

POV

Lead with the Latest Technology for your Data Center

Future-proof your Infrastructure with Dell PowerEdge

 **Dell** Technologies

It's no secret that the business environment is rapidly changing. Industries that once enjoyed a level of exclusivity due to high barriers to entry are being disrupted by new entrants that are delivering their goods and services in innovative ways. To maintain a competitive edge, organizations are increasing their digital transformation, evolving their business models and adopting contemporary go-to-market strategies.

Speed and Flexibility are the Keys to Success

In this new environment, velocity and agility are paramount to success. Speed has emerged as a differentiator and catalyst for transformation. Organizations that can move quickly are outperforming others with innovation, growth and other metrics, like financial outcomes.¹ Digital transformation is allowing organizations to harness new processes and technology to embrace speed and flexibility.

Security Threats Remain a Concern

Accompanying this support of digitization is a higher risk of security threats. Threat vectors continue to expand as cybercriminals use increasingly sophisticated tools to search out and exploit weaknesses in IT infrastructure. In fact, in the first six months of 2021, attacks increased 151% compared with the previous year and the average cost of a breach increased 10% from 2020-2021.^{2,3} As a result, business resiliency has also emerged as yet another competitive advantage, allowing organizations to withstand crises and build trust while delivering on their strategic goals.⁴

Workloads and new applications are driving today's technology investments

In the rapid move to digitize operations and offer more value to customers, organizations are also investing in new types of technology and applications. Some technologies making the biggest impact include:

Artificial intelligence and machine learning



In the drive to digital transformation and the rise of the data-driven organization, business leaders recognize AI as one of the most important technologies helping organizations innovate, which is why 30% of all AI projects are steered by the CEO.⁵

Organizations are accelerating the adoption of AI and machine learning (ML) because they have a wide range of uses. AI can automate business processes, making them more efficient and deliver insights to improve decision making and reduce risk.

Virtual desktop infrastructure



As work from anywhere or hybrid working becomes the norm, virtual desktop infrastructure (VDI) enables organizations to deliver and manage the full set of tools that employees need, on any device, to remain connected, collaborative and productive. With VDI, performance is key to ensuring a positive end-user experience, but at the same time, security and simplified IT operations are vital for successful and sustainable enterprise adoption.

Data analytics



Business leaders are continually searching for ways to optimize their performance. Whether it is improving the customer experience, increasing employee engagement or even getting products to market faster, organizations are increasingly using data analytics to make more informed decisions. Yet, even today, many organizations are challenged to successfully deploy analytics projects, move data and protect digital assets in legacy infrastructures.

Virtualization



Virtualization helps organizations change the way they deploy and manage IT resources. Nevertheless, virtualized environments place significant demands on server hardware, which is why successful virtualization efforts rely on the ability to deliver data to the CPU subsystem as quickly as possible. IT decision makers also know that performance and storage capacity are critical to delivering an optimal virtual experience.

Edge computing and IoT



Sending vast amounts of device-generated data to a central data center is a challenge, so organizations turned to edge computing as a remedy. Edge computing puts computing power closer to the data source thereby reducing latency and the need for expensive bandwidth requirements. It also enables organizations to deliver faster, more reliable services while leveraging IoT devices and cloud resources. In 2020, overall enterprise IoT spending grew 12.1% to \$128.9 billion as organizations pursued the advantages that edge computing and IoT offer.⁶

Change is driving today's technological investments

So why are these new and/or emerging technologies taking hold across organizations of all sizes and industries? Because the old business rules are no longer working. Organizations need to be able to adapt quickly to meet the needs of their customers and employees. They are looking to technology to help them adapt, but just not any technology. Leaders want technology that:

- Increases productivity and efficiency with automation that reduces manual tasks
- Supports new ways of working with anywhere, anytime access to resources and enables collaboration
- Leverages data when and where it occurs to help gain insights, improve decision making and drive better performance
- Balances workloads between onsite and hybrid locations, increasing operational agility
- Minimizes their vulnerability to cybersecurity threats and increases enterprise resiliency

All these changes aren't coming without pain. The adoption of new technologies has introduced more complexity for organizations including putting immense pressure on the IT infrastructure as well as those who manage and support it. That is why organizations understand the need for a modern infrastructure.



Today's Business Needs their Infrastructure to do More



Flexibility to align with an evolving business



Intrinsic security



Ability to scale as needed



Support for modern workloads



Efficient power and cooling



Automated and integrated management



Support for a dispersed enterprise, from edge to hybrid cloud



Compute power

Modern Infrastructure that goes beyond the status quo

A modern and resilient IT infrastructure will support an organization through new operating models, effectively manage risk, handle new technologies and be flexible enough to support what may happen in the future. It will also address newer challenges that appear like:

- Containing costs even as performance pressures increase
- An increasing need for power and cooling solutions to address power-hungry data accelerator technologies
- Growing IT skills gaps needed to support rapidly evolving infrastructure changes

Dell Technologies' latest generation of PowerEdge offers servers that can deliver more than ever — from compute power to security to simplified, automated systems that don't sacrifice flexibility. The 22 new PowerEdge servers are supported with 1,100 Dell-owned or US-filed patents and are built based on three pillars critical to customer needs.

Adaptive Compute:

Our latest generation of servers delivers the right combination of technology and capabilities to address your unique compute and workload needs. They are performance-optimized to encompass a wide range of use cases from new workloads around cloud, IoT and AI/ML to more traditional workloads around big data and VDI. We also introduced ruggedized, short-depth servers designed specifically to meet the edge-centric requirements of telco and the military.

Autonomous Compute Infrastructure:

Newer PowerEdge servers include automation and simplified management to free up your staff. Your IT team will be able to stop managing and start innovating with intelligent, autonomous systems that work on their own based upon user-defined guidelines and limits. And, by eliminating siloed operations and providing full visibility across your hybrid environments, our servers can help streamline and improve management with one comprehensive platform.

Proactive Resilience:

We offer end-to-end supply chain assurance with proactive resilience that starts with the silicon design and permeates the system's lifecycle, from manufacturing, through the supply chain, and retirement — all from a single, trusted vendor. Our comprehensive approach to supply chain security utilizes tools for counterfeit avoidance, manufacture chain of custody, code signing, chassis intrusion and tamper-evident packaging.

To be ready for the opportunities of our data-centric future, and to embrace change, you need a partner who can help you reimagine IT as your essential engine to innovation. With Dell Technologies, our [PowerEdge portfolio](#), and our [Dell Technologies Services](#), you get an ally relentlessly focused on creating the integrated solutions that help you turn data into insights and action. Flexibly, responsibly, reliably and securely.

At Dell Technologies, we never stop pushing for better. We're always working to innovate, to improve and to advance. Because progress happens when you relentlessly push through every challenge — and constantly move onto the next one.

For more information visit www.tarsus.co.za.

1 McKinsey, [The Need for Speed in Post-Covid Era: Survey](#), April 2020.

2 Seals, Tara, [Ransomware Volumes Hit Record Highs as 2021 Wears On](#), Threatpost, August 3, 2021.

3 Ponemon Institute, sponsored by IBM Security, [2021 Cost of a Data Breach Report](#), July 2021.

4 Forrester, [Five Pandemic-Induced Trends That Will Change Business And Technology Over The Next Decade](#), July 2020.

5 Gartner, [Gartner Hype Cycle for Artificial Intelligence](#), September 2020.

6 IoT Analytics, [2021 Global IoT Spending](#), June 2021.