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Streamlining Infrastructure And Operations: A Blueprint For Modernization

Consolidate And Streamline Infrastructure
To Increase Visibility And Accelerate Modernization

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Tech Leaders Future Vision Depends On Infrastructure Consolidation

Building a path toward modernization is an ongoing effort. Enterprise IT organizations are increasingly prioritizing the modernization of their infrastructure as a first step, followed by the modernization of their applications. To ensure their environment is ready for these advancements, organizations need to prepare their internal data to support these modernization efforts. To build a strong foundation for modernization, decision-makers are keen to invest in infrastructure that centralizes and streamlines their operations efforts. This strategic approach ensures that the foundational elements are robust and capable of supporting advanced, modern applications, as well as burgeoning AI capabilities.

Key Findings

IT decision-makers are laying the foundation for modernization, AI adoption, and improved employee productivity.

Their current infrastructure lacks operational consistency, scalability, and flexibility, further complicating their efforts to remain secure and compliant.

Respondents hope to consolidate their infrastructure and advance cloud-native development capabilities in order to modernize and improve data quality for AI adoption.

Prepare For The Future With Updates To Infrastructure, Data, And AI

Organizations are aware that modernization is one key to remaining competitive, but the paths to modernization are changing. Respondents say modernization with cloud and new computing architectures is a key priority for the coming year. In addition to updating the infrastructure, they plan to prioritize increasing the level of automation for operations and employee-centric workflows to deliver a more streamlined employee experience, as this is likely to enhance employee satisfaction and productivity. They are also keeping an eye on emerging technologies like AI and discovering how they can improve their ability to capture, transform, and deliver data at scale to prepare for increased AI adoption.

IT Priorities For The Next 12 Months

55%
Modernize with cloud and new computing architectures

53%
Increase the level of automation for employee workflows

51%
Capture, transform, and deliver data at scale for AI

50%
Increase the level of automation for operations

45%
Embrace modern application development techniques

43%
Deliver modern, resilient operations

Base: 220 IT infrastructure decision-makers in NA, EMEA, and APAC
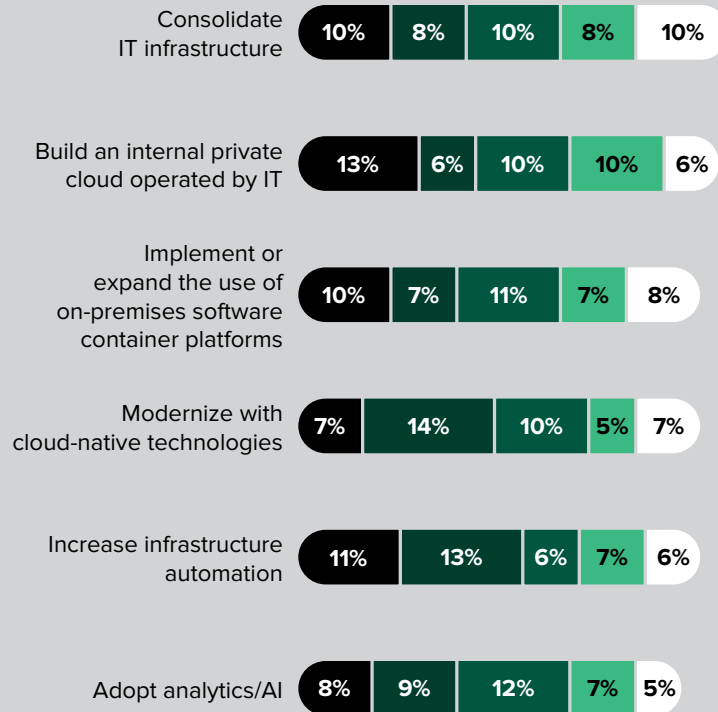Source: A commissioned study conducted by Forrester Consulting on behalf of Google, March 2020

Streamline Existing Operations Experience To Enable Modernization

Respondents are focusing on key initiatives that pave the way toward modernization. By prioritizing building an IT-operated internal private cloud, enterprises can reduce reliance on outside vendors and streamline their internal infrastructure without increasing maintenance and management burdens. The right approach includes implementing and expanding the use of on-premises software containers platforms and modernizing with cloud-native technologies that ease the management experience.

So while firms are moving toward consolidating their infrastructure, they are focusing on the tools and capabilities that work best for their organization and increasing automation in their infrastructure. These initiatives will help them move toward a streamlined mode of operation where their tools work together within their evolving cloud environment to reduce manual work/disconnected workflows for multiple stakeholders.

IT Priority Initiatives For The Next 12 Months

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

Consolidate IT infrastructure: 10% | 8% | 10% | 8% | 10%

Build an internal private cloud operated by IT: 13% | 6% | 10% | 10% | 6%

Implement or expand the use of on-premises software container platforms: 10% | 7% | 11% | 7% | 8%

Modernize with cloud-native technologies: 7% | 14% | 10% | 5% | 7%

Increase infrastructure automation: 11% | 13% | 6% | 7% | 6%

Adopt analytics/AI: 8% | 9% | 12% | 7% | 5%

Base: 220 IT infrastructure decision-makers in NA, EMEA, and APAC
Note: Showing top six responses
Source: A commissioned study conducted by Forrester Consulting on behalf of Google, March 2020

Current Infrastructure Challenges Hinder Modernization

Respondents are keen to modernize and consolidate their infrastructure as their current infrastructure is fraught with challenges. Tech respondents face the most friction with suboptimal app performance, followed by issues created by outdated infrastructure; 28% of the respondents rank meeting specific compliance requirements, a lack of operations consistency, and infrastructure scalability as key challenges. Twenty-six percent of them also rank the security vulnerabilities present within their infrastructure as a key challenge affecting their organization. While respondents are excited to modernize, their unreliable, inflexible, and vulnerable infrastructure is hindering their progression towards modernization maturity. Issues created by vulnerable and noncompliant architecture can be costly for a firm — both for their brand reputation and their bottom line.

Challenges With Current Infrastructure

(Showing top ranked responses)

28% Meeting specific compliance requirements

Consistency of operations **27%**

26% Scalability of aging infrastructure

Security vulnerabilities with infrastructure **26%**

19% Infrastructure silos

Base: 220 IT infrastructure decision-makers in NA, EMEA, and APAC
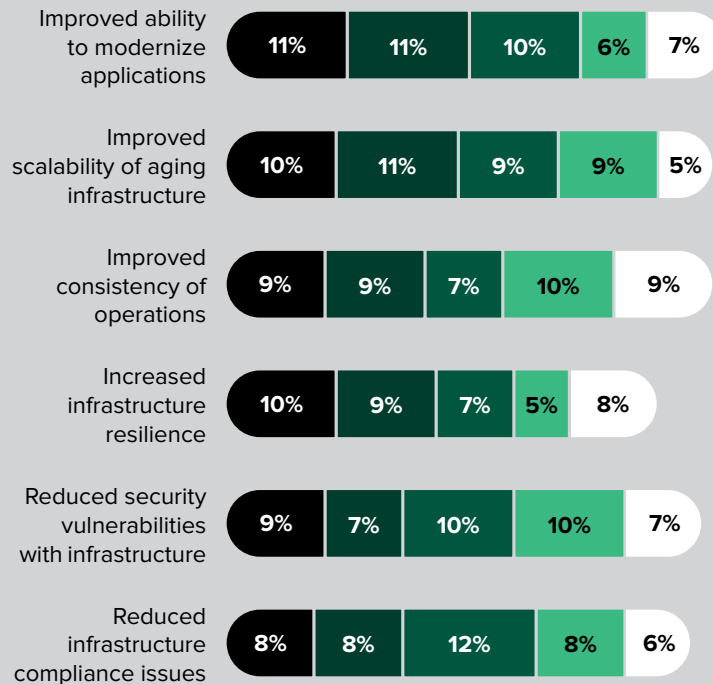Note: Showing top five responses
Source: A commissioned study conducted by Forrester Consulting on behalf of Google, March 2020

Centralized Infrastructure And Operations Are The Foundations Of Modernization

When decision-makers are searching for new infrastructure to address these challenges, they have a specific wish list in mind. Respondents indicate they want their new infrastructure to have improved monitoring/management, technology-agnostic architecture, and flexibility to address multiple needs. They also emphasize the need for scalability of aging architecture, allowing them to make full use of their entire environment. Within this environment, they want to be able to meet and exceed service-level agreements (SLAs) without their current challenges, allowing them to make good on timelines and work expeditiously. By adopting a solution that provides a more centralized infrastructure operations experience, respondents expect increased consistency of operations while reducing security vulnerabilities and keeping their data secure.

Centralized Infrastructure Operations Offers Key Benefits

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

Improved ability to modernize applications: 11% | 11% | 10% | 6% | 7%

Improved scalability of aging infrastructure: 10% | 11% | 9% | 9% | 5%

Improved consistency of operations: 9% | 9% | 7% | 10% | 9%

Increased infrastructure resilience: 10% | 9% | 7% | 5% | 8%

Reduced security vulnerabilities with infrastructure: 9% | 7% | 10% | 10% | 7%

Reduced infrastructure compliance issues: 8% | 8% | 12% | 8% | 6%

Base: 220 IT infrastructure decision-makers in NA, EMEA, and APAC
Note: Showing top six responses
Source: A commissioned study conducted by Forrester Consulting on behalf of Google, March 2020

Infrastructure-Related Benefits Radiate From IT To The Whole Business

The myriad benefits available to IT organizations through centralized infrastructure management do not just benefit IT; these improvements will lead to other downstream positive impacts to the business. Thanks to reduced security risk, IT can expect streamlined monitoring and data visibility as well as the improved ability to modernize applications. That data visibility will help break down business silos while easing the management burden. Respondents also expect productivity benefits like improved performance of tools, reduced time spent on administrative work, and reduced time troubleshooting support tickets. These positive impacts all culminate in simplified cost management for IT and saved cost for the business overall.

Downstream Business Impacts Of Centralized Infrastructure Operations

64%
Improved data visibility/
simplified monitoring

59%
Improved performance
of tools

57%
Reduced time spent
on administrative work

55%
Simplified cost
management/saved cost

53%
Reduced cost of
infrastructure maintenance

52%
Reduced downtime spent
troubleshooting tickets/issues

Base: 220 IT infrastructure decision-makers in NA, EMEA, and APAC
Source: A commissioned study conducted by Forrester Consulting on behalf of Google, March 2020

Conclusion

Organizations must leverage the agility of modern infrastructure and architecture to deliver their products to the market faster, reduce infrastructure silos, and improve costs. This includes aligning modernization efforts with business goals, such as improved performance, cost savings, enhanced security, or better user experience.

They should also invest in infrastructure that keeps pace with increasing business needs. That includes the modular hardware, virtualization, and automation tools that will supply dynamic scaling, improved cost, and efficient resource management.

Adopting a unified management platform to monitor, control, and automate processes across systems will centralize tech operations for organizations. It will also ensure consistency, efficiency, and improved visibility.

Project Team:

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Contributing Research:

Forrester's Technology Architecture And Delivery research group

Methodology

This Opportunity Snapshot was commissioned by Broadcom. To create this profile, Forrester Consulting supplemented this research with custom survey questions asked of 220 infrastructure and operations decision-makers in NA, EMEA, and APAC. The custom survey began and was completed in November 2024.

ABOUT FORRESTER CONSULTING

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Demographics

GEOGRAPHY	
Germany	**25%**
India	**25%**
United States	**25%**
United Kingdom	**25%**

INDUSTRY	
Financial services/ insurance	**8%**
Technology and/or tech services	**8%**
Retail	**6%**
Energy, utilities, and/or waste management	**6%**
All others	**72%**

NUMBER OF EMPLOYEES	
2 to 99	**15%**
100 to 499	**22%**
500 to 999	**23%**
1,000 to 4,999	**21%**
5,000 to 9,999	**19%**

ROLE LEVEL	
C-level	**15%**
Vice president	**29%**
Director	**31%**
Manager	**25%**