

Accelerating business transformation with desktop virtualization

Retail Sector Advisory



Adapting to digital disruption and retail customer demands

It's in the interests of every sector to become more agile, more adaptable and more effective, but probably none more so than retail. If you work in this sector, your strategic initiatives and business projects are likely to be focusing on delivering better customer experiences and increasing your market relevance. And then there's the need to prepare, as best you can, for disruption and change. If you can do this better than the competition, then the business is more likely to benefit in ways that will appeal to customers, employees, and stakeholders. This is where investments in new digital technologies and IT infrastructure become a factor. With this in mind, let's consider how modern desktop virtualization can help your organization adapt to an unpredictable future.

Rising to the challenge of the retail revolution

Digital transformation is arguably at its fiercest within the retail sector, so if you're an established 'bricks-and-mortar' retailer, the attentions and efforts of your company's managers and professionals (up to 20% of the workforce) are likely to be focused on boosting store activity, improving profitability, and driving online sales through e-commerce and customer engagement investments. Like you, these employees use a variety of devices, applications, and systems to get work done, so effectiveness is going to be hindered if the desktop computing environment isn't up to scratch.

Modernization is probably part of the big picture too, with cloud and mobile technologies reshaping supply chain management, inventory management, and store operations. And then there's the daily balancing act of getting stock and staffing levels just right, so that customers can get what they want, when they want it, without having to queue for it. If you're an online retailer, things aren't wholly different, you're still looking for new and novel ways to engage and serve your customers, improve margin, and drive sales. Your competitors will also be a mix of disrupters and incumbents.

Customer-facing sales roles represent around half of the retail sector workforce, so the relationship that these employees have with technology is part of the modernization journey, especially if shops and stores become more like showrooms, replete with the latest technologies and innovations.

Modern retail, whether online or on the high street, is data driven, controlling everything from in-store price checks to online promotions. And while mobile devices have extended the reach and range of retail systems, the Windows desktop still plays a major role, especially when you consider point-of-sale units, kiosks, digital signage, etc. Windows 7 reaches 'end-of-life' in January 2020, so now might be a good time to take a closer look at modern desktop virtualization technologies as you develop your Windows 10 adoption, migration, and delivery strategies.

Developing an adaptive digital workspace with desktop and application virtualization

The design goal of a modern computing environment is to provide users with an easy-to-use, secure, and cost-effective desktop experience that can deliver the personalized applications and data they need, on any device they are likely to use, from any location they happen to be. You're probably familiar with traditional desktop virtualization products, but you might want to consider the relevance of modern desktop virtualization as you think about the changing nature of retail.

- ◆ **Virtual Reality:** Using new graphics virtualization technologies, specialized processors can be dedicated to virtual PCs, enabling customers and staff to experience virtual reality, augmented reality, and mixed reality applications.
- ◆ **Access systems from anywhere:** Multifactor authentication, resource authorization policies, and connection authorization policies control access to resources and commercial data located within your business and supply chain, enhancing security, compliance, and mobility.
- ◆ **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 remote desktop infrastructure is available here too, including 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, IT admins can give

employees 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 requirements.

Using desktop virtualization to adapt to the everchanging retail environment

Desktop virtualization isn't the first technology that people think of when they consider information security and data privacy, yet that's exactly how some industries use it. Server session-based desktops are a familiar site in many shop floor retail environments, but you might want to deploy virtual desktop infrastructure more broadly as you consider your General Data Protection Regulation (GDPR) obligations and other relevant governance and compliance initiatives.

Retail analytics is a well-established market, enabling managers and retail professionals to direct the business based on hindsight (What happened?), insight (Why did it happen?), and foresight (What will happen?). Workstation-grade hardware isn't always a prerequisite for these applications, but power users still want to model data from time-to-time using spreadsheets and other analytical/statistical tools. Supplying a large, heavy, expensive laptop has been the traditional approach, but it's worth considering how a workstation-grade virtual desktop might be a more effective option.

Online and in-store retail technologies are clearly developing at great pace, so significant changes within your business 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 business as you consider modern desktop virtualization.

Modern Desktop Virtualization Benefits and Opportunities	Productivity and Business Continuity	Governance, Risk and Compliance	IT Efficiency & Efficacy	Digital Transformation Opportunity
Retail Manager, Franchise Director, Supermarket Manager, Trade Manager	✓	✓	✓	✓
Logistics Director, Stock Accounting Manager, Depot Operations Manager	✓	✓	✓	✓
Marketing Advertiser, Promotions Coordinator, Internet Marketer	✓	✓	✓	✓
Sales Advisor, Shop Worker, Customer Advisor, Sales Assistant, Retail Assistant	✓	✓	✓	✓
Customers and Retail Store Visitors	✓	✓	✓	✓

The bigger the tick, the more positive the impact

Virtual desktop implementation considerations

Digital 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, from initial assessment right the way through to Desktop-as-a-Service (DaaS). However, there's plenty of scope for the retail sector to add its own layer of business value. Desktop virtualization isn't a panacea, but we think that delivering a modern digital workspace without it is likely to be a lot harder.

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.

About Fujitsu

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.

For more information, please see: www.fujitsu.com/global/vdi.

Terms of Use

This document is Copyright 2018 Freeform Dynamics Ltd. It may be freely duplicated and distributed in its entirety on an individual one to one basis, either electronically or in hard copy form. It may not, however, be disassembled or modified in any way as part of the duplication process. Hosting of the entire report for download and/or mass distribution by any means is prohibited unless express permission is obtained from Freeform Dynamics Ltd or Fujitsu. The contents contained herein are provided for your general information and use only. Neither Freeform Dynamics Ltd nor any third party provide any warranty or guarantee as to the suitability of this document for any particular purpose.