DELIVER A TRULY DIGITAL WORKSPACE

Taking mobility to the next level can help organizations in any industry achieve their goals.

EXECUTIVE SUMMARY

Seen not long ago as "nice-to-haves" or "extras," mobile devices and apps continue to revolutionize the way organizations operate. Workers expect to be able to do their jobs from wherever they happen to be — whether that's in the office, in the field, at home or in an airplane terminal. Enterprises that can't meet those demands find themselves falling behind their competitors when it comes to attracting and empowering top talent. But until now, a full mobile platform wasn't available.

Enter the digital workspace.

The digital workspace isn't a technology, but rather a strategy enabled by the careful orchestration of several different technologies, including virtualization, identity and access management, mobile devices, cloud applications and collaboration tools.

A successful digital workspace takes more than investments in technology, however. It also requires that organizations engage in a thoughtful planning process in order to define the outcomes they hope to achieve and then strategize around how to meet these goals.

Understanding the Possibilities of a Digital Workspace

It's difficult to overstate the extent to which mobility has transformed the workplace in a relatively short time.

In the span of just a few years, many enterprises have moved from merely toying with the idea of allowing users to bring their personal mobile devices into the workplace all the way to adopting "mobile-first" strategies that prioritize mobile solutions for any new or updated applications. Nearly 85 percent of organizations allow at least a basic level of mobility for users with mobile applications such as email, calendar and secure mobile browsing, according to VMware.

The reasons behind this rapid transformation are many, but the most important may be that mobility is attractive to both organizations and workers. While enterprises enjoy the benefits of greater productivity, users like the freedom and flexibility of being able to work where and when they want, using whatever device they choose. This win-win dynamic is displayed in the numbers. Remote workers can see a boost in productivity of up to 55 percent, according to Citrix. And eight in 10 business professionals agree that mobile access leads to better work-life balance, *Entrepreneur* magazine reports.

47%
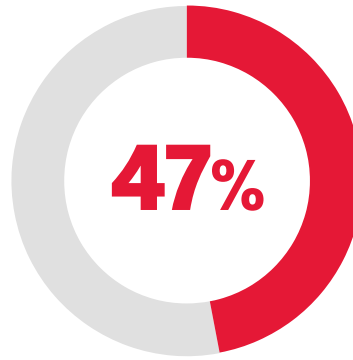
The proportion of time that users spend on mobile phones for work, compared to 39% on PCs[1]

The shift toward mobility has revolutionized workflows and information delivery methods in virtually every industry. Students in elementary school classrooms use tablets to read electronic books, play educational games and answer teachers' multiple-choice questions. Sales representatives in the field tie into inventory, ordering and customer relationship management (CRM) systems to answer questions in real time and close more deals. Government inspectors use tablets to snap photos and run mobile apps with drop-down menus to record data about regulatory compliance. And workers across sectors use their mobile devices to join conference calls, collaborate with their colleagues, and submit or approve expense reports and other important documents.

Despite the clear benefits of mobility, many organizations struggle to move beyond the most basic level of offering individual productivity apps. According to VMware, only one in five organizations has successfully transitioned a core business process to a mobile model.

That failure to fully integrate mobility into the enterprise is a missed opportunity, to be sure, but it is perhaps understandable given the various challenges that IT departments face in this arena. Not surprisingly, the security and control of devices tops the list of factors preventing companies from undertaking mobility initiatives, with nearly half (46 percent) of organizations citing this as a top challenge, according to VMware. Other significant hurdles include the cost and complexity of management, data backup and recovery, supporting multiple devices and the need to maintain application compatibility.

Given those challenges, it's not difficult to imagine an IT manager looking at an organization's existing systems and processes and essentially saying, "Good enough."

The problem with that line of thinking is that, as the workforce evolves to include more and more digital natives — and as those younger workers bring with them a lifetime of experience with consumer mobile IT — failing to invest in mobility tools won't be "good enough" at all. Not only will organizations miss out on the productivity benefits that come with having a mobile workforce, but they may also miss out on top talent.

In response to the growing demand for mobile solutions, vendors have developed fully mobile platforms that simplify traditional mobility challenges and provide a seamless end-user experience. Collectively, those end-to-end mobility solutions are known as the digital workspace.

The digital workspace strategy combines multiple technologies to deliver a balance between productivity, usability and security. Often, users are given some level of choice over both the devices they want to carry and the types of tools they want to use on those devices. Above all, the strategy aims to deliver the collaboration and communication tools that workers need to be more productive, providing access from any location and on any device.

Employees at one organization may use tools such as Cisco Systems' Spark, Jabber and WebEx, while workers at another

Managing the Digital Workspace

While many organizations manage their digital workspaces manually, vendor RES Software calls this practice "slow, expensive and unreliable." For example, if no one submits requests to the IT department to deactivate accounts for terminated employees, their digital workspaces may remain active for months.

RES Software identifies three ways that automation can be applied to digital workspaces.

HR-driven policies: Human resources events such as hiring can be used as triggers to automatically deploy resources based on job title and department. Systems can also be set up to automatically deactivate accounts as soon as users leave employment with the organization.

IT automation: IT staff can save time and avoid confusion by using a purpose-built system to automate repetitive management tasks.

Self-service and line-of-business delegation: Common workspace management tasks, such as resetting a password or spinning up new instances of routine applications, can be automated so that employees or managers can trigger these tasks without having to involve IT.

Source: RES Software, "What is a Digital Workspace?" January 2017

might rely on Microsoft's Skype for Business and SharePoint. More important than the tools themselves are the questions that should be answered before getting started: How easy are they for employees to use? How simple are they for IT staff to secure and manage? And what do they allow users to do that they couldn't do before?

A number of vendors have begun bundling several existing products to provide an integrated digital workspace experience. Those include VMware Workspace ONE, Citrix Workspace Suite and Microsoft Enterprise Mobility Suite (EMS). However, many organizations take an *à la carte* approach toward digital workspaces, picking and choosing solutions from multiple vendors based on their specific needs. Often, those enterprises work with a trusted partner to design a digital workspace solution that will both meet their mobility needs and ensure interoperability.

Any digital workspace deployment will give users access to standard mobility tools including email, text messaging, file sharing, storage, collaboration, virtual meetings and voice communication. What sets the strategy apart is that workers also achieve mobile access to nearly all work applications, including those that have traditionally been delivered only to PCs. That is made possible through robust desktop and application virtualization, as well as identity and access management systems that give users single sign-on access to the apps they need.

Through a combination of end-user productivity tools and IT management solutions, the digital workspace allows organizations to make "mobile first" more than just a slogan.

The Benefits of the Digital Workspace

When done well, the digital workspace represents the opposite of technology for technology's sake. Because the strategy emphasizes the end-user experience, digital workspace tools can immediately begin to transform the ways users do their jobs — and the ways that organizations carry out their missions.

The tangible benefits of a digital workspace strategy include:

Speed to market: A digital workspace strategy enables enterprises to quickly and confidently respond to escalating customer demands. When changing market conditions force an organization to reorganize lines of business and shuffle its workforce, the ability to immediately modify users' digital workspace to respond to these changes is crucial. This agility also makes itself apparent during mergers and acquisitions, as the automated, policy-based provisioning of digital workspaces simplifies the process of providing large numbers of new users with IT resources.

Greater productivity: The productivity benefits of enterprise mobile apps are, by now, no secret. About 39 percent of organizations cite improved efficiency as the single greatest benefit of mobile technologies, according to Fliplet, followed by 21 percent that cite business process improvement. Another 21 percent mention a reduction in paperwork. Mobile apps have been shown to increase productivity by as much as 40 percent — the statistical equivalent of adding two days to the work week.

The digital workspace amplifies those productivity benefits by ensuring that users have instant access to the apps they need, when they need them. Single sign-on capacity is central to this seamless productivity, as it eliminates the need for knowledge workers to remember multiple passwords and engage in cumbersome login processes each time they want to complete a task.

Better customer service: The digital workspace can improve customer experiences in numerous ways. All customers benefit when employees are more productive and flexible, but the greatest impact is often seen when users directly engage with digital workspace solutions during their customer interactions. For example, when sales staff can use their mobile devices to check inventory, place orders or help answer questions in real time, the customer realizes an immediate benefit.

Employee satisfaction: Fewer than one-third of employees are engaged at work, meaning that they have a passion for

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Mobility Headaches: By the Numbers

Despite years of investments by organizations in mobility and collaboration tools, employees often struggle to use these tools effectively.

26%
Only 26 percent of knowledge workers say their companies provide the tools they need to collaborate effectively.

38%
Just 38 percent of information workers say that their employers' web conferencing tools meet their needs. **Forty-two percent** say that large-screen digital interactive solutions meet their needs, and **51 percent** say the same about both digital whiteboards and audio conferencing solutions.

45%
Forty-five percent of information workers say it's difficult to engage all participants when conducting technology-enabled team meetings. **Thirty-five percent** say they've experienced connection issues, and **22 percent** complain that remote participants can't connect via video.

47%
Under half (47 percent) of IT and facilities workers say that their organizations are making a "significant investment" in technologies and tools to improve employee productivity.

24%
Only **24 percent** of information workers consider their offices "completely up-to-date and equipped with the latest and greatest technology and workspaces."

Source: Forrester, "Digital, Disparate, and Disengaged: Bridging the Technology Gap Between In-Office and Remote Workers," June 2016

their jobs and feel a profound connection to their organizations, according to Gallup. Slightly more than 50 percent said they are "not engaged" or "checked out." Most alarming, 17.2 percent of employees report they are "actively disengaged" — a level of dissatisfaction characterized by negatively acting out and undermining what their colleagues accomplish.

Effective IT tools are essential to keeping workers engaged, especially millennials, who are now the largest cohort in the workforce. Millennials are more likely than their older colleagues to get frustrated when they have to waste time on tasks such as searching for documents or finding contact details for coworkers. They are also more likely to use consumer productivity apps when they're not satisfied with the technology tools at work.

Security: Managers at many organizations have long been aware of the benefits of robust mobility deployments but have opted against them anyway. The reason? Security concerns. Time and again, the fear of data loss tops the list of obstacles standing in the way of business mobility. This is a reasonable worry, especially for organizations operating in highly sensitive and heavily regulated industries.

The Ponemon Institute estimates the average total consolidated cost of a data breach at $4 million. A well-designed digital workspace strategy takes into account an organization's security needs. Often, digital workspaces are designed so that, even when users are accessing data from the field using tablets and smartphones, that data never actually resides on the mobile devices themselves.

The State of the Digital Workspace

In a December 2016 report on the state of the digital workspace, VMware identifies five key findings.

1 **Business gains outweigh operational gains.** Around 90 percent of companies successfully executing a digital workspace strategy saw staff time savings, compared to around one-third that saw reductions in the time required to manage and deliver apps.

2 **Costs drop as organizations embrace digital workspaces.** Across all businesses, the return on investment for business mobility solutions averages 150 percent.

3 **Digital workspaces improve the ability to create new revenue.** Forty-eight percent of companies that have successfully executed mobility initiatives have improved their ability to rapidly bring new revenue streams online, compared to 34 percent of companies that have not executed a digital workspace strategy.

4 **Mobility brings benefits across categories.** Organizations that successfully executed digital workspace strategies saw benefits across all business, operational and financial categories.

5 **Digital workspaces address top mobility concerns.** Forty-five percent of executives say that a digital workspace strategy is a way to address security and compliance risks.

Digital Workspace Across Industries

Some examples show how organizations across a variety of sectors are successfully implementing digital workspace strategies.

Healthcare: Patient outcomes and satisfaction levels are central to the digital workspace strategies of hospitals and other healthcare providers, which often focus their investments on crafting more effective digital experiences for patient-facing users. Some of the most important mobile applications in healthcare settings include accessing and displaying patient data and imaging, electronic medical record integration and cloud storage that complies with the Health Insurance Portability and Accountability Act. However, digital workspace solutions can be used to improve workflows in virtually all aspects of medical operations. Some hospitals are even using cart-mounted tablets to help streamline the work of their housekeeping departments.

Retail: A mobile workspace strategy allows stores to offer shoppers a better experience and to reach them in more ways with tools such as digital signage, location-based marketing, mobile point of sale and self-service kiosks. When sales associates are given mobile devices, apps and content that connect them with a retailer's resources, they feel empowered to better serve customers. Rather than saying, "Maybe you can find it online" during their interactions with customers, associates begin to say, "Let me see whether we can order that for you." At a time when online shopping continues to supplant brick-and-mortar retail, this is a powerful difference.

Energy and utilities: In addition to providing office workers with mobile solutions, energy companies have extended digital workspace strategies into power plants and field operations. At some, paper-based work packages have shifted onto tablets, with virtualization tools helping organizations to automatically sync and secure data. At some energy companies, meter readers use mobile apps to warn each other about which houses on which routes have potentially dangerous dogs.

Finance: Some banks incorporate digital workspace solutions, including virtualization, to transform call centers into customer engagement centers that use email, web chat, click-to-call and social media, in addition to voice. Those institutions also use digital workspace tools to distribute consistent versions of applications and desktops to thousands of individual users operating on a variety of different devices.

Overcoming the Obstacles to the Digital Workspace

If devising and executing a digital workspace strategy were easy, no organization would struggle to manage its mobility environment, no worker would ever use rogue apps to circumvent IT policies and no data breaches tied to mobile devices would occur.

To be successful, enterprises must tackle obstacles that often stand in the way of a digital workspace strategy.

Business silos: Siloed relationships between business units such as sales, operations and human resources are an age-old problem in IT, and they must be overcome before a true digital workspace strategy can be achieved. When business units are siloed, priorities often differ from group to group, coordination

and communication are poor, and different units may employ redundant or incompatible IT tools to perform similar tasks.

View of IT as a cost center: Too often, enterprises view and treat their IT departments as cost centers. This may be accurate from a purely accounting perspective (typically, IT departments serve internal users, rather than create revenue by selling to external customers), but as a mindset, it is woefully outdated. When IT is seen as a mere cost center, technicians often spend the bulk of their time responding to disconnected line-of-business needs — or, even worse, "putting out fires" and flitting from one maintenance problem to another.

Organizations that instead treat IT as a mission enabler empower the department to take a strategic approach to solving problems. In this environment, CIOs are given a seat at the decision-making table, and IT is seen as a department capable of generating new ideas and business processes that have an impact on an organization's forward trajectory. Often, organizations achieve this mindset shift in part by moving resources to the cloud, reducing management burdens and freeing IT staff to focus on strategic goals. However, it's important that enterprises keep tabs on their cloud deployments to avoid mismanagement and overspending.

Enterprise stagnation: Organizations that have not made strategic IT investments may find it difficult to build the necessary momentum to break away from old habits. In some cases, organizations simply don't understand what their users need and how to enable them to achieve desired outcomes. This scenario, in turn, can create a situation in which users do not make use of internal IT tools, resulting in underutilized IT. Often, workers at such enterprises go outside of proper channels, bringing rogue or shadow IT into the organization to meet

60%
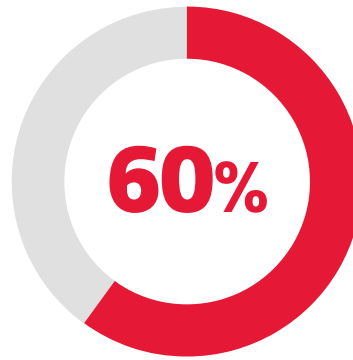
Percentage of knowledge workers who report working outside the office at least one day per week[2]

their needs. It takes the full commitment of enterprise leaders — not just that of the IT department — to flip the culture and successfully execute a digital workspace strategy.

Privacy concerns: Just as managers worry about mobility deployments resulting in corporate data leaks, users don't want their bosses to have access to all of the private data residing on their mobile devices. It's important for organizations to clearly communicate to users exactly what sorts of personal data the IT staff is able to access, if any. Some solutions allow IT teams to set privacy and management controls and to monitor compliance without seeing the private data —or even the apps — that live on individual users' devices.

Interoperability: In a true digital workspace model, end users have seamless access to all of the applications and data they need on whatever device they want to use. When multiple vendors are involved in a mobility deployment, a robust back-end infrastructure is required to bring solutions together in a way that feels fluid and natural for users.

Rolling out a Digital Workspace Strategy

Virtually all organizations already support at least some of the components of the digital workspace. But often, these technologies aren't serving a larger strategy, don't meet end users' needs or fail to help enterprises achieve their objectives. In order to successfully roll out a digital workspace strategy, organizations must shift their cultures to emphasize end users and provide tools that help them to connect, collaborate and communicate.

This shift requires that IT departments first understand how users within their organizations prefer to work. Workers may have already adopted consumer versions of apps for functions such as file sharing, video conferencing, storage and other use cases. This scenario can create security, compliance and management problems. But these tools can also give IT departments a window into what sorts of mobility solutions are the most valuable and attractive to users.

As the digital workspace becomes more prevalent, some questions that previously loomed large over mobility initiatives become less important, such as the ownership model for mobile devices. Organizations have long grappled with whether to incorporate users' personal mobile devices via bring your own device (BYOD) programs or to supply devices through corporate owned personally enabled (COPE) deployments. This issue fades into the background with an effective digital workspace strategy, which can accommodate either model.

To support the digital workspace, leaders must create a governance model that supports connectivity, enables collaboration, enhances compliance and mitigates risk. Often in the past, these goals have been at odds with each other. Many organizations feared that giving their users tools to connect from outside the office and collaborate with their colleagues would increase the danger of data breaches. In practice, however,

Cloud Containment

Hosted applications are a big part of many organizations' digital workspace strategies.

Maybe *too* big.

Organizations, on average, think they're using fewer than 100 cloud applications, according to Cisco Systems. The real number: a staggering 1,220. That sort of overdeployment of cloud resources carries a number of risks, including data leakage, compliance issues, overspending and threats to business continuity.

IT professionals can contain these issues by adopting Cloud Consumption as a Service (CCaaS), in either hybrid or public cloud environments. This emerging tool offers IT leaders and management greater visibility and protection, while also streamlining workflows for end users.

it has proven difficult to keep users away from mobile tools that help them to do their jobs more effectively. Leaders must have an honest conversation about how mobile devices and an entire advanced technology platform will be used within the context of the digital workspace.

Buy-in from leadership at all levels is essential for transforming enterprise mobility from an ad hoc deployment into a cohesive strategy. In practice, however, IT typically leads the charge. IT executives are among the top advocates for the digital workspace at 57 percent of organizations, compared to 35 percent of companies where senior business executives play the role of top advocates, according to VMware's 2016 report, "The State of the Digital Workspace."

Digital transformation is becoming a larger executive priority, that report also states. About 62 percent of executives recognized the power of mobility to transform their organizations and viewed a lack of adoption as an impediment — up six points from the previous year. However, only about

one-third of organizations actively executed on most mobility initiatives, including rebuilding mission-critical apps for mobile, upgrading infrastructure to support mobility and creating seamless access to apps from any device.

As organizations embrace the digital workspace, it is important that executives move beyond paying lip service to the importance of mobility and perform the hard work of designing and investing in systems that give users the ability to be productive anytime, anywhere, using any device. If not, users will very likely continue to seek solutions from outside the enterprise.

To learn more about how CDW's experts can help your organization develop an effective mobility strategy, register for a mobility consultation by visiting CDW.com/mobility-consultation.

CDW: A Mobility Partner That Gets IT

As a trusted partner to enterprises across every industry, CDW helps organizations of all sizes to devise and execute mobility strategies that increase user satisfaction and productivity, reduce management and security burdens, and lead to measurable operational benefits.

During a mobility engagement, CDW solution architects first conduct preplanning discussions to learn more about an organization's specific needs and goals, and to answer any initial questions. Next, these professionals create custom proposals tailored to the organization's requirements. Once a mobility deployment has been agreed upon, solution architects work with the organization to execute the plan. And finally, CDW maintains the relationship to review results and chart next steps.

CDW also offers mobility strategy development services, mobility strategy workshops and customized application viability studies. During those engagements, CDW solution architects go in-depth with organizations, helping executives with complex, but necessary, processes, including security standards and compliance reviews, cost modeling, network infrastructure planning and gap analysis.

The CDW Approach

ASSESS
Evaluate business objectives, technology environments and processes; identify opportunities for performance improvements and cost savings.

DESIGN
Recommend relevant technologies and services, document technical architecture, deployment plans, "measures of success," budgets and timelines.

DEPLOY
Assist with product fulfillment, configuration, broad-scale implementation, integration and training.

MANAGE
Proactively monitor systems to ensure technology is running as intended and provide support when and how you need it.

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PEOPLE WHO GET IT®