

White Paper:

# A Guide To Going Mobile-Only With Samsung DeX



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# Why Mobile-Only Is The Way Of The Future

Every decade in recent memory has introduced a new era of computing. The 1980s were all about the PC. The 1990s brought us e-mail, online shopping and the full force of the internet. The 2000s saw the rise of social media, YouTube and the rest of Web 2.0.

The 2010s are coming to a close, and it's clear that the shift to mobile computing has dominated this decade. Feature phones gave way to smartphones so quickly that by the end of 2017, 2.4 billion smartphones were in use globally — and it shows no sign of tapering.<sup>1</sup> The smartphone-using population is forecast to keep growing steadily, hitting 5.9 billion by 2025, or seventy-one percent of the total population of the planet.<sup>2</sup>

This rapid rise is no surprise. Today's smartphones are faster and more powerful than the most advanced supercomputers from just a few decades ago, and they facilitate the new pace of work, which requires the blending of professional and personal throughout the day. Companies would not be able to innovate and execute at speed without the smartphone, and at the same time, mobile devices would not have become so powerful so quickly if enterprises had not demanded it.

Going “mobile-only” is the obvious next step in the evolution of computing. According to a Frost & Sullivan study, mobile devices boost worker productivity by 34 percent, saving employees on average two hours per day, equally split between work and personal tasks.<sup>3</sup> The clear follow-up

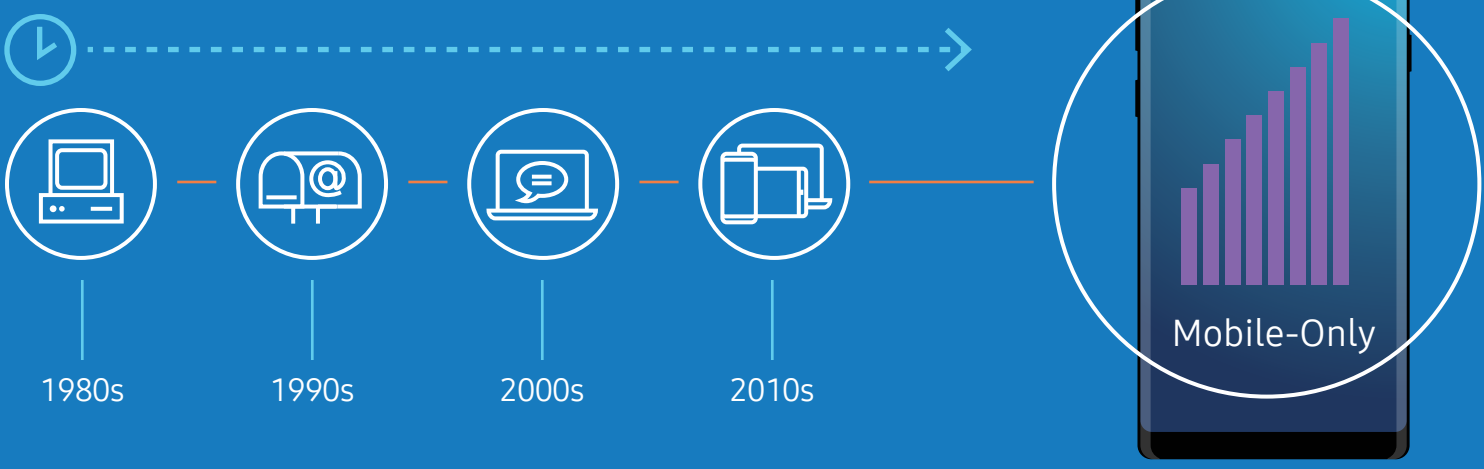
question is this: Why can't we move all computing tasks to the convenient, powerful tool that our employees and teammates are already using?

## The Next Mobile Economy

The shift to the Next Mobile Economy is already well underway. Businesses that have migrated some or all of their tasks to mobile devices are reaping huge productivity gains, maintaining 24/7 connectivity, and enabling employees to serve partners and customers in real time and at the right time. That's giving technology leaders a crucial edge in this age of innovation and continual disruption, all while maintaining control over both security and costs. Equally as important, it's causing laggard enterprises to fall further and further behind, at increasing risk of becoming obsolete.

Any company looking at all towards the future needs to closely re-examine their legacy PC-based infrastructure and decide when — not if — to replace it with a mobile-only one.

**This guide lays out the key planning considerations and the practical steps for an enterprise, or even a smaller organization, embarking on a transition to mobile-only computing. In particular, we will focus on how Samsung's DeX platform can be leveraged to enable workforces to use their smartphone to support both their mobile and desktop computing needs.**



# DeX At A Glance

Samsung DeX allows users to extend their Galaxy smartphone into an intuitive desktop experience with a monitor, keyboard and mouse.



Open multiple apps and windows at once



Use VDI to access Windows desktops seamlessly



Use keyboard shortcuts



Right click with your mouse for more options

# 10 Reasons To Go Mobile-Only Today



1

**Workforces are increasingly mobile.** IDC predicts that by 2020, nearly three-quarters of the U.S. workforce will be mobile. Almost 15 million American office workers already utilize coworking spaces. Workers need to be able to get things done while working from home, on the go, or from a shared workstation or hot desk. Forty-three percent of workers say the ability to work flexible hours, remotely and on-the-go is a must-have.<sup>4</sup> This shift in the workforce dynamic requires a rethink of workplace technology.



2

**Employees prefer mobile.** According to a survey by GfK, mobile workers spend one-third of their day working on their smartphone, and can get half of their work done using only their phone. That effectiveness led 62 percent to say they'd be willing to give up their PC entirely, provided they could connect their smartphone to a monitor, keyboard and mouse. The flexibility that comes with mobile can also impact your ability to attract and retain talent.<sup>5</sup> Fifty-five percent of executives surveyed in a 2018 study by Harvard Business Review Analytic Services said that their company's workplace technology, including their mobile devices and apps, factor into whether applicants accept job offers or not.<sup>6</sup>



3

**Your business is already heavily invested in enterprise mobility.**

Smartphones and tablets have been used in most companies for many years. Chances are your company has already adapted and supports enterprise mobility in a major way. This can include investing in mobile devices, MDM/EMM software, apps and processes such as stipends for personal smartphones used for work, or, most likely, all of the above.



4

**BYOD is an ineffective mobile strategy for long-term digital transformation.**

BYOD is a short-term bandage for enterprises that allows some additional mobility, but leaves PCs as the hardware centerpiece. An enterprise-led mobile strategy such as Choose Your Own Device (CYOD) or Company Owned/Personally Enabled (COPE) is a firm commitment to a mobile future. By issuing mobile devices to employees, you are able to achieve greater security, management and effective use of applications, and at a similar long-term cost. According to a study by Oxford Economics, BYOD companies consistently see less benefit from their mobile investments versus those that provide devices.<sup>7</sup>



5

**Supporting both PCs and smartphones strains IT budgets and resources.**

Managing smartphones can place a strain on IT resources — unless the mobile devices replace your PCs. It's time for IT departments to take a hard look at the costs and time required to support what are increasingly duplicative infrastructures. If you are able to transition early to mobile-only, the cost savings and increased focus obtained are significant.

# 5 More Reasons to Go Mobile-Only



**Mobile technology has reached a tipping point where it is able to deliver a full desktop computing experience.** Smartphone processor power, storage and screen size, and work-anywhere capabilities such as Samsung DeX mean “turn any space into a workspace” is a reality. Since smartphones are typically upgraded more often than PCs, it’s likely that your employees are carrying a phone with just as much computing power as their PC.



**Software and service providers are focusing app investment and innovation on mobile platforms.** Software vendors have embraced mobile apps and, like enterprise IT departments, they want to cut down on duplication of effort. According to a recent study by Gartner, the market for enterprise application software is growing steadily, with many companies looking to shift partially or entirely to SaaS solutions.<sup>8</sup> New players are building fresh, more-powerful mobile apps with less effort and time. In that light, it’s unsurprising that vendors are moving to mobile as fast as they can persuade their customers to join them.



**Business apps are increasingly cloud-based.** Concurrent with the rise of mobile has been the increase in cloud computing for business. Each enables the other. Storing apps and data in a central cloud is easier to secure and update, while mobile devices represent the perfect gateway to the cloud. This means that there’s a fundamental shift in computing needs — away from physical, on-premise storage, and toward securing the connection to cloud and SaaS applications.



**Mobile-only will help IT by streamlining device management and enabling more focused innovation.** Having to invest time and money to support legacy infrastructure such as PCs is complicated and costly. It keeps IT constantly looking back to the past, when it would rather focus on future innovations. As we enter the 2020s, it’s time to welcome innovation and jump into mobile-only computing, and let go of legacy technology that holds enterprises back.



**Mobile-only benefits users by providing a single device, unifying workflows and computing experiences.** Rather than carrying multiple computing devices — each with a different UX, applications and stored data — users can address all their computing needs with one powerful smartphone, leveraging peripherals to quickly connect and work. Embracing mobile-only is key to transforming from a closed to an open enterprise and creating an agile company culture. According to a study by the UK think tank, The Future Laboratory, 87 percent of business leaders agree that collaborative mobile tools unlock flexibility and productivity among employees.<sup>9</sup> Whether you’re at a high-flying startup or a high-security enterprise, your workers will need their mobile devices to help them work anytime, anywhere — lest they be shut out of the critical conversations and opportunities that will make or break your business.

# Going Mobile-Only With Samsung DeX: Plan And Rollout

## The Mobile-Only Rollout Plan

Phasing out laptops and embracing a smartphone-powered computing model is a shift large enough that, in order to succeed, you'll need both determination and meticulous planning. Over the following pages we'll map out the key considerations and practical steps to help your organization make the transition to mobile-only.

When developing a mobile-only transition plan, CIOs and IT managers need to work together to define processes, strategies and success metrics. A well-designed plan will start with key user groups, then expand gradually throughout the organization. This allows the project advocates to troubleshoot problems incrementally, and build excitement and adoption with each internal success story.

Your plan should include tools, protocols and strategies for adoption and retention, both immediately and long-term. Once a comprehensive plan is designed, rolling out Samsung DeX can begin.

## Design Mobile-Only Strategies With Key Decision Makers



Mobile-only strategies require strong management buy-in. If IT pushes a mobile-only strategy without the support of key stakeholders, the move is more likely to be dismissed as risky or unnecessary. When the direction comes from the C-suite at the top of the organization, line-of-business managers will see this as part of company strategy, not an independent IT initiative. Your mobile-only adoption campaign has to be organized and persuasive.



The CIO, IT and information security teams play a key role in developing strategy. It's their job to help decision-makers throughout the organization understand what can and can't be done, what the latest developments in mobile technology are, and what the advantages to the organization will be. Mobile-only approaches to end-user computing are out-of-the-box for many organizations, so having both line-of-business leaders and IT visionaries at the table at the same time gets things moving in the right direction.



## Take a Phased Approach

As with any major IT initiative, shifting to a mobile-only workforce has to happen group by group, and each successive onboarding should take place only once the previous one is successful. Business leaders or CIOs pushing to shift away from PCs to Samsung DeX on smartphones and tablets should be early adopters themselves. Groups that have shifted can become enthusiastic evangelists for

a mobile-only approach to computing. This moves mobile-only from management push to end-user demand — a key success factor.

CIOs should reach for the low-hanging fruit first: groups that will see the most value, the most rapidly, with the least disruption. User groups who are often away from their desks, who travel frequently and who regularly use mobile applications are ideal first candidates.

User groups who can be excellent early adopters of the Samsung DeX platform:

Characteristic	Why?	Type of Group
High collaboration	Users who frequently meet, collaborate using tools such as voice and video conferencing, and are mobile within the enterprise campus	Strategists, managers, marketing
High contact	Users who have frequent contact with customers, who need to deliver content and information to their contacts and are already naturally mobile	Pre-sales, post-sales, field service
High knowledge consumers; low data creation	Users who primarily consume information from applications and databases, but don't generate a lot of new content	Customer service, front-of-house staff
High mobility	Users who work remotely most or all of the time leveraging mobile devices, but have some reporting duties	Telecommuters, branch office, traveling teams

## A Critical First Step: Application Inventory

Shifting to mobile-only is not as simple as replacing a desktop PC with a Samsung smartphone and DeX. Before the first user gets on board, you need to inventory applications and ensure that the tools people need will be available and usable from the start.

A comprehensive application inventory for each user group expected to transition will identify business-critical mobile and web-based applications, as well as Windows-native applications.

## Mobile Applications

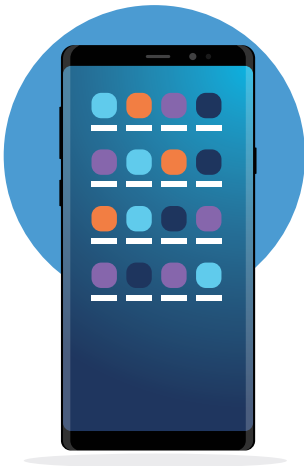
For Android mobile applications, the user experience is seamless in Samsung DeX — although everything should still be tested. If you have custom-built mobile applications, these can easily be optimized for DeX to take greater advantage of the platform and give users a better experience when using the desktop-like interface.

Many mobile applications have been extended to take advantage of the DeX interface, as shown below.

Some Windows native applications can be replaced by their mobile cousins. Many of the leading productivity applications, such as the Microsoft Office suite, have not only been ported to Android, but have also been optimized for use in DeX to support features such as keyboard shortcuts, drag-and-drop and right-click mouse functions.



Many core business applications are optimized for DeX



Application Family	Optimized for DeX
Office Productivity	Microsoft Office, WPS Office, Hancom Office
Browser	Samsung Internet, Chrome Browser
Document Viewers	Acrobat Reader, OfficeSuite
Audio/Video Conferencing	Skype, Zoom, BlueJeans, GoToMeeting
Virtual Desktop	Citrix Receiver, VMware Horizon, Amazon WorkSpaces
Email	Microsoft Outlook, Gmail, Secure Mail, VMware Boxer
Photo Editing	Photoshop Express, Lightroom CC
File Sharing	OneDrive, Google Drive

## Web-Based Applications

Most modern web-based applications can be accessed from the Samsung Internet or Chrome mobile browsers within Samsung DeX. However, due to the broad spectrum of web-based applications in use across an organization, it is possible that some sites (particularly those with plug-ins such as ActiveX) will present compatibility or user experience challenges. Business-critical web-based applications should all be thoroughly tested, and any that don't work (and can't be made to work through patches or updates) need to be treated as Windows native applications.

## Windows Native Applications

Windows native applications aren't show-stoppers for mobile-only workgroups. A successful strategy for moving towards mobile-only acknowledges that Windows is still an important part of desktop computing in enterprises — and leverages virtual desktop infrastructure (VDI) to bridge the gap until applications can be ported or replaced with mobile equivalents.

## Leverage VDI to Simplify Your Transition

VDI environments (such as Citrix Receiver, Amazon Workspace, and VMware Horizon) are the ideal way to address Windows native challenges identified in your application inventory for several reasons:

- Your enterprise likely has some form of VDI already installed and operating
- VDI environments solve problems of data storage and backup easily

- A VDI environment will look familiar to users transitioning away from traditional PCs to a mobile-only scenario

Enterprises with broad VDI deployments already have the tools and experience to deliver Windows native applications to Samsung DeX users through a VDI client on the smartphone or tablet. IT managers who have used VDI for specific applications or user groups should see the mobile-only plan as another use case for VDI and scale up resources accordingly. As you scale out DeX, you have the choice to use VDI fully, as a tool to access just a few specific apps, or somewhere in between — and you can alter that as you go. Effectively, a combination of DeX and VDI gives employees “training wheels” as they get used to the new system, which can play a crucial part in ensuring that productivity doesn't flag during roll-out.

Enterprises without an existing VDI deployment may want to consider a cloud-based VDI product, such as Amazon WorkSpaces, rather than an on-premises VDI product. Another option would be to use MS Remote Desktop, which can be a helpful supporting tool for transitioning. If VDI is a transitional technology for mobile-only, this saves licensing and deployment costs, and makes it easy to scale up — and down — during the move to mobile-only.

As enterprises gain more experience in replacing desktops with smartphones and tablets, they have the option to move on from VDI-assisted deployments to completely native mobile applications, gradually and carefully. Pushing this type of deployment down the line not only leverages experience and lessons learned, but also lets the organization take advantage of future technology advances, including both more powerful mobile devices and more advanced file sharing and synchronization environments.

## Feedback and Capacity Checkup




A successful Samsung DeX rollout relies on the processing power, durability and adaptability of Samsung's premium smartphones. But the smartphone is only one part of the equation. Users will expect that their experience with mobile-only matches or beats what they've had on their desktop: software needs to launch as smoothly, web browsers should perform as quickly and be as compatible, and collaboration tools such as video and audio conferencing need to be perfectly integrated.

To ensure that the overall user experience is the best one possible, IT managers need to look at IT capacity and capabilities. This means answering some important questions about enterprise infrastructure, both from a technology and a policy point of view. Small user groups shifted to Samsung DeX may not represent a big change in infrastructure requirements, but as the number grows, capacity review is critical.

Characteristic	Potential Issues and Concerns
<p><b>Do we have an effective CYOD or COPE program in place for smartphones?</b></p>	<p>Enterprises should revisit CYOD and COPE policies to ensure that they cover expanded use and a larger population of users. A shift from BYOD towards CYOD/COPE is appropriate if not already in place.</p>
<p><b>Is our support team ready for more smartphones (and fewer desktops)?</b></p>	<p>Your help desk may need to shift resources or get training as device populations shift. If support is outsourced, additional time or even contractual issues may come up.</p>
<p><b>Does our IT team have a solid MDM/EMM solution ready to go?</b></p>	<p>MDM/EMM tools are critical to managing large numbers of smartphones. Licenses and infrastructure may need attention, and it's possible a different tool will be required if "MDM lite" is all that's in place now.</p>
<p><b>Are our developers ready to dive into mobile applications?</b></p>	<p>Thin browser-based clients are a common starting point, but enterprises who want to take full advantage of the power of a mobile-only strategy will want to shift application development from browsers to mobile platforms.</p>
<p><b>Is our VDI ready for more users and full desktop replacement?</b></p>	<p>Many VDIs are set up for specific troublesome applications (such as thick clients) or occasional desktop replacement. Heavy use of mobile devices as VDI clients may require changes to profile synchronization, backups and capacity planning.</p>
<p><b>Is our network infrastructure ready for VDI?</b></p>	<p>VDI running over wired Ethernet is fairly straightforward, but VDI over Wi-Fi should trigger a technology audit for client capacity and throughput. If Wi-Fi is not engineered and secured properly, risk is significantly increased, so make sure to configure Knox to force DeX to trigger over Ethernet. Leveraging the Knox API, IT can limit usage of Samsung DeX to Ethernet-only if this is a concern.</p>

## Built-In Management Benefits

Managing Samsung DeX is essentially just an extension of managing mobile devices — something that should already be in place in any enterprise looking at going mobile-only. That means significant management savings are achieved by shifting to Samsung DeX and reducing the need to manage so many desktops. However, IT managers should look at smartphone and Samsung DeX-specific infrastructure changes that bring additional benefits, such as:

Device Management	Biometrics and SSO	Knox Platform for Enterprise
 <p>MDM/EMM tools need to be able to manage smartphones as well as Samsung DeX-specific configuration information. This can require software updates to handle the new Knox/DeX APIs and added functions specifically for DeX management, control and monitoring.</p>	 <p>Samsung Galaxy phones and tablets all have biometric authentication capabilities, which go beyond simply unlocking the phone, and add layers of security as needed. IT managers should investigate using these capabilities to speed and simplify application authentication and deliver single sign-on (SSO) to DeX users.</p>	 <p>Separating home and work use of the smartphone is even more important when it's the primary tool for all enterprise applications. IT managers should establish a closely-managed container using Knox Platform for Enterprise, to create the same security profile on smartphones that they've designed into their enterprise desktops.</p>

## Equipping the Workforce for Mobile-Only

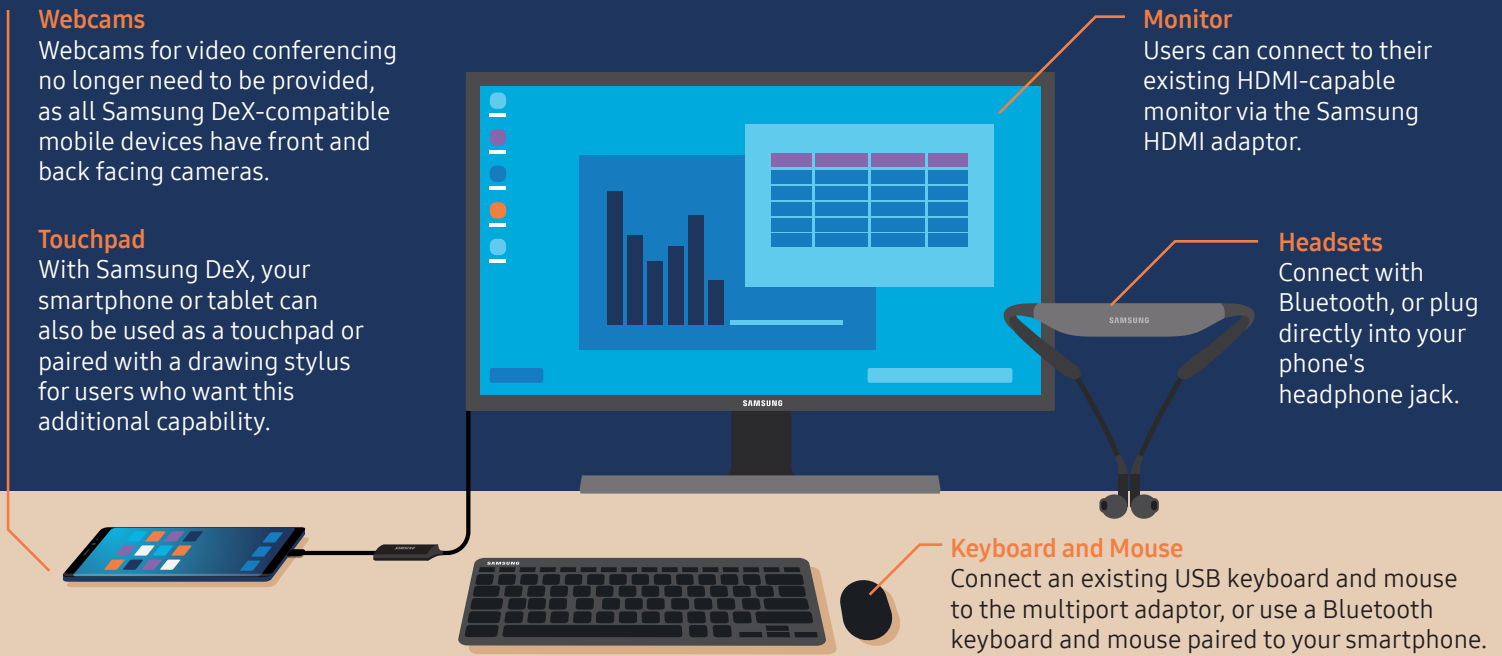
The core of the mobile-only strategy is the smartphone, and IT managers should have a variety of devices available for different types of users. Samsung DeX depends on Samsung's newest premium smartphones, which means that DeX users will start with a high-end solution with a high-resolution screen, a fast CPU and plenty of memory and storage. All that's needed in addition are a few choice accessories, such as keyboard and mouse, all of which can be suited to the user's preferences and connected either via USB or Bluetooth.

Because users are now carrying their desktop with them in their pocket, IT managers can also set up hot-desk environments very easily and economically — not just in traditional offices but even in break rooms and other common work spaces. Similarly, conference rooms with displays should have a Samsung DeX HDMI adaptor added

to make it easy for DeX users to connect and present.

Each Samsung DeX user should have at least two additional DeX adaptors, allowing them to seamlessly transition from the office, to the home, to offsite or travel locations.

Though smartphones may be familiar tools to the majority of workers, it's still wise to anticipate pushback from some users when the idea of a smartphone-centric workplace is initially presented. There are key differences between smartphones and existing laptop and desktop PCs, and it's important to address concerns about moving to a new computing environment by providing proper training and support. With Samsung DeX, IT managers can call on Samsung's mobility experts and consulting services to ensure that a strong knowledge base is in place at the outset.



## Measuring Success As You Go

A smart approach to shifting to mobile-only builds on successful internal pilots with larger and larger groups, which cultivates strong user acceptance by showing both team and total enterprise value.

Achieving success means measuring each pilot from both points of view.

Pitching mobile-only pilot projects requires CIOs and IT managers to show early adopters that benefits are not only on one side of the table: while the enterprise gains, end users also benefit from the update. Highlight that existing functionality is either unaffected or enhanced, and new features available through mobile workstations, such as improved collaboration via voice and video, allow for increased flexibility and autonomy.

### Success Criteria

#### Enterprise/Management Point of View

**Lower desktop management costs:**  
fewer devices, less imaging, less expensive hardware upgrade and replacement needs

**Lower security cost:**  
lower level of security alerts and malware infections, better compliance with enterprise and industry security requirements, reduced exceptions

**Lower IT management costs:**  
reduction in support costs, simpler backup/DR operations, quicker rollout of new device images

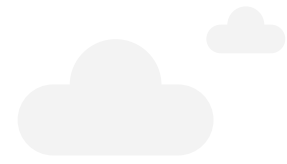
#### User Point of View

Able to accomplish key desktop functions without slowdown

Able to move seamlessly between desktop and mobile activities

High satisfaction with mobile-only environment

# Continuing With A Mobile-Only Approach & Streamlining IT



The real benefits of a mobile-only approach to end-user computing come from making the workforce more mobile and flexible, unchaining people from their desks to improve collaboration and teamwork, and empowering people to work wherever they want and need to. But that's not all: IT groups also gain from a workforce shift to mobile devices and away from traditional desktop PCs and laptops.

Some benefits will come from basic characteristics of mobile devices and mobile applications: they're easier to use, require less training and generate fewer help desk calls. But IT will see other benefits as well, including simpler system management and stronger security.

## Simpler System Management

One of the most important differences between mobile devices based on Android and desktop and laptop systems running Microsoft Windows is a much lighter level of system management required. Windows has evolved tremendously over the past 25 years, but it's still a heavy lift for IT managers, requiring a huge complex of tools for managing Windows desktops, building golden masters and deploying them, managing applications, customizing configurations, and monitoring and reporting on each tool and process. Along with this arsenal has, of course, come associated complexity, hardware and software costs and overhead.

IT managers may have finally tamed their Windows desktops — until the next version comes out — but at what cost?

Meanwhile, smartphones and the MDM/EMM tools that manage them have benefited from more than 20 years of Windows system management. Enterprises already have MDM/EMM tools in place to handle CYOD/COPE programs. A shift to Samsung DeX doesn't add new management tools; in fact, you can deploy DeX without a single change to your MDM/EMM configuration if you want. Samsung has built a number of DeX management features into the Knox API, letting MDM/EMM tools adjust DeX configurations when needed.

Managing smartphones has its own challenges — they tend to be lost and stolen more frequently, for example, and people like to store more photos and music on them than their desktop PCs — but overall the cost of system management, hardware management, backups, networking,

acquisition, repair, replacement and deployment for 1,000 smartphones is significantly lower than the cost for the same number of Windows desktops.

Most IT departments understand that a mobile-only approach won't work for all users and all scenarios today, but a gradual deployment strategy that focuses on those teams that would most benefit from the upgrade can dramatically cut costs associated with managing end-user computing.

## The Cost Savings of Going Mobile-Only With Samsung DeX

### Transitional Costs



Galaxy S8/S8+, Note8, S9/S9+ or Note9 (if not already provided)



DeX accessories including adaptors, Bluetooth keyboard and mouse

### Long-term Savings



Elimination of laptop computers



Elimination of management costs for PCs



Elimination of desktop application upkeep costs

## Samsung Support Resources



Looking for help rolling out and managing thousands of devices, or installing a new EMM?

**Samsung's Knox QuickStart** services help companies through initial deployment and equip you and your team with the tools and expertise needed to manage the new tech long-term.



Need to add support resources to ensure your help desk is ready to handle increased business-critical smartphone use?

**Samsung ProCare Technical Support** offers multiple levels of technical support and can handle replacement, spares and advanced device exchanges.



Need to provide resources to application developers to speed a transition to mobile platforms or ensure that security is designed from the start?

**Samsung Application Support Services** can provide developer training and consulting, or even handle custom application development directly.

## Stronger Security

Security is another area where smartphone vendors have learned from their desktop cousins. Samsung's Galaxy smartphones are equipped with a full skillset of security features and capabilities, including:

- application sandboxing
- work/home protected application containers
- trusted execution environment (TEE) hardware
- full-disk encryption
- biometric sensors
- mandatory access controls
- tight integration with MDM/EMM agents

It's not a question of adding, upgrading or installing apps or tools — this is how Samsung Android phones with Knox come out of the box. With a stronger platform come fewer security incidents, tighter control on application-based malware, and a better approach to end-user computing security.

The mobile-only approach brings other security benefits: information security managers will see a dramatically changed attack surface as applications migrate from unreliable VPN-enclosed models to an offensive security model needed in today's computing environment. By moving security controls closer to application servers and more tightly controlling flows between application users and servers, security managers will gain better insight into application security requirements. The result will be better security overall: fewer alerts and, more importantly, fewer expensive and time-consuming incidents.

As with any major change, it will take a few years for the new model to catch hold as application owners better understand a mobile-focused network and security environment, but the results will be game-changing for information security managers.

Intelligently shifting to a mobile-only model will lower security management costs and result in fewer breaches.



## Managing PCs and Managing Smartphones: Less Work, More Control

Management Element	Typical Windows Tools	Typical Smartphone Tool
<b>Security settings: account, audit, options, rights</b>	<ul style="list-style-type: none"> <li>• Use GPO editor tool to set Group Policy Objects</li> <li>• Hope that PC is properly domain-joined and in the right group</li> <li>• Home PCs aren't in the domain, so you don't get to control them</li> </ul>	<ul style="list-style-type: none"> <li>• Use your MDM/EMM tool to set security policy on both the home and work device, because they're one and the same.</li> </ul>
<b>Golden Master creation</b>	<ul style="list-style-type: none"> <li>• Use Microsoft MDT or other tool to create a golden master for different types of users and hardware</li> <li>• Test and update frequently</li> <li>• No access to home PCs</li> </ul>	<ul style="list-style-type: none"> <li>• Use a vendor tool such as Samsung Knox Configure to change basic configuration or pre-install applications when device is first turned on.</li> </ul>
<b>Golden Master deployment</b>	<ul style="list-style-type: none"> <li>• Create deployment servers and ensure that they are accessible and have sufficient bandwidth wherever the system will be turned on</li> <li>• Ensure BIOS is set to boot from network first</li> </ul>	<ul style="list-style-type: none"> <li>• Turn on tablet or phone on near a Wi-Fi hotspot.</li> </ul>
<b>Device and software inventory</b>	<ul style="list-style-type: none"> <li>• Use Microsoft System Center or another third-party tool to install agent and perform software and hardware inventory</li> <li>• No access to home PCs</li> </ul>	<ul style="list-style-type: none"> <li>• Use your MDM/EMM tool to view the phone or tablet configuration and software inventory on all devices.</li> </ul>
<b>Software Updates and Patches</b>	<ul style="list-style-type: none"> <li>• Use Microsoft System Center or other third party tool to control updates</li> <li>• Employ additional tools and/or GPOs depending on installed software and tools</li> <li>• Build infrastructure of patch and update servers</li> <li>• For home PCs, hope that users are keeping software up-to-date</li> </ul>	<ul style="list-style-type: none"> <li>• Use MDM/EMM tool to control software updates from the Google Play store on smartphones and tablets.</li> <li>• Samsung E-FOTA enables IT to test, remotely control and enforce OS updates.</li> </ul>
<b>Operating System Upgrades and Patches</b>	<ul style="list-style-type: none"> <li>• Use Microsoft System Center or GPOs to control patches</li> <li>• Build infrastructure of patch servers</li> <li>• For upgrades, use Microsoft licensing tool to ensure licensing compliance</li> <li>• For home PCs, send newsletter to encourage people to enable auto-updates</li> </ul>	<ul style="list-style-type: none"> <li>• Use MDM/EMM tool to control O/S updates (which are free) from carrier or vendor servers on home/work device.</li> </ul>
<b>Anti-Malware</b>	<ul style="list-style-type: none"> <li>• Use a third-party tool to control configuration of end-point security (EPS) suite</li> </ul> <p>Note that this probably doesn't talk to System Center but does work with non-domain-joined PCs (like home systems), so you'll need to maintain two diverse inventories</p>	<ul style="list-style-type: none"> <li>• Either don't run it because of the much lower risk of malware on Android, or use the same EPS suite if you want on home/work devices.</li> </ul>

## Managing PCs and Managing Smartphones: Less Work, More Control

Management Element	Typical Windows Tools	Typical Smartphone Tool
Backups	<ul style="list-style-type: none"> <li>• Either don't do it because backing up desktops is too hard, or install third-party backup tool on each system and manage large farm of backup servers to capture backups and notify you when something is awry</li> <li>• No access to home PCs</li> </ul>	<ul style="list-style-type: none"> <li>• Let built-in cloud backup tools keep a copy of critical information</li> <li>• Use enterprise file sharing tools (like Dropbox, OneDrive) for all data, automatically giving backups</li> <li>• Home/work partition automatically keeps work data safe</li> </ul>
Lost Devices	<ul style="list-style-type: none"> <li>• Hope that the device is locked and the disk is encrypted</li> </ul>	<ul style="list-style-type: none"> <li>• Use MDM/EMM tool to disable home/work device and wipe data; if the device isn't accessible, trust in mandatory full-disk encryption to keep things secure.</li> </ul>

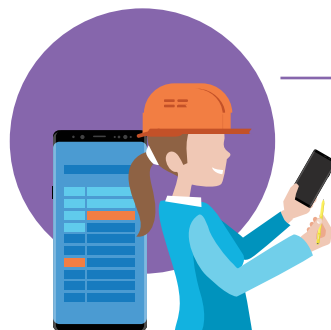
## Mobile-Only Industry Use Cases



**Hot-desking employees.** Flex work is the new reality, as employees increasingly split their time working from home and office, between different company and client locations, collaborating with different teams, or simply on the move. Fixed cubicles are out, and open spaces full of interchangeable, shareable hot desks are in. Organizations are offering next-level mobility to workers by deploying workstations equipped with a monitor, keyboard and mouse, and a DeX adaptor. Workers carrying Samsung smartphones with DeX can sit down, connect, and within seconds be up and running. Your hardware costs shrink dramatically, as does all of the time needed to deploy, manage and secure these mobile endpoints. If you have a lot of employees who are only occasionally in the office, your real estate needs just went down as well.



**Police officers on the beat.** Samsung DeX delivers in-car computing by pairing Galaxy smartphones with a dash-mounted display and keyboard. This replaces the siloed combination of phones, radios and expensive in-car laptops. Officers can access the computer-aided dispatch and do reporting, all from a smartphone. DeX optimizes applications and information to make full use of the in-car display, rather than simply stretching the smartphone interface. This allows critical information to be viewed quickly while also enabling officers to complete all tasks from wherever is most convenient. Beyond the squad car, DeX also allows officers to dock in to a workstation upon return to the department.



**Field service workers.** Field service workers are ultra-mobile, spending most of their day physically on the move, and only coming in to file their daily reports at the end of the day. There's no reason for someone who only wants access to a workstation for an hour to be required to physically come into the office each day; it's a drag on productivity. Today's workers file their daily reports from the convenience of their home office utilizing their smartphone and DeX. To ensure security, IT can leverage a VDI solution such as VMware Horizon or Citrix Receiver to deliver their corporate desktop and data, and Samsung Knox's management and containerization capabilities to keep personal and work data separate.



# Conclusion

Going mobile-only can offer significant benefits, from reducing your long-term IT costs and improving your overall endpoint security, to increasing the productivity and effectiveness of your workers. That said, major changes in IT strategy require significant time and training; for most companies, the best plan of action will be a gradual rollout, starting with your most mobile user groups.

Migrating to mobile-only one department at a time will allow training and troubleshooting to be completed in stages, ensuring the overall success of the project. Once completed, your new mobile-only workforce will enjoy greater freedom and more efficient workflows, while also focusing IT on a single platform that provides significant opportunities for innovation.

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Future-proof your workforce with Samsung DeX.

# Footnotes

1. <https://mobilemarketingmagazine.com/24bn-smartphone-users-in-2017-says-emarketer>
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7. <https://insights.samsung.com/2018/07/03/how-much-should-your-business-be-spending-on-mobile/>
8. <https://www.gartner.com/newsroom/id/3845563>
9. <https://www.samsung.com/us/business/short-form/next-mobile-economy/>

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