

AI and Security Redefine the Future of Server Environments

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Research Objectives

In the digital era of business, server infrastructure provides the foundation for everything from empowering new innovation, to driving internal operations, to enabling customer engagement. As business transitions into an age defined by AI, organizations are turning to their IT leaders to modernize their compute infrastructure to serve the future of application demands.

To gain insight into how these server environments must evolve to empower a new, likely AI-based, application era, and how strategies related to the deployment and migration of applications are affected, TechTarget’s Enterprise Strategy Group surveyed 350 IT professionals from small and medium-sized organizations (SMBs; 50-750 employees) worldwide who are knowledgeable about their organization’s purchase process for storage, servers, and client technology solutions.

THIS STUDY SOUGHT TO:

Measure the needs of modern server environments for SMBs worldwide.

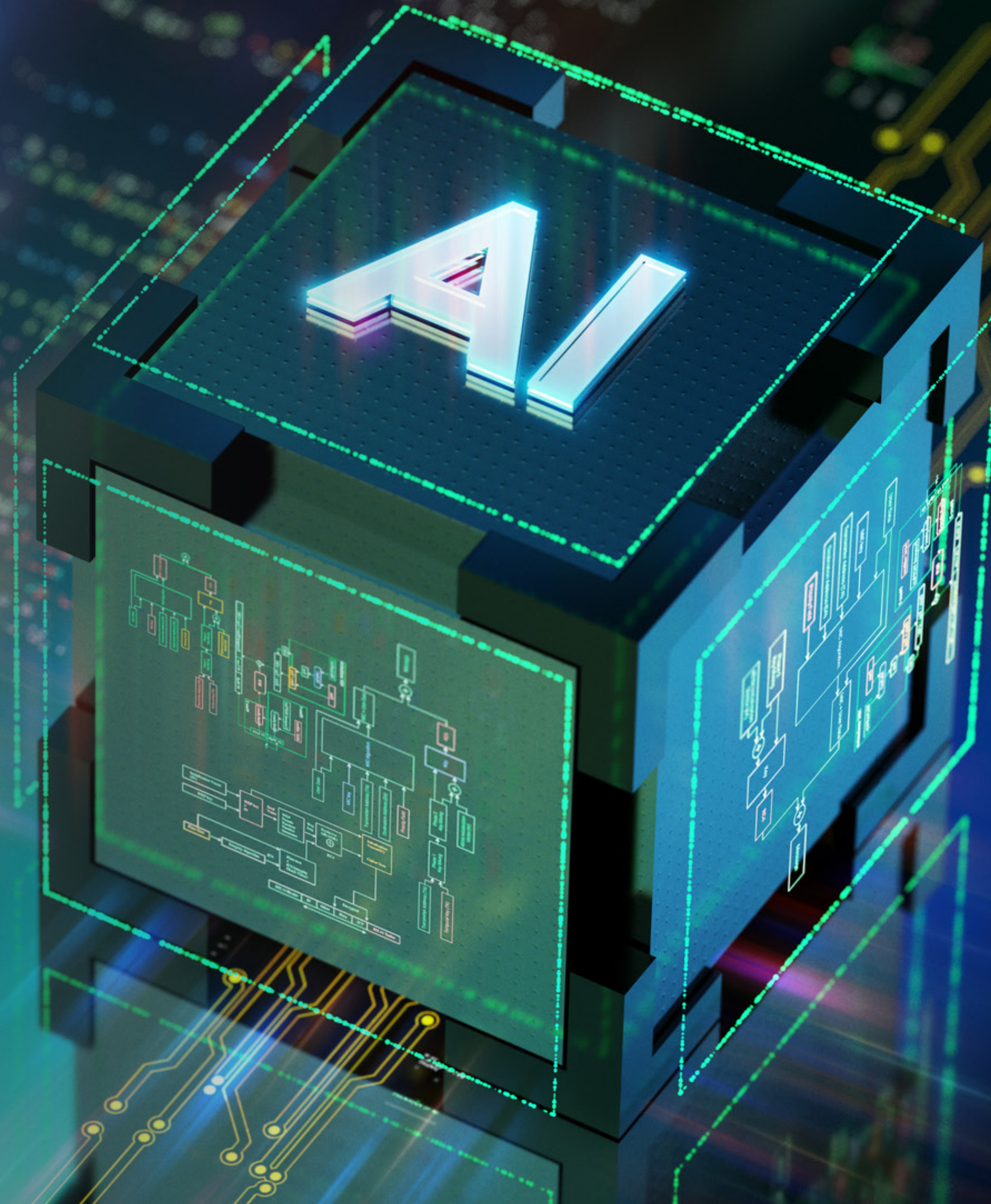
Predict the direction of future server infrastructure investments and the impact of AI, security, and hybrid cloud technologies on application environments.

Examine how AI is affecting the key requirements for server environments in the cloud and on premises.

Validate the role of IT in driving business goals as well as the value of and preferences for on-premises and cloud server solutions and services to assist in meeting application goals.



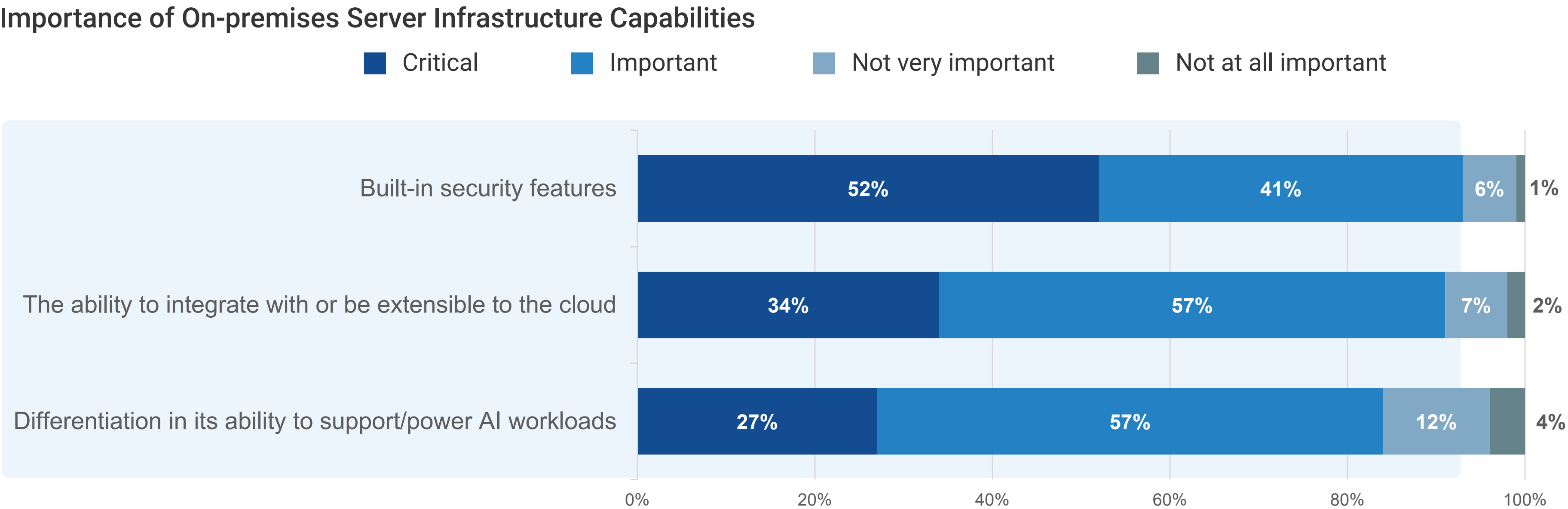
AI Is Fueling Server Modernization



“As SMBs seek to modernize their server environments, **over 80% deem integrated security, hybrid cloud, and the ability to power AI workloads as either critical or important.**”

Security, Hybrid Cloud, and AI Define a New Era of Server Investment

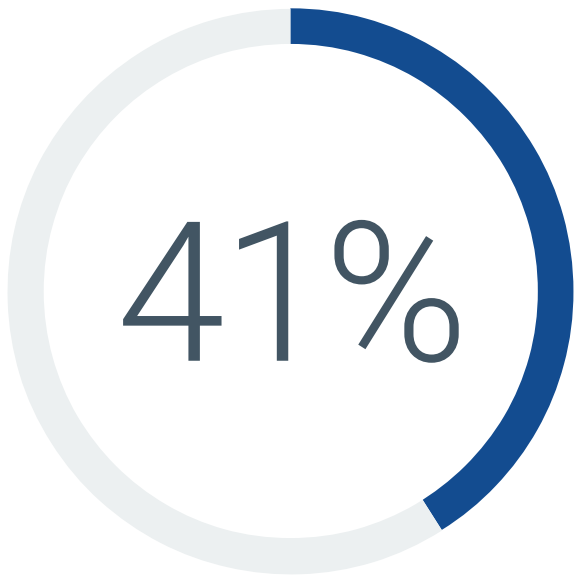
As SMBs seek to modernize their server environments, over 80% deem integrated security, hybrid cloud, and the ability to power AI workloads as either critical or important. The traditional metrics of availability, performance, and cost, while still important, are not sufficient in purchase decisions.



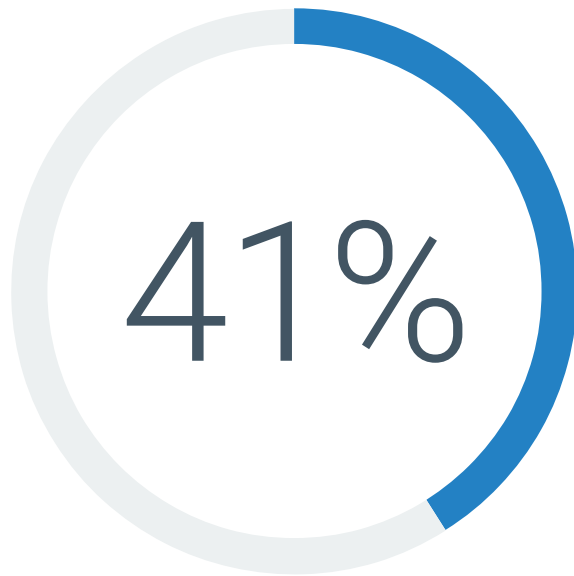
Server Investment Priorities Into 2025 Span Hybrid Cloud, Public Cloud, and Data Center Environments, With a Focus on AI

AI is transforming the application landscape, how SMBs budget for server technology, and which features they prioritize, including security and AI-optimization.

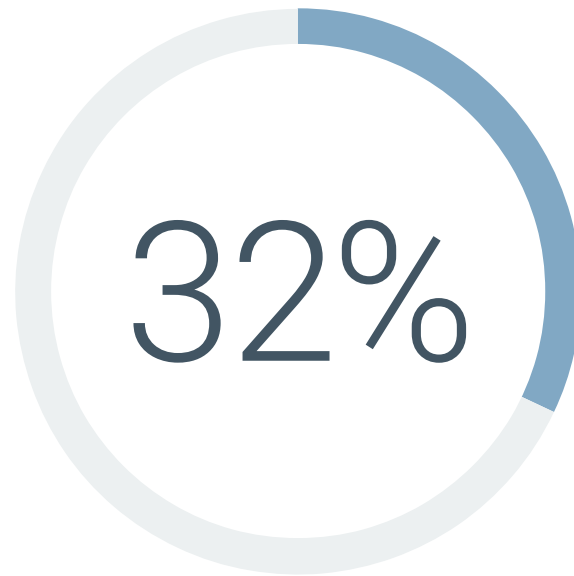
Server/Compute Infrastructure and Management Technology Investment Priorities Over the Next Year



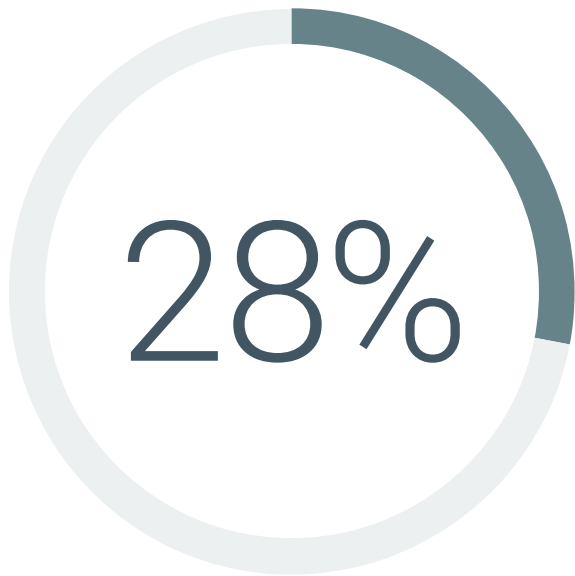
Hybrid cloud infrastructure



Off-premises cloud computing infrastructure (IaaS/PaaS)



AI-optimized servers with diverse GPU options



Data center compute infrastructure



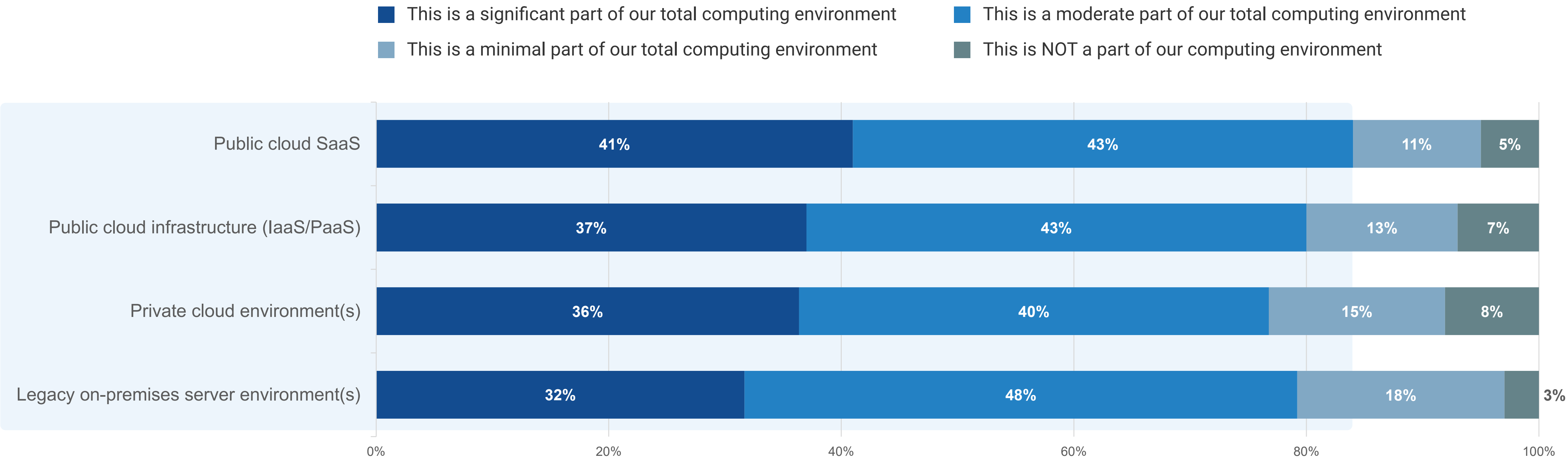
**As Modern Server
Environments Span
Hybrid/Multi-cloud,
Data Center Environments
Offer Strategic Value**



The Modern Server Ecosystem Spans Data Centers and Clouds

Most SMBs report using all infrastructure types or locations: More than 75% said each environment is at least a moderate part of their total computing environment. A capable and modernized application environment requires the flexibility of multiple deployment options, on and off premises.

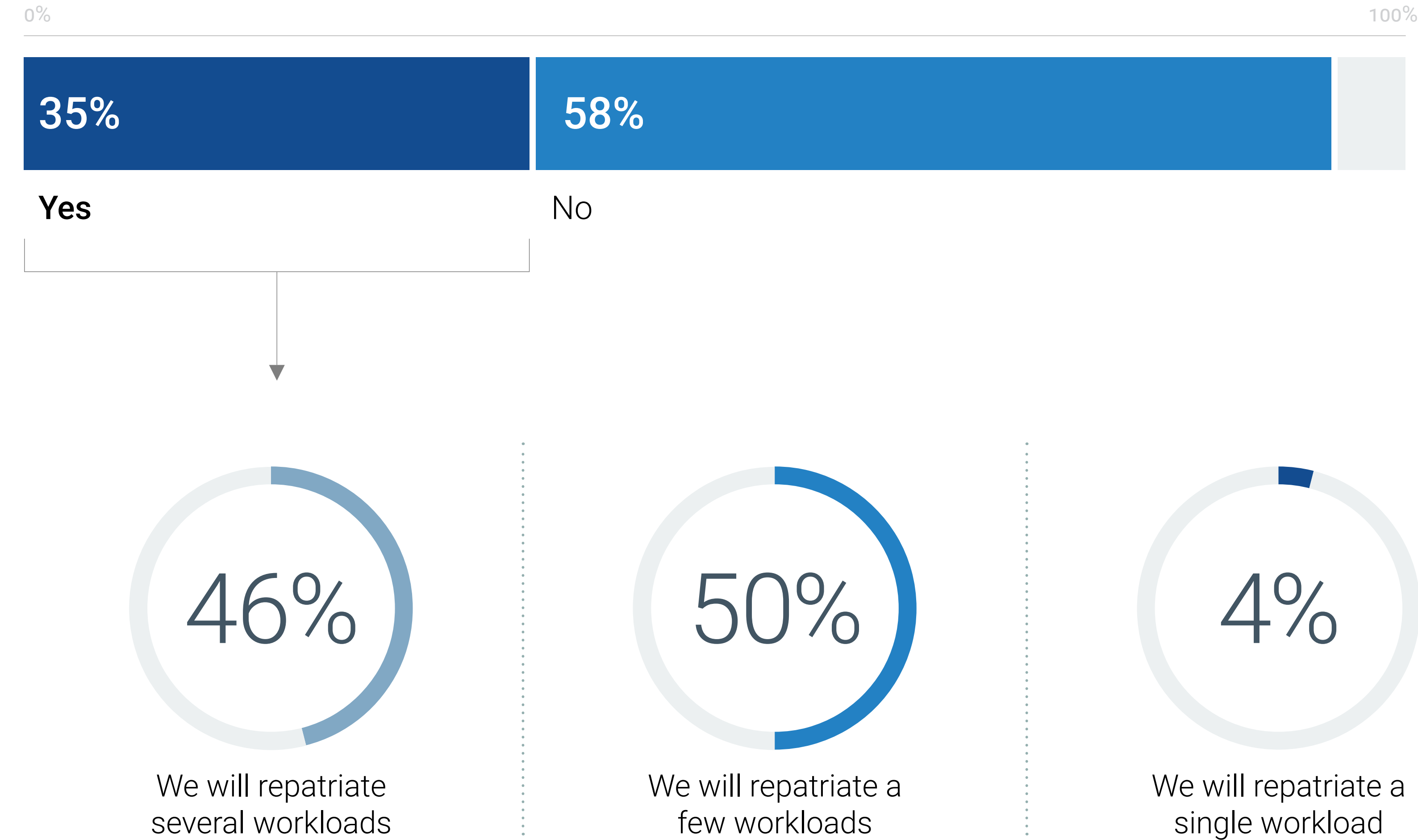
How Organizations Deliver Applications and Services to End Users and Customers

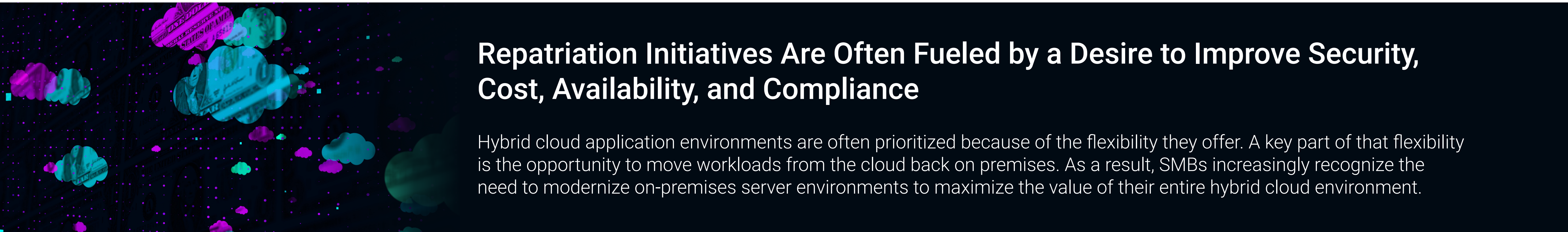


As Modern Application Environments Span On- and Off-Premises Locations, Organizations Often Bring Workloads Back to the Data Center

More than one-third of organizations will repatriate IaaS-hosted workloads this year. Of those repatriating workloads, it is an almost ubiquitous expectation that multiple workloads will be repatriated. These initiatives highlight a reality that, in modern hybrid cloud environments, application migrations happen in both directions as organizations seek to optimize their entire application environment.

Cloud-resident Workload Repatriation Plans Over the Next Year

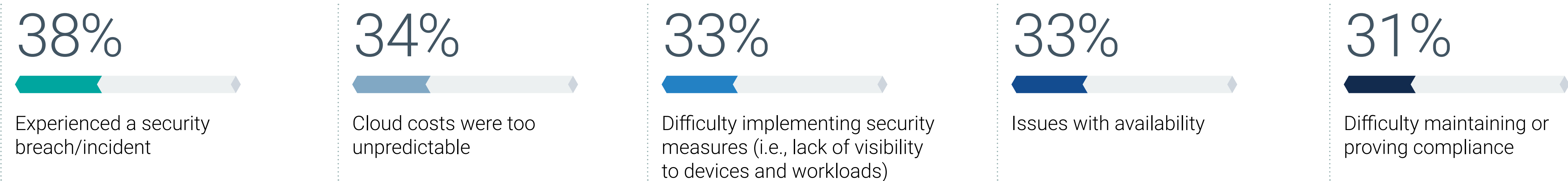




Repatriation Initiatives Are Often Fueled by a Desire to Improve Security, Cost, Availability, and Compliance

Hybrid cloud application environments are often prioritized because of the flexibility they offer. A key part of that flexibility is the opportunity to move workloads from the cloud back on premises. As a result, SMBs increasingly recognize the need to modernize on-premises server environments to maximize the value of their entire hybrid cloud environment.

Top Five Reasons for Workload Repatriation



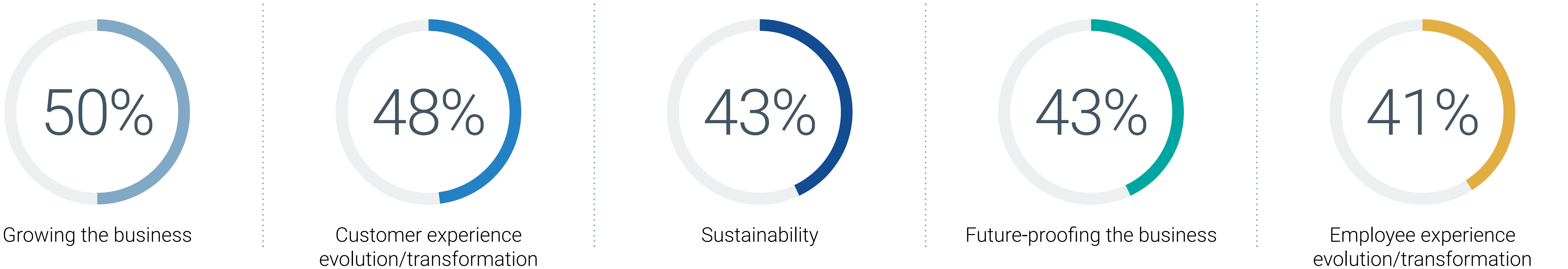
IT Teams Are Leading Digital Business Initiatives and AI via Server Modernization



IT Teams Are Often Tasked With Driving Business Growth and Improving Customer Experience

Modern business is digital. As a result, SMBs are relying on IT to lead their transformation efforts. AI will likely play a central role in IT’s plans to help create a stronger business that better engages with its customers.

Top Business Priorities Over the Next 12-24 Months



Faced With the Need to Drive the Business, Over 40% of the IT Budget Is Allocated to Net-new Investment

As businesses increasingly prioritize AI and security, IT is asked to lead these initiatives with new investment both on and off premises.

The adoption of secure server technology that can best enable AI presents a strong opportunity for IT to lead their organizations and best position themselves to be able to support the future of AI-enabled applications.

Allocation of the Overall 2024 IT Budget





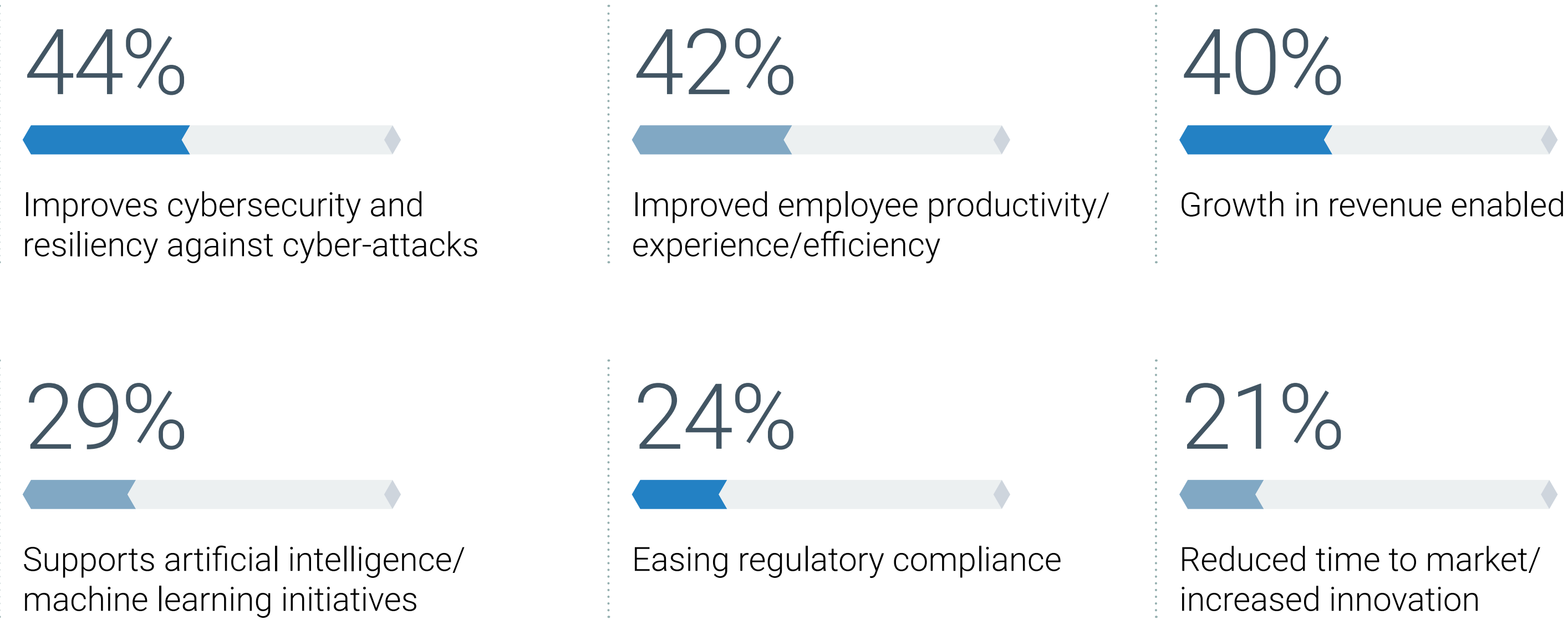
While Security, Productivity, and Revenue Still Drive IT Budgets, AI, Compliance, and Innovation Also Rank Among Top Funding Justifications

Nearly 1 in 3 identify AI/ML as one of their most important justifications for new IT investment.

Given their broad applicability, security, productivity, and revenue top this list. AI's inclusion, however, highlights an understanding of the massive opportunity AI presents.

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Top Justifications for New IT Investment Over the Next Year





Conclusion

The future of business applications will be driven by AI, along with a need for integrated security and the usage of hybrid cloud environments. These three initiatives have become must-have features for modern server environments. As SMBs increasingly rely on IT to be the leader for the business in both growth and customer engagement, server technology that has built-in functionality to improve security and better support AI is crucial to success.

How Dell Technologies, Intel and Microsoft can help

In this age of rapid change, modern data centers must continuously evolve to handle complex tasks like AI and ML. Choosing Dell Technologies to modernize your server infrastructure means leveraging trusted, co-engineered solutions from Dell, Intel, and Microsoft. PowerEdge XE servers are acceleration-optimized, purpose-built for Artificial Intelligence (AI), Generative AI (GenAI), and High Performance Computing (HPC). With superior acceleration and diverse GPU options, these powerful platforms are optimized to turn ideas into action faster.

Accelerate with Intel® Xeon® Processors

With Intel’s advanced technologies embedded in Dell solutions, you can expect world-class performance, optimized workloads, and efficient power usage. Featuring Intel’s Xeon processors, PowerEdge now offers servers that can be easily installed in or outside the data center. They include a range of GPU-optimized models that can support a variety of AI use cases and mark a significant leap forward in computing power and sustainability creating a major performance uplift for AI workloads from edge to core. Intel’s processors and security features are designed to optimize AI capabilities and protect against evolving threats, ensuring that businesses have the power and protection they need to succeed.

Modernize with Windows Server 2022, the cloud-ready operating system that boosts on-premises investments with hybrid capabilities.

Advanced multilayer security in Windows Server 2022 provides the comprehensive protection that servers need today. It includes enhanced security features with secured-core server and secure connectivity and supports advanced protection and preventative defense mechanisms, ensuring data integrity and compliance. The cloud-ready operating system boosts on-premises investments with hybrid capabilities, allowing seamless integration with Azure services.

This collaboration ensures a streamlined, secure, and sustainable infrastructure, empowering businesses to excel in data-intensive and AI-driven environments. Discover how you can accelerate your transformation with a diverse range of servers optimized for the latest workloads with Dell, Intel, and Microsoft.

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