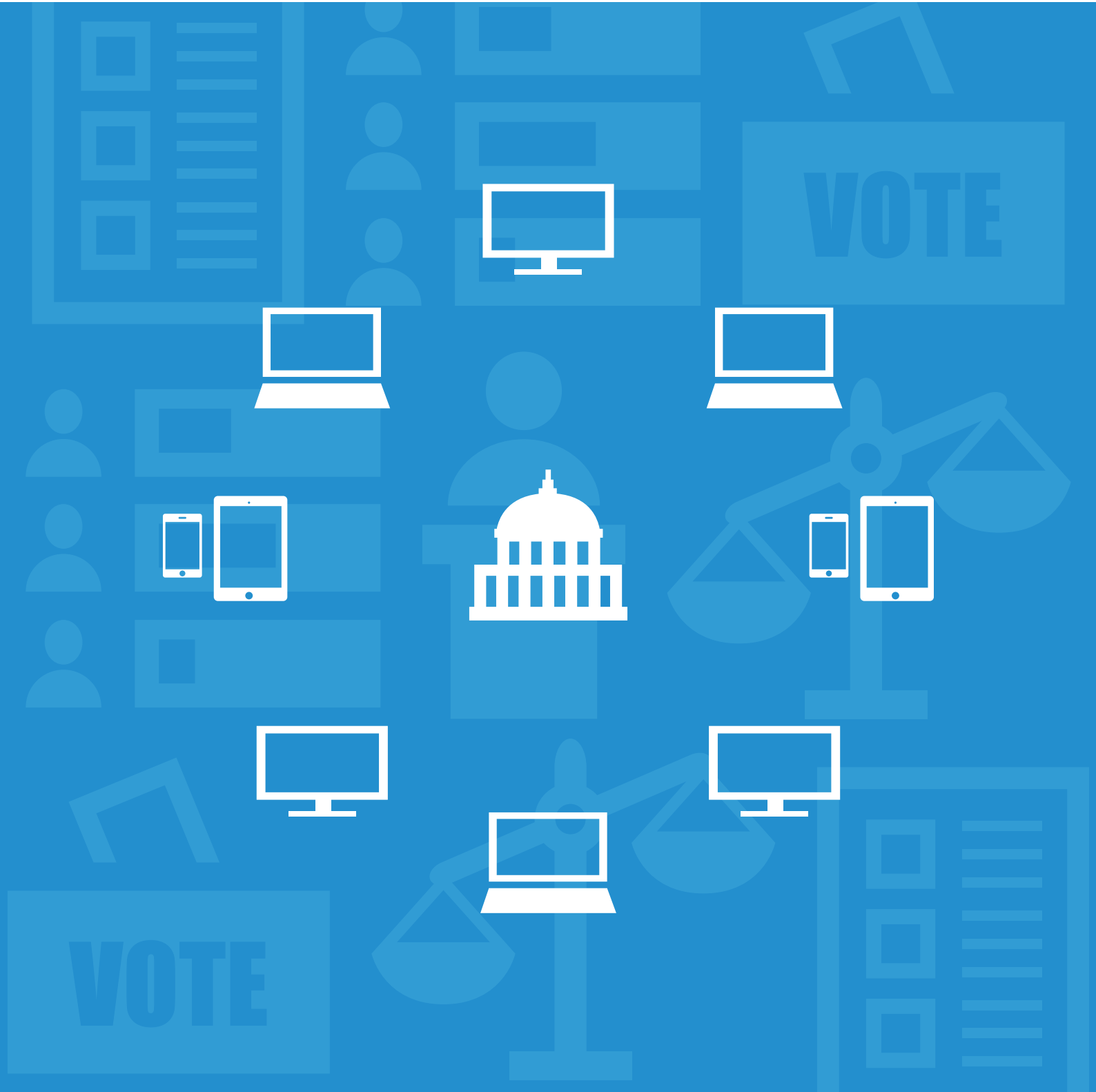# Accelerating business transformation with desktop virtualization

Government Sector Advisory

Delivering digital government and effective public administration

Organizations across every sector are differentiating their products and services by focusing on their customers, sensing their needs and responding appropriately. You don't get to choose your customers if you work in the public sector, but you still have to meet the expectations of citizens, businesses, and institutions as they deal with government bodies and public service providers. Government policy reforms and initiatives are steadily changing the way in which the sector operates, but departments and agencies are also expected to transform the delivery of their services using modern technologies and processes. Re-skilling and re-equipping public servants is part of the transformation journey, so with this in mind, let's look at how modern desktop virtualization can help.

Efficient and effective administration of the state

Information technology is critical to the smooth running of government and public administration, which means that data processing and the production, distribution, and consumption of information are core activities for most employees. Like you, they rely on the familiar Windows desktop for at least some of their activities. So, if the desktop computing environment isn't up to scratch, productivity and efficacy are likely to suffer, along with the development, management, and administration of public services. Service delivery costs could also increase too.

The adoption of mobile devices and applications is probably central to many of your digital transformation initiatives, but retrofitting modern data protection capabilities across multiple different roles, applications, networks, and devices can be expensive and complex. And then there's the end user aspect. None of us wants any undue burden or complication when it comes to using IT, but it's important to find the right balance between governance, risk, and compliance, and productivity, adaptability, and mobility.

Windows 7 reaches its 'end of life' in January 2020, and has limited support when running on new computers, so we can probably say that the upgrade/migration countdown clock is ticking. Incumbent technologies, such as the Windows desktop, can eventually become costly legacy impediments without thoughtful investment, so now might be a good time to consider recent developments in the desktop virtualization market, especially the provision of virtual desktop infrastructure, as this is where cost savings can accrue thanks to IT infrastructure elasticity and on-demand services.

The renewed relevance of virtual desktop infrastructure

The design goal of a modern computing environment is to provide employees with an easy-to-use, secure, and cost-effective desktop experience that can deliver the personalized applications and data they need, on devices they are authorized to use, from locations they need to be. You're probably familiar with traditional desktop virtualization products, but you might want to consider the relevance of new capabilities as you think about Windows 7 upgrades and desktop migrations.

◆ **Access systems from anywhere:** Multifactor authentication, resource authorization policies, and connection authorization policies control access to resources and data located within the organization, enhancing security, compliance, and mobility.

◆ **Workstation-class hardware:** Using a new capability called Discrete Device Assignment, high performance devices, such as NVMe storage and GPUs, can be allocated to virtual machines, providing power users with workstation-class performance from almost any device.

◆ **Pre-configured, pre-integrated, pre-tested:** Vendors and system integrators are taking the pain out of deploying the servers, storage, network connectivity, and software required for on-premise desktop virtualization initiatives. And when cloud services make sense, modern secure remote desktop infrastructure is available here too, including private cloud Desktop-as-a-Service (DaaS).

Server session-based desktops continue to offer the most cost-effective route to a fully managed Windows PC, but with Windows Server 2016, Remote Desktop Services can also be configured to provide personal and pooled virtual desktops, or a combination of the two. Within these virtualization environments, public servants can be given access to a fully-managed modern desktop experience, complete with applications and productivity tools. Alternatively, users can access specific applications that are hosted/run on a virtualized system but appear as if they're running on their desktop like local applications. By combining these approaches, you can develop more adaptive, more creative working environments that are optimized for specific roles, locations, activities, and security postures.

Exploring the benefits of modern desktop virtualization within the government sector

Malware, ransomware, and botnet attacks are on the increase, often spreading through employee devices. As a result, your organization is probably looking at ways to reduce its attack surface without impeding service delivery or business processes. And then there's information security management to think about, especially when handling sensitive data, be it citizen, business, or government.

Desktop virtualization might not be the first thing that springs to mind when you consider cyber security and data protection; however, its highly centralized management model can reduce IT response latency. Server session-based desktops may already be a familiar site in your environment, but it's worth thinking about deploying modern virtual desktop infrastructure more broadly as you consider business continuity, information security management, and disaster recovery initiatives.

Managerial, professional, and technical occupations account for more than half of public administration roles, and they typically represent the 'PC power-user', placing heavy demands on the desktop computing environment and those that support it. Modern desktop virtualization technologies can help reduce this burden while accelerating change through the deployment and adoption of new processes, applications, and tools. Furthermore, DaaS presents an alternative procurement model that might be better suited to some situations and budget constraints.

Information technology is clearly developing at a great pace, so significant changes within every organization are to be expected. Accommodating these changes, with an adaptable and scalable digital workspace, would seem to make sense, so you might want to consider how the matrix below would look for your own organization within the context of your service transformation initiatives.

Modern Desktop Virtualization Benefits and Opportunities	Productivity and Business Continuity	Governance, Risk and Compliance	IT Efficiency & Efficacy	Digital Transformation Opportunity
Elected Officials, Legislators, Senior Civil Service, Director General, Councillor	✓	✓	✓	✓
Program Director, Risk Analysis Manager, Information Compliance Officer	✓	✓	✓	✓
Senior Executive Officer, Freedom of Information Officer, Civil Servant	✓	✓	✓	✓
Local Government Officer, Rate Collector, Inland Revenue Executive	✓	✓	✓	✓
Administration Assistant, Clerical Assistant, Committee Clerk	✓	✓	✓	✓

The bigger the tick, the more positive the impact

Virtual desktop implementation considerations

Service transformation initiatives can be accelerated when business and IT leaders co-create solutions with experts in the field. System integrators and technology providers have already developed a range of offerings that span every aspect of desktop delivery strategy, from initial assessment right the way through to modern Desktop-as-a-Service. However, there's plenty of scope for the government sector to add its own layer of business value. Desktop virtualization isn't a panacea, but we think that delivering a modern digital workspace is likely to be a lot harder without it.

Further Reading

The full paper 'Desktop virtualization as an accelerator of digital transformation: Fast-track creation of a modern digital workspace' can be downloaded from the Freeform Dynamics website here.

About Freeform Dynamics

Freeform Dynamics is an IT industry analyst firm. Through our research and insights, we aim to help busy IT and business professionals get up to speed on the latest technology developments, and make better-informed investment decisions.

For more information, and to access to our library of free research, please visit www.freeformdynamics.com.

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Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Approximately 156,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers.

Fujitsu provides desktop virtualization solutions based on best-in-class virtualization technologies, proven infrastructure products, and end-to-end lifecycle services from a single source. Customers benefit from rapid implementation and reduced risk resulting from Fujitsu's extensive project experience. Especially for VDI, several integrated Fujitsu systems give customers the choice of making a fast and easy move to virtual workspaces according to specific business needs, including applications and digital workspaces delivered as a service from the Fujitsu Cloud.

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