

# Next-Generation Infrastructure for Resilience and Digital Advantage

## **Datacenter and System Resilience Critical for Digital Business**



of organizations reported increased demand on datacenter resources to support operations during the pandemic.

Source: IDC's Datacenter Operational Survey, May 2020, n = 400



of advanced organizations—
those with more mature and
integrated digital transformation
strategies—were able to
dynamically adapt operations
and are more likely to return
to growth quickly.

Source: 2020 IDC COVID-19 Impact Survey, Wave 10. n = 670

## Modernizing IT for Digital Advantage in Supporting a Hybrid Workforce

For many organizations, modernizing IT has a direct and measurable impact on their business:



Saving on IT infrastructure costs



Responding more quickly to new business needs



Increasing employee productivity



Being more competitive in their market





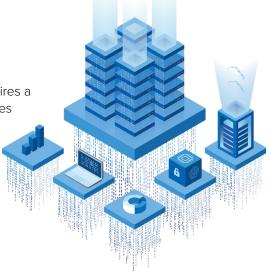
Enhancing the customer experience



Source: IDC, 2020 Q1 IT Infrastructure for Compute Survey, n = 996

# **Building for Resilience**

Building a resilient business that supports hybrid working practices requires a new approach to deploying and operating IT infrastructure. It also requires infrastructure that supports greater automation and advanced analytics. The impacts of downtime and service interruption are magnified in an era of digital business. As business processes and IT service are inextricably linked, the need to reduce failures is a top priority. With the end game being an infrastructure that supports the hybrid workforce while ensuring business, business continuity, data security and cost containment are equally important aspects of adopting new technology.



How can downtime be reduced? Many factors impacting downtime may be outside of the IT organization's control, such as interruptions in power or connectivity resources. But IT can control other factors, such as human error. New automated solutions built on adaptive, self-regulating, and cloud-centric platforms present a path to improved uptime and reduced risk of downtime. Infusing IT operations with infrastructure that is self-healing and self-regulating may be moving the needle on the frequency of human errors. Although 25% of organizations still experience downtime due to human errors, IDC believes this percentage will decrease as IT becomes more automated, self-managing, and self-healing. However, there is still much work to be done, and the requirements are becoming more complex as the ecosystem evolves. As IT resources are increasingly located outside of the core datacenter and infused into many new locations (often physically separated from IT staff), the need for hands-off management is even more essential.

## **Building for Expansion**

Next-generation architectures that support greater automation and advanced analytics are designed to reduce risk in IT operations. They are also designed to enable the shift of IT outside the walls of the core datacenter. With more infrastructure at the edge, traditional maintenance using internal staff resources becomes impossible or at least highly inefficient due to the geographic reach, sheer scale, and large numbers of equipment at the edge. Digital business requires automated digital infrastructure across all locations—within company-owned datacenters, at colocation providers' datacenters, in distributed edge deployments, and through cloud service providers. Regardless of location or infrastructure ownership, next-generation IT can be deployed, operated, and maintained with a high degree of automation.

# **Building for Digital Advantage**

Addressing business continuity is table stakes for survival in digital business. But what does it take to thrive and create competitive advantage? It requires the ability to innovate with IT. Moving quickly into new markets and creating new digital experiences for customers is directly tied to an organization's ability to leverage ubiquitous IT that supports operations wherever data, people, and business reside. The ability to consume and manage resources in the best location, with optimal latency, availability, and the right security and compliance is a challenge with a traditional approach to IT. As organizations move to more agile, automated IT, having cloudlike resources becomes a necessary step. Speed is essential. Building frictionless coordination among cloud, edge, and core IT resources often requires investment in more intelligent, advanced digital infrastructure.

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