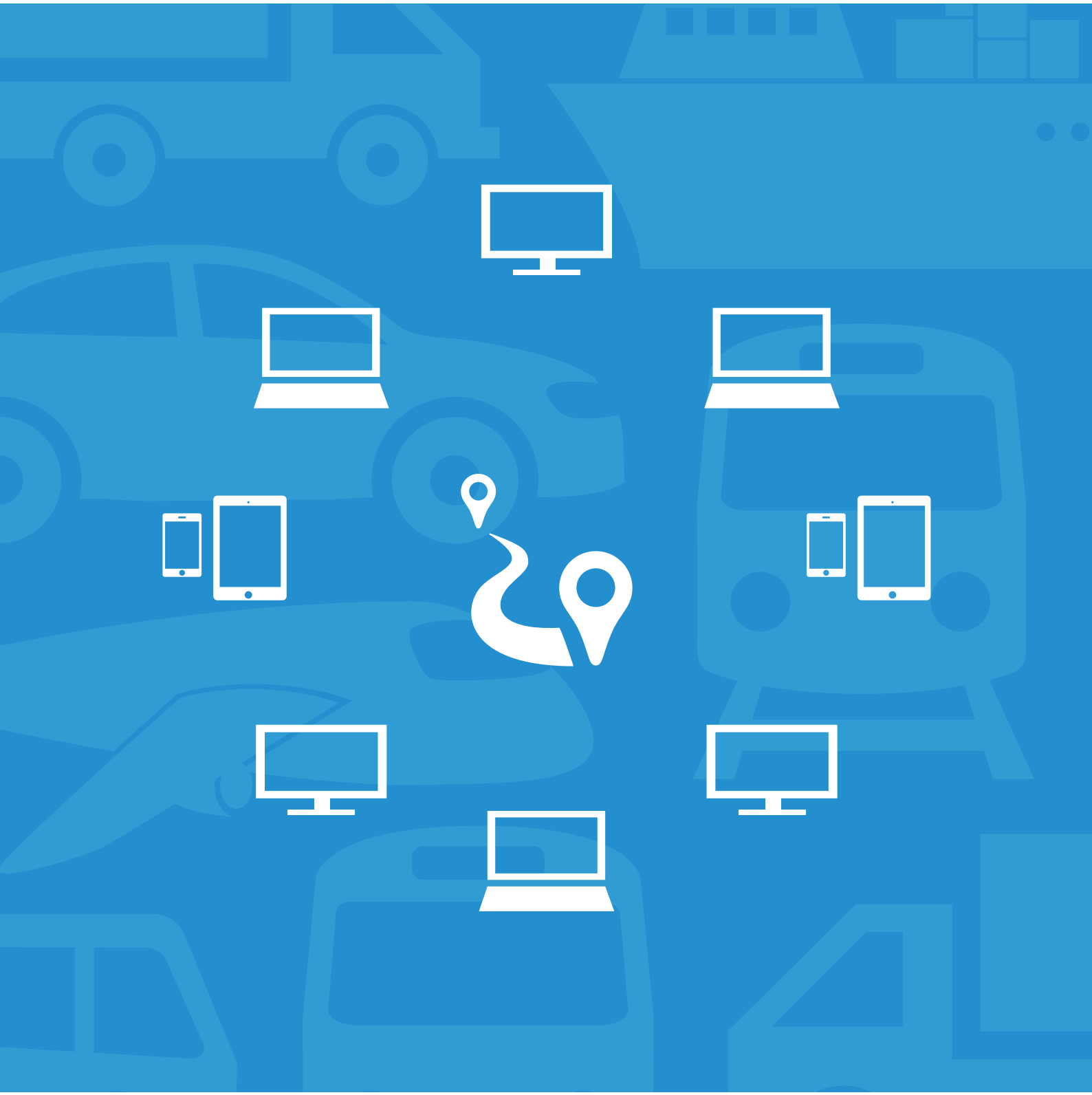
Accelerating business transformation with desktop virtualization

Transportation Sector Advisory



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Delivering the digital world through transportation and logistics

If you work in the transportation sector, your focus is likely to be that of matching delivery capacity to the fluctuating demands of the unpredictable economies that form our modern world. And whether it's delivering payloads into space or packets to the home, digital technologies touch almost every aspect of this sector and those it serves. Highly efficient distribution chains have been developed in many markets, but adaptation and innovation are still vital as you keep pace with shifting business models driven by new technologies. Investments in digital technologies are powering growth in the transportation sector too, however, it's the workforce, connected through the digital workspace, that ultimately drives and delivers them, so let's consider how desktop virtualization might help.

Shaping the future with transportation and logistics

The efficient movement of people, goods, and materials is an essential part of every economy and almost every industry, even those that deal ostensibly in bits and bytes. Amazon, for example, continues to roll out its very own delivery infrastructure network while simultaneously developing digital relationships with a range of transport providers and logistics partners.

Technology has always played an important role in this sector, with connected mobile devices being the most recent example. Enabled by real-time traffic, navigation, and logistics applications, mobile tech is transforming the market, bringing major benefits to industry and commerce, consumers and companies. However, the Windows desktop is still central to many roles, and the platform probably underpins many of the essential workflows within your organization.

Around 25% of employees in the transportation sector are likely to be PC users, at least for some part of their role. These numbers have been held back somewhat by the introduction of tablet computers and web-based applications, but PC usage is still significant. So, while the future of your business is undoubtedly linked with capacity planning, asset utilization, and use of mobile technology, it's your 'knowledge workers' who develop these and bring them to life.

Disruptive technologies, new customer expectations, and regulatory change have resulted in an almost permanent state of flux, spawning endless challenges and opportunities. One thing we know for sure, however, is that incumbent technologies can quickly become legacy impediments without thoughtful investment, so now might be a good time to consider recent developments in the desktop virtualization market.

Building an adaptive workspace with virtualized desktops and applications

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 consider the relevance of the following desktop virtualization advancements as you think about your own organization's challenges:

- **Demand modelling:** Using new graphics virtualization technologies, specialized processors can be dedicated to virtual Windows desktops, enabling fleet managers and cargo capacity analysts to run sophisticated modelling applications on-demand, on any device.
- **Access systems from anywhere:** Multifactor authentication, resource authorization policies, and connection authorization policies control access to IT resources and sensitive data located within your business, 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 personaland 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 just 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 needs.

Enabling rapid change and enhanced workplace appeal with modern desktop virtualization

Companies working across land, air, and sea each have a unique set of challenges and constraints, but senior operational roles are likely to share similar requirements and expectations: ready access to transportation management systems, robust tools and applications, and help with understanding large amounts of fast moving data. Multiscreen, workstation-class PCs may already be familiar in your environment, but modern virtual desktop infrastructure (VDI) solutions can enhance the mobility of employees and their ability to respond to incidents.

The success of any business, including transportation and logistics operators, depends on the skills and qualities of the employees it attracts. Two-thirds of employees working in the transportation sector are drivers, so there are challenges and opportunities ahead as self-driving technologies develop and evolve. Today, drivers manage safety and efficiency while sat at the wheel. In the future, with computer assistance, a driver might also communicate directly with customers, coordinate truck platooning/convoys, or manage ancillary drop-off/collection drones as part of their role. With these and other thoughts in mind, how might the matrix below look for your own business?

Modern Desktop Virtualization Benefits and Opportunities	Productivity and Business Continuity	Governance, Risk and Compliance	IT Efficiency & Efficacy	Digital Transformation Opportunity
Airport Manager, Cargo Manager, Fleet Manager, Freight Manager	✓	✓	✓	✓
Airline Captain, Flight Engineer, Commercial Pilot, Navigator	✓	✓	✓	✓
Logistics Administrator, Freight Clerk, Road Haulage Load Planner	✓	✓	✓	✓
Passenger Handling Agent, Airline Reservation Agent, Cabin Crew	✓	✓	✓	✓
Goods Driver, Tanker Driver, Livestock Transporter, Transport Contractor	✓	✓	✓	✓

The bigger the tick, the more positive the impact

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 strategy, from initial assessment right the way through to Desktop-as-a-Service (DaaS). However, there's plenty of scope for the transportation 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 Fujitsu website here.

About Freeform Dynamics

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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.