

The Business Value of Dell Technologies APEX Pay-Per-Use Solutions



Susan G. Middleton
Research Vice President, Flexible Consumption
and Financing Strategies for IT Infrastructure, IDC



Matthew Marden
Research Vice President,
Business Value Strategy Practice, IDC



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Executive Summary

Digital transformation (DX) continues to bring about significant organizational, process, and technological changes. These changes are leading to massive shifts in how businesses operate and create value and how employees, customers, and stakeholders implement them. The goals of digital transformation continue to be to simplify complex IT environments, improve operational agility, and align budgets with growth priorities. However, when asked, business leaders say they are not satisfied with the pace of business outcomes, inhibited by IT complexity, technical debt, skill shortages, and outdated (and siloed) architectural approaches. IDC's research finds that 69% of IT leaders worldwide are very or extremely concerned about the growing amount of technology investments required to remain competitive. In other words, IT leaders remain cautiously optimistic about the resiliency of their organization but acknowledge the ever-increasing burden on technology investments required to maintain that resiliency.

Organizations want to achieve the following:

The delivery of a simplified multicloud experience:

Recently, IT organizations piloted a multicloud strategy with mixed results. Investments included unification of control and management planes, flexibility in application deployments, and more control over data placement. The next phase focuses on simplifying and automating the hybrid cloud operating model.

The derisking of data mobility:

Digital transformation introduced several data logistics challenges, including the ability to secure data assets across multiple locations, adherence to data governance requirements due to newly introduced laws and regulations, and the ability to secure assets from an increased threat of cyberattacks.

The delivery of IT on demand:

Armed with next-generation tools and service capabilities, IT can now be a translation layer through which the business gains scalable, steady, operational-friendly, and on-demand IT services.

Business Value Highlights

Click the highlights below to navigate to content within this document.

- ↓ **35%**
lower three-year cost of operations
- ↑ **194%**
three-year ROI
- ↓ **27%**
lower cost of infrastructure
- ↑ **50%**
overall IT staff efficiencies
- ↑ **60%**
faster to deploy new hyperconverged/ server capacity
- ↑ **16%**
higher developer productivity
- ↓ **91%**
less unplanned downtime
- ↑ **\$9.21 million**
higher revenue per organization per year

It is against this backdrop that the importance of multicloud will play a key role in IT transformation and modernization strategies. To implement these transformation and modernization strategies, 63.7% of enterprises will commit resources, skills, and development efforts across one or more clouds to address infrastructure, data, and application needs (source: IDC's *Future Enterprise Resiliency and Spending [FERS] Survey, Wave 5*, June 2022). Leveraging multicloud infrastructure is and will continue to be a critical deployment model for years to come, and it is essential that enterprises build a defined strategy across all deployment models to ensure that IT teams can extract maximum value from technology investments while effectively managing cost.

IDC interviewed organizations using Dell Technologies APEX Pay-Per-Use solutions, including APEX Flex on Demand and APEX Data Center Utility, to assess their impact on server/hyperconverged, storage, and data protection capacity. Study participants consistently reported establishing a more cost-effective, efficient, and agile IT infrastructure to support their business operations with Dell Technologies APEX.

IDC's analysis of these organizations' experiences demonstrates the significant value they are achieving, which IDC values at \$4.98 million per organization per year, driven by the following benefits:

- **Reducing IT infrastructure costs** by minimizing overprovisioning for buffer capacity and having the ability to scale infrastructure capacity up and down as needed to meet current business requirements, with study participants realizing average infrastructure cost savings of 27%
- **Saving IT staff time** by establishing more consolidated IT environments and leveraging new functionalities of newer and upgraded infrastructure solutions, with study participants benefiting from 50% more efficient IT infrastructure teams
- **Improving the ability of development teams** to deliver timely and impactful new functionality to users and customers through enhanced agility and scalability, reflected in 60% faster-than-average delivery of new compute resources
- **Providing a more robust infrastructure environment** that creates fewer business interruptions through outages and therefore exerts lower costs in terms of lost productivity and revenue, with average decreases in impactful unplanned outages of 91%
- **Empowering business gains** by better addressing customer demand and ensuring a better customer experience, as evidenced by average annual revenue gains of \$9.21 million per organization

Situation Overview

The Shift to as-a-Service “XaaS”

Organizations contending with economic uncertainty, budgetary pressures, and the need for agility drive the demand for XaaS. The rapid proliferation of interconnected workloads that span multiple public clouds, distributed edge locations, and on-premises datacenters means that IT organizations can never go back to the traditional approaches to managing IT environments.

While many organizations have turned to hybrid cloud operating strategies, success is often complicated. IDC’s November 2022 Future Enterprise Resiliency and Spending Survey, Wave 10, provides a view into ongoing challenges that IT decision makers face with multicloud environments as they balance DX effort and budget constraints. One of the key findings from the survey is that 65% of organizations recognize the need to simplify, unify, and standardize dedicated (on-premises) and shared (public) cloud infrastructure management and security to improve resiliency and reduce operational costs. Further, IT leaders continue to be mindful of budgetary pressures and are focused on improving responsiveness within secure environments.

To deal with the daunting challenges of managing complex IT environments, the pressure to invest in expensive, bleeding-edge technologies, and IT talent and skills shortages, IT organizations turn to XaaS providers that offer technology platforms as a managed service.

As **Figure 1** (next page) illustrates, IDC’s research from June 2023 underscores this viewpoint: 78% of respondents agree that XaaS offers is a key part of their future strategy.

The key market trends that are driving interest in these XaaS offers:

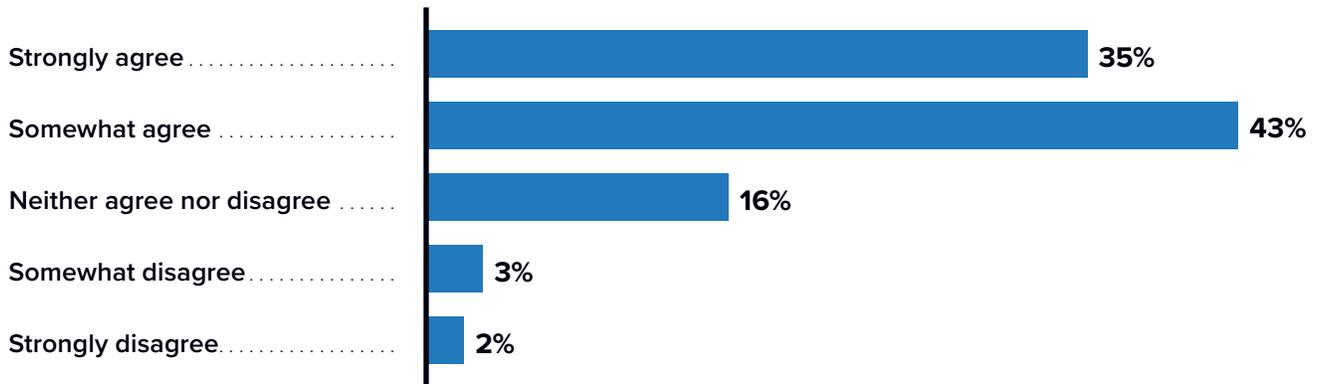
- Leveraging as-a-service solutions to reduce IT workloads and enable the staff to develop new skills
- Accelerating modernization, automation, and consumption strategies
- Strengthening and extending collaboration and governance across line-of-business, development, and data teams
- Aligning KPIs to business outcomes

FIGURE 1

IT as a Service's Importance to IT Strategy

To what extent do you agree with the following statement: **Shifting to purchasing digital infrastructure as a service, including consumption models and remote support, is a critical element of our future strategy.**

(% of respondents)



n = 876; Source: IDC's Future of Digital Infrastructure Worldwide Sentiment Survey, June 2023

XaaS, when coupled with a multicloud operating strategy, delivers the agility, efficiency, and resiliency that organizations need to be competitive. The adoption of XaaS models and the shift from complete ownership of all IT assets can deliver the best of all worlds.

Dell Technologies APEX Pay-Per-Use Solutions Overview

Dell Technologies' APEX Pay-Per-Use solutions give organizations the capacity flexibility they need and help them stay within budget requirements. Organizations are looking for a simplified approach to managing an increasingly complex IT environment with the flexibility and security required in today's diverse ecosystem. By working with Dell Technologies, organizations can build the IT infrastructure portfolio they need without the challenges of constant upgrades, long procurement cycles, equipment overprovisioning, and unplanned outages.

The monitoring services built into the Dell APEX offers enable IT teams to focus on business outcomes instead of managing IT infrastructure.

- **Dell Technologies APEX Flex on Demand** offers both reserve and buffer capacity that can shift as your capacity requires changes. Life-cycles services, such as asset recovery, deployment, and support, are all available in one contract.
- **Dell Technologies APEX Data Center Utility** aligns costs with usage and provides customers with the flexibility and transparency to keep IT infrastructure costs within budget. This customized approach leverages Dell's broad product portfolio and life services to support and manage your datacenter environment. Organizations enjoy the flexibility required to meet their growing capacity requirements, all delivered in one invoice.

The Business Value of Dell Technologies APEX Pay-Per-Use Solutions

Study Demographics

IDC's research focused on understanding the impact of using Dell Technologies APEX Pay-Per-Use Solutions on organizations. IDC conducted in-depth interviews with IT decision makers who have strong knowledge about the impact of using Dell Technologies APEX on IT costs, IT staff activities, development and business agility, and business results.

Table 1 (next page) provides an overview of the firmographics of study participants. As shown, they were enterprise-level organizations, with an average of 27,800 employees and annual revenue of \$4.29 billion (medians of 6,200 employees and \$1.85 billion revenue, respectively). Interviewed Dell Technologies APEX customers were headquartered in several geographical markets, including the United States (5), Australia, India, and the United Kingdom, and offered their experiences from the perspective of a number of industry verticals, including the retail (3), engineering, government, healthcare, insurance, and manufacturing industries.

TABLE 1
Demographics of Interviewed Organizations

	Average	Median
Number of employees	27,800	6,200
Number of IT staff	294	105
Number of business applications	243	135
Revenue per year	\$4.29B	\$1.85B
Countries	The United States (5), Australia, India, and the United Kingdom	
Industries	Retail (3), engineering, government, healthcare, insurance, and manufacturing	

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

The Choice and Use of Dell Technologies APEX Pay-Per-Use Solutions

The interviews covered study participants’ use of Dell Technologies APEX Pay-Per-Use solutions, for server/hyperconverged, storage, and data protection capacity. In total, IDC conducted interviews with eight organizations, including seven using Dell Technologies APEX for server/hyperconverged, five for storage, and four for data protection capacity.

Study participants spoke of common considerations in deciding to use Dell Technologies APEX Pay-Per-Use solutions. Most frequently, they concluded that they could no longer count on their then-current IT environments, which were usually based on buying and running infrastructure on premises to meet business needs in a cost-effective manner. They described struggling to match the provisioning of IT infrastructure capacity to changing business requirements and facing the dilemma of either purchasing too much capacity upfront or not having enough capacity on hand to meet changing demand patterns from their businesses. These factors led them to consider new approaches, especially those based on a more flexible model of provisioning capacity, which led to their decision to use Dell Technologies APEX Pay-Per-Use solutions.

Interviewed Dell Technologies customers detailed the criteria upon which they made their decisions, which included both analyses related to cost and business enablement and as well as confidence in the support they would receive through their Dell Technologies relationship:

A cost-effective way to meet business demand, server/hyperconverged:

“We started the conversations for budgetary reasons. ... It was very difficult for us to plan a capacity we would need when we were buying new equipment. So we worked with the Dell team to look at this Pay-Per-Use option option. ... It genuinely has been transformational for us.”

The procurement model’s flexibility allows us to meet business deadlines, server/hyperconverged:

“We went with Dell Technologies APEX to give us more flexibility in running our high-performance workloads. We have always purchased equipment, so this was a big sell to our finance department, but everyone can see now this is working for us. ... APEX gives us the capability we need to meet deadlines, which reduces stress on all the teams.”

The right solution for meeting growth requirements, storage:

“Ultimately, the Dell consumption-based agreement for us was by far the most beneficial agreement. We just couldn’t afford to grow at the rate we’ve grown if we didn’t have the Pay-per-use agreements in place.”

The quality of the Dell relationship and support, server/hyperconverged and storage:

“There was a clear toss up between [a competing solution] and Dell Technologies APEX, but we were more comfortable with the kind of technical support the local Dell team could provide. ... So the support extended by Dell and the local team here swayed it in their favor.”

Table 2 (next page) provides information about study participants’ Dell Technologies APEX Pay-Per-Use environments. As shown, Dell Technologies APEX is a core part of their IT environments, making up an average of around one-third of total IT capacity with six on-premises datacenters and two public clouds. The scale of use is also reflected in the use of Dell Technologies APEX to support an average of 320 business locations and applications/services that closely tie to 85% of total revenue.

As noted, IDC spoke with organizations using Dell Technologies APEX for hyperconverged/server, storage, and data protection capacity.

The study participants had the following APEX environments:

Hyperconverged/servers:

The seven interviewed organizations interviewed using APEX for hyperconverged/server capacity had an average of 66 servers and 1,629 virtual machines and/or cloud virtual machines to run an average of 180 business applications.

Storage:

The five interviewed organizations using APEX for storage capacity had an average of seven storage arrays with 396TB of storage capacity.

Data protection:

The four interviewed organizations using APEX for data protection capacity had an average of four data protection machines with the capacity to support an average 339TB of data.

TABLE 2

Dell Technologies APEX Use by Interviewed Organizations

	Average	Median
Dell Technologies APEX as percent of flexible capacity	66%	73%
Dell Technologies APEX as percent of total IT environment/capacity	33%	23%
Number of on-premises datacenters	6	2
Number of public clouds	2	2
Number of colocation providers	1	0
Number of business locations	320	24
Percent of revenue supported	85%	100%
Hyperconverged/server		
Number of servers	66	30
Number of VMs/cloud VMs	1,629	975
Number of terabytes	273	110
Number of business applications	180	95
Revenue per year	\$4.29B	\$1.85B
Storage		
Number of storage arrays	7	7
Number of terabytes	396	271
Data protection		
Number of data protection machines	4	4
Number of terabytes	339	62

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

Business Value and Quantified Benefits of Dell Technologies APEX Pay-Per-Use Solutions

IDC's research demonstrates the value of using Dell Technologies APEX Pay-Per-Use solutions, from both a cost of operations and business enablement perspective, for organizations. Study participants reported establishing more cost-effective IT environments with APEX that also enable them to better serve employees and customers, leading to operational efficiencies and business gains.

They detailed the close relationship between changing how they provision IT resources in support of their businesses and better operational results:

The meeting of customer commitments, server/hyperconverged:

"The biggest benefit we get from using Dell Technologies APEX is in meeting our commit deadlines. ... With APEX Pay-Per-Use, we have the extra compute capacity already waiting to go. We can open this up and run more jobs with this excess capacity."

A foundation for digital transformation to meet customer demand, server/hyperconverged and storage:

"The most significant benefit of Dell Technologies APEX is being able to undertake this incredible digital transformation journey that is giving us access to things we did not have before and that will eventually provide the customer experience that is now being demanded by the market in our industry."

The ease of meeting actual business requirements, storage:

"With Dell Technologies APEX, we just pay as we grow but also reduce that as we shrink. It's been fundamental in the growth of our business unit, and we simply couldn't have done it any other way."

IDC's analysis demonstrates the broad value proposition of using Dell Technologies APEX for study participants, with benefits distributed across IT cost and IT staff benefits as well as risk reduction and business enablement benefits.

Overall, IDC calculates that study participants will realize benefits considered for IDC's return-on-investment (ROI) model worth an annual average of \$4.98 million in the following areas (see [Figure 2](#), next page):

IT staff productivity benefits:

Interviewed organizations reported the enabling of development teams through enhanced IT agility and reduced day-to-day management and support burden on IT teams. IDC estimates that these productivity benefits and time savings will be worth an annual average of \$1.73 million.

Risk mitigation — user productivity benefits:

Interviewed organizations benefit from having a more robust IT infrastructure that suffers fewer unplanned outages. As a result, they benefit from higher user productivity and net revenue, which IDC values at an annual average of \$1.51 million.

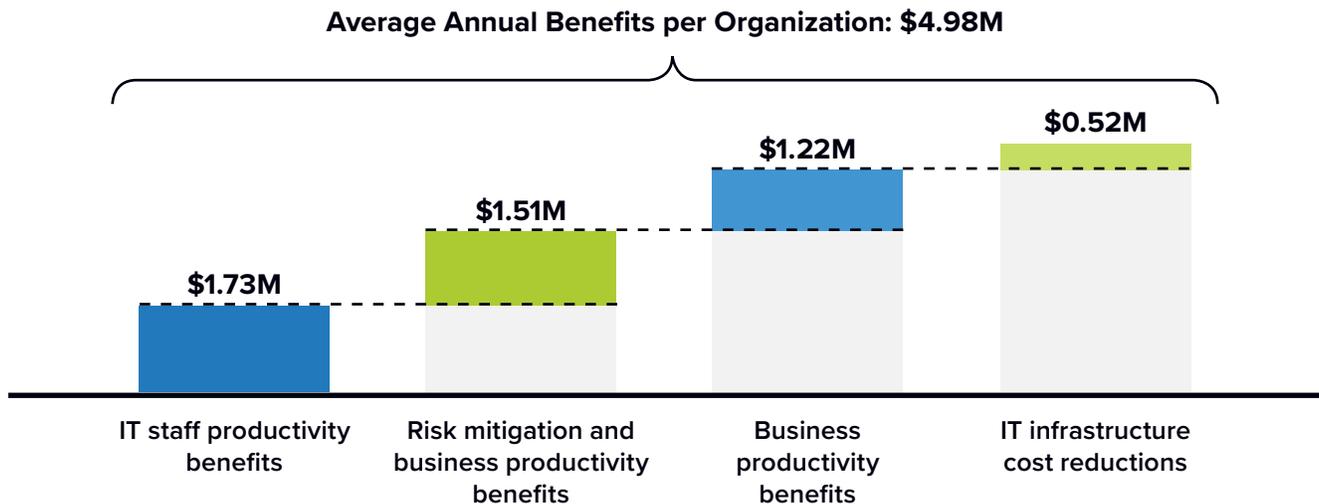
Business productivity benefits:

Interviewed organizations ensure a better customer experience and move more quickly to address business demand, generating higher net revenue worth an annual average of \$1.22 million.

IT infrastructure cost reductions:

Interviewed organizations must maintain less buffer capacity and avoid needing to make repeated capital investments in hyperconverged/server, storage, and data protection infrastructure, thereby saving an average of \$0.52 million per year.

FIGURE 2
Average Annual Benefits per Organization
 (\$ per organization)



n = 8; Source: IDC Business Value In-Depth Interviews, August 2023
 For an accessible version of the data in this figure, see [Figure 2 Supplemental Data](#) in Appendix 3.

IT Infrastructure Cost Reductions

Study participants linked their use of Dell Technologies APEX Pay-Per-Use solutions, whether for hyperconverged/compute, storage or data protection capacity, to their ability to establish and maintain more cost-effective IT infrastructures.

They consistently cited their ability to add or reduce capacity as needed with Dell Technologies APEX as driving cost-effective infrastructure consumption. Instead of needing to either minimize capacity concerns by potentially overprovisioning or risk insufficient capacity with insufficient provisioning, they emphasized their ability to have the right amount of capacity with APEX.

Thus, they must maintain less buffer capacity and avoid the need to make longer-term capital investments with a buy-and-run model. Interviewed organizations described how they have captured infrastructure cost savings with Dell Technologies APEX:

Reduced spend on buffer capacity, server/hyperconverged and storage:

“Spending on buffer capacity has gone down because Dell Technologies APEX provides buffer on demand made available in very quick time. ... Our buffer capacity has gone down by almost 10%.”

The ability to move away from capital expenditures, server/hyperconverged, storage, and data protection:

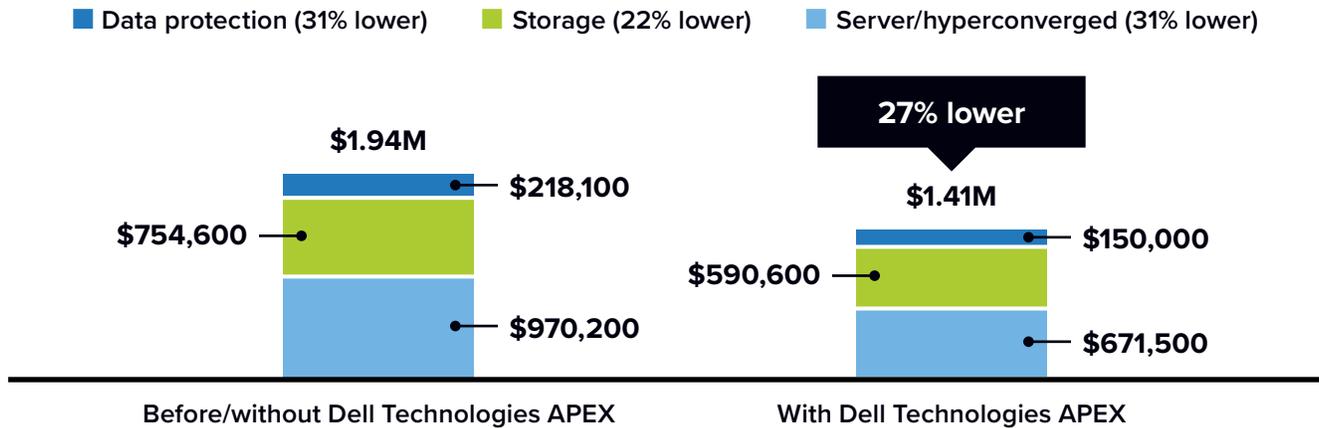
“With Dell Technologies APEX, we don’t have to make capital expenditures because we pay based on usage. When the business needs something, we just spin it up, and when we don’t need it anymore, we spin it down.”

Reduced need to provision excess storage capacity, server/hyperconverged, storage, and data protection:

“Dell Technologies APEX is about 5% of our IT budget, including labor costs. If we were doing this on premises with a capex model, it would be more like 9–10% of our IT budget. ... We had to have around 50% more storage because the utilization of storage on APEX is more optimized.”

Overall, study participants reported spending an average of 27% less on hyperconverged/server, storage, and data protection capacity with Dell Technologies APEX (see **Figure 3**, next page). Cost savings were relatively similar across these infrastructure groups, with 31% average savings for hyperconverged/server and data protection and 22% for storage. In addition, study participants reported further operational cost efficiencies from having upgraded technologies, benefiting from average power cost reductions of 14% and facility cost reductions of 10%, with one study participant explaining: *“Dell Technologies APEX is much more power efficient. It allows us to benchmark the amount of power that we’re using and to only use capacity as needed. It saves on power and cooling costs.”* These power and facility cost savings bring total infrastructure savings to an average of 25% over three years.

FIGURE 3
Annualized Infrastructure Costs
 (Cost per organization per year)



n = 8; Source: IDC Business Value In-Depth Interviews, August 2023
 For an accessible version of the data in this figure, see [Figure 3 Supplemental Data](#) in Appendix 3.

IT Staff Efficiencies

Study participants reported that modernizing and rightsizing their IT infrastructure environments with Dell Technologies APEX Pay-Per-Use solutions have generated significant efficiencies for teams responsible for managing and supporting their compute, storage, and data protection environments.

Interviewed Dell Technologies customers attributed these efficiencies to improved performance that requires less day-to-day troubleshooting, functionality including automation that eases the burden of configuration and deployment, and the ability to maintain more streamlined IT environments:

Reduced firefighting means efficiencies, server/hyperconverged:

“Our IT infrastructure team is probably 70% more productive with Dell Technologies APEX than what they were previously just because they’re not firefighting as much. ... The volume of tickets that are coming through into the infrastructure team now has dropped dramatically.”

A single pane of glass enables more efficient management and delivery, server/hyperconverged and storage:

“We have been able to provision fast the spin-offs, and benefits have been realized in faster deliveries and in quicker go-to-market faster product launches with Dell Technologies APEX by having a single pane of glass. ... In a nutshell, it has created a lot of efficiencies because it starts at the lowest level of the infrastructure.”

IT infrastructure team benefits from strong built-in security features, server/hyperconverged, storage, and data protection:

“Our IT infrastructure team saves time with Dell Technologies APEX because there is a lot more security built into the offer — they save around eight hours per month collectively on security tasks. ... We can now respond within the hour to a security threat compared with an hour and a half.”

As shown in **Table 3**, study participants benefit from requiring less staff time to manage and run equivalent workloads with Dell Technologies APEX. On average, they reported 50% efficiencies for IT infrastructure teams, including 51% for hyperconverged/server teams, 46% for storage teams, and 56% for data protection teams.

TABLE 3
Impact on IT Infrastructure Teams

	Before/ Without Dell Technologies APEX	With Dell Technologies APEX	Difference	Benefit
Hyperconverged/server				
Equivalent FTEs required for the same workloads	10.1	5.0	5.1	51%
Value of equivalent FTE time required (cost per organization per year)	\$1.01M	\$501,600	\$512,800	51%

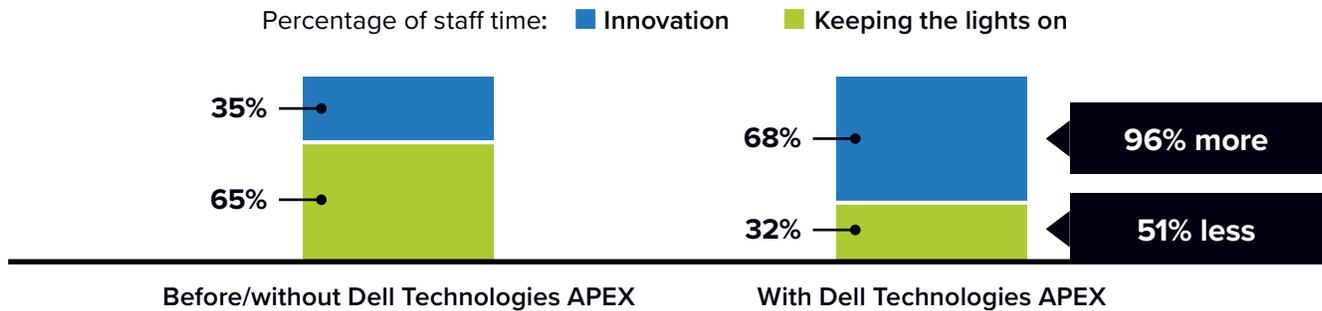
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	Before/ Without Dell Technologies APEX	With Dell Technologies APEX	Difference	Benefit
Storage				
Equivalent FTEs required for the same workloads	5.2	2.8	2.4	46%
Value of equivalent FTE time required (cost per organization per year)	\$522,100	\$282,800	\$239,300	46%
Data protection				
Equivalent FTEs required for the same workloads	1.7	0.8	0.9	56%
Value of equivalent FTE time required (cost per organization per year)	\$168,800	\$75,000	\$93,800	56%
Total FTEs	17.1	8.6	8.5	50%

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

Importantly, study participants noted that these efficiencies multiply in value as they can refocus valuable staff time on other projects and initiatives. For example, a customer using hyperconverged, storage, and data protection solutions explained: *“Our IT team can now focus on more business-critical projects related to the supply chain with Dell Technologies APEX. Previously, these projects would have gone to consulting groups, which has resulted in savings for us.”* Likewise, an organization using hyperconverged and storage noted: *“With Dell Technologies APEX, we’ve been able to reorganize our IT team slightly. We’ve been able to deliver on business change a lot more quickly, and that’s had a positive impact.”* As shown in **Figure 4** (next page), this shift in focus is noticeable; study participants reported that these teams have almost two times as much time (96%+) to focus on innovation and other projects because they must spend 51% less time keeping the lights on.

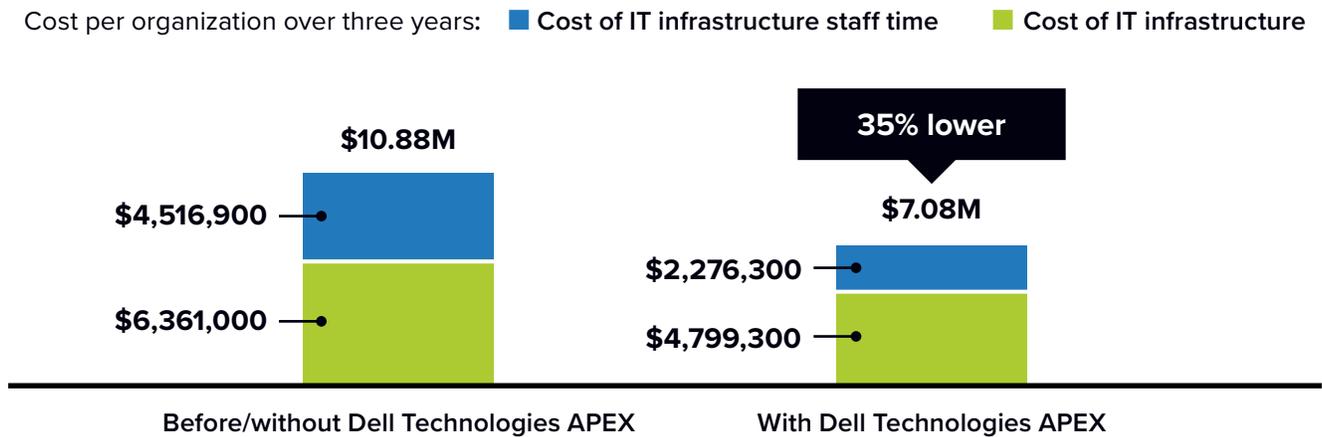
FIGURE 4
Impact on IT Innovation



n = 8; Source: IDC Business Value In-Depth Interviews, August 2023
For an accessible version of the data in this figure, see [Figure 4 Supplemental Data](#) in Appendix 3.

IT infrastructure and IT staff efficiencies combine to create a compelling value proposition for Dell Technologies APEX Pay-Per-Use solutions in terms of cost of operations. As shown in **Figure 5**, IDC calculates that study participants incur average costs that are 35% lower over three years, reflecting an average organizational saving of \$3.80 million over that period.

FIGURE 5
Three-Year Cost of Operations per Organization



n = 8; Source: IDC Business Value In-Depth Interviews, August 2023
For an accessible version of the data in this figure, see [Figure 5 Supplemental Data](#) in Appendix 3.

Enhanced Agility and Development

Study participants consistently cited ready access to additional compute, storage, and data protection capacity as a core value of using Dell Technologies APEX Pay-Per-Use solutions.

They acknowledged challenges in delivering IT resources at the speed required by their business and development operations with buy-and-run models but reported that APEX has instilled strong agility and confidence in their ability to move much faster to meet business requirements:

Increased speed when delivering to users, storage:

“Previously, we couldn’t scale effectively. The timing of scaling depends, but our users can have something the next day if they need it with Dell Technologies APEX. Before, if we had to do it, we’d have to order it, get it in, and set it up.”

Ease of scaling to business needs, server/hyperconverged, storage, and data protection:

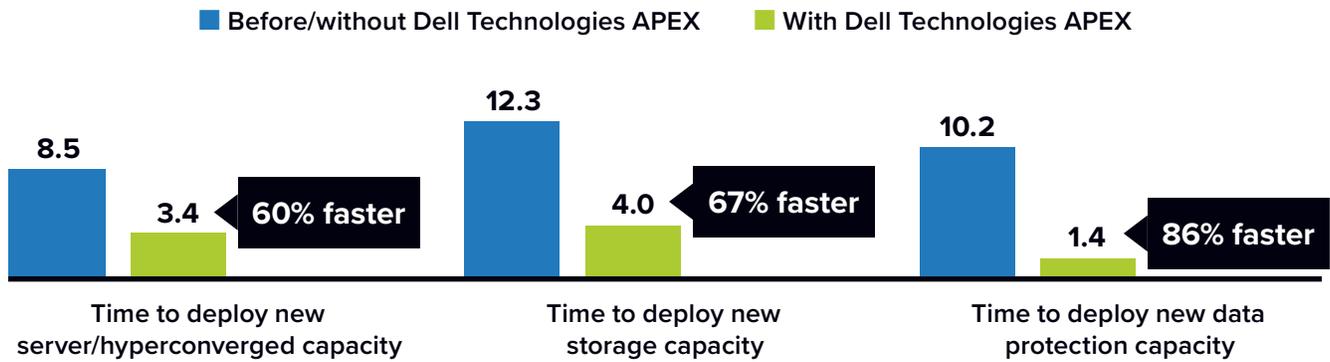
“With Dell Technologies APEX, we can scale up and scale down based on business demand instead of waiting for equipment to be purchased and provisioned.”

The ability to extend use without concern about capacity limitations, server/hyperconverged:

“If we get a new workload that we need to protect, we can do so more easily without concern of going over a set point or a threshold in our environment with Dell Technologies APEX.”

Figure 6 (next page) demonstrates the significant impact in terms of speed to provide IT resources with Dell Technologies APEX. Study participants reported being able to deploy new server/hyperconverged capacity 60% faster, new storage capacity 67% faster, and new data protection capacity a strong 86% faster. When asked about the typical overall impact of Dell Technologies APEX, study participants reported needing 60% less time to provide net-new additional capacity to their IT environments.

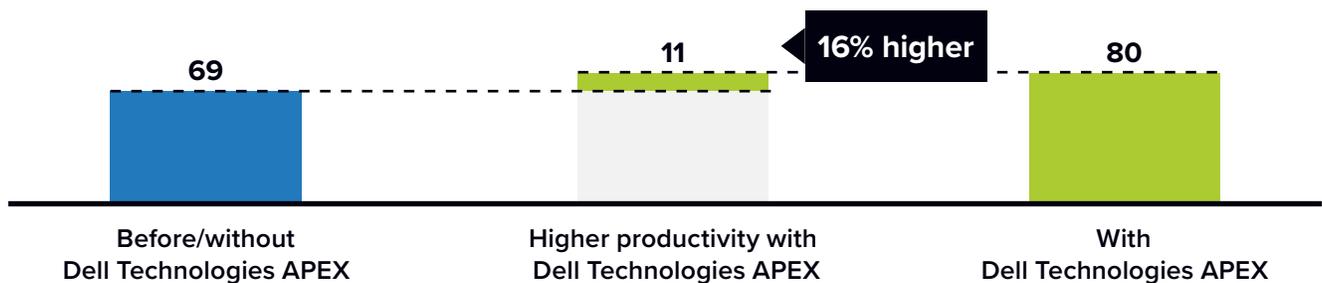
FIGURE 6
Impact on IT Agility
 (Number of hours)



n = 8; Source: IDC Business Value In-Depth Interviews, August 2023
 For an accessible version of the data in this figure, see [Figure 6 Supplemental Data](#) in Appendix 3.

One important benefit of greater IT infrastructure agility is that it empowers development teams to move faster and more readily to meet business needs. Study participants described how ready access to additional capacity limits friction across the development life cycle, with an organization using hyperconverged resources explaining: “We can use nodes for other development purposes with Dell Technologies APEX that sometimes we’d have to take offline to do, like testing or a big OS upgrade. We can take one of those nodes for a few days or a couple weeks and do things, and we have a known quantity from a performance perspective.” For interviewed Dell Technologies APEX customers, this translates to more effective development efforts, which IDC quantifies at 16% higher developer productivity, including 13% greater volume and 16% shorter development life cycles (see **Figure 7**).

FIGURE 7
Impact on Development Team Productivity
 (Equivalent development productivity, FTEs)



n = 8; Source: IDC Business Value In-Depth Interviews, August 2023
 For an accessible version of the data in this figure, see [Figure 7 Supplemental Data](#) in Appendix 3.

Performance and Business Benefits

Interviewed Dell Technologies APEX customers also attributed improved application and system performance to the modernization and consolidation of their IT infrastructures. They explained that the ability to readily increase their infrastructure capacity limits bottlenecks and brings down the risk of performance issues. One customer using hyperconverged and storage resources commented: *“It was becoming difficult to manage our peak business periods, but once we moved to a single pane of glass provided by Dell Technologies APEX, we have been able to do a lot during those peak periods. Even though public cloud providers offer elastic capacity, it was not harnessed well. We have benefited from APEX, and we have had 3–5% additional revenue because of this.”*

For study participants, one important measure of the improved performance they have achieved with Dell Technologies APEX is the limiting of the impact of unplanned outages. As shown in **Table 4**, they reported experiencing 67% fewer unplanned outages and bringing down the productivity impact of outages by 91%. Further, interviewed organizations spoke to how Dell Technologies APEX has helped them limit the direct business impact of outages, reducing revenue loss by an average of 67% and almost \$3.3 million per year.

TABLE 4
Impact on Unplanned Downtime

	Before/ Without Dell Technologies APEX	With Dell Technologies APEX	Difference	Benefit
Number of unplanned outages per year	6.8	2.3	4.6	67%
Mean time to repair (hours)	4.4	1.1	3.3	74%
Hours of productive time lost per user per year	3.9	0.3	3.6	91%
Productivity loss per year in FTEs per organization	19.0	1.6	17.3	91%
Value of lost productivity time per organization per year	\$1.33M	\$113,700	\$1.21M	91%
Value of lost revenue per organization per year	\$4.92M	\$1.62M	\$3.30M	67%

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

Importantly, interviewed customers spoke in clear terms about how having a more cost-effective, efficient, and agile IT infrastructure has led to significant business gains in the form of winning new business and better serving existing customers. For most interviewed customers, business gains related to much-enhanced scalability (i.e., the ability to move with purpose to address customer needs).

With Dell Technologies APEX, study participants reported that they can now do this consistently, whereas they often struggled to fully support the business previously:

Avoidance of business delays associated with resource availability, server/hyperconverged:

“Previously, we couldn’t scale sufficiently to meet our schedules, which meant that time to revenue was extended by that amount of time, and it’s created a significant delay to getting revenue. So you can imagine the value we get with APEX always being able to stay on schedule. ... It has had clear benefits to the organization.”

The ability to stay ahead of customer needs, storage:

“A consumption-based model through the Data Center Utility agreement offered by Dell is fantastic because it gives us access to capacity on demand without having to make significant capital outlays, which just wouldn’t be doable. What DCU has enabled for us as a new business unit is to build out capacity well in advance of demands from our customers.”

Table 5 shows how much improved scalability affects business results, with study participants reporting average annual revenue gains of \$9.21 million through the use of Dell Technologies APEX (of the \$9.21 million in higher revenue, IDC includes 15%, or \$1.38 million, for the purpose of quantifying the benefits achieved with Dell Technologies APEX solutions).

TABLE 5
Business Productivity Benefits — Higher Revenue

Revenue impact	Per Organization	Per 100 VMs
Total additional revenue per year	\$9.21M	\$565,500
Assumed operating margin	15%	15%
Total additional net revenue per year	\$1.38M	\$84,800

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

ROI Analysis

Several study participants explained in detail the crucial role that Dell Technologies APEX has had in enabling how they run their business operations.

They laid out a strong case that APEX has been fundamental to their business models and how they serve their customers:

Major business impact, storage:

“Our growth levels would not have been achieved if we hadn’t had the ability to be able to deploy millions of dollars’ worth of storage arrays across our markets that only have to pay for the blocks that customers wrote to with Dell Technologies APEX. It’s a massive commitment that Dell has made in us, and we will grow to an extent that Dell will hit the consumption levels they need. It’s been an excellent relationship. Dell understood our business and understood the uniqueness of a privately owned organization.”

Benefits from cost and business perspectives, server/hyperconverged:

“Dell Technologies APEX has ended up being a win all around for everybody. We were able to get more for the same capex depreciation rate monthly than what we ended up putting in from a monthly opex. It was close to what we had targeted, and we ended up with more capacity. So finance was happy, design was happy, and we were happy.”

Table 6 (next page) provides IDC’s ROI analysis of study participants’ use of Dell Technologies APEX Pay-Per-Use solutions. IDC calculates that they will realize discounted benefits over three years worth \$11.79 million in reduced infrastructure costs, IT team efficiencies, development team productivity gains, user productivity gains, and higher net revenue. These benefits compare with three-year discounted investment costs of an average \$4.01 million, which would yield a three-year ROI of 194% with a breakeven on investment occurring in an average of eight months.

TABLE 6

Three-Year ROI Analysis

	Per Organization	Per 100 VMs
Benefit (discounted)	\$11.79M	\$723,400
Investment (discounted)	\$4.01M	\$246,100
Net present value (NPV)	\$7.78M	\$477,300
Return on investment (ROI)	194%	194%
Payback period	8 months	8 months
Discount rate	12%	12%

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

Challenges/Opportunities

For the foreseeable future, the single biggest objective for businesses everywhere will be to create cyber-resilient, on-demand, and seamless digital experiences for employees, customers, and partners. Data-driven intelligence, automation, and operations will fuel such experiences.

However, when asked, business leaders say they are not satisfied with the pace of business outcomes, which IT complexity, technical debt, skill shortages, and outdated (and siloed) architectural approaches inhibit. IDC’s research finds that 69% of IT leaders worldwide are very or extremely concerned about the growing number of technology investments required to remain competitive. In other words, IT leaders remain cautiously optimistic about the resiliency of their organizations but acknowledge the ever-increasing burden on technology investments required to maintain that resiliency.

Dell Technologies APEX Pay-Per-Use solutions address many of these goals with their customized and flexible options for IT infrastructure strategies.

It will be important for Dell Technologies to continue to focus on key challenges for customers and incorporate them into its APEX offerings:

Sustainability:

Dell's dedication to sustainability initiatives is truly commendable and is poised to attract environmentally conscious customers seeking to collaborate with a reliable vendor that offers on all aspects of reporting. From power usage to secure asset disposal within all regions of operation, this will be important information for organizations. For Dell, this will be a key imperative to showcase its continued investment in this space, from product design to reducing ewaste. IDC research demonstrates that customers are looking at these metrics for the vendor selection process, underscoring the importance for Dell to continue to invest in this key area.

Competitive differentiation:

Many OEMs, cloud providers, and prominent partners are promoting their flexible consumption options and developing models to capture all aspects of consumption within an organization's ecosystem. Dell Technologies must continue to develop new partnerships, offerings, and investments to expand the Dell APEX portfolio. These strategic investments will enable Dell to capitalize on its market opportunity.

Conclusion

Organizations share common goals across their diverse digital transformation initiatives, including the simplification of IT environments, increasing operational agility, and the alignment of IT budgets and spending with business growth priorities. However, achieving these objectives is rarely straightforward, as solutions must be found that provide flexibility and help create integrated and high-performing IT infrastructure foundations across various cloud and on-premises environments. Increasingly, organizations look to as-a-service solutions, such as Dell Technologies APEX Pay-Per-Use solutions, to provide the right balance of performance, cost, and scalability.

This IDC study demonstrates how interviewed Dell Technologies customers have leveraged Dell's APEX to achieve both their IT cost and operations and their business objectives. They reported that Dell's APEX solutions enable them to not only optimize infrastructure consumption and costs but also significantly speed up the delivery of IT resources needed to support business activities. For the interviewed organizations, this results in value in various areas, including direct cost savings, staff time savings, increased development velocity and productivity, and higher employee productivity and revenue. IDC calculates that these benefits will outweigh investment costs in Dell Technologies APEX Pay-Per-Use solutions by almost a three-to-one margin, resulting in an average three-year ROI of 194%.

Appendix 1: Methodology

IDC utilized its standard Business Value/ROI methodology for this project. This methodology is based on gathered data from organizations currently using Dell Technologies APEX Pay-Per-Use solutions, including hyperconverged/compute, 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 the purposes of this analysis, based on the geographic locations of the interviewed organizations, IDC 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.

Appendix 2: Quantification of Benefits

Table 7 (next page) provides details about the financial value that IDC calculates study participants will achieve on an annual basis over three years by using Dell Technologies APEX Pay-Per-Use solutions.

TABLE 7
Annual Quantified Financial Benefits

Category of Value	Average Quantitative Benefit	15% Margin Assumption Applied	Calculated Average Annual Value*
Infrastructure cost reductions	Compute, 31% savings worth \$298,700/year; storage, 22% savings worth \$163,900/year; data protection, 31% savings worth \$68,100/year	No	\$468,600
Power cost savings	14% savings, worth \$43,200 per year	No	\$38,200
Facility cost savings	10% savings, worth \$15,700 per year	No	\$13,800
IT infrastructure compute team efficiencies	51% efficiencies — 5.1 FTEs, \$100,000 salary	No	\$452,800
IT infrastructure storage team efficiencies	46% efficiencies — 2.4 FTEs, \$100,000 salary	No	\$211,300
Data protection team efficiencies	56% efficiencies — 0.9 FTE, \$100,000 salary	No	\$82,800
Application development team productivity gains	16% productivity gain — 11 FTEs, \$100,000 salary	No	\$987,700
Unplanned downtime — productivity gains	91% improvement — 17.3 FTEs, \$70,000 salary	No	\$1.07M
Unplanned downtime — revenue gains	67% improvement — \$3.30M higher revenue	Yes	\$436,600
Business productivity — revenue gains	\$9.21M higher revenue	Yes	\$1.22M
Total annual benefits, use of Dell Technologies APEX	\$4.98M		

* Includes 4.8 months deployment time in year 1.

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

Appendix 3: Supplemental Data

This appendix provides an accessible version of the data for the complex figures in this document. Click “Return to original figure” below the tables to go get back to the original data figure.

FIGURE 2 SUPPLEMENTAL DATA

Average Annual Benefits per Organization

	IT staff productivity benefits	Risk mitigation and business productivity benefits	Business productivity benefits	IT infrastructure cost reductions
Per organization	\$1.73M	\$1.51M	\$1.22M	\$0.52M
Average annual benefits per organization	\$4.98M			

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

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FIGURE 3 SUPPLEMENTAL DATA

Annualized Infrastructure Costs

	Server/ hyperconverged (31% lower)	Storage (22% lower)	Data protection (31% lower)
Before/without Dell Technologies APEX	\$970,200	\$754,600	\$218,100
With Dell Technologies APEX	\$671,500	\$590,600	\$150,000

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

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Appendix 3: Supplemental Data (continued)

FIGURE 4 SUPPLEMENTAL DATA

Impact on IT Innovation

	Keeping the lights on	Innovation
Before/without Dell Technologies APEX	65%	35%
With Dell Technologies APEX	32%	68%

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

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FIGURE 5 SUPPLEMENTAL DATA

Three-Year Cost of Operations per Organization

	Cost of IT infrastructure	Cost of IT infrastructure staff time
Before/without Dell Technologies APEX	\$6,361,000	\$4,516,900
With Dell Technologies APEX	\$4,799,300	\$2,276,300

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

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FIGURE 6 SUPPLEMENTAL DATA

Impact on IT Agility

	Time to deploy new server/hyperconverged capacity, hours	Time to deploy new storage capacity, hours	Time to deploy new data protection capacity, hours
Before/without Dell Technologies APEX	8.5	12.3	10.2
With Dell Technologies APEX	3.4	4.0	1.4

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

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Appendix 3: Supplemental Data (continued)

FIGURE 7 SUPPLEMENTAL DATA

Impact on Development Team Productivity

	Baseline productivity	Higher productivity
Development team productivity level before/without Dell Technologies APEX	69	n/a
Higher productivity with Dell Technologies APEX	69	11
Developer team productivity level with Dell Technologies APEX	80	n/a

n = 8; Source: IDC Business Value In-Depth Interviews, August 2023

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About the IDC Analysts



Susan G. Middleton

Research Vice President, Flexible Consumption and Financing Strategies for IT Infrastructure, IDC

Susan leads IDC's worldwide research on IT equipment, software, and services financing markets. As research vice president for IDC's Flexible Consumption and Financing Strategies for IT Infrastructure research, she provides analysis and insight from both a supply-side and a buyer's 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 G. Middleton](#)



Matthew Marden

Research Vice President, 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.

[More about Matthew Marden](#)

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IDC Research, Inc.
140 Kendrick Street, Building B, Needham, MA 02494, USA
T +1 508 872 8200

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