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Would You Innovate on Your Outdated Server Infrastructure?

Get Ahead of Your Technical Debt

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Table of Contents

CLICK BELOW TO NAVIGATE TO EACH SECTION IN THIS DOCUMENT.

In This InfoBrief

To address rapidly evolving workload demands, organizations must assess whether their current approach to server refresh and upgrades is adequate to prepare them for the next wave of change.

- **Successful organizations need to innovate to grow their revenues, deliver new services to customers, and remain competitive.** It is, therefore, imperative that they review their current server refresh/upgrade strategy.
- **IDC recently surveyed IT leaders to examine their current approaches to server refresh and upgrades.** This InfoBrief provides a detailed analysis of the survey results, showing the factors and circumstances shaping organizations' server refresh and upgrade strategies.
- **This research is a guidebook for organizations evaluating their approach to refreshing and upgrading their server infrastructure.** It assesses how their strategy compares to those of other organizations.

SURVEY

200 respondents
from the United States

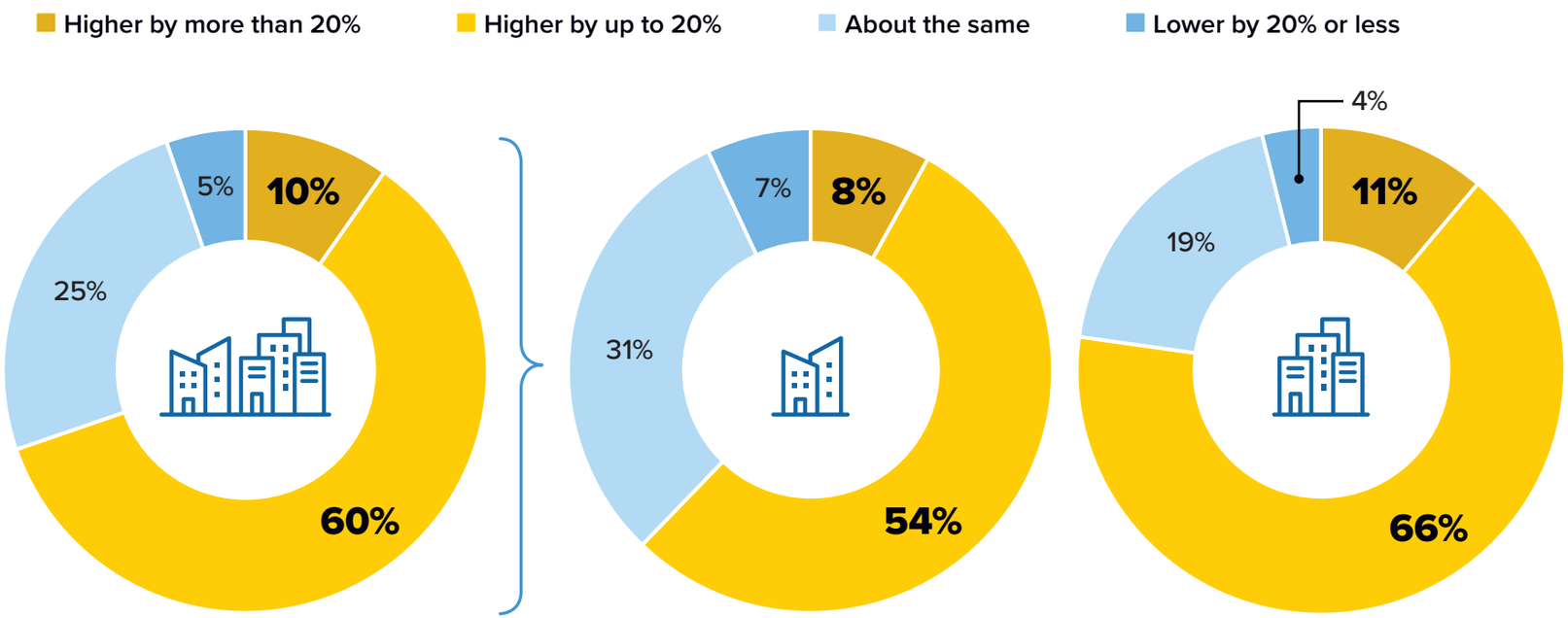
Organizations with
at least 1,000 employees
across vertical industries, including retail, finance services, transportation/logistics, healthcare, and education

Decision-making processes related to
on-premises compute and/or converged/ hyper-converged infrastructure

Compute Spending Growth

New workload requirements are increasing compute spending.

How is your organization's spending for overall compute expected to change in 2025 compared with 2024?



TOTAL

SMALLER ORGANIZATIONS
1,000–4,999 employees

LARGER ORGANIZATIONS
5,000+ employees

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | For an accessible version of the data in this figure, see Figure from Page 4 in the Appendix.

IN 2025:

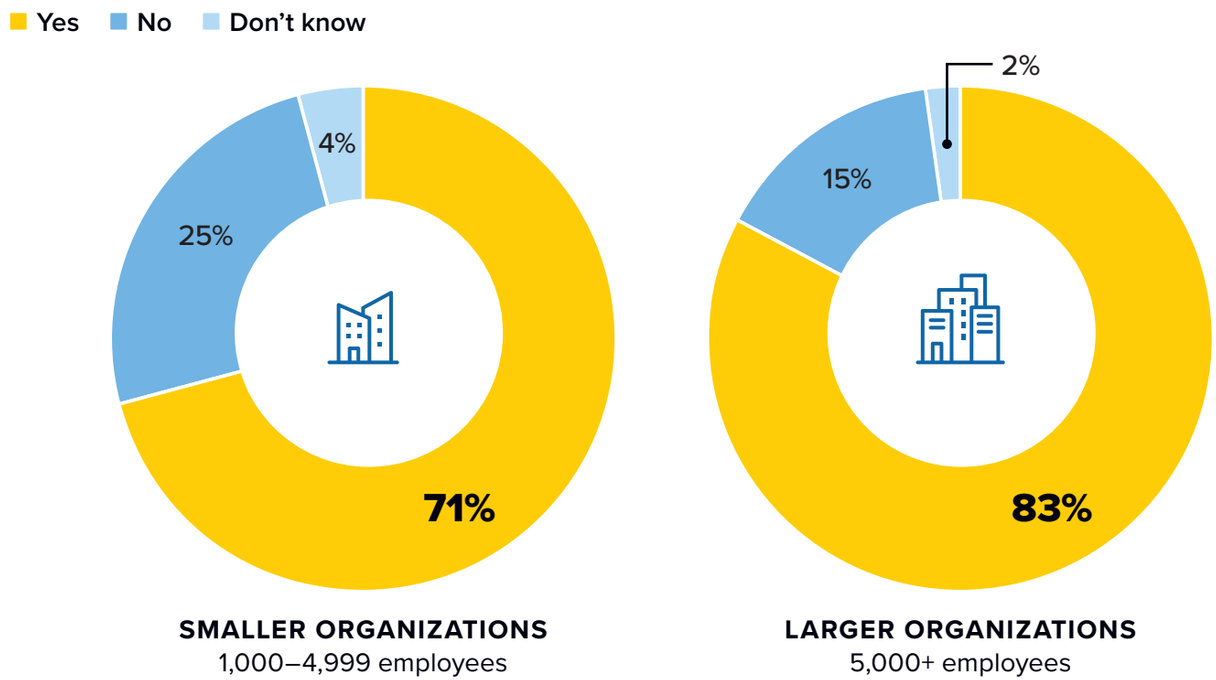
- **70%** of organizations expect their compute spending **to grow by up to 20% or more.**
- Larger organizations will see a larger uptick in overall compute spend.

- Key drivers will be a response to **growing data volumes** and the need for **higher-performance compute** to support new applications and workloads, including **AI and edge workloads.**

New Server Deployments

The rise in compute spending dovetails with new server deployments. The majority of organizations will bring new servers into operation in the next two years.

Does your organization plan to increase the number of servers in operation in the next two years?



n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | For an accessible version of the data in this figure, see Figure from Page 5 in the Appendix.

IN THE NEXT TWO YEARS:

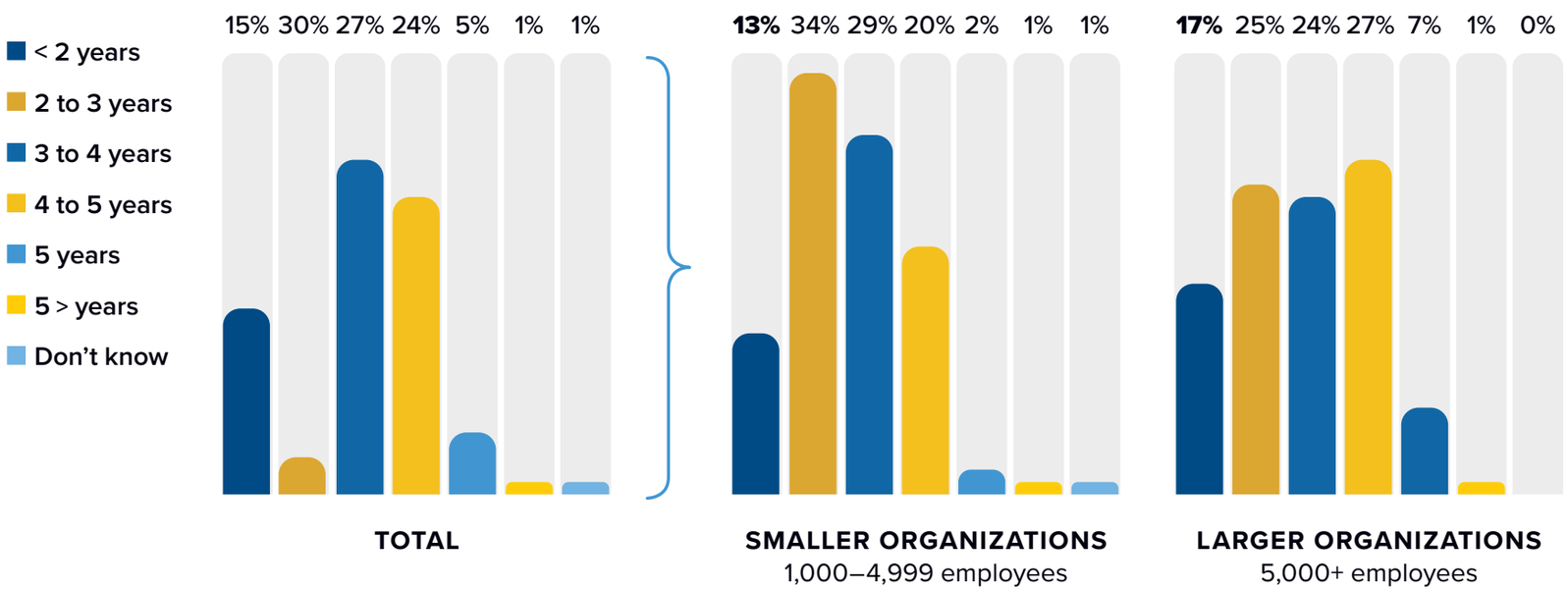
- Over **70%** of smaller organizations and over **80%** of larger organizations plan to bring new servers into operation.

- Organizations will deploy new servers in both datacenters and edge locations, largely in response to **growing data volumes** and the need to support the demands of **new AI workloads.**
- New server deployments will coincide with moves to consolidate and **refresh/upgrade existing infrastructure.**

Server Refresh/Upgrade Cycles

Organizations are refreshing/upgrading their servers more frequently. Over 40% of organizations refresh/upgrade their servers in under three-year cycles. Forty-three percent of organizations refresh/upgrade their servers more frequently since the COVID-19 pandemic.

How frequently does your organization typically refresh/upgrade its on-premises server platforms?



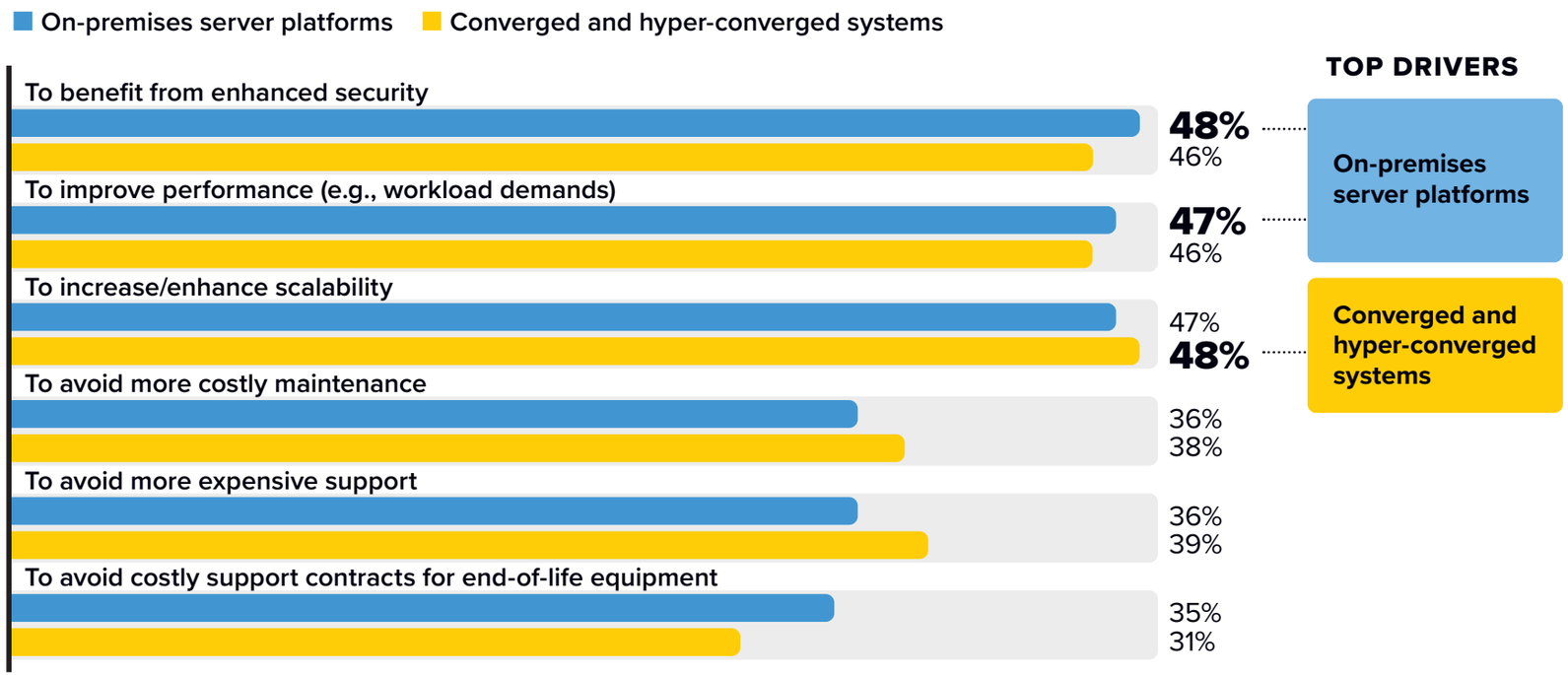
n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | For an accessible version of the data in this figure, see Figure from Page 6 in the Appendix.

- Among large organizations, **17%** refresh/upgrade their servers less than every two years compared to **13%** of smaller organizations.
- However, larger organizations are also likely to follow **longer refresh/upgrade schedules (every four to five years).**
- Smaller organizations are more likely to refresh/upgrade their servers **every three to five years.**

Top Drivers for Refresh/Upgrade

Performance, security, and scalability are the top refresh/upgrade drivers. Infrastructure must support evolving workload demands while helping organizations manage risks.

Please state the most common drivers for refreshing/upgrading your organization's on-premises server platforms and converged and hyperconverged infrastructure systems.



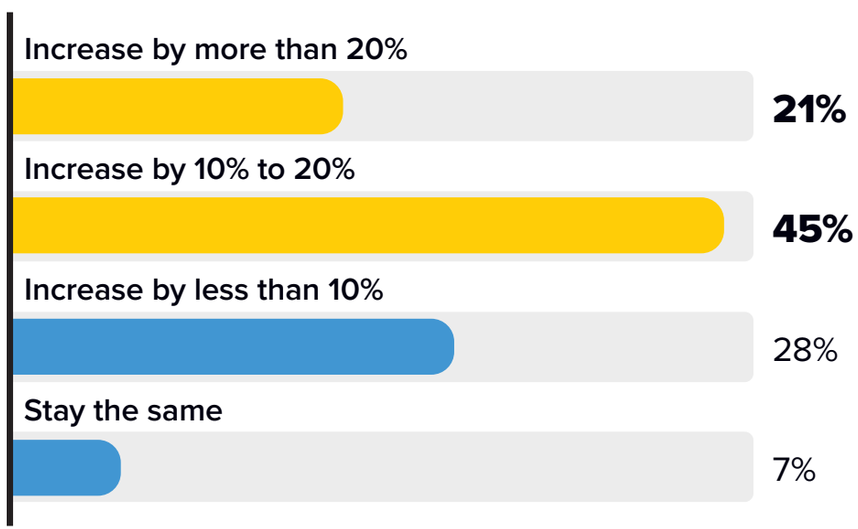
n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | For an accessible version of the data in this figure, see Figure from Page 7 in the Appendix.

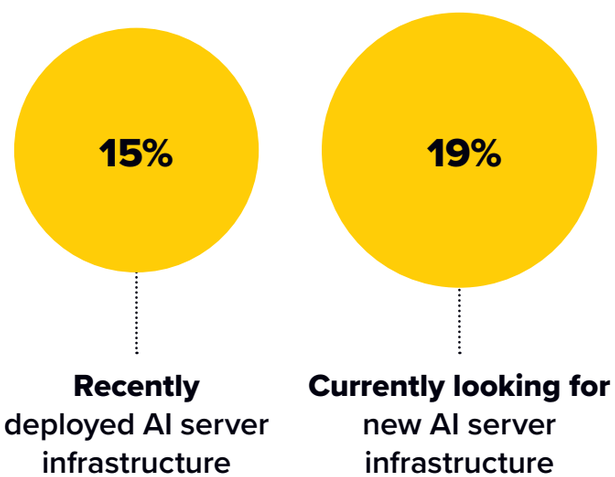
- **Refresh and upgrade strategies must prioritize performance and scalability** to ensure server platforms are ready to support the growing demands of AI, GenAI, and other workloads.
- **Ensuring their compute infrastructure is up to date** can also protect organizations from the latest security threats and help them manage the risk of costly maintenance and support, including support contracts for end-of-life equipment.

AI Workload Growth Requiring New Server Infrastructure

Rapid AI workload growth requires new, robust server infrastructure.
AI growth trends require a critical reassessment of existing server platforms' capabilities.

In the next 12 months, do you plan to increase, decrease, or maintain the usage of AI workloads, and to what extent are AI initiatives influencing the procurement and deployment of new server infrastructure?





n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025

IN THE NEXT 12 MONTHS:

- **66%** of organizations expect to see a minimum 10% increase in AI workload use.

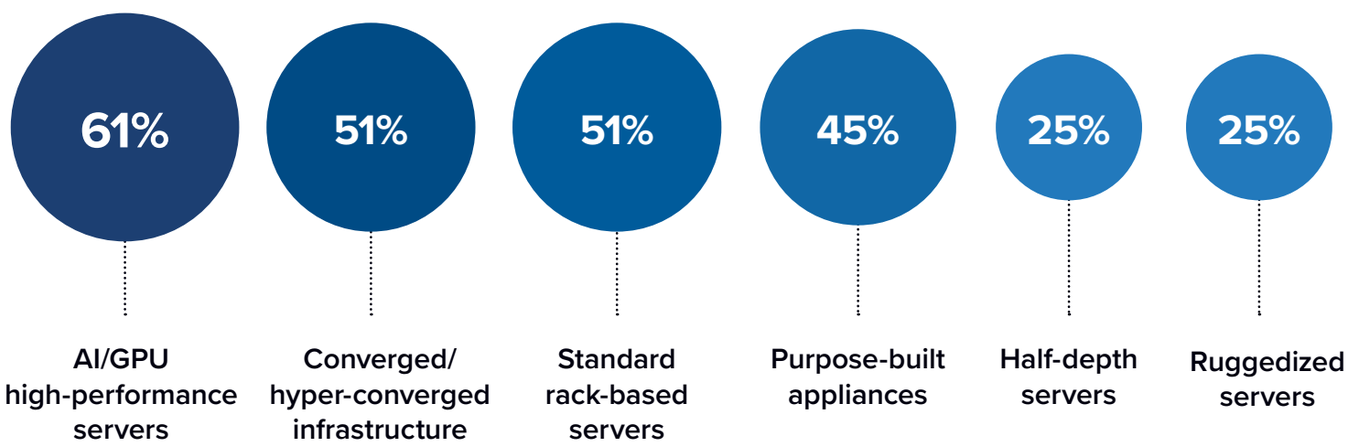
- Only **15%** of organizations say they have **recently deployed server infrastructure** to support existing or future AI workloads, while **19%** are currently looking for **new AI server infrastructure.**

- With the expected rapid growth of AI workload use, **a significant need exists for server infrastructure** to support increasing computational demands.

Reassessing Server Refresh/ Upgrade Cycles at the Edge

The need to reassess server refresh/upgrade cycles also extends to the edge. To support new workloads at the edge, many organizations will require new server equipment.

What type of servers will your organization operate at edge locations in 2025?



n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025

IN 2025:

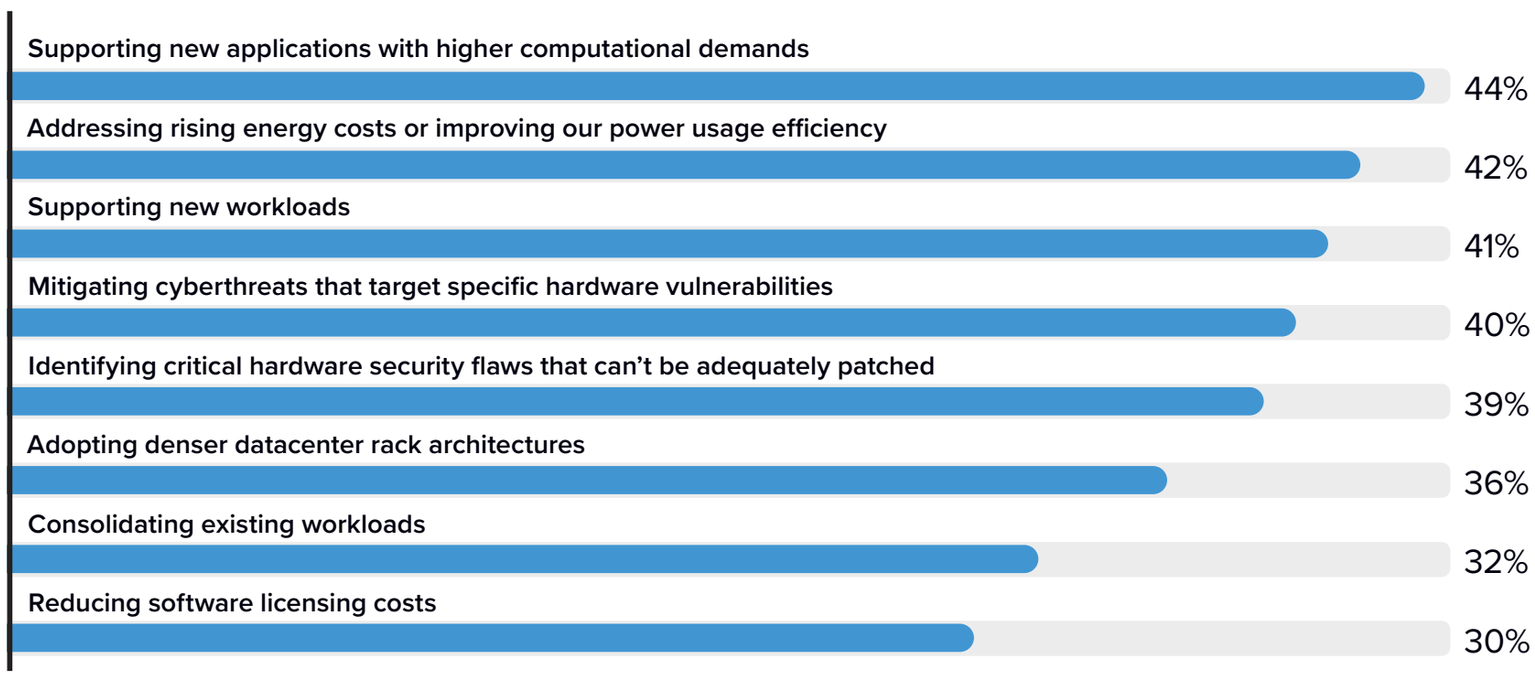
- **89%** of organizations plan to expand their use of edge servers.

- **75%** of organizations say they **currently operate servers at edge locations,** which include edge datacenters, branch offices, manufacturing, retail, and other locations.
- At these locations, there is a strong commitment to ensuring that **edge servers can support the evolving requirements of AI workloads.**
- Furthermore, **43%** of organizations say they **refresh or upgrade their edge servers more frequently than those in their datacenters.**

Increasing the Urgency of Server Refresh/Upgrade Cycles

Various factors are increasing the urgency of server refresh and upgrade cycles.

Which of the following requirements has caused server refresh/upgrade cycles to become more urgent and, therefore, be implemented ahead of planned schedules?



n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025

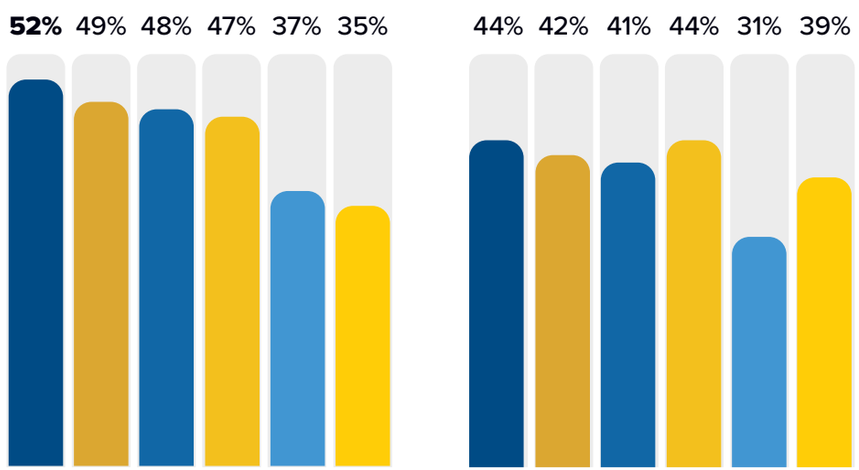
- Organizations identify various requirements and developments that require bringing cycles forward.
- **59% of C-suite executives say that the need to support new workloads with higher computational demands** has increased the urgency of server refresh/upgrade schedules.
- A further **48% of C-suite executives identify the risk of new cyberattacks** as a reason to bring server refresh/upgrade cycles forward.

Software Considerations for Server Platform Success

A server platform's success also depends on various software considerations. Organizations need to factor key software capabilities into all refresh/upgrade strategies.

In what ways does software factor into your organization's server selection and procurement processes?

- Our servers must support the latest virtualization software from VMware or other providers.
- We consider software licensing models, support, and integration costs for long-term ROI.
- Our servers must support integrated management and remote monitoring.
- We look for software-defined solutions that allow us to scale and adapt to changing demands.
- Our servers must support automation capabilities.
- Our servers must have container orchestration compatibility (e.g., Kubernetes, Docker).



n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | For an accessible version of the data in this figure, see Figure from Page 11 in the Appendix.

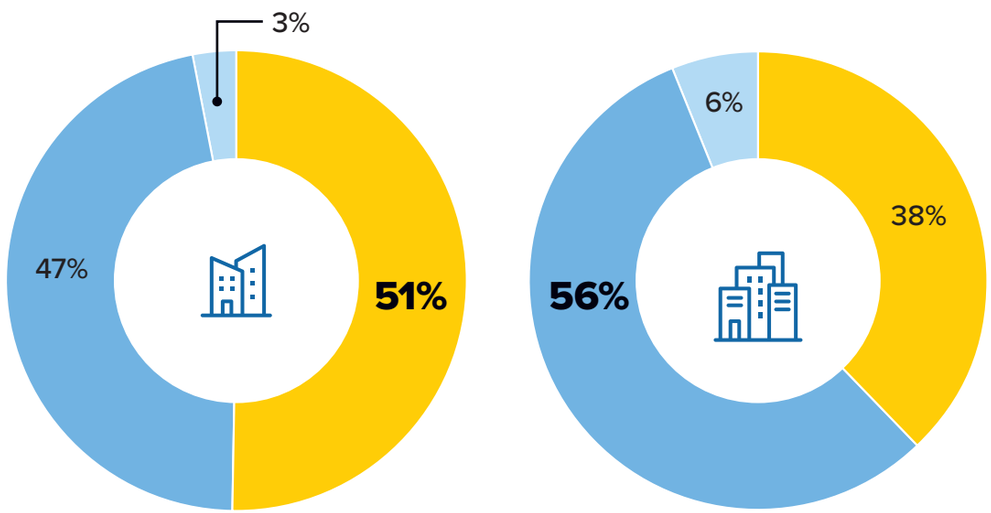
- Over **52%** of smaller organizations require their servers **to support the latest virtualization software** from VMware or other providers.
- Other important software considerations include **licensing models and software-defined capabilities.**
- **Container orchestration compatibility** is also a strong consideration, especially among larger organizations.

Virtualization Costs and Server Refresh/Upgrades

Organizations must also factor virtualization costs into server refresh/upgrade plans. Virtualization software can be a significant added cost to operating a server platform.

To what extent does the cost of virtualization affect your organization's decisions about new server procurement and/or workload migration?

- It significantly influences decisions about server procurement and/or workload migration.
- It has a moderate influence on decisions about server procurement and/or workload migration.
- It does not influence decisions about server procurement and/or workload migration.



SMALLER ORGANIZATIONS
1,000–4,999 employees

LARGER ORGANIZATIONS
5,000+ employees

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | For an accessible version of the data in this figure, see Figure from Page 12 in the Appendix.

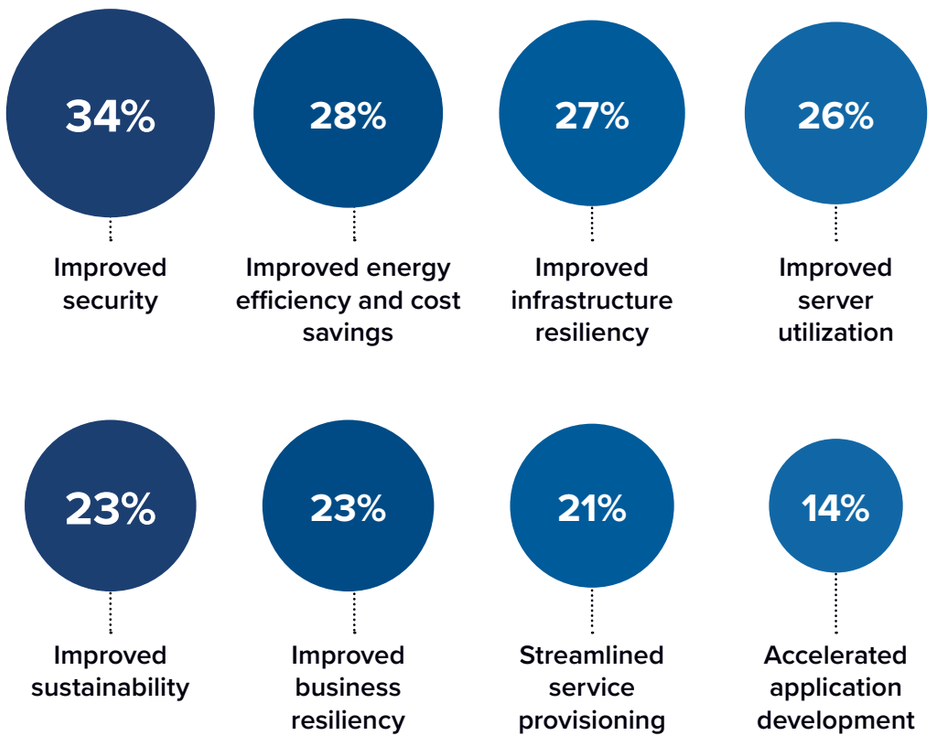
- **The cost of virtualization software is an important consideration** that organizations should factor into server procurement decisions.
- Over **50%** of smaller organizations say that the cost of virtualization **significantly influences decisions** about server procurement.
- For larger organizations, virtualization software costs are more likely to have **moderate or no influence** on server procurement decisions.

Automation Benefits and Capabilities

Server refresh/upgrades can unlock new automation benefits and capabilities.

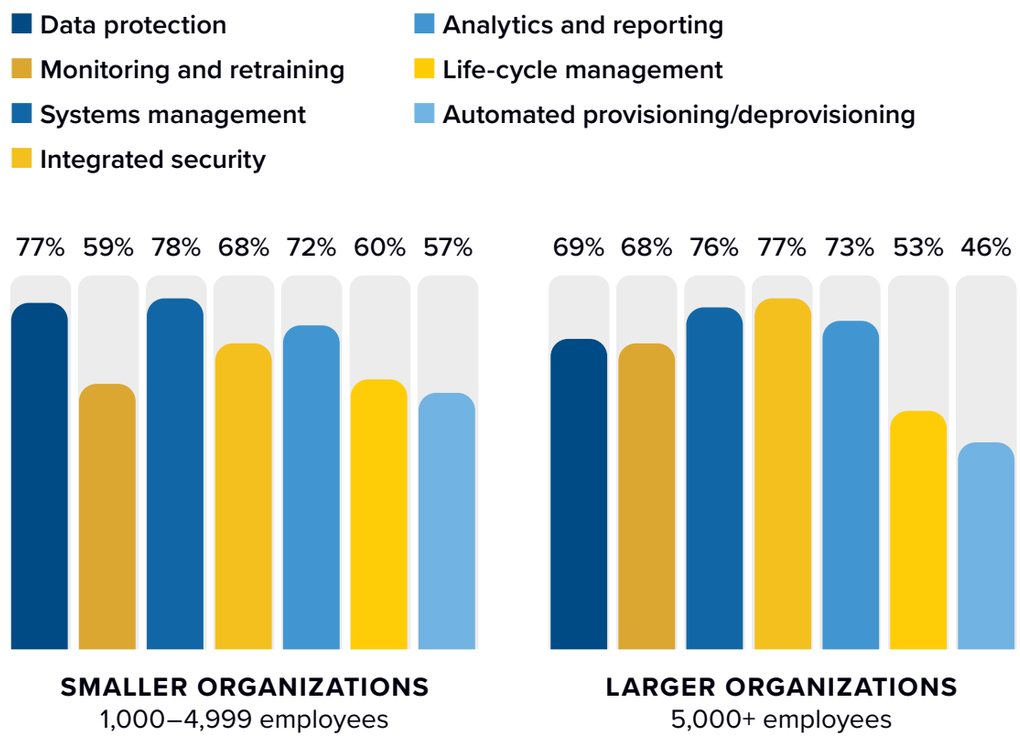
Organizations identify security, energy efficiency, and server resiliency as the top benefits.

What are the top benefits that server automation provides to your organization?



n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025

Which server automation capabilities does your organization currently have?

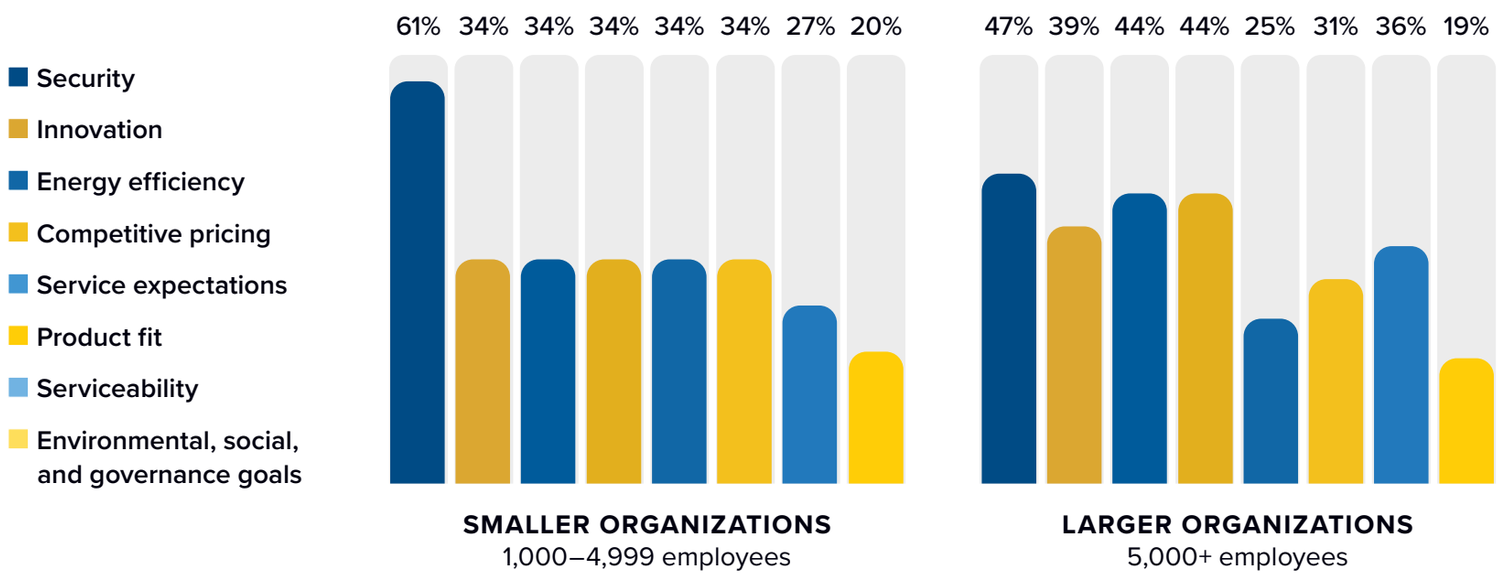


For an accessible version of the data in this figure, see Figure from Page 13 in the Appendix.

Adding New or Additional Server Vendors

Refresh/upgrade cycles allow for the introduction of new or additional vendors. Various factors influence decisions about whether and when to change/add new vendors.

What factors play into the decision to change or add server vendors?



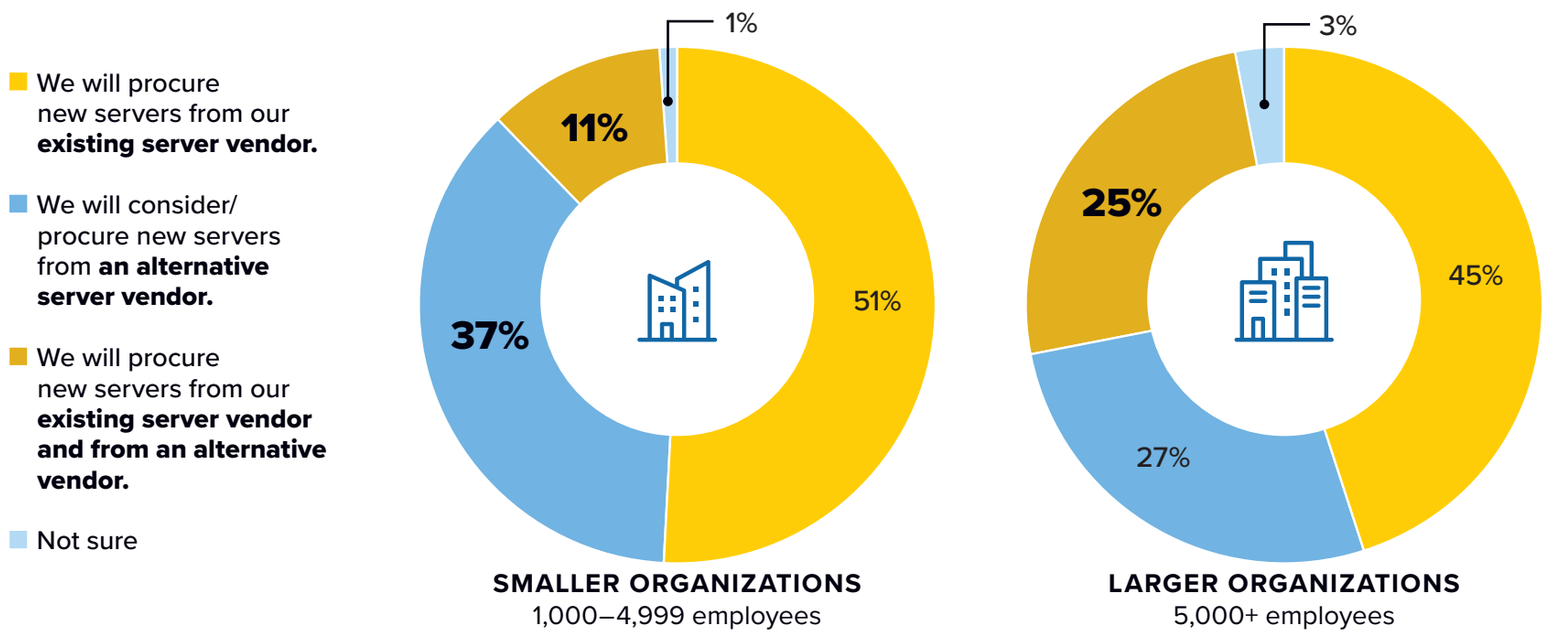
n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | For an accessible version of the data in this figure, see Figure from Page 14 in the Appendix.

- Over **50%** of organizations prioritize software compatibility and high bandwidth networking when acquiring newer servers.
- **Security** is one of the biggest factors that influences decisions about whether to change or add server vendors, especially for smaller organizations.
- For large organizations, **energy efficiency and competitive pricing** are additional key factors that influence decisions about whether to change or add server vendors.

Evolving Business Demands and Vendor Selection

Evolving business demands will change existing approaches to vendor selection. Many organizations will consider partnering with a new or additional server vendor.

Where will your organization most likely procure its new servers from in the next two years?



n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | For an accessible version of the data in this figure, see Figure from Page 15 in the Appendix.

IN THE NEXT TWO YEARS:

- Over **37%** of smaller organizations will consider or procure **new servers from an alternative vendor.**
- **11%** of smaller organizations will partner with both their **existing vendor and an alternative vendor.**
- Among larger organizations, **25%** will consider or procure **new servers from both their existing vendor and an alternative vendor.**

Key Takeaways

1

THE IMPORTANCE OF SHORTENING SERVER REFRESH/ UPGRADE CYCLES

Organizations should consider the numerous benefits of shortening their current server refresh/upgrade cycles. These include avoiding the risk that their existing server platforms become obsolete in the face of rapid data growth and workload evolution.

2

OPTIMIZING SERVER PLATFORMS FOR AI AND EDGE WORKLOADS

Refresh and upgrade strategies should prioritize performance and scalability to ensure that server platforms are ready to support the growing demands of AI, GenAI, and other workloads, including those running at the edge.

3

SAFEGUARDING ORGANIZATIONS WITH ADVANCED SERVER TECHNOLOGY

Maintaining the latest server technology can protect organizations from the latest security threats while helping them manage the risk of costly maintenance and support (e.g., technical debt).

4

OPTIMIZING SERVER PLATFORMS THROUGH SOFTWARE ENHANCEMENTS

A robust and effective server platform also depends on various software considerations, and organizations should factor the benefits of key software capabilities into all refresh/upgrade strategies. These include various new automation and observability capabilities.

5

BALANCING SUSTAINABILITY: UPGRADING TO ENERGY-EFFICIENT SERVERS

Many organizations are committed to sustainable growth and greater resource efficiency. Although this may appear to be an argument in favor of extending the life of existing server infrastructure, switching to more energy-efficient servers can be a more sustainable option in the long term.

Appendix: Supplemental Data

The tables in this appendix provide accessible versions of the data for the complex figures in this document. Click "Return to original figure" below each table to get back to the original data figure.

FIGURE FROM PAGE 4

How is your organization's spending for overall compute expected to change in 2025 compared with 2024?

	Total	Smaller Organizations: 1,000–4,999 Employees	Larger Organizations: 5,000+ Employees
Lower by 20% or less	5%	7%	4%
About the same	25%	31%	19%
Higher by up to 20%	60%	54%	66%
Higher by more than 20%	10%	8%	11%

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | Return to original figure

FIGURE FROM PAGE 5

Does your organization plan to increase the number of servers in operation in the next two years?

	Smaller Organizations: 1,000–4,999 Employees	Larger Organizations: 5,000+ Employees
Yes	71%	83%
No	25%	15%
Don't know	4%	2%

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | Return to original figure

Appendix: Supplemental Data (continued)

FIGURE FROM PAGE 6

How frequently does your organization typically refresh/upgrade its on-premises server platforms?

	Total	Smaller Organizations: 1,000–4,999 Employees	Larger Organizations: 5,000+ Employees
< 2 years	15%	13%	17%
2 to 3 years	30%	34%	25%
3 to 4 years	27%	29%	24%
4 to 5 years	24%	20%	27%
5 years	5%	2%	7%
5 > years	1%	1%	1%
Don't know	1%	1%	0%

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | Return to original figure

FIGURE FROM PAGE 7

Please state the most common drivers for refreshing/upgrading your organization's on-premises server platforms and converged and hyperconverged infrastructure systems.

	On-Premises Server Platforms	Converged and Hyper-Converged Systems
To benefit from enhanced security	48%	46%
To improve performance (e.g., workload demands)	47%	46%
To increase/enhance scalability	47%	48%
To avoid more costly maintenance	36%	38%
To avoid more expensive support	36%	39%
To avoid costly support contracts for end-of-life equipment	35%	31%

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | Return to original figure

Appendix: Supplemental Data (continued)

FIGURE FROM PAGE 11

In what ways does software factor into your organization's server selection and procurement processes?

	Smaller Organizations: 1,000–4,999 Employees	Larger Organizations: 5,000+ Employees
Our servers must support the latest virtualization software from VMware or other providers.	52%	44%
We consider software licensing models, support, and integration costs for long-term ROI.	49%	42%
Our servers must support integrated management and remote monitoring.	48%	41%
We look for software-defined solutions that allow us to scale and adapt to changing demands.	47%	44%
Our servers must support automation capabilities.	37%	31%
Our servers must have container orchestration compatibility (Kubernetes, Docker, etc.).	35%	39%

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | Return to original figure

FIGURE FROM PAGE 12

To what extent does the cost of virtualization affect your organization's decisions about new server procurement and/or workload migration?

	Smaller Organizations: 1,000–4,999 Employees	Larger Organizations: 5,000+ Employees
It significantly influences decisions about server procurement and/or workload migration.	51%	38%
It has a moderate influence on decisions about server procurement and/or workload migration.	47%	56%
It does not influence decisions about server procurement and/or workload migration.	3%	6%

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | Return to original figure

Appendix: Supplemental Data (continued)

FIGURE FROM PAGE 13

Which server automation capabilities does your organization currently have?

	Smaller Organizations: 1,000–4,999 Employees	Larger Organizations (5,000+ Employees)
Data protection	77%	69%
Monitoring and retraining	59%	68%
Systems management	78%	76%
Integrated security	68%	77%
Analytics and reporting	72%	73%
Life-cycle management	60%	53%
Automated provisioning/ deprovisioning	57%	46%

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | Return to original figure

FIGURE FROM PAGE 14

What factors play into the decision to change or add server vendors?

	Smaller Organizations: 1,000–4,999 Employees	Larger Organizations: 5,000+ Employees
Security	61%	47%
Innovation	34%	39%
Energy efficiency	34%	44%
Competitive pricing	34%	44%
Service expectations	34%	25%
Product fit	34%	31%
Serviceability	27%	36%
Environmental, social, and governance goals	20%	19%

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | Return to original figure

FIGURE FROM PAGE 15

Where will your organization most likely procure its new servers from in the next two years?

	Smaller Organizations: 1,000–4,999 Employees	Larger Organizations: 5,000+ Employees
We will procure new servers from our existing server vendor.	51%	45%
We will consider/procure new servers from an alternative server vendor.	37%	27%
We will procure new servers from our existing server vendor and from an alternative vendor.	11%	25%
Not sure	1%	3%

n = 200; Source: IDC's *Intel-Dell Server Refresh and Upgrade Survey,* March 2025 | Return to original figure

About the IDC Analyst

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Chris Drake is senior research director within IDC's Worldwide Infrastructure Research organization and is part of the Compute Infrastructure and Service Provider Trends practice. As part of the compute infrastructure research, Drake covers key trends in the computing systems, platforms, and technologies markets. This includes high-end, accelerated, in-memory, and heterogeneous computing infrastructure systems, platforms, and technologies.

More about Chris Drake

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