



ESG WHITE PAPER

Dell Technologies Data Protection Portfolio

Protecting Data Assets Wherever They Live

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Contents

Market Landscape	3
The PowerProtect Portfolio.....	4
Proven and Modern Cloud Data Protection.....	4
VMware and Containers Innovation.....	5
Cyber Resiliency.....	5
PowerProtect Portfolio at a Glance	5
Software.....	5
Simplified Management	6
The Bigger Truth	6

Market Landscape

In the past few years, the IT landscape has seen many profound changes and evolutions fueled by a combination of vendor innovation and seemingly unstoppable data growth.

ESG research confirms that the volume of data and the evolving cybersecurity landscape are key IT complexity drivers, along with new data security and privacy regulations.¹ These combine to form the perfect storm against a backdrop of IT and digital transformation.

Another trend that is fundamentally affecting how IT supports business objectives and mandates is the cloud. Its usage is ubiquitous, with 94% of IT professionals currently reporting use of public cloud services, and most remaining on-premises workloads seen as cloud candidates over the next five years.² Cloud infrastructures and services have also become strategic tools for IT that provide a fertile ground to run mission-critical processes. Mission-critical applications are also on the rise, especially in the cloud, with over a quarter of mission-critical applications reported to be on IaaS and 32% in SaaS environments.³

Where mission-critical workloads exist, data protection and availability services must be deployed to protect the business against downtime, data loss, and corruption, which could result in significantly negative impacts across the organization (see Figure 1).⁴

Another factor affecting the data protection landscape is that the service level agreements typically tracked for data protection, recovery time objective (RTO) and recovery point objective (RPO), are stringent across the board. According to recent ESG research:

- 15% of surveyed organizations can tolerate **no downtime at all** for their mission-critical applications (RTO=0).
- 42% say their mission-critical applications must be back online in less than one hour (RTO<1hr).
- 90% cannot tolerate more than one hour of lost “mission-critical” data (RPO<1hr).⁵

The future is data-centric, as data is or will become the business. When asked about the role of data in their organizations, 21% of IT professionals expect that their organization will develop and offer new data-centric products and services in the next 2 years.⁶

Data has therefore become a critical asset to the business, but also a challenge because of its exponential growth, the complexity it carries, and the stringent data protection service levels that must be met.

In combination, these mandates appear hard to meet without the right type of infrastructure in place. That’s where Dell Technologies’ portfolio of data protection solutions can help organizations tackle many challenges at once.

¹ Source: ESG Master Survey Results, [2020 Technology Spending Intentions Survey](#), January 2020.

² Ibid

³ Source: ESG Master Survey Results, [Real-world SLAs and Availability Requirements](#), August 2020.

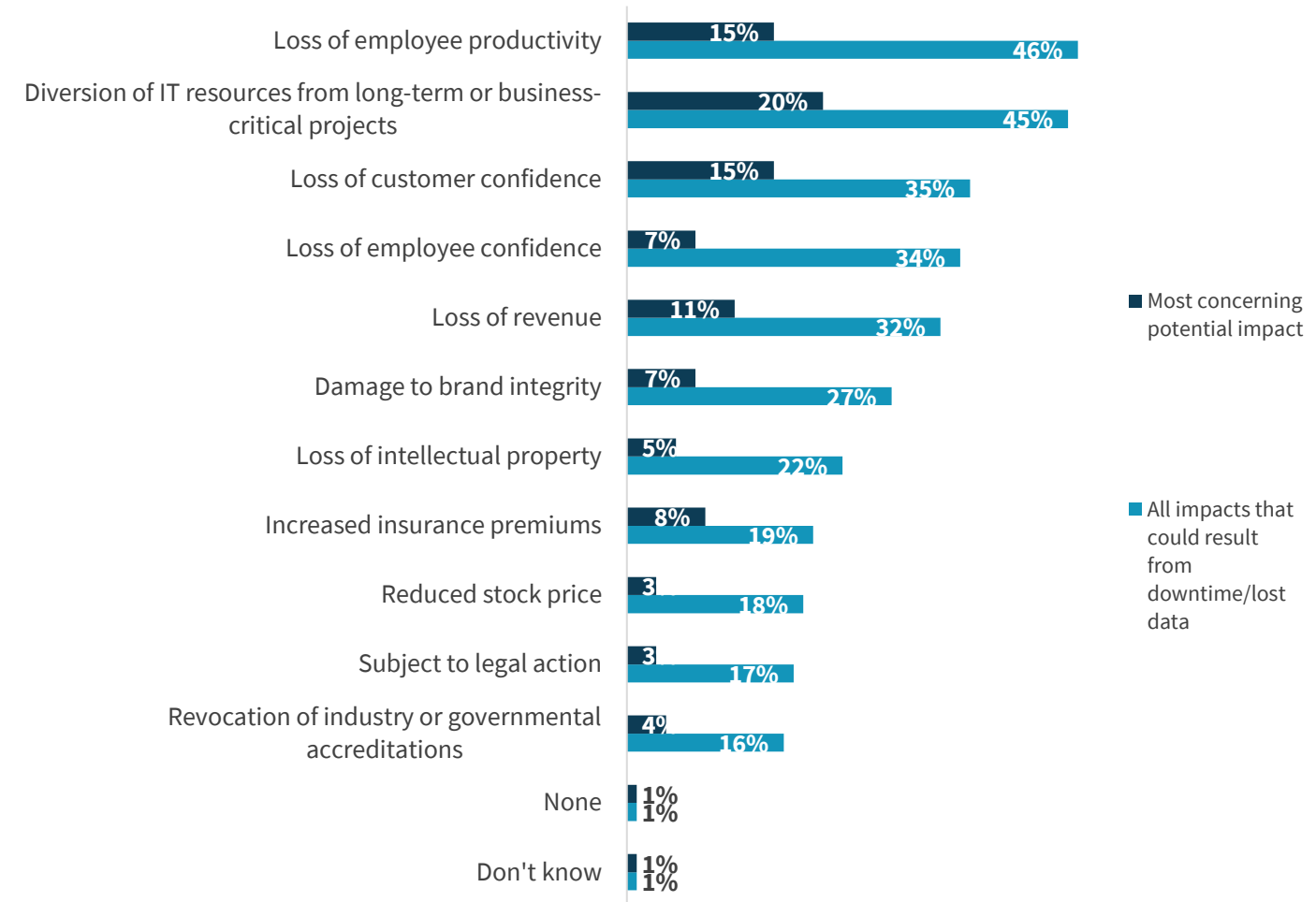
⁴ Ibid

⁵ Ibid

⁶ Source: ESG Research Report, [The Evolution from Data Backup to Data Intelligence](#), February 2020.

Figure 1. Impact of Downtime

Which of the following impacts to your organization could result from application downtime or lost data? Which impact is most concerning for you? (Percent of respondents, N=378)



Source: Enterprise Strategy Group

The PowerProtect Portfolio

Proven and Modern Cloud Data Protection

ESG has had the opportunity to validate Dell Technologies platforms and solutions over the years, both technically and through customer interactions. Dell Technologies has built a comprehensive set of solutions for data protection, while staying laser-focused on constant innovation as topologies, workloads, and customer needs evolve. The result: A portfolio of cloud data protection solutions with a proven track record that can cover pretty much any workload whether physical, virtual, container-based, cloud-native, or SaaS. With topologies in a constant state of evolution, the company has also methodically addressed data protection requirements across edge, core, and cloud environments. Ensuring availability regardless of data type and wherever it resides translates into operational benefits and the assurance to meet data protection SLAs for customers. The PowerProtect portfolio provides customers with the choice and flexibility to implement data protection appliances or data protection software solutions to meet their specific data protection requirements—whether it’s on-premises or in the cloud.

VMware and Containers Innovation

Most organizations are familiar with and leverage VMware extensively across the board for a variety of applications, including mission-critical workloads. In order to optimize protection and simplify deployments, it is essential to implement data protection solutions that are tightly integrated with VMware. The resulting simplification of IT operations can translate into lower operational costs and the ability to scale seamlessly, sometimes to thousands of VMs.

As workloads keep evolving, protecting these new applications must evolve in unison. Examples include delivering data protection for container-based workloads with Kubernetes and VMware Tanzu integrations.

Cyber Resiliency

Cyber-attacks keep coming and are accelerating, with 47% of surveyed organizations reporting heightened attack frequency during the recent COVID-19 crisis.⁷ The ability to ride out cyber-attacks depends on a variety of technologies spanning a range of security and data protection disciplines. One area that Dell Technologies has invested in and developed in its portfolio is integrated air-gapped cyber recovery that delivers the automation and orchestration to mitigate the risk of cyber threats. Customers benefit from an isolated recovery environment and can also become “Sheltered Harbor” certified for those who need this financial industry certification. These solutions are designed to isolate and protect data efficiently, as resources scale as they are needed.

PowerProtect Portfolio at a Glance

Appliances from Dell Technologies come in different “consumption” modes to adjust to a variety of use cases, all geared toward providing the most adequate protection for each customer situation.

Integrated Systems: PowerProtect DP series appliances are all-in-one data protection software and storage in a single solution to deliver backup, replication, recovery, search, and analytics. Integrated appliances are becoming increasingly popular due to ease of deployment and management for organizations of all sizes. The new DP series models are designed to deliver enhanced performance and efficiency and retain long-term retention and disaster recovery to cloud capabilities. Backup in the cloud is also possible when using the broader portfolio as well.

Target Systems: PowerProtect DD series appliances

Many Dell Technologies customers use the well-established PowerProtect DD series appliances as target systems for advanced deduplication while leveraging existing data protection software investments. The DD series is the next generation of Data Domain and delivers enhanced performance and scale. The solutions range from those that meet the needs of SMBs to those that service large enterprises that require the consolidation of backup, archive, and disaster recovery capabilities while maintaining high throughput requirements at petabyte scale. It should be noted that high-availability configurations exist in certain models. DD series appliances also deliver cloud long-term retention and cloud DR. PowerProtect DD Virtual Edition is a *software-defined* version of DD series appliances designed for ROBO, entry, and cloud environments. When used with PowerProtect software, DDVE can also deliver in-cloud backup capabilities.

Software

On the software front, the portfolio includes:

- **PowerProtect Data Manager**, which protects traditional and modern cloud workloads across edge, core, and cloud, and writes to all PowerProtect appliances. PowerProtect Data Manager is a software-defined data protection platform

⁷ Source: ESG Master Survey Results, [Technology Impact of COVID-19: IT Decision Maker \(ITDM\) View](#), May 2020.

designed to deliver next-generation data protection that enables faster IT transformation, while providing capabilities to safeguard and quickly unlock data's value.

- **Data Protection Suite**, which delivers the widest breadth of data protection workload coverage and can be deployed as standalone or in conjunction with PowerProtect appliances.

Simplified Management

In the space of data protection as in all IT disciplines, understanding the performance and general health of the environment is critical. Data Protection Central plays this role for the PowerProtect portfolio by delivering cohesive monitoring and reporting across the data protection estate. Centralized monitoring with customizable and intuitive dashboards makes problem identification and isolation simple. This is one of the most efficient ways for IT professionals to build operational efficiency best practices into their daily data protection.

The Bigger Truth

Data loss and availability exposures are a fundamental business risk as data is increasingly becoming the asset fueling digital transformation. Maintaining these assets safely is not only a mandate, but also a key to survival and to establishing lasting differentiation as a business. Data and the key applications it supports must be reliably protected and made highly available across increasingly complex, hybrid infrastructures that must also take into account new workloads and deployment mechanisms.

Over the past few years, Dell Technologies has regularly updated its data protection solutions with new innovations that focus on solving both infrastructure issues and new threats.

Dell Technologies' data protection portfolio is unique in its tightly integrated VMware hybrid cloud solutions, which results in the delivery of a uniform data protection experience on-premises and in the cloud while providing coherent and SLA-focused data protection and automation across traditional and modern workloads.

Another important anchor to the portfolio and further differentiating characteristics can be found in the innovative solutions to harden and secure the infrastructure with cyber resiliency, providing remediation and recovery from destructive cyber-attacks: The PowerProtect Cyber Recovery Platform is a true air-gapped solution for ensuring cyber resilience and Dell Technologies is the first Sheltered Harbor Solution Provider.

PowerProtect data protection technologies deliver a comprehensive portfolio of solutions that provide customers with the flexibility and choice of integrated data protection appliances and software protection for traditional and modern workloads like Kubernetes containers, cloud-native apps and SaaS, across edge, core, and cloud.

We expect Dell Technologies' innovation in the space of data protection to continue at a rapid pace to support organizations' intelligent data management initiatives in pursuit of digital and IT transformation.

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