a mobile workforce. These initiatives are all part of a holistic strategy that enables IT to improve IT control and security, while enabling employees to experience secure, easy access to applications and data for improved productivity. As result, IT should be able to simplify daily operations while mitigating risks and improving user satisfaction. By following these best practices and initial steps, you'll find many opportunities to improve productivity (just be alert to potential pitfalls, while you're maintaining a constant focus on the end-user experience).

By embracing hardware integration, and automation and management tools, IT infrastructure should be easy to deploy, manage, and maintain. And, as you explore the various options available to you, consider working with IT vendors that can expertly advise you about a comprehensive, end-to-end strategy—since your strategy will greatly impact the data center and extend out to the endpoints.

Now is not the time to be a pioneer. Rather, it is a time to identify where mobility can aid in improving productivity. By leveraging these guidelines, you'll be more prepared to make significant contributions toward improving the way employees work and how businesses operate—more easily, more efficiently, and more productively.



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