

The Best Path Forward: Full Storage Solutions vs. Standalone Products

From modernization to AI and automation,
select the solution that can address your
innovation goals more effectively.



What's Inside



<u>03</u>	Introduction
	CHAPTER 1
<u>04</u>	Mapping the differences between storage providers
	CHAPTER 2
<u>05</u>	Challenges of improving IT infrastructure
	CHAPTER 3
<u>06</u>	Comparing outcomes of different models
	CHAPTER 4
<u>07</u>	Infrastructure built with AI in mind
	CHAPTER 5
<u>08</u>	Accelerate your journey to innovation with Dell Technologies
<u>09</u>	Next Steps

Introduction

Artificial intelligence is booming. Between the innovations in AI, machine learning, automation, and other emerging technologies, organizations are quickly trying to adapt. These innovations could change how business is conducted by automating manual tasks and speeding AI-driven innovation. To fully benefit from the emerging opportunities of the AI era, companies need a variety of agile, interoperable solutions that deliver best-in-class services for demanding jobs and evolving strategies.

An increasing number of resources will be dedicated to housing unstructured data and training AI. IT infrastructure will need to adapt to new plans and new innovations. Even beyond the plans for digital transformation, every new application or innovation will put a bigger burden on an efficient tech stack. That means decision makers need to start strategizing on how their infrastructure can meet new demands yesterday.

One choice that decision makers will need to make is how solution providers can help them meet the demands of AI and automation. Beyond looking at mere capacity and specs, decision makers need to consider how a solution provider's services meet the needs to adapt and evolve. Is a provider just focused on a niche or do they have a broad solution set?

This eBook summarizes the different approaches storage providers are proposing to help businesses advance IT infrastructure and harness AI-driven innovation. You'll gain a better understanding of what challenges organizations face as they re-tool their data centers for the AI era. You'll also get insights on which approach to IT modernization can help you succeed.



CHAPTER 1

Mapping the differences between storage providers

It can be difficult to navigate the wide range of storage solutions in the market, but distinguishing between the different approaches vendors are proposing for data center modernization is a good starting place. In general, storage vendors align behind either a full-solution approach, or an approach that centers on a standalone product. Understanding the differences between these approaches helps contextualize what to expect from the various vendors. Each approach has different benefits and drawbacks, depending on your organization's needs.

Storage providers that offer standalone products, also known as pure-play businesses, focus on a specific type of offering. These partners offer expertise and focused innovation in a particular niche that can help clients with a specific need or problem. This model can be helpful for businesses in a segment that matches the offerings of a storage-only provider, but it is not beneficial to every client and every challenge. Furthermore, services tend to be limited to improving capacity without deep expertise in areas like network or cloud integration.

Full-solution providers, on the other hand, have a wide breadth of offerings and expertise. Instead of solely offering solutions that expand storage capacity, these partners deploy a comprehensive suite of integrated technologies to complement storage solutions. These are one-stop-shops that can help businesses develop a more cohesive and agile IT ecosystem. While they may not provide specialty solutions for a certain segment, they are able to meet IT needs on a broader scale and solve a wider range of challenges.

Partner Models

Storage-only model: Narrow expertise focused only on storage hardware

Full stack model: Capabilities in a wide range of integrated solutions with as-a-service offerings

In the dynamic landscape of storage solutions, Dell Technologies is an example of a full-solution IT infrastructure provider. In addition to innovative storage offerings, Dell Technologies offers a comprehensive suite of end-to-end solutions that integrates software, hardware, data services, and the cloud. This inclusive strategy encompasses a growing portfolio of as-a-service offerings that can help improve IT agility in a wide range of projects and industries. Dell's full-solution strategy is contrasted by the offering of companies like Pure Storage that only offer a limited scope of solutions under a standalone point-solution model.



CHAPTER 2

Challenges of improving IT infrastructure

Deciding which type of provider is right for an organization depends on the strategy for improving storage infrastructures. In the face of evolving technologies, many challenges originate from transforming traditional siloed storage infrastructure into a more flexible, cohesive model. Understandably, challenges can also arise from managing an increasingly complex infrastructure or dealing with the threat of data breaches.

In a future centered around data and advanced technology, one of the biggest goals across organizations is simply increasing storage capacity. Nearly one in five organizations report that meeting capacity demand is a top obstacle when it comes to storage infrastructure.¹ This means that solutions not only need to increase storage in the short-term, but they also need to be agile and scalable as the demand for capacity continues to increase.

In addition to addressing capacity demands, many organizations are concerned with critical new challenges around cybersecurity. The number one challenge that IT personnel report is preventing ransomware and malware attacks, and the second challenge is reducing IT complexity. Many organizations are also looking to improve the ease in which they can manage and protect data.¹

When it comes to how providers can address these pain points, full-solution providers are more adept at enabling synergies across solution ecosystems. While standalone storage offerings can help improve security and capacity with individual pieces of hardware, the benefits are more limited. When faced with challenges of reducing IT complexity, improving integration, and improving cybersecurity across an ecosystem, a full-solution provider is better at meeting those goals.

Top Storage Challenges Listed by Organizations:¹

34%

Improving cybersecurity

28%

Reducing IT complexity

25%

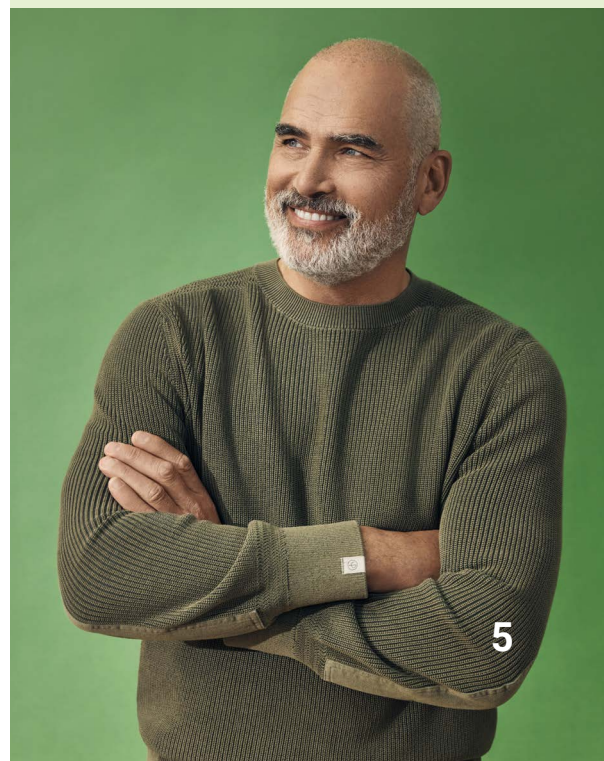
Maximizing ROI of IT investments

19%

Meeting increasing needs for storage capacity

17%

Improving integration





CHAPTER 3

Comparing outcomes of different models

Benefits of a Full-Solution Storage Approach:¹

80%

more likely to see faster application performance

75%

more likely to improve management satisfaction

55%

more likely to improve application deployment time

45%

less likely to see downtime

When put into practice, these two models have drastically different results. IT modernization becomes easier when storage infrastructure is designed to integrate with the cloud and other datacenter ecosystems. Every solution in an IT infrastructure should interoperate synergistically or else agility and innovation are hindered across an organization. A more holistic, full-solution approach to IT modernization results in better innovative outcomes, while standalone storage falls short when meeting emerging needs.

Companies that utilized standalone storage often requested improvements when it came to a range of limitations. The topmost requested improvement was customer service, but the next five top requested changes relate to the limitations of the storage itself. Half of standalone storage customers later requested better cloud integration, and 44% desired increased storage flexibility.¹ These solutions end up being harder to customize and adapt after they are deployed, resulting in slower innovation.

In contrast, organizations that modernize with a holistic approach to storage see greater improvements in functionality and protection. Businesses who take a full-solution approach to storage infrastructure are 25% more likely to improve and upgrade cybersecurity capabilities, ensuring data is safe from a breach.¹ With scalable and automated storage achieved through broader solution modernization, organizations are also 80% more likely to have faster application performance and 75% more likely to improve management satisfaction.¹

Ultimately, following a full-solution approach with IT infrastructure can help you harness technology innovation more effectively. For example, a holistic approach to storage can help concurrently strengthen capabilities around cybersecurity, agility, and scalability. This can be achieved through full transformations or more manageable and affordable as-a-service offerings. Either way, a strong infrastructure paves the way for fast, successful AI-driven innovation organization-wide, and it helps you maintain a competitive edge in a quickly changing digital marketplace.



CHAPTER 4

Infrastructure built with AI in mind

A full-solution approach to infrastructure build-out is especially important in the changing face of AI and advanced technology. Businesses across industries are already using AI to improve operations and efficiencies. Applications range from customer service and fraud detection to inventory management and accounting. These applications require infrastructure that is purpose-built to handle large volumes at exceptional performance and provide rigorous data security.

Organizations plan to double the adoption of advanced technology, from edge computing to artificial intelligence. More than half of businesses plan to have AI solutions deployed within the next two years.² A strong foundation of storage, security, and data management technology can help businesses realize the benefits of emerging technology with a faster time-to-value.

Storage offerings are already helping companies to innovate. Best-in-class organizations, or those who are already succeeding at incorporating advanced technology, are 90% more likely to implement holistic solutions. This approach helps ensure greater scalability, flexibility, and security in a wide range of use cases. With Dell Technologies, you can choose best-in-class products across a wide range of solution categories, avoiding the limitations of a standalone product approach.

Leading organizations are...

90% more likely to choose holistic solutions¹

33% more likely to adopt solutions optimized with AI¹

A leading portfolio of solutions from Dell Technologies are already enabled for AI use cases. Leading organizations are 33% more likely to adopt infrastructure solutions that utilize AI and automation to constantly evolve.¹ IT automation tools are essential for managing infrastructure and application deployment, and AI-enabled servers are essential for training models quickly.



CHAPTER 5

Accelerate your journey to innovation with Dell Technologies

With a vast selection of solutions designed for AI, Dell Technologies is a full-solution partner that can help your organization build a strong foundation for advanced technology and AI-driven innovation. From unstructured data storage solutions to precision workstations and professional services, a comprehensive portfolio of solutions helps fuel AI-driven innovation and enable success. Below is a selection of end-to-end solutions to unlock the power of AI:

PowerScale Storage

This software-driven file storage platform helps fuel AI workloads with scalable, secure, and cost-effective storage.

Dynamic AppsON

This efficient configuration integrates PowerStore with VxRail dynamic nodes to deliver advanced storage with simplicity, scalability, and ease of management.

PowerEdge Servers

Dell PowerEdge servers are engineered to deliver unmatched performance and versatile configurations excel in meeting the demands of GenAI workloads.

PowerSwitch Networking

Dell software-defined networking technology improves network performance and enhances flexibility to adopt new AI.

Dell CloudIQ

This cloud-based AIOps combines proactive monitoring, machine learning, and predictive analytics so you can take quick action and simplify operations.

Advisory and Implementation Services for Generative AI

ProConsult Advisory Services helps develop a strategic roadmap for generative AI, and implementation services help establish a generative AI platform primed for innovation.

Cybersecurity Services

Dell can help protect your business with enterprise-class services like managed detection and response, cybersecurity advisory services, and incident response and recovery services.

Dell APEX

Dell APEX delivers end-to-end as-a-service solutions that drive efficient IT operations such as cyber recovery services, cloud platform services, and block storage services.

Datacenter Sustainability

At Dell Technologies, sustainability is an integral part of everything which includes driving ethical and environmentally sustainable practices across the supply chain and throughout the industry.

Next Steps

AI is already delivering tangible benefits to organizations across industries. As you explore storage options to advance AI-driven innovation at your organization, full-solution partners provide better agility, performance, and security. Dell Technologies can be the partner that helps you take a holistic approach to storage with a full portfolio of industry-leading solutions and services. Plan your next steps toward innovation with Dell Technologies and achieve success in your AI journey.

Discover how Dell Technologies can help you drive agility and innovation.

[Learn More](#)

For more information view the Executive Summary: [The Advantages of a Full Stack Infrastructure Platform Over Pure Play Storage Solutions](#)



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Sources

¹ In July of 2023, Aberdeen Strategy & Research conducted a survey of 301 IT professionals in the US. All participants were decision-makers for storage solutions at their organizations, and the survey focused on their challenges, actions, and outcomes when it came to storage infrastructure. Those respondents scoring in the top 20% of success metrics such as uptime, performance, security, and cost optimization were identified as best-in-class. <https://www.spiceworks.com/tech/data-center/articles/full-stack-storage-infrastructure-advantages/>

² "2024 State of IT," an annual study by Spiceworks and Aberdeen Strategy & Research released in September 2023.