



# The Business Value of Dell Technologies APEX as-a-Service Solutions

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## Navigating this White Paper

*Click on titles or page numbers to navigate to each section.*

<b>Business Value Highlights</b> .....	<b>3</b>
<b>Executive Summary</b> .....	<b>3</b>
<b>Situation Overview</b> .....	<b>4</b>
<b>Dell Technologies APEX Overview</b> .....	<b>6</b>
<b>The Business Value of Dell Technologies APEX</b> .....	<b>7</b>
<b>Study Demographics</b> .....	<b>7</b>
<b>Choice and Use of Dell Technologies APEX</b> .....	<b>8</b>
<b>Business Value and Quantified Benefits of Dell Technologies APEX</b> .....	<b>10</b>
More Efficient and Effective IT Operations .....	<b>10</b>
More Cost-Effective IT Environments .....	<b>13</b>
Improved Agility and Business Results .....	<b>16</b>
<b>Challenges/Opportunities</b> .....	<b>20</b>
<b>Conclusion</b> .....	<b>21</b>
<b>Appendix</b> .....	<b>22</b>
<b>Methodology</b> .....	<b>22</b>
<b>About the Analysts</b> .....	<b>23</b>

## BUSINESS VALUE HIGHLIGHTS



Click on highlights below to navigate to related content within this white paper.

**39% lower**  
three-year cost of operations

**38% more**  
efficient IT infrastructure teams

**54% more**  
efficient help desk

**39% lower**  
annual infrastructure costs

**34% reduction**  
in buffer capacity required

**33% faster**  
to prepare IT for business  
extensions

**12% faster**  
development life cycles

**\$7.66 million**  
in higher revenue per  
year per organization

## Executive Summary

IDC's research demonstrates that enterprise organizations are prioritizing digital infrastructure resiliency as a foundational element of their IT strategy. Customers are looking for richer levels of visibility, cross-platform control, advanced data management, and protection that spans the entire edge-to-core continuum. The pandemic has shown that organizations that prioritize adaptability and resiliency are much better equipped to adapt and meet changing market demands. Because of this realization, organizations are now focused on managing outcomes instead of IT infrastructure and looking to vendors and partners to help reach this goal. Recent IDC surveys demonstrate the customer interest and market momentum. In a February 2021 survey, IDC observed that 61% of organizations worldwide were interested in shifting to consumption-based models for IT investments. This interest is being driven by an explosion of interconnected applications and data across multiple locations that stretch from edge to core. All of this serves to demonstrate a clear market opportunity and the need for new operating models like APEX.

IDC interviewed organizations that have deployed significant workloads on Dell Technologies APEX as-a-service hyperconverged, storage, and data protection solutions that are powered by Intel hardware (Dell Technologies APEX) about their experiences. Interviewed Dell Technologies customers reported using APEX to not only establish more efficient and cost-effective IT environments but also ensure that they can adjust to and match changing business needs.

**Based on interviews with Dell Technologies APEX customers, IDC's analysis shows that they are capturing significant value by:**

- ▶ **Keeping workloads on premises in a cloud operating model** by enabling a cloud operating model on premises with flexible pay-per-use pricing and improved scalability, thereby easing concerns of moving data and applications off premises while ensuring a cloudlike experience, including confidence in compliance, security, and data migration

- ▶ **Establishing more efficient and effective IT operations** by creating streamlined IT environments with strong functionality and Dell Technologies support and managed services, thereby freeing valuable IT team time to focus on other activities and initiatives
- ▶ **Running more cost-effective IT environments** by matching infrastructure capacity to actual business requirements, which limits the need for over-provisioning and maintaining buffer capacity and allows for streamlined use of compute, storage, and data protection capacity
- ▶ **Increasing agility and improving business results** by having the ability to more quickly introduce innovative technologies, extend IT capacity quickly, and deliver IT resources as business/development requirements change — improving IT organizations’ ability to serve as a partner to business operations and results in business gains in the form of higher revenue and better services.

## Situation Overview

The COVID-19 pandemic experience pushed organizations to reevaluate internal and external processes and invest in areas that will enable faster innovation cycles and improve business resiliency and agility. Digital transformation is the foundational requirement to deliver the innovation, resiliency, and agility that businesses need to remain competitive in today’s fast-changing environment. For organizations, this means relying on their IT organizations to shift from a center of operations to a center of innovation. This shift will support new business initiatives with detailed insights so that organizations can adapt quickly and with precision.

Recent IDC surveys reveal the new priorities for businesses as they incorporate the lessons learned from the pandemic into strategic business goals. IDC conducted a worldwide survey in May 2021 and asked respondents to describe the organization’s view on the priority of digital infrastructure resiliency investments over the next two years, as it relates to ensuring the long-term resilience and success of the business. Of those surveyed, 71% rated digital infrastructure resiliency investments as a priority or a top priority technology investment (n = 832 [worldwide]; source: IDC’s *Future Enterprise Resiliency and Spending Wave 4 Survey*, May 2021).

The need for organizations to invest in digital infrastructure is driven by the understanding that today’s IT environments can often be classified as complex, inefficient, and expensive to maintain—all of which stifle innovation. One of the key lessons learned from the pandemic was that shifting the focus to outcomes is vital to operational efficiency and success. And we see that theme threaded through many of our surveys. Organizations are now focused on improving business and operational efficiency to drive better business outcomes and customer satisfaction.



Base = 600 | Source: IDC's *Consumption-Based Infrastructure Market Trends Survey*, September 2020

**In May 2021, IDC surveyed 832 organizations worldwide and asked the top 3 business priorities:**

- 1. Customer satisfaction (46%)**
- 2. Operational efficiency (44%)**
- 3. Innovation (37%)**

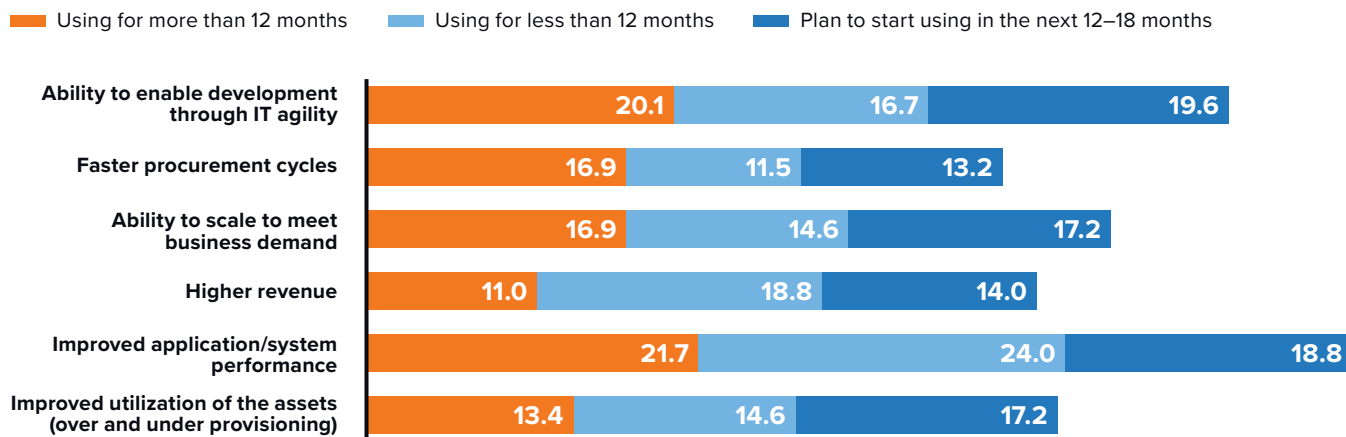
n = 832 (worldwide), Source: IDC's *Future Enterprise Resiliency and Spending Wave 4 Survey*, May 2021

These survey findings underscore that businesses are looking for better alternatives to managing their IT infrastructure and are ready to invest to meet their business priorities. IDC conducted a survey in February 2021 and 61% of organizations worldwide were interested in shifting to consumption-based/as-a-service models for IT investments. This interest is being driven by an innovation explosion of interconnected applications and data that stretches from edge to core. All of this serves to demonstrate a clear market opportunity and the need for new operating models such as APEX.

Beyond the trends, it is also important to discuss the top benefits for adopters of as-a-service models to understand the quantifiable benefits and savings that these models deliver. Last September, IDC surveyed 600 Information Technology Decision Maker (ITDM) in six countries to understand business-related benefits from the use of consumption-based infrastructure (see **Figure 1**).

**FIGURE 1**  
**Top Business-Related Benefits of as-a-Service Models**

Q. What business-related benefits resulted, or do you expect will result from your organization's use of consumption-based infrastructure?



n = 600  
Source: IDC's *Consumption-Based Infrastructure Market Trends Survey*, September 2020

The top responses were focused on the improved application and system performance, ability to enable development through IT agility, and improved utilization of the assets. Organizations anticipate these models will improve system optimization and ensure that they can react quickly to new projects because of the built-in analytics about usage and availability.

The success of these as-a-service models is derived by the services the vendors provide to create the cloudlike experience. In these solutions, the vendor is responsible for the asset and its life cycle: those life-cycle services are related to assessing, planning, designing, implementing, supporting, managing, and proper disposition and replacement of the assets. Within those life-cycle services, the vendor must create an experience for the customer that matches or, in some cases, is better aligned with requirements than what the customer can get in current public cloud offerings.

Reducing IT staff workload on routine tasks (such as patching, monitoring, and troubleshooting) is a key issue for IT teams. They view the IT staff as enablers of creating business value and outcomes and reducing that burden of routine tasks is a critical aspect to get them focused on how they can help the business with new opportunities and services. Adopting these models enable IT organizations to shift from a center of operations to a center of innovation.

## Dell Technologies APEX Overview

In October 2020, Dell Technologies announced APEX, a portfolio of as-a-service offerings that simplify digital transformation by increasing IT agility and control. At Dell Technologies World 2021, held May 5–6, Dell provided more details about the current and future road map for this strategic portfolio. Dell introduced APEX Cloud Services to provide instance-based integrated compute, operating systems, storage, and networking resources. APEX's private cloud services provide dedicated infrastructure on premises or in Equinix locations, while APEX's hybrid cloud services extend visibility and control to public cloud partners. Under all APEX scenarios, customers retain control over all data, applications, and middleware software running on APEX services. Dell Technologies expects to continue to introduce more enhanced data analytics and software services, over time, to help customers keep up with the rapid proliferation of data across the enterprise. The cornerstone of these offers is the Dell Technologies APEX Console, which provides a unified view of all parts of the as-a-service experience. From ordering, deployment, management, and optimization to growth, the APEX Console captures all steps of the journey. This solution is meant to unify the company's as-a-service and cloud strategies, technology offerings, and go-to-market efforts. APEX will help provide a consistent as-a-service experience wherever a company runs its workloads, including on premises, edge locations, and public clouds.

APEX envisions Dell's customers using a unified interface to define and deploy on-demand infrastructure with a few clicks. Offered free of charge, the APEX Console will initially offer access to infrastructure services from AWS, Azure, and Google Cloud as well as Dell's infrastructure on-demand services. The APEX Console provides a unified portal with access to a cloud infrastructure marketplace and self-service ordering for initial provisioning as well as infrastructure expansion. Initial general availability is planned in the United States in the first half of 2021.

### Some highlights of the solution are:

- ▶ **APEX Console** allows Dell Technologies customers a platform to consume IT as a service.
- ▶ **APEX Data Storage Services** will be deployed and managed on premises by Dell Technologies.
- ▶ **Dell Technologies Cloud Platform** advancements make cloud compute resources accessible with instance-based offerings, lowering the barrier of entry and extending subscription availability.
- ▶ **Dell's services organization** provides the white-glove treatment to ensure the APEX customer gets the right experience with the solution.

Dell Technologies' continued investment and realignment of its vast array of flexible consumption offers across its broad portfolio into one cohesive program enables the company to keep pace with rapidly expanding market demands and deliver technology infrastructure solutions at scale.

# The Business Value of Dell Technologies APEX

## Study Demographics

IDC interviewed 17 organizations using Dell Technologies APEX as-a-service solutions for hyperconverged, storage, and data protection capacity. Interviews were designed to understand the overall impact for these organizations of using Dell Technologies APEX, including the impact on IT operations, IT costs, and business agility and results.

### IDC's research included:

- ▶ Seven interviews with organizations using Dell Technologies APEX for hyperconverged infrastructure capacity
- ▶ Five interviews with organizations using Dell Technologies APEX for storage capacity
- ▶ Five interviews with organizations using Dell Technologies APEX for their data protection environments

**Table 1** (next page) provides an overview of the firmographics of study participants. Interviewed Dell Technologies APEX customers had an enterprise profile, with an average employee base of 28,627 and annual revenue of \$9.96 billion (medians of 8,000 and \$1.50 billion, respectively). Interviews provided the perspectives and experiences of organizations from a variety of industry verticals: financial services, healthcare, manufacturing, IT services and manufacturers, and others.

**TABLE 1**  
**Demographics of Interviewed Organizations**

	Average	Median
Number of employees	28,627	8,000
Number of IT staff	485	300
Number of business applications	436	60
Revenue per year	\$9.96B	\$1.50B
Countries	United States, Philippines, Singapore	
Industries	Financial services (4), healthcare (3), manufacturing (2), financial technology, IT services, marketing, medical technology, nonprofit, telecommunications, technology services, wholesale	

n = 17, Source: IDC In-depth Interviews, June 2021

## Choice and Use of Dell Technologies APEX

Study participants chose Dell Technologies APEX as-a-service solutions for hyperconverged, storage, and data protection in the context of deciding to use flexible consumption models for procuring infrastructure capacity. They described viewing enhanced flexibility and greater control over costs as advantages of a flexible consumption model, as well as allowing them to move toward more of a cloudlike infrastructure environment without needing to move fully to the public cloud.

### Interviewed Dell Technologies customers spoke to these considerations in more detail:

- ▶ **Suits broader initiatives and trends, financial services, hyperconverged:**  
*“Flexible consumption with Dell Technologies for hyperconverged fits into our strategy because we are completely changing how we run our storage. We’re also moving from more of a datacenter-based approach to a cloud approach.”*
- ▶ **Transparency of pricing matches broader needs, financial technology, hyperconverged:**  
*“Dell Technologies APEX fits pretty well, given the ever-changing dynamics of our industry nowadays. Nothing is static and everything has to be elastic and more transparent.”*
- ▶ **Improved agility and reliability, manufacturing, storage:**  
*“The benefits of Dell Technologies APEX are business agility and ability to depend on flexibility and predictability in terms of both cost and reliability for meeting SLAs.”*



Study participants cited similar reasons related to increased flexibility, visibility, transparency in cost, and ease of management for choosing Dell Technologies APEX, as well as the strength of their existing relationships with Dell Technologies. For study participants, the advantages of Dell Technologies APEX made it a more compelling solution than extending or upgrading their previous environments, which were generally based on purchasing and running on-premises hyperconverged, storage, and data protection hardware and capacity.

**Study participants cited the compelling value proposition that Dell Technologies offered in terms of IT operational enablement and costs, as well as improved ability to match IT to actual business needs:**

▶ **Match infrastructure spending to actual demand, payment flexibility, nonprofit, storage:**

*“The biggest thing with Dell Technologies APEX is that we’re actually able to use what we need instead of overconsuming in resources and spending money that we didn’t need to spend, as we had in the past.”*

▶ **Operational flexibility, healthcare, hyperconverged:**

*“The advantage of Dell Technologies APEX is being capable to adjust in our environment .... We grow and move from one facility to another to accommodate patient counts, so we had to be flexible enough to have a parallel system while that transition occurred .... I haven’t seen any disadvantages in this model.”*

▶ **Ability to match cost to actual use, technology services, storage:**

*“Basically, we can scale up or scale down with Dell Technologies APEX and that’s the beauty of it. So if we get rid of a lot of data as we’re transforming or need more, we can get more or less.”*

▶ **Ease of management, healthcare, data protection:**

*“Our platform administrators no longer have to worry about the health of our data protection environment because that’s all managed now .... It helps with attracting and retaining talent because now we are getting into some more cloud services, which is the trend.”*

**Table 2** (next page) provides specifics about study participants’ use of Dell Technologies APEX solutions. Overall, study participants reported running environments with an average of 366TB of storage, ranging from 156TB for data protection and 190TB for hyperconverged to 690TB for storage customers. In addition, **Table 2** notes that hyperconverged customers reported using 47 Dell Technologies hyperconverged appliances to run an average of almost 2,000 VMs. Study participants reported running almost exactly one-third (33%) of their relevant environments (i.e., compute, storage, and/or data protection) on Dell Technologies APEX solutions, with APEX constituting almost all of their use of flexible consumption models (91% on average).

TABLE 2

**Dell Technologies APEX Environments**

	Average	Median
<b>Number of appliances</b> (hyperconverged only)	47	19
<b>Number of VMs</b> (hyperconverged only)	1,986	390
<b>Number of terabytes (TB)</b> (hyperconverged only)	190	70
<b>Number of TB</b> (storage only)	690	200
<b>Number of TB</b> (data protection only)	156	71
<b>Number of TB</b> (overall)	366	100

n = 17, Source: IDC In-depth Interviews, June 2021

## Business Value and Quantified Benefits of Dell Technologies APEX

IDC's research demonstrates the value of using Dell Technologies APEX solutions — that is, Dell Technologies as-a-service hyperconverged, storage, and data protection solutions to run and support their business operations. Study participants reported optimizing IT costs, freeing up IT staff time, and gaining in agility, reliability, and performance through their use of as-a-service infrastructure solutions with Dell Technologies APEX.

### More Efficient and Effective IT Operations

Study participants' IT organizations have been tasked with not only remaining lean and efficient but also taking an increasingly pronounced role as business partner and enabler. These objectives, which could be viewed as contradictory in nature, require IT organizations to find solutions that help them achieve the delicate balance of efficiency and effectiveness. Interviewed Dell Technologies customers explained that they view their use of Dell Technologies APEX solutions as fundamental to their ability to deliver to increasing expectations in terms of IT operations.

For study participants, Dell Technologies APEX solutions provide the requisite balance of strong functionality and performance with features and capabilities that enable efficient and effective IT operations.

In particular, study participants’ ability to maintain more streamlined infrastructure environments with and leverage specific features of Dell Technologies APEX frees valuable IT team time to focus on other business-related activities and initiatives.

**In particular, study participants noted strong efficiencies related to capacity planning and procurement, gains in performance related to telemetry, and the substantial value of having direct support from Dell Technologies as needed:**

▶ **Ease of management and access to data from telemetry, Telecommunications, Hyperconverged:**

*“Dell Technologies APEX is easier to manage because it’s service provided, and so we just request our requirements and then it’s done without needing to plan .... Telemetry is a benefit and all of the reporting that we receive, such as diagnostics, is very helpful, as are capacity and availability metrics, and KPIs.”*

▶ **More proactive IT, Healthcare, Hyperconverged:**

*“With Dell Technologies APEX, we’re able to do more planning and projects capability for the capacity to be more preemptive instead of reactive. When you look at the capacity use for most users, we can react to that without having to worry about legal processes or changes .... We can react fairly easily. Before, it would have to be a quarterly or annual preparation.”*

For study participants, these types of efficiencies are critical to their ability to minimize the amount of their teams’ time required to administer and run their hyperconverged, storage, and data protection environments. These teams frequently must grapple with the need to grow their IT environments to match business requirements or deliver new capabilities to the business, which highlights the importance of efficiencies they achieve for these teams with Dell Technologies APEX. As shown in **Table 3**, study participants reported that their IT infrastructure teams are 38% more efficient with Dell Technologies APEX, thus providing a path for handling growth in a resource-effective manner.

**TABLE 3**  
**Impact on IT Infrastructure Teams**

	Before/Without Dell Technologies APEX	With Dell Technologies APEX	Difference	Efficiency
Staff time to manage per organization (full-time equivalent [FTEs])	9.6	5.9	3.7	38%
Number of staff hours per 100 users per year	63	39	24	38%
Value of staff time per year	\$962,300	\$593,800	\$368,400	38%

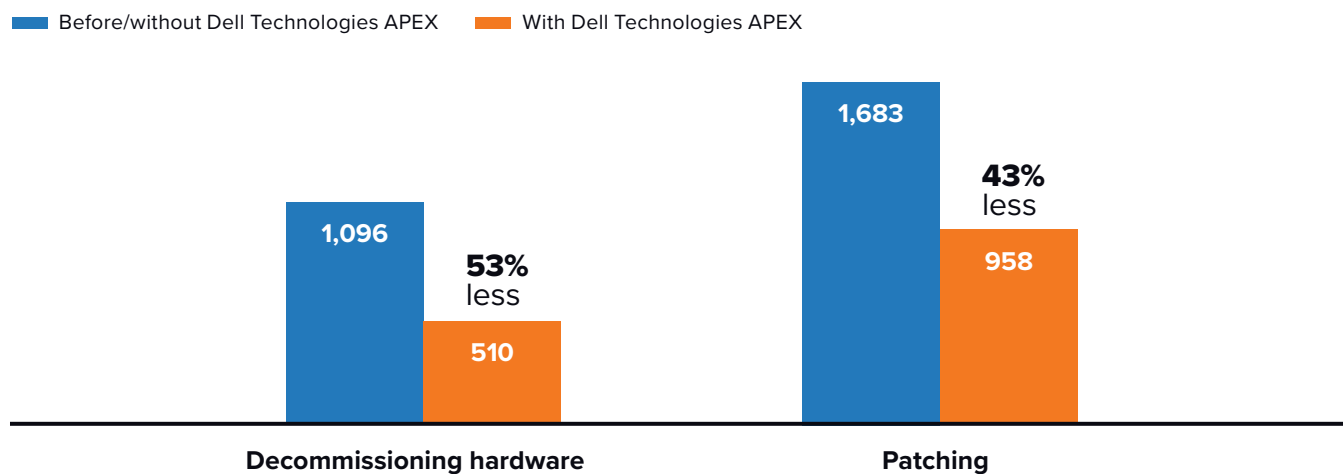
n = 17, Source: IDC In-depth Interviews, June 2021

Study participants pointed to two responsibilities of their IT infrastructure teams in particular where the APEX as-a-service model and its functionality have driven strong efficiencies. By moving away from a “buy and replace” model, study participants must handle activities related to decommissioning and retiring hardware with less frequency. Thus beyond the benefit of increasing the sustainability of their IT environments, their IT staff spend 53% less time on average on these activities. Likewise, their IT teams have captured the benefit of automated and reliable patching with Dell Technologies handling most of these tasks, needing 43% less time to plan and complete patches with APEX (see Figure 2).

**These efficiencies also carry over to other IT teams, including:**

- ▶ **Help desk teams**, which are an average of 54% more efficient with Dell Technologies APEX, including being able to resolve problems an average of 31% faster (worth an average of \$92,000 per year per organization)
- ▶ **Security teams**, which are an average of 24% more efficient, demonstrating their ability to provide more secure, robust IT environments for their businesses without adding commensurate security team resources (worth an average of \$28,100 per year per organization)

**FIGURE 2**  
**IT Infrastructure Staff Time Requirements**  
 (Staff hours per year per organization)



n = 17, Source: IDC In-depth Interviews, June 2021

For interviewed Dell Technologies customers, the value of APEX in terms of IT operations is not about reducing head count; rather, it is about enabling IT teams to deliver the most value possible.

## Study participants described their perspectives on IT operational enablement with Dell Technologies APEX with varied examples that spoke directly to the substantial impact:

### ▶ Higher performing and improved ability to respond to issues, Manufacturing, Hyperconverged:

*“With Dell Technologies APEX, we have help desk tickets a few times a month. Without the flexible consumption model, it would be around four times a week. Time to resolve is now 20 minutes to an hour, but would be much longer, maybe a couple of hours .... Our help desk team is saving time because they’re armed with specific tools to address issues.”*

### ▶ Focus on strategy instead of maintenance, Manufacturing, Storage:

*“With Dell Technologies APEX, we can have our staff focused on strategic things and leave the maintenance to Dell, and so there’s definitely cost savings and reduced overhead costs.”*

### ▶ Changing role of IT team, Nonprofit, Storage:

*“Our environment has really turned into an ‘environment’ with Dell Technologies APEX, where before you’d have a staff person that would be allocated to one specific task. Now, we’re all in a hybrid role and we’re getting involved in security projects, architectural projects, strategy and security policies .... We were datacenter engineers, and now we are the data services team.”*

Thus IT operational enablement with Dell Technologies APEX goes well beyond quantifiable time savings and efficiencies for study participants’ IT organizations. In many respects, study participants’ ability with Dell Technologies APEX to deliver IT services at a higher level has profound business implications. In other words, the metrics and topics that businesses use to evaluate their success, including time to market, risk, and customer satisfaction, all relate back to IT operational enablement spurred by use of Dell Technologies APEX.

## More Cost-Effective IT Environments

Study participants also expressed a clear link between their use of Dell Technologies APEX and their ability to deploy and maintain cost-effective hyperconverged, storage, and data protection environments. Like many organizations, interviewed Dell Technologies customers face the ongoing dilemma of how to have sufficient IT capacity to meet always shifting business requirements but without incurring excessive costs. Generally speaking, they will lose in one of two ways: by foregoing business opportunities when they cannot provide requisite IT resources or by over-provisioning IT resources and thus maintaining excess capacity that comes with additional costs.

Most importantly, by moving to an as-a-service solution with Dell Technologies APEX, study participants gained the ability to move with sufficient agility and speed to match the capacity they provision to actual business requirements. They can do this both ways also: as they require additional capacity and as their need for capacity diminishes.

The result is that they face fewer situations in which they make costly up-front investments in resources with the intent to “grow into” their environments and more closely tailor their hyperconverged, storage, and data protection environments to business needs.

**Interviewed Dell Technologies customers provided specific examples:**

▶ **Ability to maintain higher use rate, Financial Services, Storage:**

*“We’d need more storage capacity with a classic on-premises approach—I think we’d need 20–25% more .... Our use rate is around 80–85% with Dell Technologies APEX .... If we did this with on premises, it would probably be 75%.”*

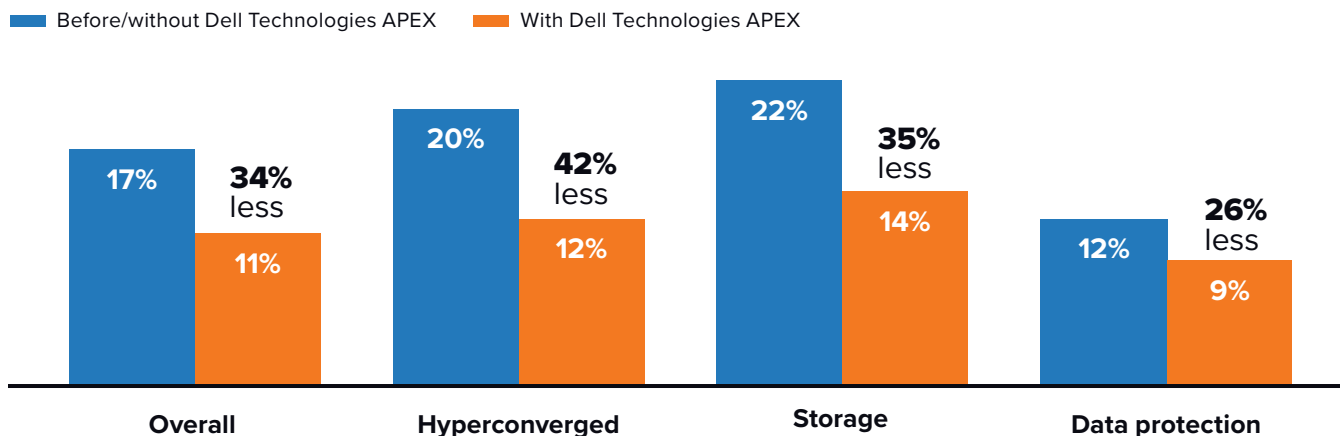
▶ **Cost and sustainability efficiencies from on-demand model, Medical Technology, Hyperconverged:**

*“We have less compute with Dell Technologies APEX because we’re buying less upfront, which means we’re buying less overhead, which means less hardware and power use and better sustainability.”*

As shown in **Figure 3**, study participants reported across-the-board reductions in their need to maintain “buffer” or extra capacity. On average, they reported environments with 34% less buffer capacity, or six percentage points lower. This is a key contributor to their ability to establish and run more cost-effective IT infrastructures.

**FIGURE 3**  
**Reductions in Over-Provisioning**

Percent of capacity, buffer capacity (%)



n = 17, Source: IDC In-depth Interviews, June 2021

Study participants have optimized their costs of providing hyperconverged, storage, and data protection capacity to a substantial extent as they maintain resources more closely tailored to business demand. Further, they spoke to the value of having greater visibility to project capacity requirements and then meet those requirements in a flexible and timely manner.



**Again, interviewed Dell Technologies customers provided examples:**

▶ **Ability to optimize infrastructure spend, Nonprofit, Storage:**

“We’ve been overconsuming our resources over the years. This pandemic really gave us the realization of too much spending .... Now, with Dell Technologies APEX, we get reports on a weekly basis that give us the ability to predict better. That way we can go to the business earlier and just say, ‘Hey, it looks like by June we may run out of storage that’s been allocated to you guys. So we should start making plans to add more.’ It makes the experience a little better, and it makes it flexible and proactive instead of reactive.”

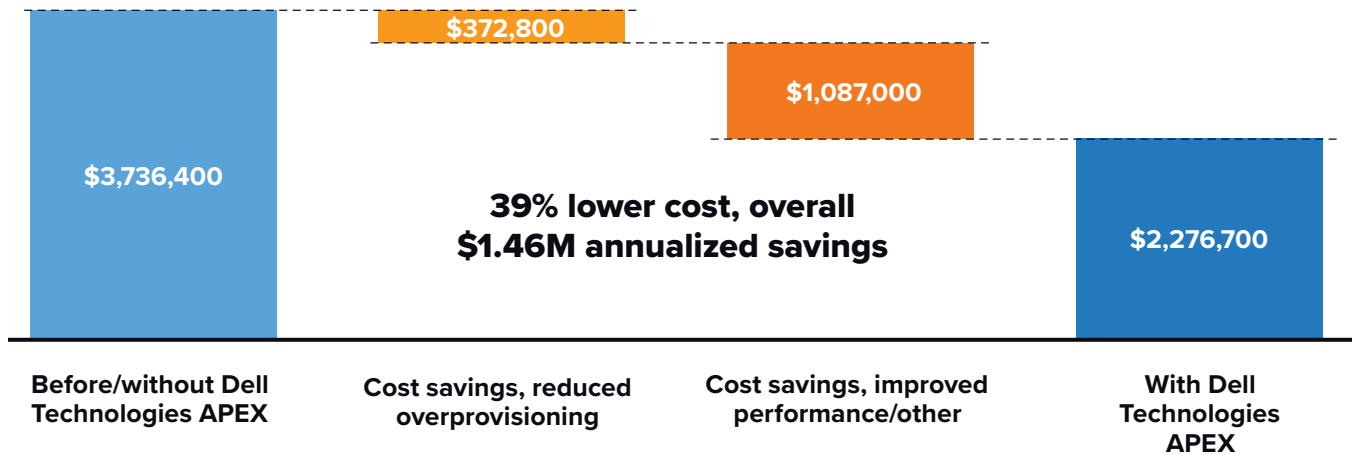
▶ **Optimized cost, Financial Services, Hyperconverged:**

“For internal applications, looking at the financial benefits, I would say there’s roughly an 18–25% improvement in cost savings across the board with Dell Technologies APEX.”

Figure 4 reflects the substantial value for study participants of optimizing their spending on hyperconverged, storage, and data protection resources with Dell Technologies APEX. On average, study participants reported spending almost \$1.5 million per year less with APEX to run equivalent workload and application environments for their businesses, which reflects a 39% cost efficiency.

**FIGURE 4**  
**Cost of Procuring Capacity per Organization**

(Annualized cost, \$ per organization)



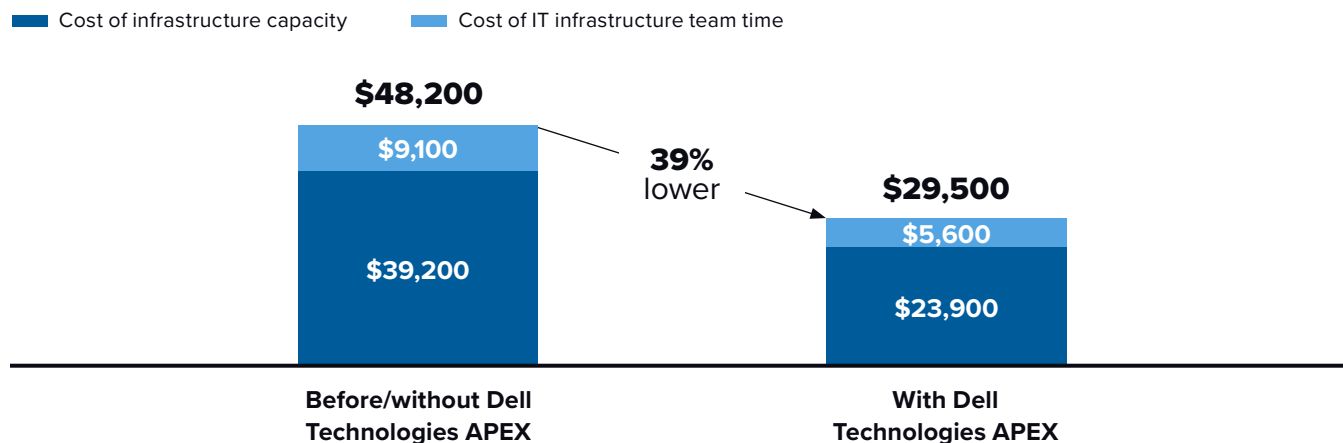
n = 17, Source: IDC In-depth Interviews, June 2021

These infrastructure-related cost savings, along with the IT team efficiencies already discussed, mean that interviewed Dell Technologies APEX customers incur substantially lower costs for running the same workloads and applications compared with their previous or alternative IT environments, which were primarily on-premises infrastructure environments that did not include flexible consumption opportunities.

IDC calculates that the study participants will on average incur 39% lower costs over three years, equating to a savings of \$5.38 million per organization, or over \$18,000 per 100 users (see Figure 5).

**FIGURE 5**  
**Three-Year Cost of Operations per 100 Users**

(\$ per 100 users, three years)



n = 17, Source: IDC In-depth Interviews, June 2021

## Improved Agility and Business Results

Study participants also ascribed business enablement to their use of Dell Technologies APEX. As is the case for most organizations, IT operations play an increasingly central role in business success. In other words, organizations count on the availability, flexibility, adaptability, reliability, and performance of their IT systems. When their IT organizations cannot deliver at a sufficiently high standard to meet these types of demand, study participants will inevitably find it more challenging to execute their business strategies and ultimately to maintain business success.

Flexibility is a core trademark of successful IT organizations. When they are insufficiently agile, scalable, or adaptable, then there will always be situations in which IT fails to deliver at the needed level for the businesses. Study participants stressed that their use of Dell Technologies APEX has increased their agility to a significant extent. Because they can provision hyperconverged, storage, and data protection capacity as needed and with far less planning, business needs can be met in near real time and with far less consideration of cost implications.

### Study participants provided specific examples of how Dell Technologies APEX has enabled them to be more agile and scalable:

► **True scalability, Technology Services, Storage:**

*“Dell Technologies APEX offers you total flexibility .... There are no negatives to it because it has that scalability so we can go up or down .... It also enables agile DevOps.”*

▶ **Carrying out seamless changes to applications with enhanced flexibility and access to storage resources, Technology Services, Storage:**

*“We’re able to deploy changes more quickly with Dell Technologies APEX .... We can make changes in the background, without even having to bring down the whole system. This means that a lot of times there is no downtime.”*

▶ **Ease of provisioning IT to support business, Financial Technology, Hyperconverged:**

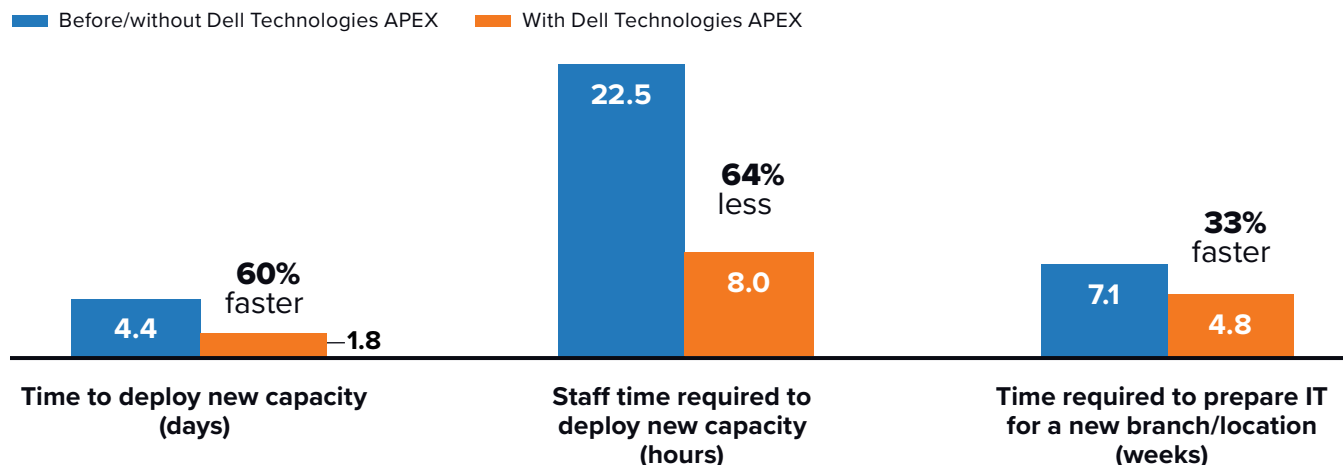
*“Previously, we bought equipment, which was a capex cost. Now, with Dell Technologies APEX, we have all this elasticity because it comes as an opex line item, so it makes things much easier to get approved.”*

Figure 6 provides metrics related to the time study participants require to provide new hyperconverged, storage, and data protection capacity. They reported being able to deploy new capacity—whether compute, storage, or data protection—60% faster compared with their previous primarily on-premises IT environments that were not based on flexible consumption models, thereby moving up delivery by more than 2.5 days, and needing 64% less staff time.

Perhaps even more importantly, interviewed organizations linked their use of Dell Technologies APEX to the ability to extend and grow their business operations with greater agility. There are numerous potential situations in which an organization needs to deploy IT for a new location, site or, even, company, including expansion efforts and merger and acquisition activity. Delay of IT deployment can impede business operations and even result in substantial lost business opportunities. Thus study participants’ ability to move forward to prepare IT infrastructures for new branches or locations by more than two weeks on average, or 33% faster (see Figure 6), stands as a confirmation of the type of real-world value that greater agility with Dell Technologies APEX can provide to companies.

**FIGURE 6**  
**Agility Key Performance Indicators (KPIs)**

(Time required)



n = 17, Source: IDC In-depth Interviews, June 2021

For study participants, enhanced agility of their IT environments with Dell Technologies APEX can spur improved development activities. In particular, they described the value with APEX of developers having easy and consistent access to resource capacity needed especially for testing and deployment. One interviewed organization in the financial technology vertical explained: *“We are getting the feedback that developers are happier with Dell Technologies APEX .... In general, the developer experience has been better because earlier, building infrastructure would take 15 minutes and now it takes 2 or 3 minutes because of the compute capacity they have available with flexible consumption.”* Table 4 presents several key findings related to the impact of Dell Technologies APEX on study participants’ development activities, including delivery of 6% more new applications and features, reducing development life cycles by an average of 12%, and 11% higher productivity for developers working on the Dell Technologies APEX platform.

**TABLE 4**  
**Impact on Development Team and Development KPIs**

	Before/Without Dell Technologies APEX	With Dell Technologies APEX	Difference	Efficiency
Productivity level of development team per organization (FTEs)	30.6	33.8	3.2	11%
Value of development team productivity per year per organization (\$)	\$3.06M	\$3.38M	\$322,200	11%
Increase in number of applications/features delivered	N/A	N/A	6%	N/A
Faster development life cycle (%)	N/A	N/A	12%	N/A

n = 17, Source: IDC In-depth Interviews, June 2021

Study participants also linked improved infrastructure performance, reliability, and security to their use of Dell Technologies APEX. They noted especially the built-in resiliency and security features of the APEX platform. An interviewed financial services company noted: *“When we would have an outage or experience something that was affecting our power, it was a ‘hot fire.’ Now, that emergency 911 call doesn’t happen nearly as often .... The built-in redundancy with Dell Technologies APEX is a huge part of the success, and the other is that there are fewer mistakes with the system, so managing it is much easier.”*

Meanwhile, an interviewed nonprofit organization using storage as a service commented on the value of telemetry capabilities to its security operations: *“We did not have telemetry before in our traditional procurement environment .... Splunk is integrated, so we really get some nice reports and updates .... That’s one of the perks in terms of what we do in the security standpoint with PowerFlex with Dell Technologies APEX.”*

**Table 5** reflects the important gains in reliability and reduction of operational risk that study participants have achieved with Dell Technologies APEX. They reported reducing productivity losses associated with outages affecting their compute, storage, and data protection environments by an average of 88%, thereby saving more than four hours of lost productivity per IT user per year.

**TABLE 5**  
**Impact on Unplanned Downtime**

	Before/Without Dell Technologies APEX	With Dell Technologies APEX	Difference	Efficiency
Number of unplanned outages per year	7.9	2.8	5.1	64%
Mean time to recovery (MTTR) in hours	4.9	2.6	2.3	46%
Lost productivity per user per year (hours)	4.9	0.6	4.3	88%
Value of lost productive time per organization per year (FTEs)	74.7	8.6	66.1	88%
Value of lost productive time per organization per year (\$)	\$5.23M	\$0.60M	\$4.62M	88%

n = 17, Source: IDC In-depth Interviews, June 2021

Many of the interviewed organizations also reported achieving direct business gains through their use of Dell Technologies APEX. In particular, they can move more quickly to address customer demand and provide customers with higher-quality solutions and services. A technology services company using storage solutions noted: *“Our customer satisfaction is about how we perform, which is also dependent on our systems being available and being in the best shape they can be .... I think the applications are performing better on Dell Technologies APEX.”*

Likewise, a financial services company using hyperconverged commented:  
 “Dell Technologies APEX has made us more agile and responsive to business demand by allowing us to create new VMs more easily. For example, if we want to pilot a product, we can create a secure sandbox to test UAT environments.”

**Table 6** shows the extent of revenue gains that study participants linked to their use of Dell Technologies APEX, reporting average revenue gains of \$7.66 million per year. For these APEX customers, the data shown reflects their real and direct ability to achieve important business gains.

**TABLE 6**  
**Business Productivity Benefits: Higher Revenue**

	Per Organization	Per 100 Users
Total additional revenue per year	\$7.66M	\$26,800
Assumed operating margin	15%	15%
Total additional net revenue per year*	\$1.15M	\$4,000

\*Additional net revenue reflects a 15% operating margin assumption used by IDC to calculate the revenue impact recognized for purposes of the ROI analysis. n = 17, Source: IDC In-depth Interviews, June 2021

## Challenges/Opportunities

APEX represents a tremendous opportunity for Dell because it will be able to deliver as-a-service models across a broad range of infrastructure assets. The focus on simplicity, agility, and control—all delivered through the APEX Console—provides the ease of use that organizations want and focuses on the main drivers for adopting as-a-service models: aligning usage with budgets and reducing the complexity of managing IT infrastructure. When done right, businesses gain access to actionable insights while ensuring consistent end-to-end performance and control. As IDC’s business value research demonstrates, customers already find value in the APEX offers with quantifiable savings in many areas from business productivity, higher revenues, and improved efficiencies.

### The challenges for Dell Technologies APEX platform are twofold:

- ▶ **Competition:** The majority of OEMs, cloud providers, and large partners are offering flexible consumption offers and are rapidly looking to expand alliances to gain share. Dell Technologies will need to continue to invest and develop new programs under the APEX umbrella to increase market momentum and share.



- ▶ **Partner programs:** Today, approximately 64% of Dell's commercial PC, server, and storage business is transacted via partners. While margins on equipment tend to be low, partners have had the opportunity to wrap their own value-added service offers around the equipment. As APEX begins to gain traction in the market, it will be imperative that Dell clearly articulates where and how partners can add value and grow revenue without being disintermediated as many of the close to the box services are incorporated in the APEX offer. This will mean that many partners will need to up their consulting and higher-value skills to remain relevant and competitive.

For APEX to be successful, Dell needs to not only bring these technologies to market in a simpler more consumable way but also be able to connect with new buyers and provide partners the training and resources needed to ensure growth.

## Conclusion

Organizations are seeking to address changing challenges with their IT investments. They require more visibility, cross-platform control, advanced data management, and protection that spans the entire edge-to-core continuum. COVID-19 has highlighted the fact that organizations that can react to changing business requirements with more agility and resiliency are more likely to prosper. Achieving this objective often requires vendor and other partnerships and consideration of new ways of procuring IT infrastructure resources. Consumption-based models are one such way of obtaining IT resources that can meet increasing requirements placed upon IT organizations by strong growth to interconnected applications and data from the edge to the core across distributed business operations.

IDC's research shows that Dell Technologies customers are successfully using its APEX solutions—that is Dell Technologies as-a-service hyperconverged, storage, and data protection solutions—to run and support their business operations. Interviewed Dell Technologies customers described achieving a variety of benefits through their use of APEX solutions, including lower IT costs, IT team efficiencies, and productivity gains, as well as enhanced agility, reliability, and performance. As a result, IDC's analysis shows that they are not only achieving substantial cost of operations efficiencies—39% lower on average over three years—but also better positioned to provide agile and high-performing applications and services to their businesses. With Dell Technologies APEX, they have confidence that they have an IT infrastructure sufficiently cost-effective, agile, and high performing to match business requirements at any given time.

# Appendix

## Methodology

IDC's standard business value/ROI methodology was utilized for this project. This methodology is based on gathering data from organizations currently using Dell Technologies APEX as-a-service solutions, including hyperconverged, storage, and data protection solutions, as the foundation for the model. To understand the impact of using Dell Technologies APEX solutions, IDC gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of using Dell Technologies APEX solutions. In this study, the benefits included IT infrastructure cost savings, staff time savings and efficiencies, the benefits of reducing risk associated with unplanned outages, and business gains such as increased revenue.

### **IDC uses a number of assumptions, which are summarized as follows:**

- ▶ **Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings.** For purposes of this analysis, based on the geographic locations of the interviewed organizations, IDC has used assumptions of an average fully loaded salary of \$100,000 per year for IT staff members and an average fully loaded salary of \$70,000 per year for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- ▶ **Because IT solutions require a deployment period, the full benefits of the solution are not available during deployment.** To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

*Note: All numbers in this document may not be exact due to rounding.*

## About the Analysts



### **Rob Brothers**

#### **Program Vice President, Datacenter and Support Services, IDC**

Rob Brothers is a Program Vice President for IDC's Datacenter and Support Services program, as well as a regular contributor to the Infrastructure Services and Financial Strategies Programs. He focuses on worldwide support and deployment services for hardware and software and provides expert insight and intelligence on how enterprises should be addressing key areas for datacenter transformation and edge deployment and management strategies. IT hardware services covered include IoT devices, converged infrastructures, storage, servers, client devices, networking equipment, and peripherals. Software covered includes software defined infrastructures, cloud support, operating systems, databases, applications, and system software. He also has expertise in the latest consumption models which includes as-a-service models such as device-as-a-service.

[More about Rob Brothers](#)



### **Susan G. Middleton**

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Susan Middleton leads IDC's worldwide research on IT equipment, software, and services financing markets. As research director for IDC's Flexible Consumption and Financing Strategies for IT Infrastructure research, her analysis provides insight from both a supply-side and a buyers' point of view. Susan's core research coverage includes the evolution of procurement models from purchasing, leasing and financing to the new as-a-service models, also known as flexible consumption. Based on her analysis and expertise on procurement strategies and IT equipment life cycles, Susan's research helps vendors and buyers understand the top drivers of the new flexible consumption models and the impact of these new buying behaviors on long-term IT equipment values and forecasts.

[More about Susan Middleton](#)



### **Matthew Marden**

#### **Research Director, Business Value Strategy Practice, IDC**

Matthew is responsible for carrying out custom business value research engagements and consulting projects for clients in a number of technology areas with a focus on determining the return on investment (ROI) of their use of enterprise technologies. Matthew's research often analyzes how organizations are leveraging investment in digital technology solutions and initiatives to create value through efficiencies and business enablement.

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