

How to Create IT Infrastructure That Drives UK Small Business Growth

Small business IT leaders struggle with limited resources to enable and sustain digital business growth. They should leverage an IT infrastructure vendor that demonstrated product and service capabilities and business processes specifically designed for small business requirements.



To achieve your business growth goals, an IT infrastructure vendor should prove the following key capabilities:

1. Servers, storage, and networking product families that are designed to let you select the performance and capacity you need now and quickly scale that performance to meet future growth.

- a) Pre-tested and validated configurations of hardware and software let you deploy easier and faster.
- b) Separate and modular compute and storage let you add what you need of each, when you need it.

2. Simplified, automated hardware management that relieves you and your staff of costly, time-consuming manual tasks.

- a) Centralised management software leveraging automatic discovery that lets you tailor infrastructure health reports for the information that matters to you.
- b) Machine learning capability that lets you optimise utilisation and performance by relying on automated monitoring, analysis, and recommendations

3. Support for advanced IT capabilities, such as hyperconverged infrastructure, that enables your business to respond faster to changing business demands.

- a) Virtualising desktops, applications, and storage to let you create a highly standardised, manageable, and adaptable business IT infrastructure.

Growth-oriented small businesses quickly strain IT infrastructure. Surging transaction volumes, customers, business data, and employees can quickly outstrip infrastructure capabilities. The results for UK small businesses can be crippling: incomplete transactions, slow business response, customer data compromised or at risk, undetected cybersecurity vulnerabilities. At best, business growth stalls. At worse, these problems put the business out of business.


IT infrastructure vendors potentially enable UK IT leaders to solve these problems, through a combination of hardware and software products and services. But how these vendors package and execute their solutions, and how well they tailor them to small business requirements, is critical to customer success. IT leaders for UK small businesses should maximise business uptime and optimise IT spending by selecting infrastructure vendors with demonstrable small business capabilities in three critical areas.

Prioritise IT Infrastructure Products That Will Maximise Your Business Uptime

Small business IT leaders know they cannot afford any kind of business downtime. Their infrastructure decisions must create flexible, reliable, and scalable IT capabilities.

These leaders also know they must get the best IT solution possible for the least amount of spending. Their infrastructure must be affordable.

Most small business IT leaders' decisions revolve around these two critical poles:



Maximising uptime **Minimising spend**

Your infrastructure vendor must demonstrate they have products and services to deal with both requirements.

In the broadest terms, all infrastructure vendors use the same building blocks. For example, servers with advanced processors from Intel and AMD, the latest in flash storage and high-bandwidth interconnect. For small businesses IT leaders, the critical added value is bundling these products to optimise your IT capacity for current workloads and ensure a smooth path forward in scaling this capacity for projected business growth.

This bundling is key, whether IT leaders need an overall IT upgrade to address obsolete software, aging hardware, and lack of support or need targeted upgrades to address specific technical problems, such as an aging network switch unable to keep up with new servers or an urgent need for additional storage. In both overall and targeted IT upgrades, the goal is ensuring a small business IT infrastructure that can satisfy the demands of current business growth and can sustain anticipated future growth.

How Dell Technologies Meets Your Infrastructure Product Requirements

Dell Technologies is the world's leading supplier of small business IT infrastructure solutions. Overall, IDC gave Dell the No. 1 worldwide position in servers, by units shipped¹, and No. 2 worldwide, by vendor revenue². IDC listed Dell Technologies as No. 1 in enterprise storage, by vendor revenue³.

This market position is based on the buying decisions of hundreds of IT leaders, who have been convinced of the superiority of Dell Technologies' IT solutions, including hardware, software, and services.

These hardware products are designed, configured, and bundled for the small business market. Products are available in pre-tested, integrated packages of servers, storage, software, and connectivity.

All products leverage advanced technology in processors, flash storage, and interconnects:



PowerEdge Servers

The starting R640 model is typical of Dell's approach: optimal and scalable processing power and bandwidth with the latest Intel Xeon CPUs; dual in-line memory modules based on DDR4, the latest RAM generation; efficient and compact enclosures; embedded management features and integration with Dell's OpenManage software; integration with enterprise management software from vendors such as BMC Software, IBM, Microsoft, VMware, and others.



PowerStore and PowerVault Storage

An appliance architecture lets customers easily scale capacity by adding single drives or entire appliances to meet performance demands; containerised software enables faster and easier software installs and upgrades, more efficient resource utilisation, and speedier new features delivery; integration with various DevOps and open management frameworks makes for faster application development and storage workflow automation.



Hyperconverged Infrastructure (HCI)

VXRail system software, with PowerEdge servers, is a pre-configured, fully tested hyperconverged infrastructure system optimised for VMware's virtual storage area network. The result is a cost-effective, quickly deployed solution for automated IT operations supporting use cases such as big data and analytics, remote office, high performance computing, graphics intensive virtual desktop integration (VDI) and more. Dell and VMware also partner to deliver VMware's Tanzu Application Service on VXRail: the combination creates a complete, quick-to-deploy, Kubernetes-based container architecture for automating software application development, scaling, and management.



Live Optics

A free software program and website that IT leaders can use to analyse their existing IT infrastructure, performance, and workloads. The program collects data about the existing IT infrastructure and workloads. An online analytics engine sifts, analyses, and visualises the data, creating in effect an infrastructure "health" report. The interactive web portal lets IT leaders view the results, shifting between system-level aggregate values and individual node details. See the [Live Optics website](#) for more information.

¹ IDC Worldwide Quarterly Server Tracker, September 9, 2021

² IDC Worldwide Quarterly Server Tracker, September 9, 2021

³ IDC Worldwide Quarterly Enterprise Storage Systems Tracker, September 9, 2021

Establish Data Security as a Built-In Part of IT Infrastructure

Two current cybersecurity threats are of special concern to small business IT leaders: stolen or compromised customer data and ransomware or denial of service attacks. Both directly put the organisation's business, and survival, at risk. Cost-effective responses require that cybersecurity capabilities are designed into infrastructure products, rather than relying solely on separate, added layers of security.

Compromised customer data and ransomware attacks directly threaten your organisation's business and, ultimately, its survival.

Choose an IT infrastructure vendor that designs security into their hardware and software offerings.

Adding security layers and features to products is costly, hard to manage, and difficult to integrate between layers across different products. In today's digital business environment, small business IT leaders cannot afford the costs and risks of this ad hoc, piecemeal security approach.

To achieve your business cybersecurity goals, an IT infrastructure vendor should prove the following key capabilities:

1. **Secure supply chain** that validates all sourced components are protected from manufacture to deployment.
2. **Cryptographically signed firmware** packages and Secure Boot to maintain data safety.
3. **Track software changes** to block unauthorized or malicious activity.
4. **Erase organization and customer data** quickly, easily, and completely on all systems and components being replaced or retired.
5. **Tight integration** with an array of third-party system management products to leverage their security and protection features for monitoring, detecting and responding to cyberattacks.

How Dell Technologies Meets Your Cybersecurity Requirements

Dell's approach is to incorporate security as a critical part of the design and manufacturing of Dell products:

- **Optimising security in product design:** Security is a priority criterion during all phases of product development, from conception to implementation, including manufacturing and maintenance.
- **Silicon-based security:** Dell servers are designed with security features built into silicon (a "root of trust") to cryptographically protect critical firmware, such as BIOS, iDRAC, and more.
 - Dell implements Intel Boot Guard to prevent unauthorised firmware from accessing the boot process.
 - Among other features, Dell servers detect and log hardware intrusion attempts, even when no AC power is available.
 - Servers have lockable bezels and lids, accompanied by sensors detect and log all attempts (including during shipment) to open or tamper with the chassis.
- **Secure global supply chain:** Dell investigates and evaluates its silicon chip manufacturing partners to customize the chips for security and build-in root of trust technology. Dell's security lifecycle approach also protects servers at each stage from component acquisition through to customer deployment.
- As previously mentioned, Dell has **extensive integrations** with a wide range of third-party system management applications.

Manage Costs Long-Term by Leveraging Select Vendor Services

Cost management for small business IT leaders entails more than just the lowest price on a new server. Total cost of ownership is a metric that takes into account not only the initial purchase price of an IT solution but its operating costs over its lifetime.

Vendor services – reliably executed with specified service levels and tiered pricing - enable you to invest proactively in cost management capabilities that would be difficult to implement in-house.

This approach to cost management can cover all or some of the entire infrastructure process:



Early consulting to accurately establish specific infrastructure requirements.



Financing options through the vendor to fund the infrastructure components.



Installation and training to speed deployment.



Remote monitoring and tiered tech support to head-off problems and maintain business operations.

To achieve your business cost management goals, an IT infrastructure vendor should prove the following key capabilities:

1. **Consulting services** that can help you analyse your current infrastructure, identify or confirm problems and outline a cost-effective solution that includes a path forward to future upgrades and scaling.
2. **Financing services** for small business customers, to minimise interest costs, structure low monthly payment schedules, or access additional financing options.
3. **Delivery and set-up services** that can entirely deploy your infrastructure solution quickly or work with in-house IT staff to coordinate installation as well as remote monitoring and remote assistance if needed.
4. **Post-installation support** that gives you tiered service options for response times, escalation, and resolution.

Ideally, a vendor's service offerings give cost-effective options to "hire" the expertise and experience you need to speed IT infrastructure design, financing deployment, monitoring, troubleshooting, end user support, and more.

Service level agreements and pricing tiers let you balance the resources you need with what you can afford to spend, and upgrade and extend as needed in the future. Initial consulting services can validate your performance requirements and guide your hardware/software purchase decisions to get the optimal solution. Remote monitoring can focus on your e-commerce site to detect and remedy emerging problems before they blow up. Installation and deployment services can speed the process of bringing your infrastructure solution online, validating its readiness and training end-users.



How Dell Technologies Helps You Reduce Your Total Cost of Ownership

Dell Technologies offers an array of services targeted at UK small businesses, covering the entire infrastructure solution process from design to tech support. These services are staffed by 1,700 specialists (along with dedicated partners) who are focused on small business customers. Selective use of these services enables small business IT leaders to control costs more predictably over the long-term and optimize resource utilization.

- **Consulting: ProConsult Advisory Services** analyse in-depth both your current infrastructure and the end-state needed to achieve the organisation's business goals. They also establish best-practice guidance for your infrastructure solution.
- **Payment: Dell Financial Services** offer a range of leasing and financing options and can consolidate multiple product purchases into a single payment stream. Dell Business Credit designs custom payment arrangement to maximise cash flow flexibility for small businesses. Some product purchases are interest-free if fully paid within 90 days.
- **Installation: ProDeploy and ProDeploy Plus** handle project management and deliver and install the infrastructure solution. ProDeploy includes a single point of project management assistance, site readiness review, and implementation planning. ProDeploy Plus adds several additional capabilities, such as a technology service manager for qualified Dell devices, onsite system software installation and configuration, and 30 days of post-deployment configuration assistance.
- **Support: ProSupport** services are tiered to give small business IT leaders a variety of support options to fit spending constraints and to support select critical systems. These services leverage an array of Dell Technologies' automated problem-detection technologies and tools.

Conclusion

Small business IT leaders are all too familiar with spending constraints and limited resources, even as they strive to enable and support business growth in dynamic markets. Selecting an IT infrastructure partner that has the experience, resources, product portfolio services to satisfy these requirements is essential to maximizing business uptime and managing costs. Vendor candidates should be able to demonstrate concretely that they have the capabilities for an IT infrastructure that will sustain small business growth.

Talk to a Dell Technologies Advisor to learn more at 0800 085 4878, or online at dell.co.uk/chat.