Embracing ITaaS For Adaptability And Growth

Strategies For Simplifying Complex Hybrid Cloud Environments

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Executive Summary

IT infrastructure can either inhibit or accelerate a company's ability to seize a new opportunity and keep up with ever-changing customer needs. Many infrastructure leaders feel locked into complex technology environments that cannot scale up or down quickly, securely, or economically. This, in turn, places a heavy burden on internal IT staff and prevents the level of agility needed in today's competitive environment. As more of their infrastructures and workloads shift to the cloud, leaders want to simplify their approaches by implementing managed infrastructure services that better support their need for modern, resilient, and cost-effective technology delivery.

In the spring of 2023, Hitachi Vantara commissioned Forrester Consulting to examine the evolution from traditional IT infrastructure purchase/lease models to IT as a service (ITaaS) with subscription- and consumption-based models. To explore this topic, Forrester conducted an online survey with 213 IT infrastructure decision-makers primarily from midsize organizations in North America and Europe. We found that new adoption is being driven by the need to deliver technology faster, to more places, more reliably, and more sustainably.

Key Findings

Modern companies turn to the cloud for speed and flexibility. To deliver dependable services that can quickly adjust to the market, organizations need flexibility, scalability, and business-model innovation. Increasingly, the cloud is a means by which companies pursue these ambitions. While leaning into hybrid cloud strategies, companies are accelerating the modernization of their technology capabilities with cloud-based practices.[1] This includes moving toward a cloud operating model for managing traditional, cloud-native, and mission-critical apps and workloads.

ITaaS models support modernization priorities. Making the disparate elements of a hybrid cloud strategy work together is a significant challenge. ITaaS solutions simplify IT infrastructure management and help enterprises progress along their modernization journeys with greater ease. Improved security, 24/7 accessibility, cloud data storage, and adoption of consistent data fabrics are drivers that have already led 73% of leaders' organizations to implement ITaaS.

The right partner can smooth the ITaaS transition. Leaders expect to meaningfully increase the portion of their infrastructure budgets dedicated to ITaaS in the next three years, so selecting the right ITaaS vendor is crucial. Leaders place high value on partners that reduce their organization's operational burden, boost its ability to deploy business solutions quickly, and enable it to drive innovation without being weighed down by legacy systems and operations.

Enterprises Must Modernize Infrastructure To Tame Complexity And Drive New Value

The cloud computing era has put technology leaders under pressure to deliver always-on capabilities, limitless on-demand capacity, and proactive resilience in the face of outage and failure.[2] Yet complexities navigating a hybrid cloud reality, rising security and compliance risks, and budget constraints make delivering on this promise efficiently and effectively a tall order. It is now essential that infrastructure leaders address these challenges with modern IT infrastructure and cloud-friendly practices and operating models to:

- **Transform IT into an engine for business growth.** Enterprises typically spend more of their IT budgets — a large portion of which is dedicated to infrastructure — on maintaining aging systems than on growing or transforming their IT practices.[3] Yet leaders sorely need modernized infrastructure that supports flexibility, scalability, and innovation to help them seize a new opportunity, keep up with demand, or decommission technology when demand for a particular product is reduced. Through modern, cloud-inspired infrastructure that can scale up or down according to business needs, leaders can realize much-needed agility, allowing them to direct resources to high-value initiatives rather than mundane management and maintenance tasks.

- **Simplify IT management to enable adaptability.** Complex technology systems are an obstacle to scalability and are inherently fragile. Infrastructure leaders need dependable, resilient technology that can adapt to any situation or disturbance on demand, including situations such as an inability to physically access a data center, escalating risk of cyberattack, workplace changes like a sudden shift to working from home, or capturing the opportunity to be first to market with a new product.[4] By simplifying infrastructure management through cloud-based solutions, leaders can quickly and securely reconfigure capabilities to meet new customer and business needs and, in turn, accelerate business growth.

IT INFRASTRUCTURE FRICTION CARRIES HIGH COSTS

Eight out of 10 leaders describe their ability to better scale IT to the business and simplify IT infrastructure management as "very important" or "critical," but they face barriers in bringing this vision to life (see Figure 1.) While scaling digital capabilities into cloud environments opens up business opportunities, it also exposes the business to more security risks. It should come as no surprise that managing security considerations is a top obstacle. Another common challenge is that legacy solutions often lack the flexibility to address modern business needs, which leads to many of the reported pain points. Data is locked into those systems, and transitioning to new platforms is difficult and expensive. This slows new technology implementation. Businesses end up being tied to siloed, on-premises platforms that limit their growth.

FIGURE 1

Top Five IT Infrastructure Pain Points
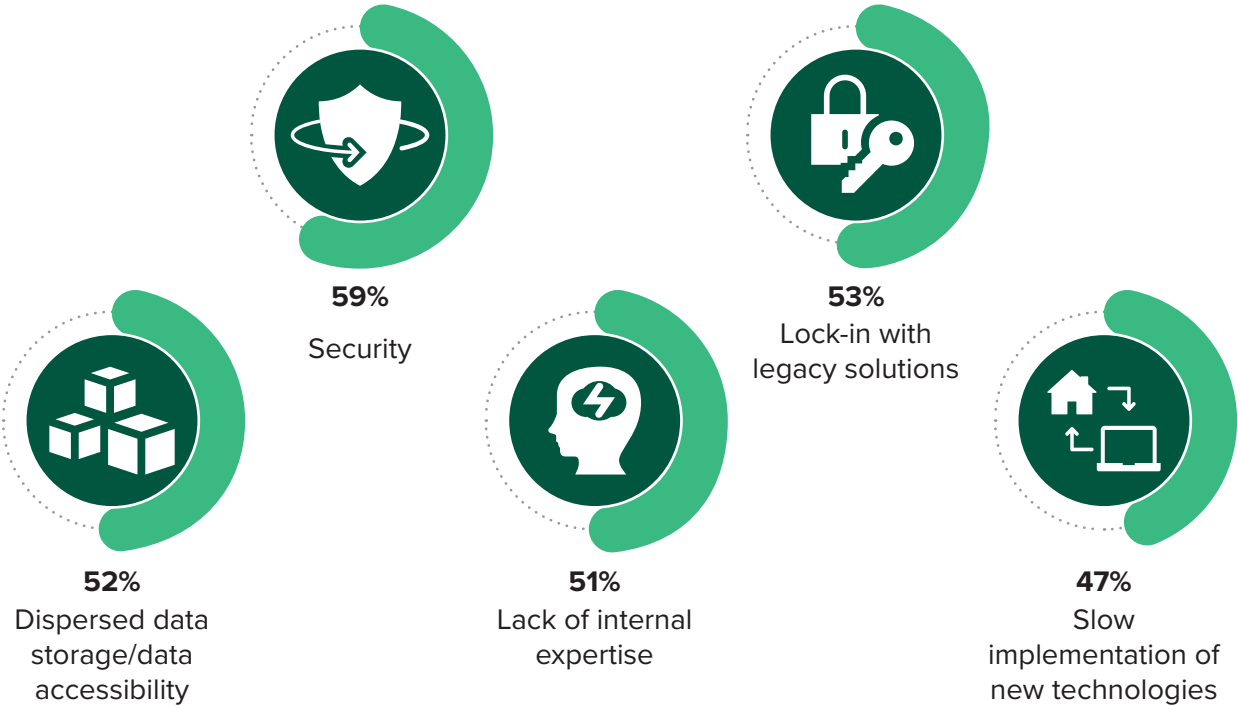
59%
Security

53%
Lock-in with legacy solutions

52%
Dispersed data storage/data accessibility

51%
Lack of internal expertise

47%
Slow implementation of new technologies

Base: 213 IT infrastructure decision-makers at organizations in North America and Europe
Note: Showing percent who ranked each option within their top five.
Source: A commissioned study conducted by Forrester Consulting on behalf of Hitachi Vantara, May 2023

An inability to mitigate these challenges leads to a myriad of negative consequences. Fifty-six percent of decision-makers said their organization experiences technology downtime that can have devasting financial, compliance, and reputational impacts (see Figure 2). Many also face difficulties with data insights and protection, high costs, and an inability to navigate their complex cloud landscapes. As overstretched IT teams scramble to address these technology problems, organizations have few resources left to drive innovation and adequately respond to the market.

FIGURE 2

Infrastructure Complexity Leads To High Direct And Indirect Costs To The Business
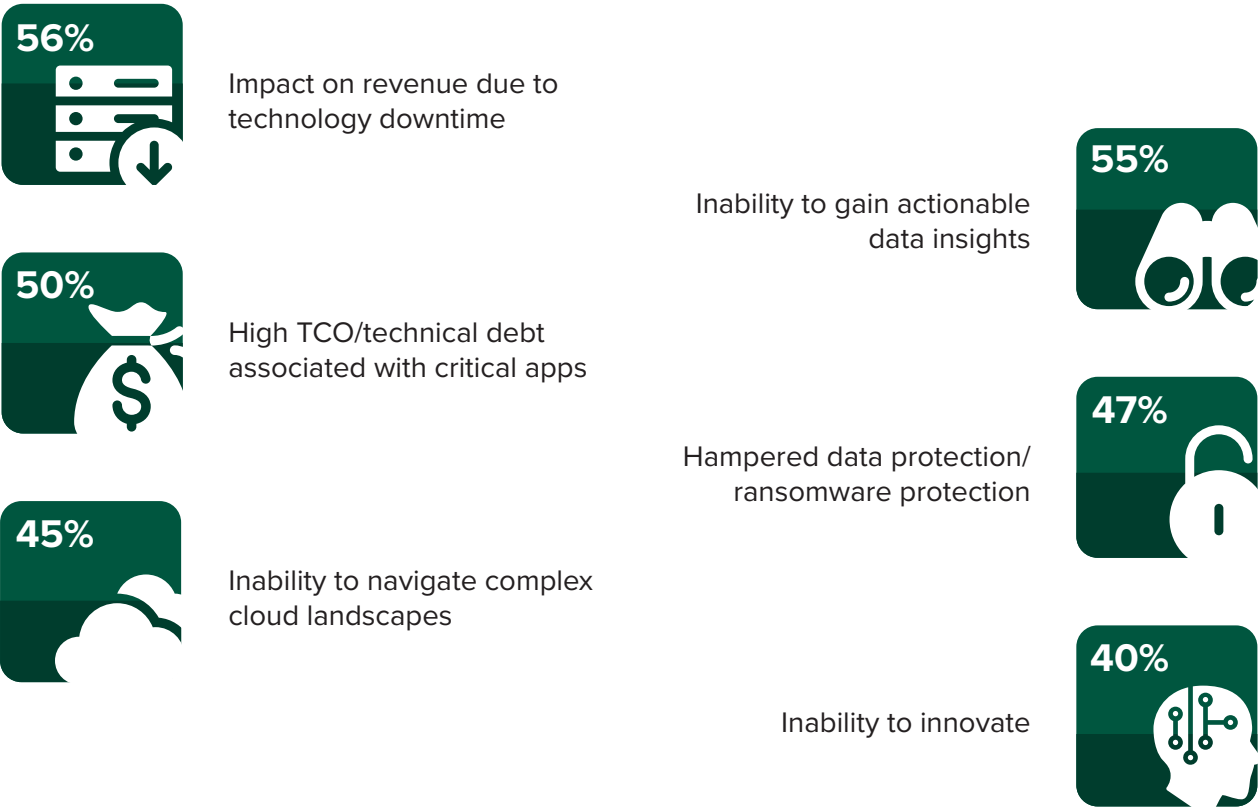
56% Impact on revenue due to technology downtime

50% High TCO/technical debt associated with critical apps

45% Inability to navigate complex cloud landscapes

55% Inability to gain actionable data insights

47% Hampered data protection/ ransomware protection

40% Inability to innovate

Base: 213 IT infrastructure decision-makers at organizations in North America and Europe
Source: A commissioned study conducted by Forrester Consulting on behalf of Hitachi Vantara, May 2023

Decision-makers are making infrastructure modernization a top priority. A big part of modernization is moving toward a cloud operating model that cohesively coordinates mission-critical, cloud-native apps alongside traditional enterprise workloads. Modernized operations facilitate rather than impede innovation, build resilience into systems to enable business continuity, simplify complexity, lean on analytics to improve decision-making, and focus attention and resources where they are most needed.[5] ITaaS can bring these modernization goals to fruition.

> ITaaS is a managed infrastructure service delivered either through a subscription with monthly payments or consumption models with cost based on use that can scale up or down based on need.
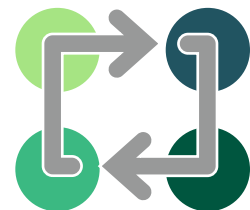
Purchased/leased infrastructure is still used in several areas. For example, at least a third of respondents report using it for storage, network, compute, and database solutions. However, ITaaS subscription and consumption-based models are taking hold and are expected to grow (see Figure 3). Seventy-three percent of respondents said their organization has adopted ITaaS for one or more infrastructure solution, and 42% said their organization is expanding adoption.

FIGURE 3

ITaaS Adoption Is Gaining Momentum

"For each of these IT infrastructure solutions, what is your organization's current adoption model?"
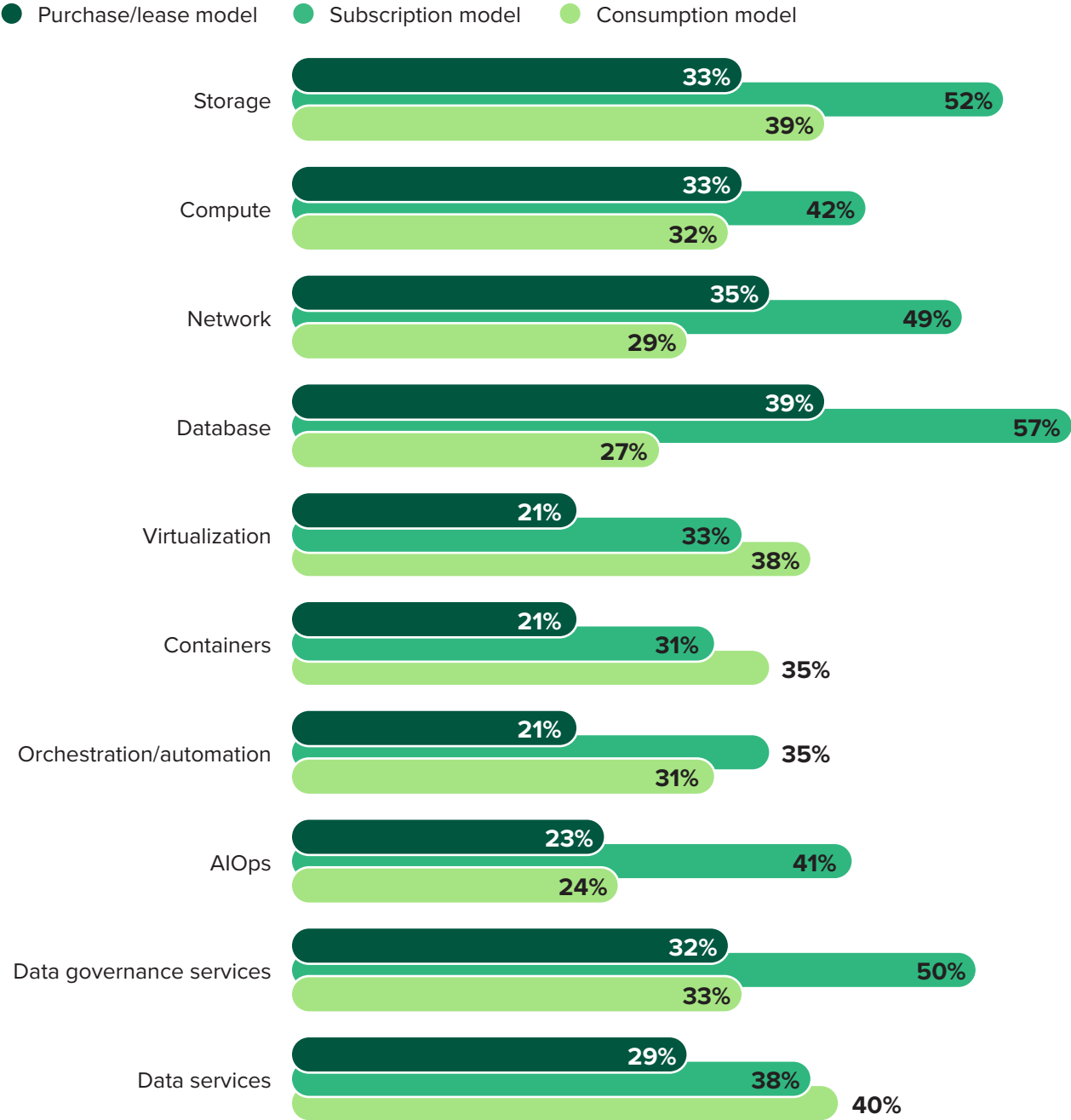
● Purchase/lease model ● Subscription model ● Consumption model

Storage
- 33%
- 52%
- 39%

Compute
- 33%
- 42%
- 32%

Network
- 35%
- 49%
- 29%

Database
- 39%
- 57%
- 27%

Virtualization
- 21%
- 33%
- 38%

Containers
- 21%
- 31%
- 35%

Orchestration/automation
- 21%
- 35%
- 31%

AIOps
- 23%
- 41%
- 24%

Data governance services
- 32%
- 50%
- 33%

Data services
- 29%
- 38%
- 40%

Base: 213 IT infrastructure decision-makers at organizations in North America and Europe
Source: A commissioned study conducted by Forrester Consulting on behalf of Hitachi Vantara, May 2023

ITAAS SOLUTIONS DELIVER VALUE WHERE IT'S NEEDED MOST

Decision-makers cited a host of factors that motivated their organizations to transition from purchase/lease models to ITaaS (see Figure 4). These drivers were most often a direct response to the benefits the organizations expected to see using ITaaS solutions. For example, businesses need flexible and secure access to their technology systems and data from anywhere and at any time. They also need fast access to expertise that can help them deploy new systems quickly. Notably, respondents' orga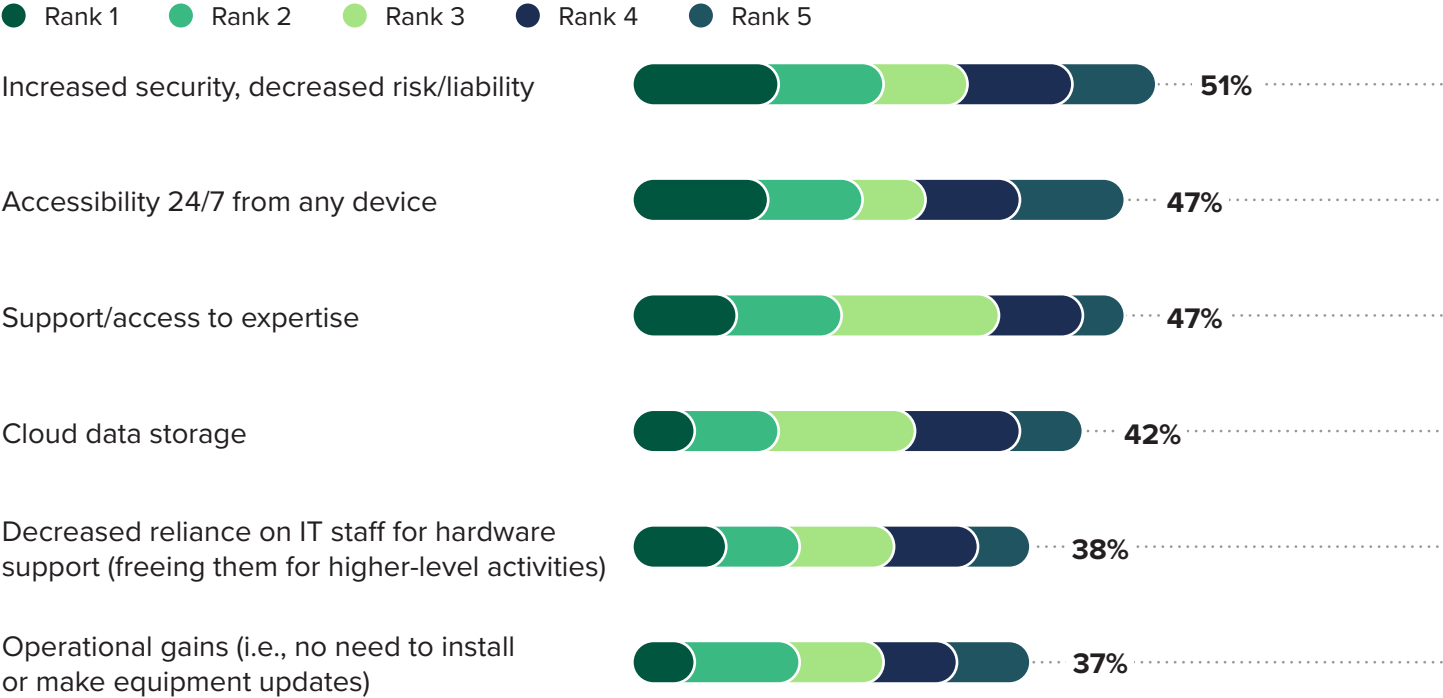nizations are not principally motivated by an expectation of cost savings. Instead, their businesses are adopting ITaaS to attain new capabilities that will accelerate velocity and growth.

FIGURE 4

Top ITaaS Adoption Drivers

"What factors were most impactful in starting the transition of some of your organization's IT infrastructure from a purchase/lease model to ITaaS?"

● Rank 1   ● Rank 2   ● Rank 3   ● Rank 4   ● Rank 5

Increased security, decreased risk/liability — **51%**

Accessibility 24/7 from any device — **47%**

Support/access to expertise — **47%**

Cloud data storage — **42%**

Decreased reliance on IT staff for hardware support (freeing them for higher-level activities) — **38%**

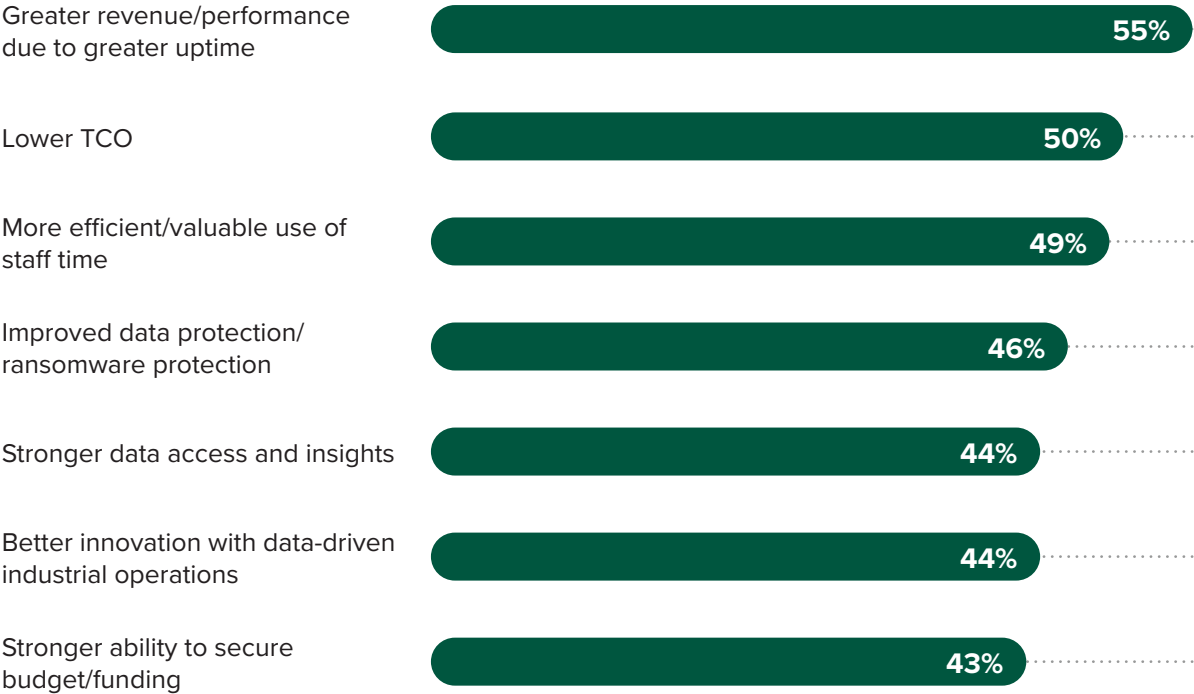Operational gains (i.e., no need to install or make equipment updates) — **37%**

Base: 156 IT infrastructure decision-makers at organizations in North America and Europe that have already implemented ITaaS
Source: A commissioned study conducted by Forrester Consulting on behalf of Hitachi Vantara, May 2023

ITaaS is valuable for delivering technology faster, to more places, more reliably, and more efficiently. Many decision-makers said their organization has already realized or expects to realize the following benefits from ITaaS adoption (see Figure 5):

FIGURE 5

Top Benefits Realized Or Expected From Implementing ITaaS

Greater revenue/performance due to greater uptime	55%
Lower TCO	50%
More efficient/valuable use of staff time	49%
Improved data protection/ ransomware protection	46%
Stronger data access and insights	44%
Better innovation with data-driven industrial operations	44%
Stronger ability to secure budget/funding	43%

Base: 213 IT infrastructure decision-makers at organizations in North America and Europe
Note: Showing percent of respondents who ranked options within their top five.
Source: A commissioned study conducted by Forrester Consulting on behalf of Hitachi Vantara, May 2023

- **Greater uptime.** ITaaS can help prevent revenue loss and reputational damage stemming from system interruptions. With ITaaS, systems are proactively monitored and managed. Proactive monitoring combined with a fast response driven by service-level agreements (SLAs) can improve IT uptime and minimize the risk of expensive problems.[6] Respondents from organizations that have not yet adopted ITaaS are much more likely to report a negative impact on their revenues (65% vs. 53%) and reputations (56% vs. 31%) due to system downtime than those from adopters.

- **Lower total cost of ownership (TCO).** It can be challenging to plan and budget for technology because things can change in a moment's notice. For example, events such as ransomware attacks or server failures can easily result in unplanned costs. To conserve capital budgets, IT leaders use ITaaS to shift their IT financing models to a set of operating costs that are easier to predict and budget for.[7] Decision-makers cited a 20% reduction in TCO on average.

- **More efficient use of in-house staff.** Instead of dedicating resources to deploying and running new technology assets, ITaaS users can leverage the technology to build value for their businesses and customers. ITaaS vendors provide users with access to teams of experienced professionals that can manage IT operations around the clock. These partners also keep users up to date on the latest technology and quickly and smoothly implement it.[8] This, in turn, frees up IT staff to focus on more strategic needs.

- **Improved data/ransomware protection.** With rising security threats, high-profile data breaches, and changing data privacy regulations, it's difficult to keep up with security and compliance issues. Compliance is especially imperative for businesses in e-commerce, retail, healthcare, education, and financial services to protect customers and avoid fines, legal penalties, and reputational damage. Companies can shift much of the security and compliance burden to ITaaS partners that can help with prevention, detection, and resolution.[9]

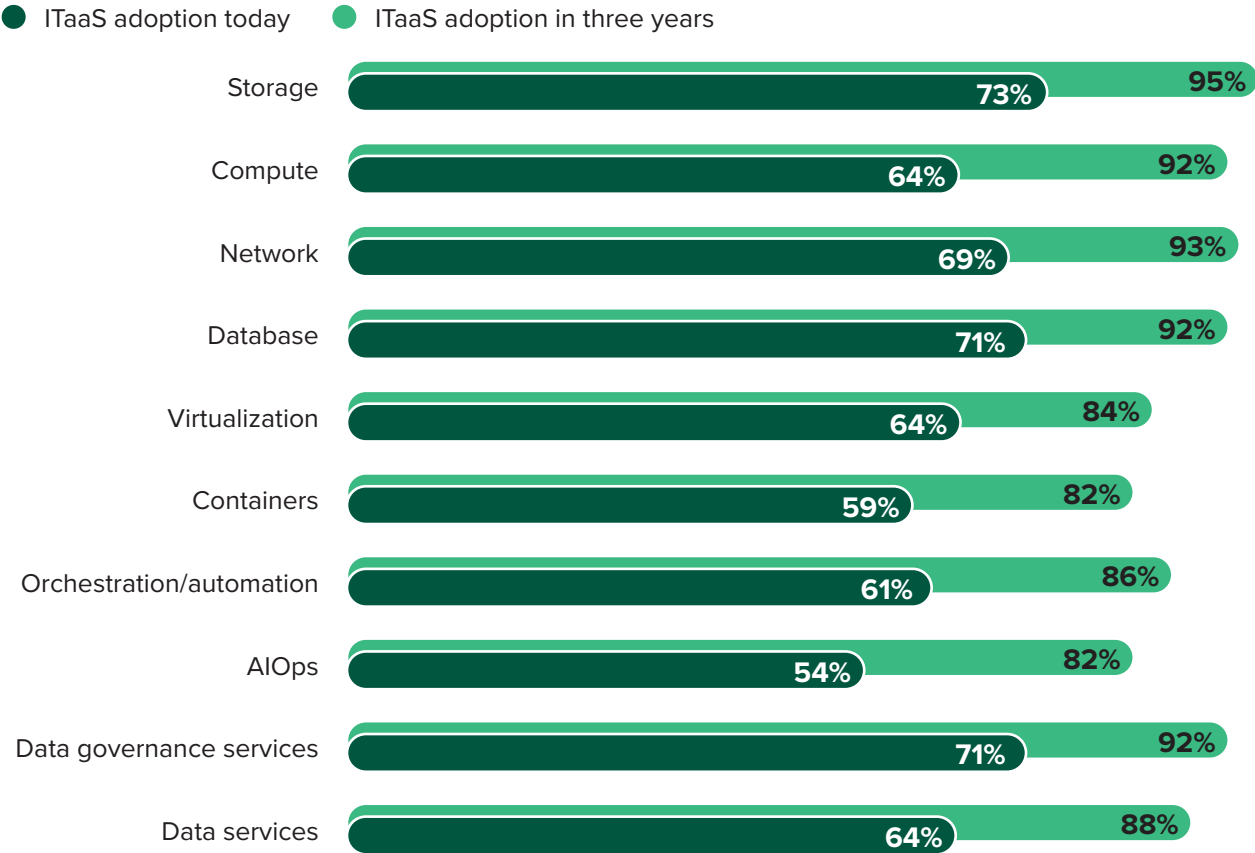## Leaders Will Fully Embrace ITaaS Models To Enable Adaptability And Growth

Decision-makers said their organizations intend to spend more on ITaaS in the near future. They estimated 22% of their IT infrastructure budgets will be dedicated to ITaaS in three years, which represents a 57% increase from current levels.

In line with the expected increase in ITaaS spending, respondents indicated that in three years:

- **Purchased/leased infrastructure usage will drop.** Purchase/lease models will still be in use, but decision-makers expect them to decrease across all 10 infrastructure solutions highlighted in our study. This drop could be as small as 6 percentage points (as is the case for virtualization) and as large as 21 points (for compute and network solutions).

- **ITaaS usage will grow and be optimized over time.** Respondents expect ITaaS adoption to meaningfully increase for each solution by between 20 points (in the case of virtualization) and 28 points (for compute and AIOps) (see Figure 6). They also expect the use of subscription models — which is prevalent today — to grow. However, future adoption expectations signal an optimization between subscription (unlimited usage) and consumption (pay-for-what-you-use) models depending on the characteristics of the type of service being used. As a result, consumption-based implementations will rival subscription-based ones for some solutions (e.g., compute) and far surpass them in others (e.g., virtualization, containers).

FIGURE 6

ITaaS Implementations Are Expected To Rise For A Range Of Solutions

● ITaaS adoption today   ● ITaaS adoption in three years

Solution	ITaaS adoption today	ITaaS adoption in three years
Storage	73%	95%
Compute	64%	92%
Network	69%	93%
Database	71%	92%
Virtualization	64%	84%
Containers	59%	82%
Orchestration/automation	61%	86%
AIOps	54%	82%
Data governance services	71%	92%
Data services	64%	88%

Base: 213 IT infrastructure decision-makers at organizations in North America and Europe
Note: Showing "Consumption model" and "Subscription model."
Source: A commissioned study conducted by Forrester Consulting on behalf of Hitachi Vantara, May 2023

- **ITaaS will permeate entire infrastructure categories.** Decision-makers not only expect ITaaS adoption to rise for individual solutions, but also across the entirety of various infrastructure categories (see Figure 7). For example, 56% report that their organization uses ITaaS for all its primary infrastructure today, and this value is expected to go up to 86% in three years. Respondents' adoption plans indicate that the advanced monitoring category will see the biggest boost in ITaaS adoption (a 70% increase). As more infrastructure and advanced technology services migrate to ITaaS, the solution will become a platform for businesses to innovate without the burden of managing legacy systems and operations.

FIGURE 7

ITaaS Is Expected To Spread Across Infrastructure Categories

INFRASTRUCTURE CATEGORIES

Business services	Advanced monitoring	Virtualization/ aggregation	Primary infrastructure
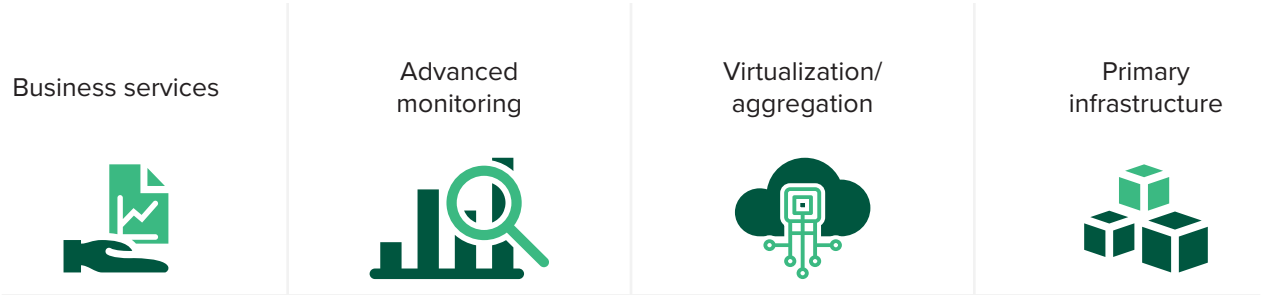
ITAAS ADOPTION FOR:

● Today ● In three years
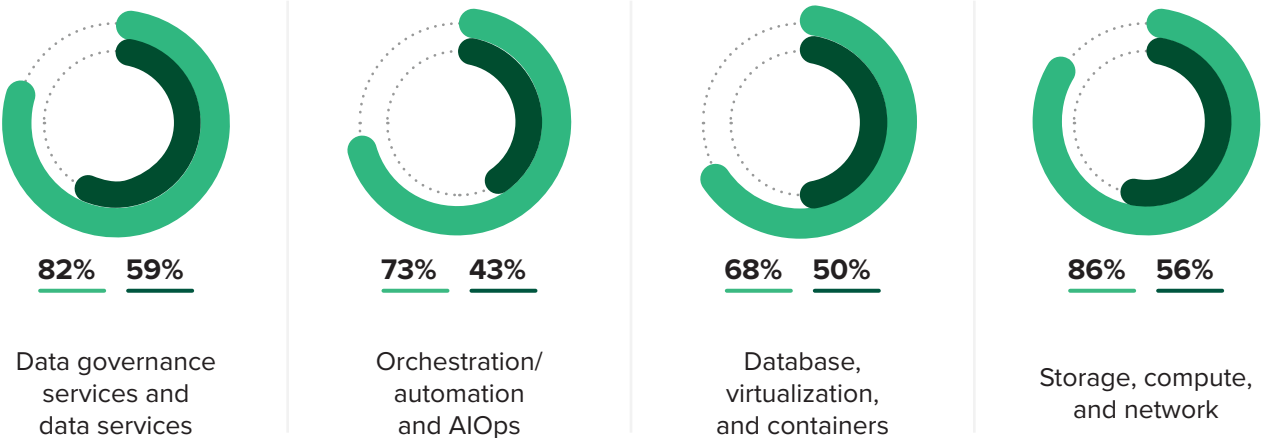
82% 59%	**73% 43%**	**68% 50%**	**86% 56%**
Data governance services and data services	Orchestration/ automation and AIOps	Database, virtualization, and containers	Storage, compute, and network

Base: 213 IT infrastructure decision-makers at organizations in North America and Europe
Source: A commissioned study conducted by Forrester Consulting on behalf of Hitachi Vantara, May 2023

THE RIGHT ITAAS VENDOR IS A STRATEGIC PARTNER

Given the value ITaaS provides and the expected increase in ITaaS investment, selecting an ITaaS vendor becomes a strategic concern. Leaders consider a range of financial, technical, and strategic factors when making this important decision (see Figure 8).

FIGURE 8

Top Criteria Leaders Take Into Consideration When Selecting An ITaaS Partner

● Rank 1 ● Rank 2 ● Rank 3 ● Rank 4 ● Rank 5

Price **44%**

SLA guarantees **44%**

Reliability **44%**

Innovation **43%**

Stability/size of provider **39%**

Services provided **34%**
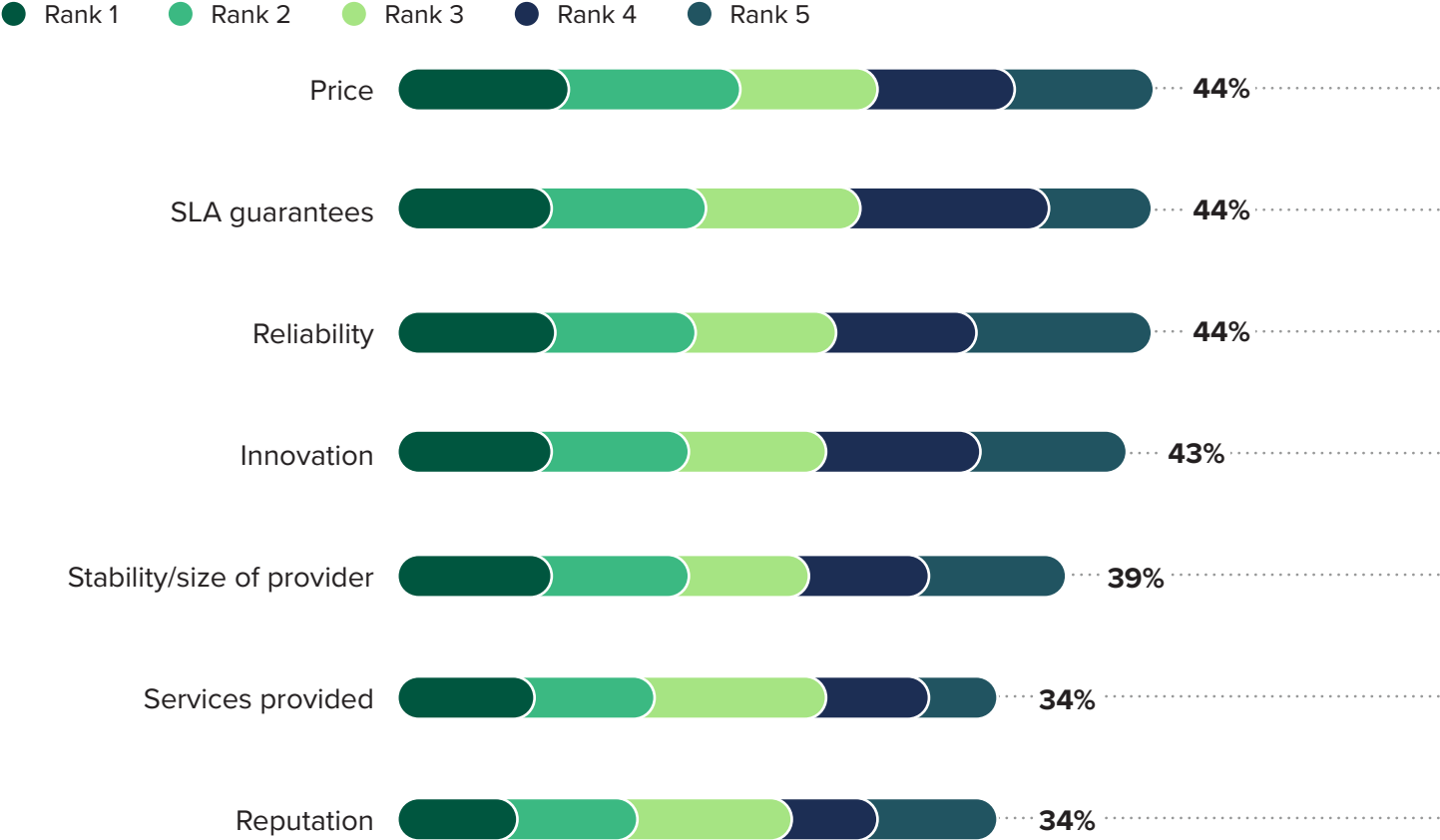
Reputation **34%**

Base: 213 IT infrastructure decision-makers at organizations in North America and Europe
Source: A commissioned study conducted by Forrester Consulting on behalf of Hitachi Vantara, May 2023

While price and SLA guarantees are the most common partner-evaluation criteria, leaders have long wish lists that go far beyond these traditional goals (see Figure 9). Among these wishes is that the partners have the ability to support their organizations' hybrid and multicloud strategies. Adopting a new technology platform like cloud can put stress on existing technology staffing capabilities. ITaaS partners can bring expertise and guidance about using cloud services effectively. A good ITaaS platform can also help optimize where workloads run across all infrastructure environments and provide information about usage, cost, and performance to improve technology delivery decision-making.

FIGURE 9

"In an ideal world, what would an ITaaS partner deliver to your organization?"

Support for cloud environments

Supports multicloud and hybrid cloud strategies

— Manufacturing director in Germany

Operational insights

Offers monitoring, analysis, and insights into the health of organizational infrastructure in real time

— Financial services VP in Canada

Strengthened compliance

Improves regulatory compliance and data governance

— Tech/tech services director in Canada

Deployment ease/speed

Simplifies software deployment and updates across the organization

— Financial services VP in the US

Access to experts

Supports access to specialized knowledge and services

— Manufacturing director in Germany

Improved security

Provides proactive monitoring and remediation of security vulnerabilities

— Tech/tech services director in the US

Business continuity

Ensures high availability and reliability of IT systems and services

— Transportation/logistics director in Canada

Performance and efficiency gains

Improves application performance and resource allocation

— Transportation/logistics director in Canada

Centralized control

Enables centralized management and control of IT assets
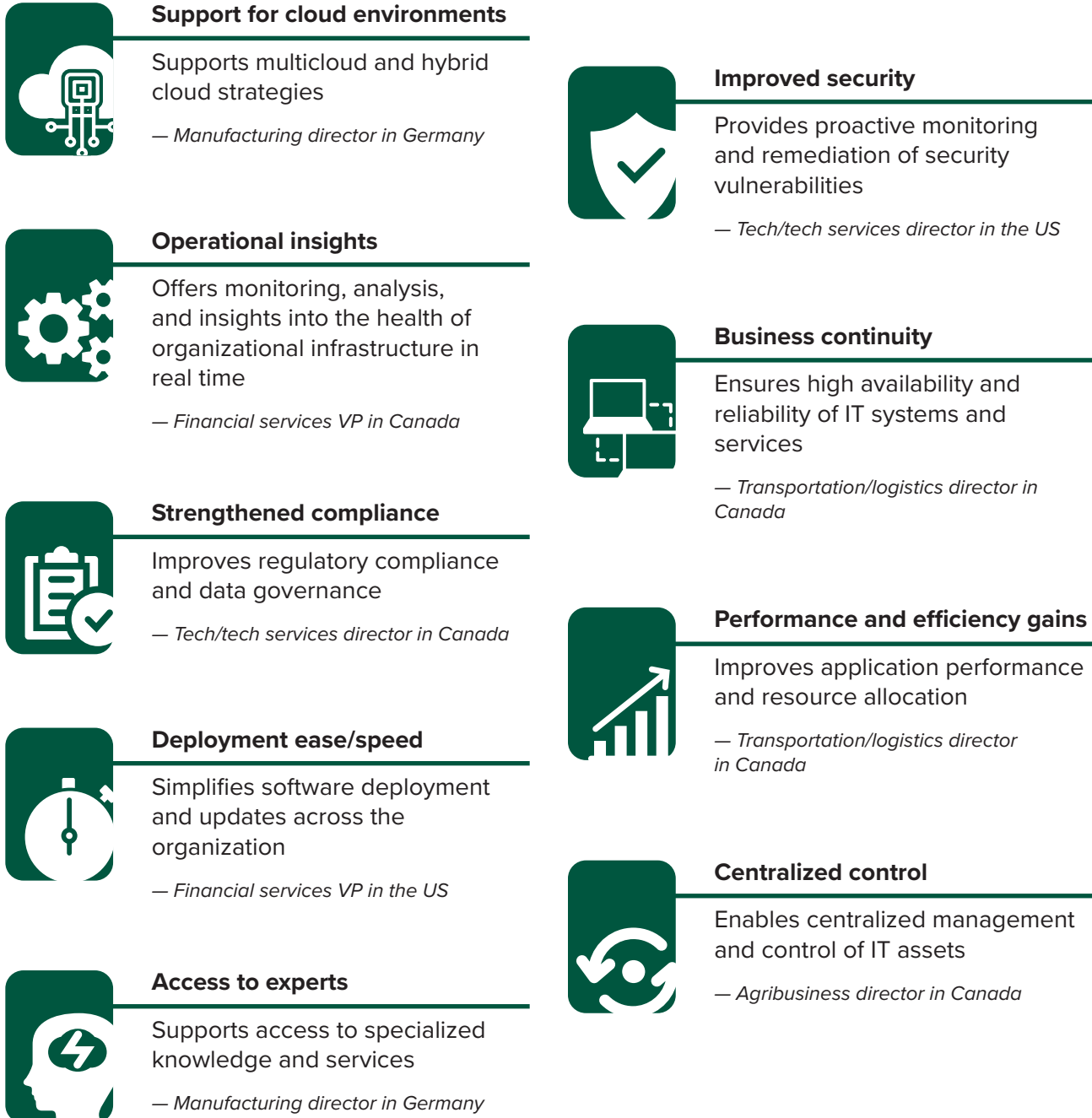
— Agribusiness director in Canada

Base: 213 IT infrastructure decision-makers at organizations in North America and Europe
Source: A commissioned study conducted by Forrester Consulting on behalf of Hitachi Vantara, May 2023

Ultimately, the ideal partner will help an organization simplify a complex technology environment, drive greater resiliency, accelerate modernization goals, and focus more on delivering customer value than on technology problems. Forward-looking partners also drive innovation as they create opportunities for consuming emerging technologies quickly without the challenge of learning how to manage and deploy those technologies internally.

> Current ITaaS users are more likely to make innovation capabilities a top consideration in a partner than those exploring ITaaS for the first time.

Key Recommendations

ITaaS platforms help offload the operational load of managing the technology services needed to address ever-changing customer needs. They play a crucial role in allowing businesses to focus resources on quickly and flexibly expanding existing revenue streams and capturing opportunities as they present themselves. Choosing the right ITaaS partner becomes a strategic concern for the business. Executives and IT leaders should work together to ensure the partners they choose expand their organizations' creativity, increase their adaptivity, and strengthen overall resilience in order to retain existing customers and win new ones.

Forrester's in-depth survey of 213 global infrastructure leaders about ITaaS models yielded several important recommendations:

Spend time up front when choosing the right partner.

Look for partners that are flexible and have knowledgeable staff, the service model you need, and great references. It can be difficult to change an ITaaS partner after adoption, so make sure to choose a company you can work with in the long run and that will support your business as it grows and changes over time.

Buy IT services that use the right model from day one.

Decision-makers from organizations that have adopted ITaaS solutions showed they plan on switching from subscription-based pricing models to consumption models for many of the services they use. Many IT professionals feel more comfortable buying a set amount of compute, storage, or other infrastructure even when moving to an opex purchasing model. But certain types of workloads, especially unpredictable ones, can leverage consumption-based models to save the business money.

Leverage your ITaaS partner for innovation and co-creation.

A good ITaaS vendor has seen initiatives from many different organizations and has experience in helping businesses leverage the composable services in their platforms to meet specific business needs and goals. Work with your ITaaS partner to co-create new solutions to old problems and accelerate your business.

Find a partner that can integrate easily.

Modern technology delivery is a team sport. Every technology strategy leverages many different vendors and solutions, especially in complex hybrid cloud environments. Look for ITaaS vendors that have a strong ecosystem of delivery partners and a collaborative ethos that will serve your company no matter where the data or workloads are hosted.

Appendix A: Methodology

In this study, Forrester conducted an online survey of 213 IT infrastructure decision-makers from organizations in North America and Europe that represent a range of industries to evaluate the current and future state of ITaaS adoption. Questions provided to the participants asked about IT infrastructure priorities and challenges, the value respondents see in ITaaS in addressing key themes, and desired qualities in an ITaaS partner. Respondents were offered a small incentive as a thank you for time spent on the survey. The study fielding began and was completed in May 2023.

Appendix B: Demographics

COUNTRY	
United States	**28%**
Canada	**23%**
United Kingdom	**19%**
Germany	**15%**
France	**15%**

ANNUAL REVENUE (USD)	
$100M to less than $500M	**15%**
$500M to less than $1B	**19%**
$1B to less than $5B	**30%**
$5B to less than $10B	**19%**
$10B or more	**17%**

TOP INDUSTRIES	
Financial services and/or insurance	**16%**
Telecommunications services	**13%**
Technology and/or technology services	**10%**
Retail	**10%**
Manufacturing	**8%**

SENIORITY	
C-level executive	**12%**
Vice president	**41%**
Director	**46%**

ROLE	
Technology delivery	**57%**
Technology procurement	**43%**

Note: Percentages may not total 100 due to rounding.

Appendix D: Endnotes

[1] Source: "The State Of IT Maturity, 2022," Forrester Research, Inc., September 14, 2022.

[2] Source: "Design For Dependability By Embracing A Future Of Trusted Technology," Forrester Research, Inc., February 25, 2019.

[3] On average, enterprises spend 59% of their IT budgets on maintaining the status quo, 25% on growing it, and 16% on transforming it. Source: "2022 Storage Benchmarks, Global," Forrester Research Inc., September 14, 2022.

[4] Source: "Build The Business Case For Modern, Resilient Operations," Forrester Research, Inc., August 2, 2021.

[5] Source: "Deliver Modern, Resilient Operations," Forrester Research, Inc., August 2, 2021.

[6] Source: "Understanding The Managed Service Provider Landscape," Forrester Research, Inc., December 23, 2020.

[7] Ibid.

[8] Ibid.

[9] Ibid.

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