

Digital Transformation @work

Empowering
Together



Digital Transformation work

Empowering Together

Digital Transformation Opportunity for Service Providers: Beyond Infrastructure

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The Digital Revolution, Still Powered by Cloud, But Grand Strategy for Digital Transformation Is Required

Sustained IT Transformation

Tactical
Existing market
IT-centric
Bolted-on value-add
"Run the Business"



**Vital Maintenance:
"Beyond Infrastructure"**

Disruptive Business Transformation

Strategic
The "new normal"
Business-centric
Integrated value-add
"Grow/Expand the Business"



**Fundamental Redesign:
"Beyond Infrastructure"**

Digital Transformation is Under Way

% of organizations

41%

Facing Significant Industry Disruption



54%

Requiring Significant Operations and IT Transformation



42%

Planning Major Digital Transformation for Next Year



Digital Transformation Leaders

49% in Business Roles

45% in IT Roles



Digital Transformation Project Orientation

26% Run the Business

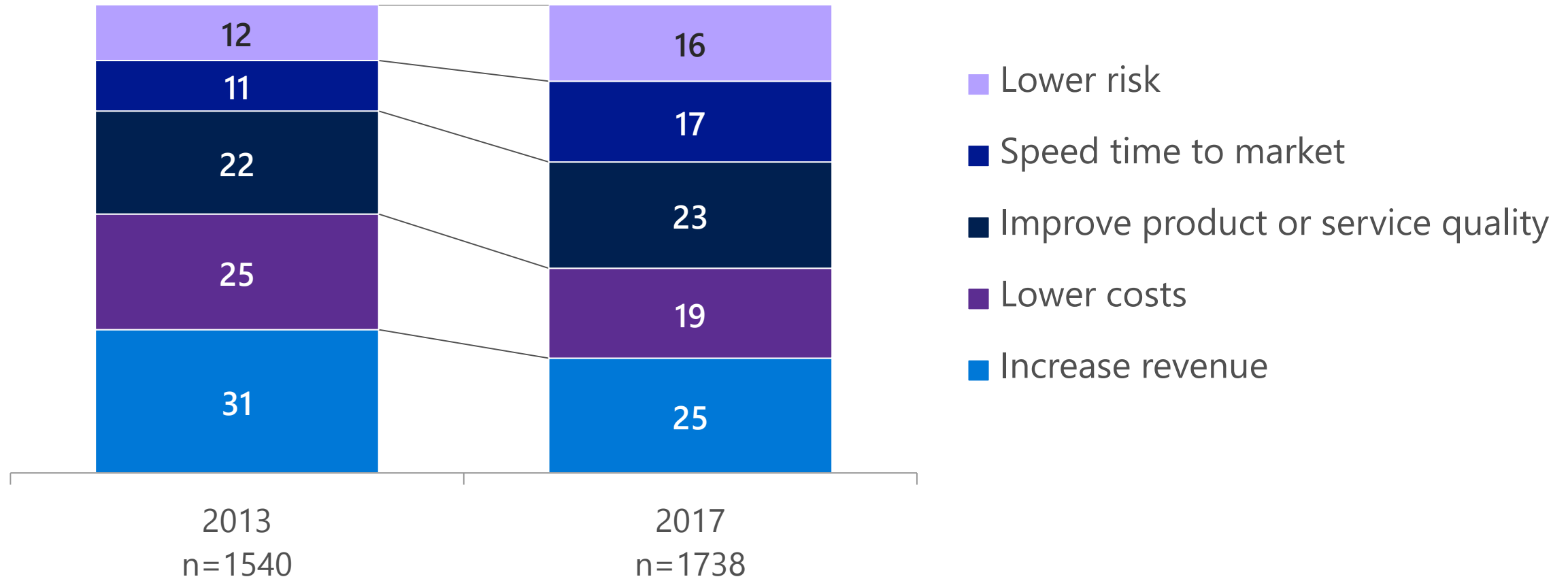
46% Grow the Business

28% Transform the Business

Evolution of Business Goals in the Digital Economy

Accelerating Time to Market While Lowering Business and Technology Risk

Q. Allocate 100 points among the following five goals as they relate to your company or organization.



Next Generation Business Priorities

Lower Risk

Identify threats in business exposure or competition

Analytics to recognize risks sooner

Reduce cybersecurity attacks

Speed Time to Market

Improve production processes

Use data to drive strategic decision making

Automate business processes

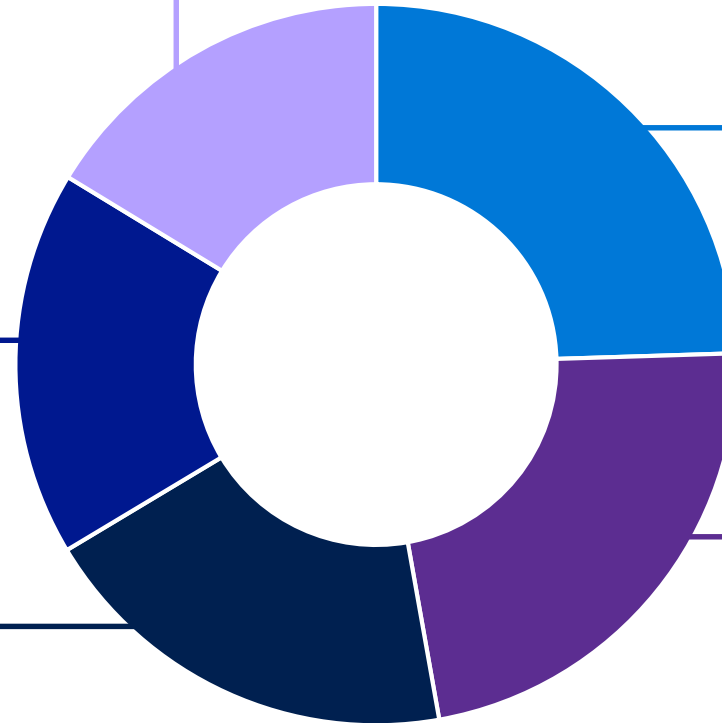
Lower Cost

Create more efficient/streamlined business process

Make workforce more productive

Improve financial analytics

Optimize supply chain and logistics



Increase Revenue

Improve marketing/ promotion of products & services

Compete aggressively for market share

Cross-sell/upsell opportunities in customer base

Improve Product/Service Quality

Innovate or deliver new products or services

Find/Develop/Retain Talent

Focus on customer convenience

Race to the Digital Economy: Life in the Fast Lane

Q. Which of the following best describes your organization? n=1738

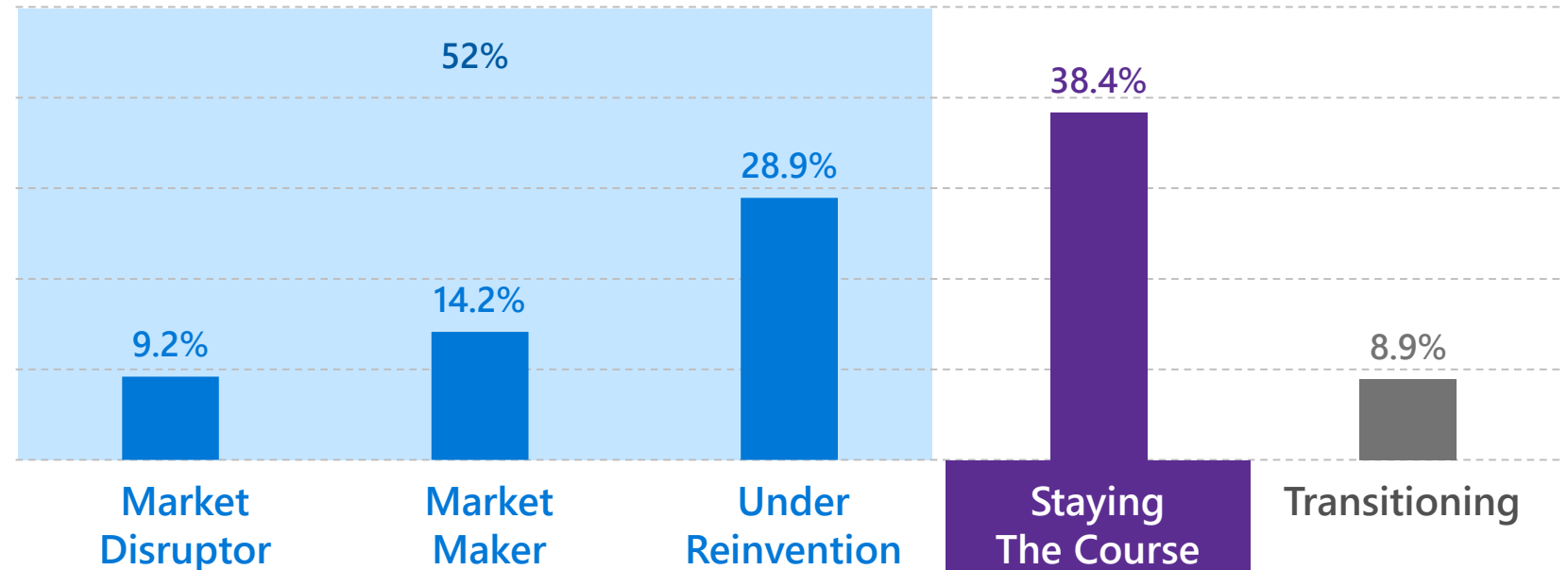
Market Disruptor: fundamentally changing an existing market, such as Uber or Airbnb.

Market Maker: creating a market that did not previously exist, such as iRobot, Facebook or Twitter

Under Reinvention: reinventing and/or repositioning your organization, such as GE's focus on environmental technologies

Staying the Course: continuing to execute existing strategies

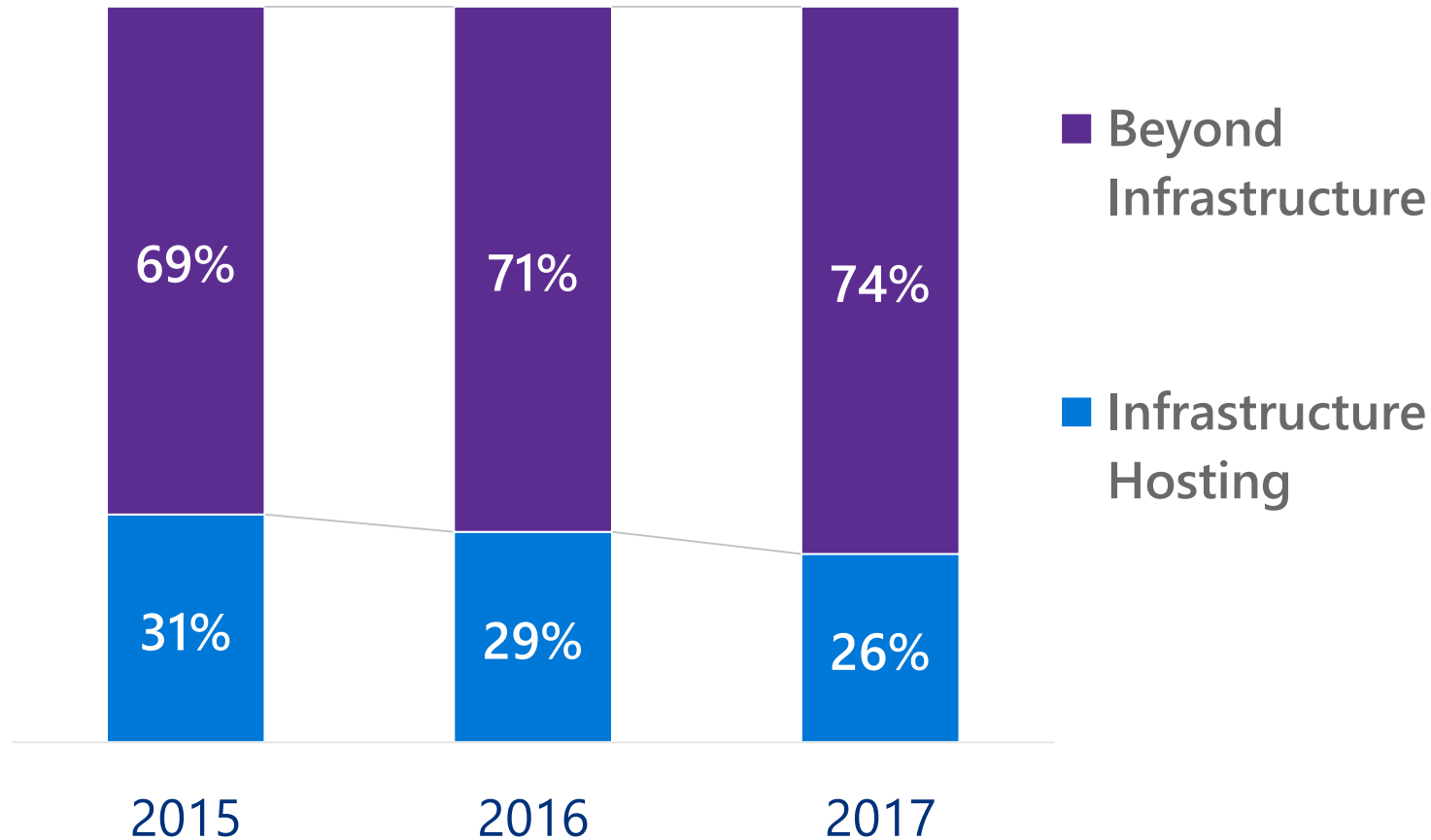
Transitioning: being sold/acquired/divesting/bankruptcy etc.



| | Market Disruptor | Market Maker | Under Reinvention | Staying the Course | Transitioning |
|-------------------------------------|------------------|--------------|-------------------|--------------------|---------------|
| High Business Transformation | 61.9% | 63.0% | 64.0% | 39.4% | 60.6% |
| High IT Portfolio Transformation | 64.4% | 62.6% | 63.0% | 41.4% | 56.8% |
| % Digital Infrastructure in 2 Years | 54.7% | 55.8% | 56.9% | 54.4% | 54.3% |
| % Digital Infrastructure Change | 3.5% | 5.6% | 9.8% | 16.5% | 11.7% |

The “Beyond Infrastructure” Shift Continues

Q. Approximately what percentage of your hosting/cloud services budget in 2017 is allocated to the following? (n=1738)

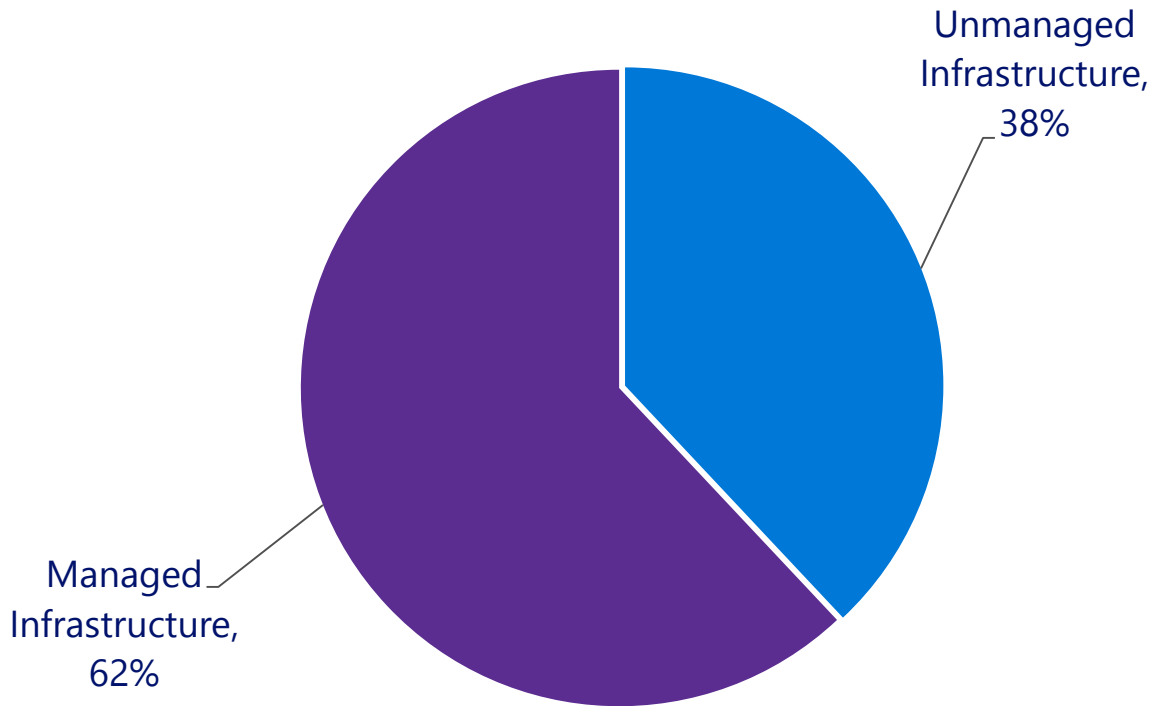


- Managed and Security Services holding steady
- Application Hosting decreasing as percentage of total “beyond infrastructure” spending: indicative of direct-to-SaaS trend
- Professional services added as a new “beyond infrastructure” category in 2017, accounting for 25% of the spending

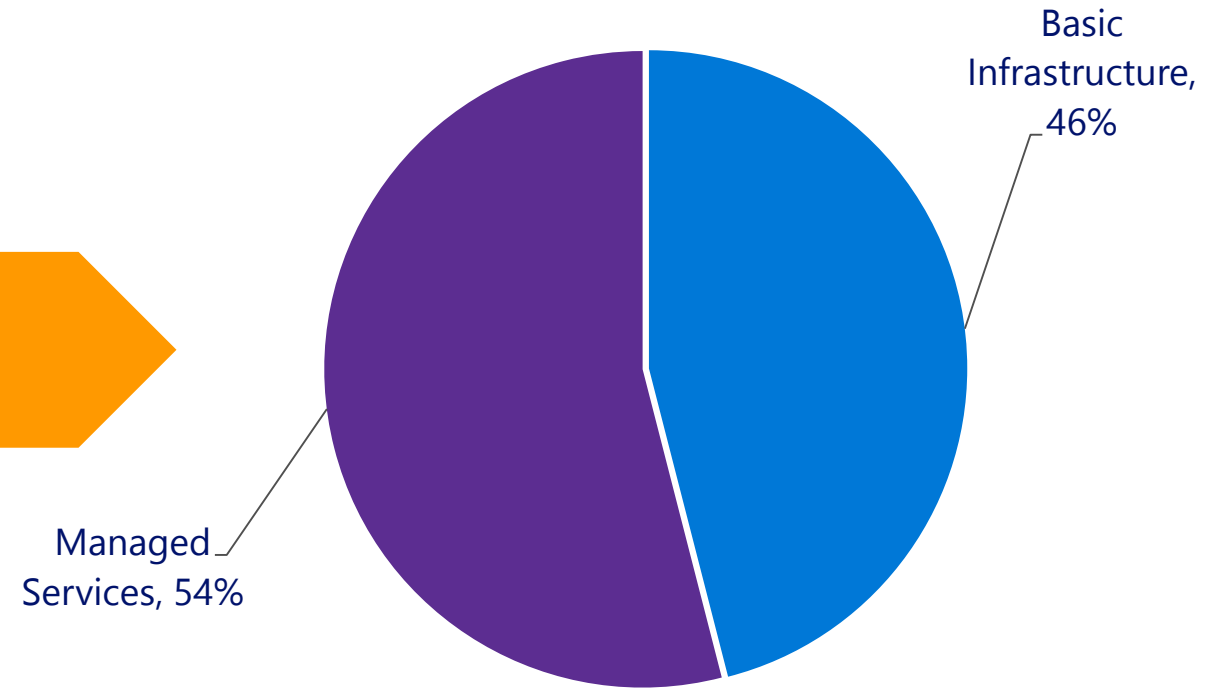
Infrastructure/Managed Services Bundles

The New Normal

Q. Of your organization's current spending on hosting and cloud infrastructure, what percentage is unmanaged (purchased without value-added managed services or security services) versus managed (bundled with at least one managed, application or security service)? n=1738



Q. Thinking about your organization's managed infrastructure spending, what percentage of the spending is allocated to each of the following? n=1738



Hosting/Cloud Services Adoption

Changing Mix

Infrastructure Services

Hosted Private Cloud



Dedicated Servers



Public Cloud/IaaS



Basic Website Hosting



Bare Metal Servers



Application Services

File Storage



Web Presence



Database and Data Warehousing



Email, Collaboration and Productivity



Customer Relationship Management (CRM)



Ecommerce



Security Services

Anti-virus/Endpoint Security



Data Encryption/Encryption Services



Web Application Firewall (WAF)



Data Loss Prevention (DLP)



Application Security

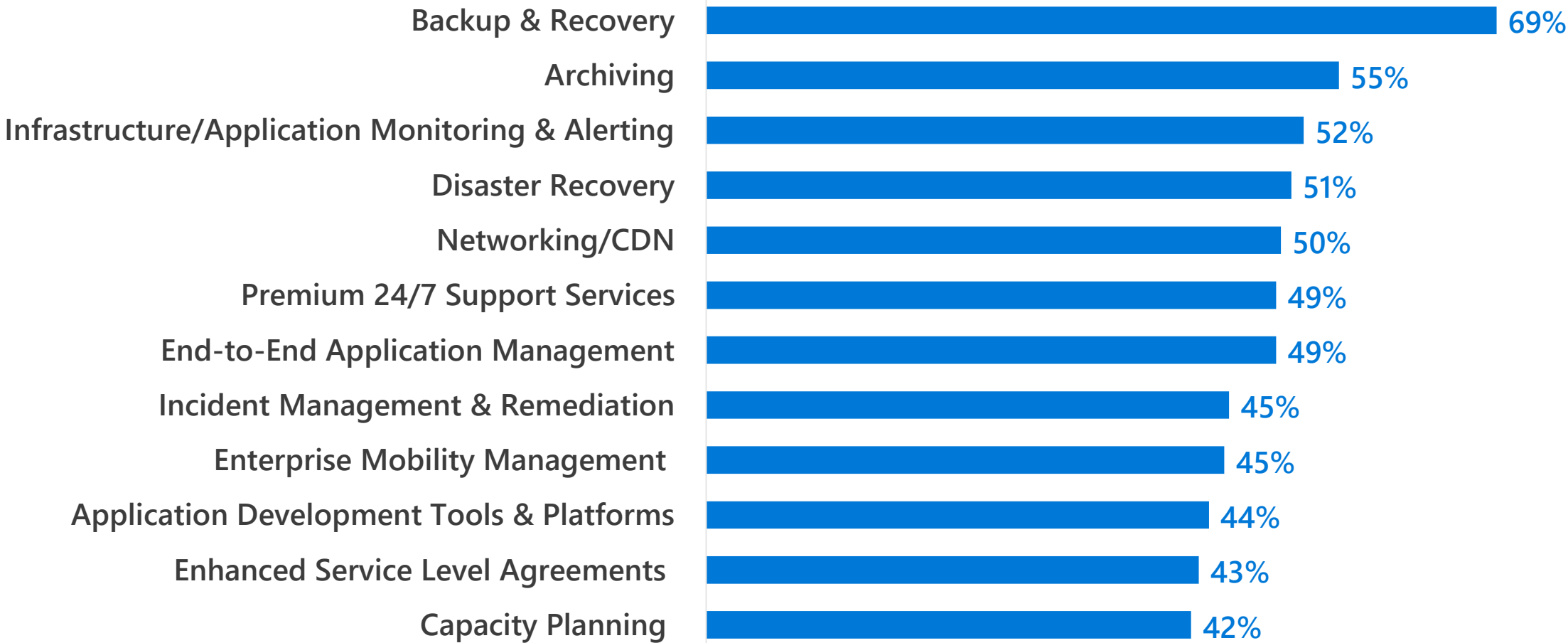


Vulnerability Assessment



“Traditional” Managed Services for Cloud and Hosting

Storage, Business Continuity, and Full Service Management Drive Adoption

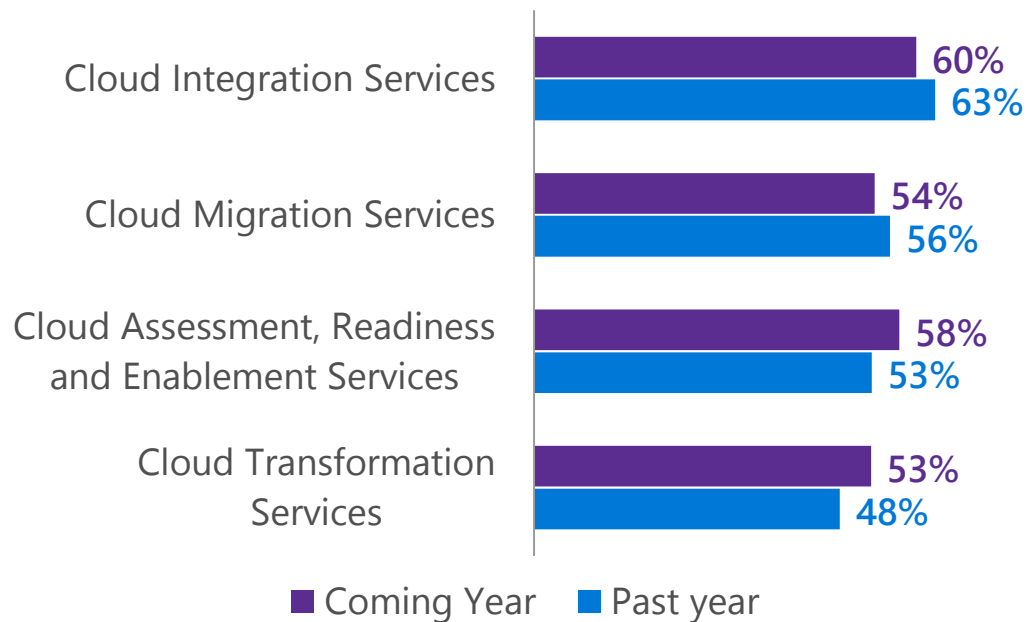


Next-Generation Managed Services

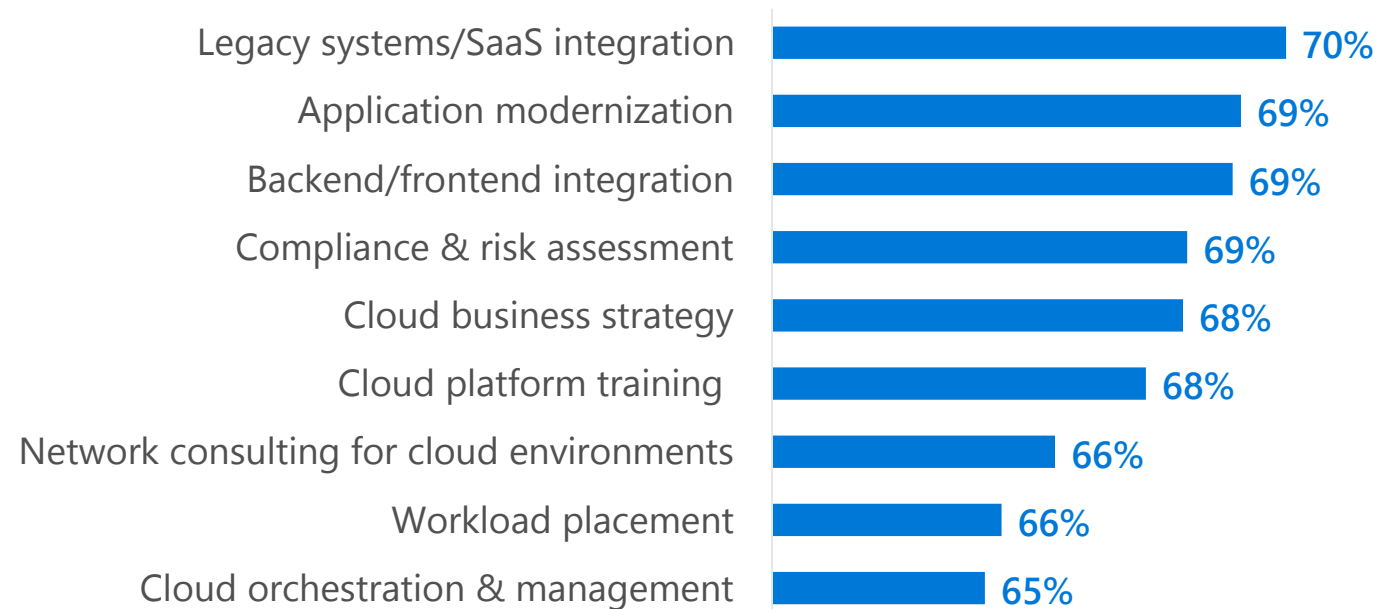
Professional Services for Cloud-Enablement

18% of total hosting/cloud infrastructure spending currently
Two-year window of opportunity until “beyond infrastructure” spending shifts to steady-state mode

Cloud-Enablement Professional Services Adoption

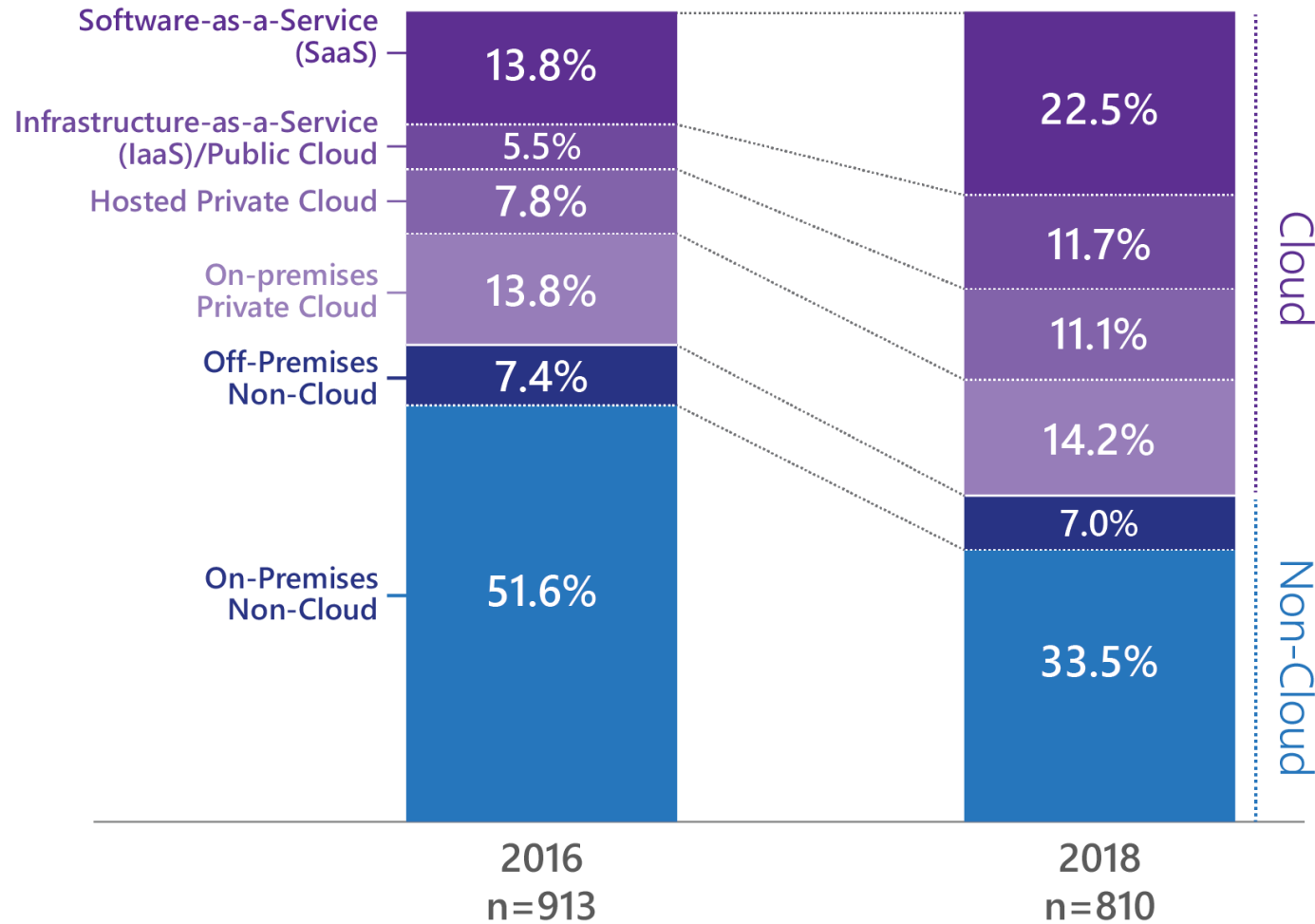


Digital Transformation Needs Addressable by Professional Services



Substantial Workload Shift to Cloud Environments

Majority Cloud (60%) in 2018



Dramatic workload migration over the next two years: from 41% currently to 60% expected in two years

On-premises to off-premises shift: from 35% to 52%

Significant expansion of public clouds (IaaS and SaaS) as workload execution venues

Source: 451 Research, Voice of the Enterprise: Cloud Transformation, Workloads & Key Projects 2016

Hybrid Gaining Momentum

The Journey Begins with Private Cloud

Q. Which of the following best describes how your organization will use different on-premises & off-premises cloud environments over the next two years? (n=1738)

We will focus primarily on a single cloud environment, not multiple clouds

31% Single Cloud

We will have multiple cloud environments, but there will be little to no interoperability between the cloud environments

28% Multi-Cloud

We will have multiple cloud environments to migrate workloads or data between different cloud environments

26% Multi-Cloud+

We will have multiple cloud environments where the delivery of a single business function across the different cloud environments is seamless

15% Hybrid

Q. Has your organization configured any of the following cloud deployments for workload migration or seamless workload operability? (n=554)

On-premises private cloud with a hosted private cloud

64%

61%

On-premises private cloud with a public cloud

57%

42%

Hosted private cloud with a public cloud

55%

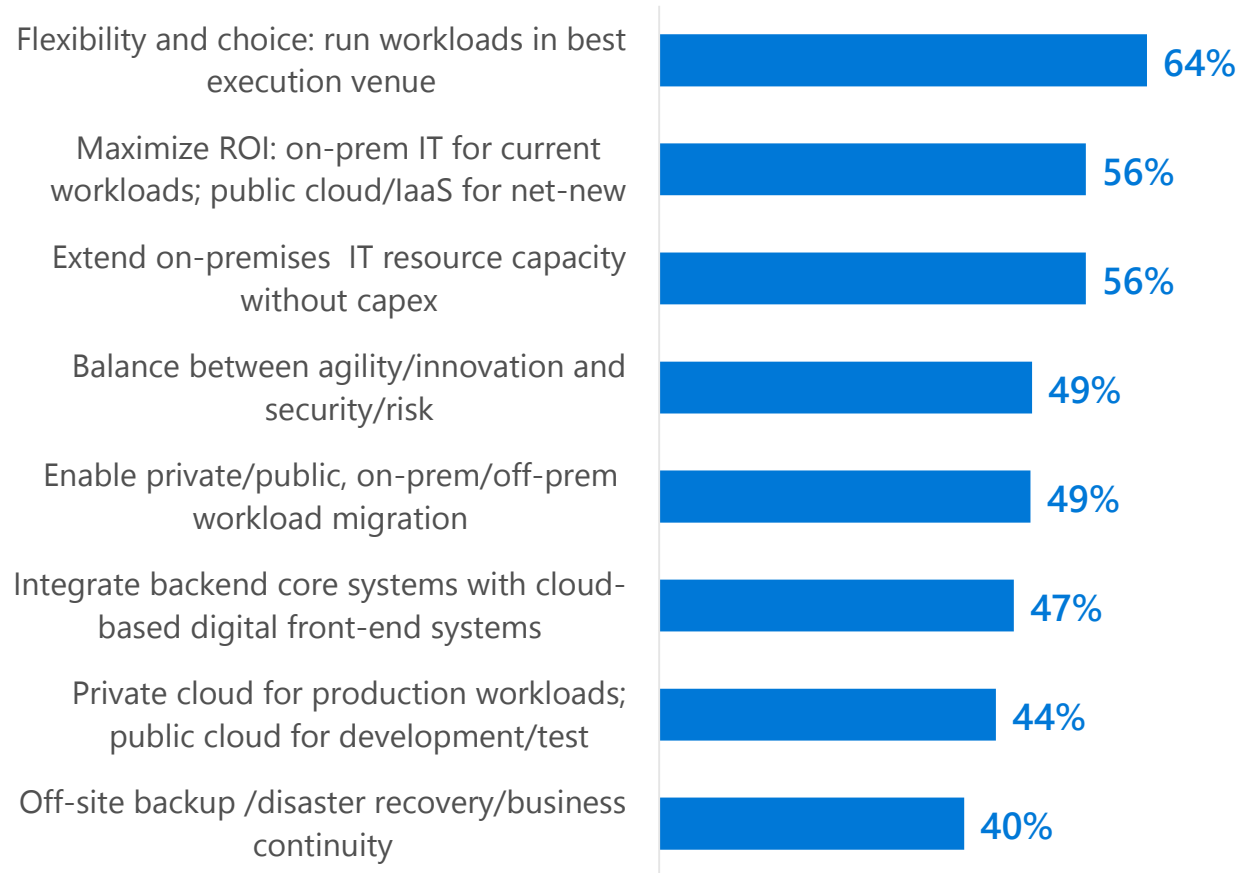
40%

■ 2017 (n=554)

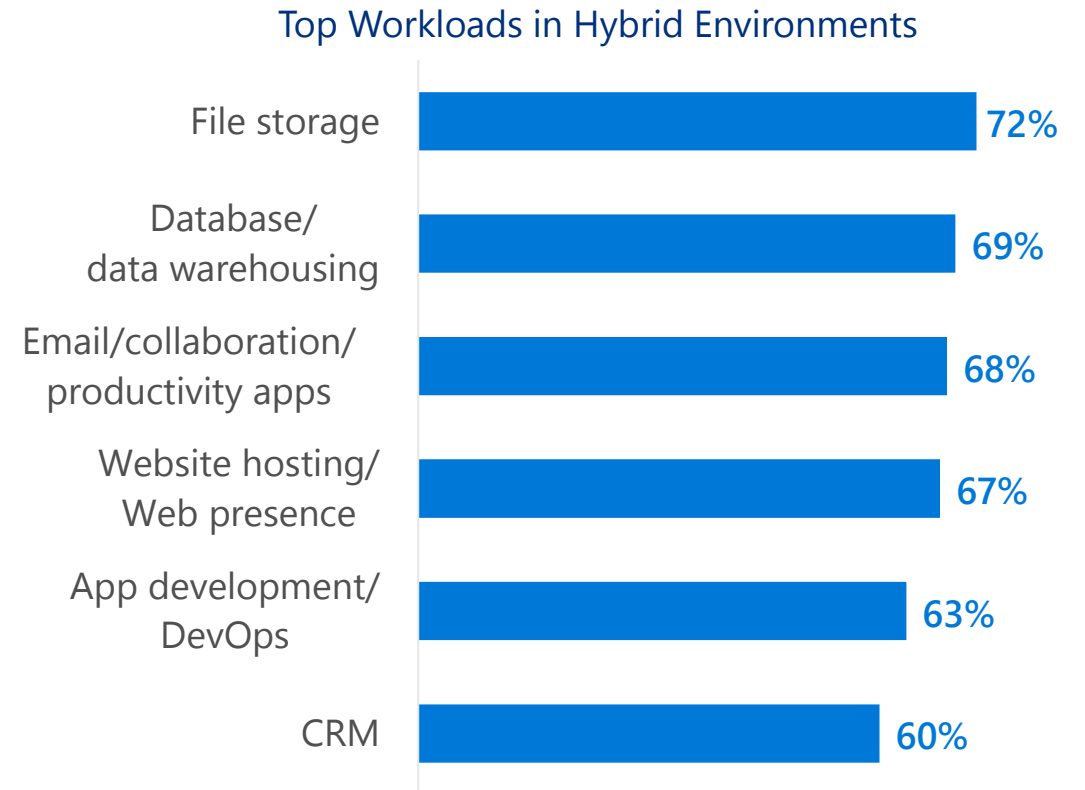
■ 2014 (n=989)

Hybrid Drivers and Use Cases

Q. Which of the following factors are driving your organization's adoption/usage of hybrid environments? (n=550; base: respondents with interoperable hybrid environments)



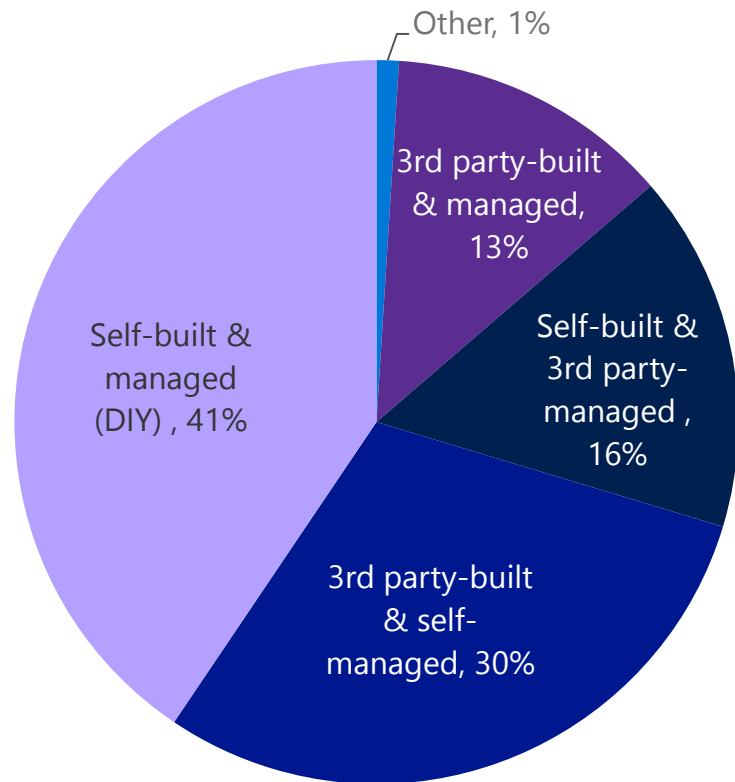
Q. Which workloads is your organization running in a hybrid environment? (n=550; respondents with interoperable hybrid environments)



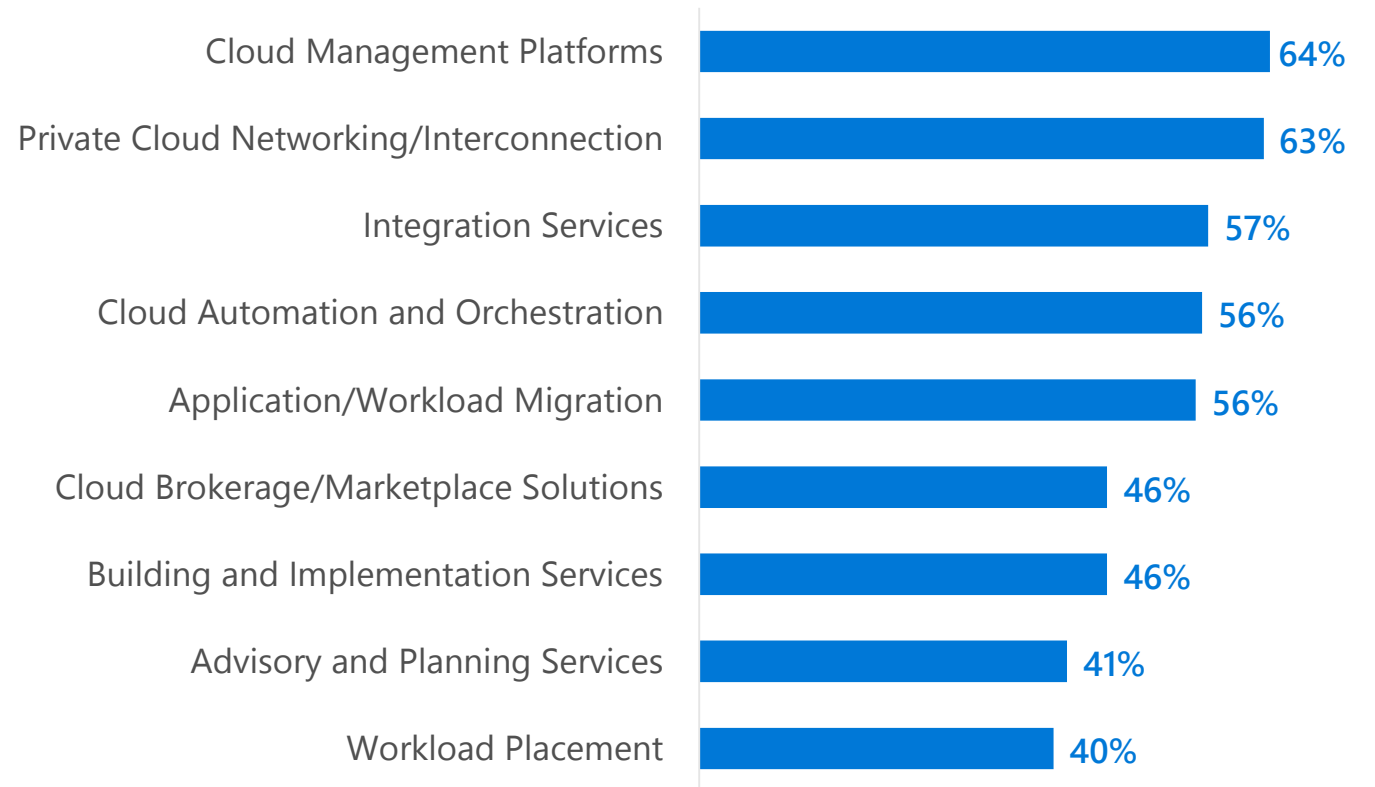
Hybrid Plays For Service Providers

Build, Manage, Network, and Integrate

Q. How is your organization implementing and managing your hybrid cloud environment? (n=480)



Q. Which of the following hybrid cloud implementation and management capabilities have you purchased/ would you consider purchasing from a service provider? (n=550)



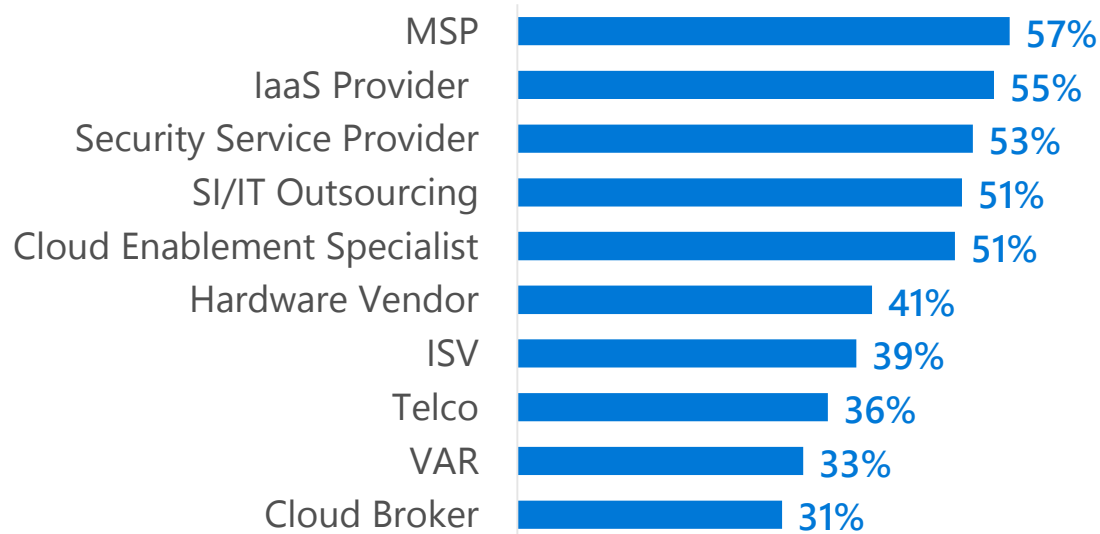
Hybrid Implementation Challenges Catalyst for Service Provider Opportunity

89% of organizations are willing to pay a premium for service provider assistance

60% of organizations want some level of third-party service provider assistance

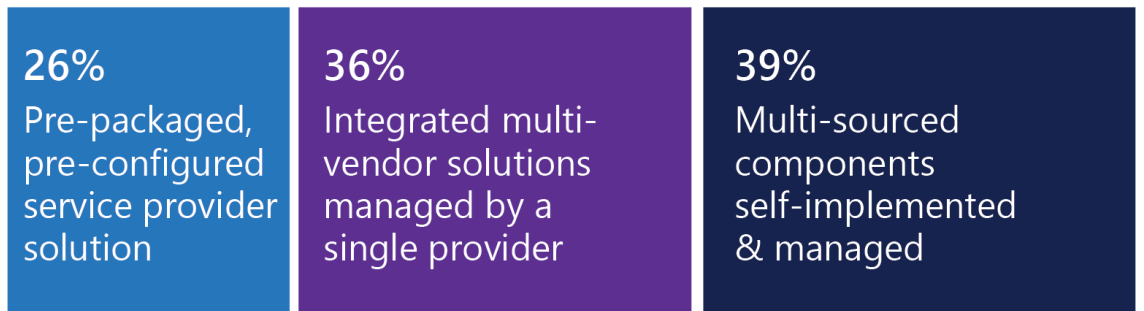
Organizations where app developers hold sway are especially keen on service provider solutions

Q. What types of service providers does or would your organization look to for hybrid cloud implementation and management capabilities? (n=490)



Q. Which of the following best describes how your organization would like to obtain hybrid cloud implementation and management services? (n=549)

Preferred Purchasing Approaches for Hybrid Cloud Solutions



Digital Transformation Landscape

67%

of Organizations Consider Service Providers "Strategically Important" to Digital Transformation Project Success

54%

of Organizations Face Skills Shortages in Cloud Expertise, Adversely Impacting Digital Transformation

50%

of Organizations Prioritize Working with Service Providers For Skills Acquisition

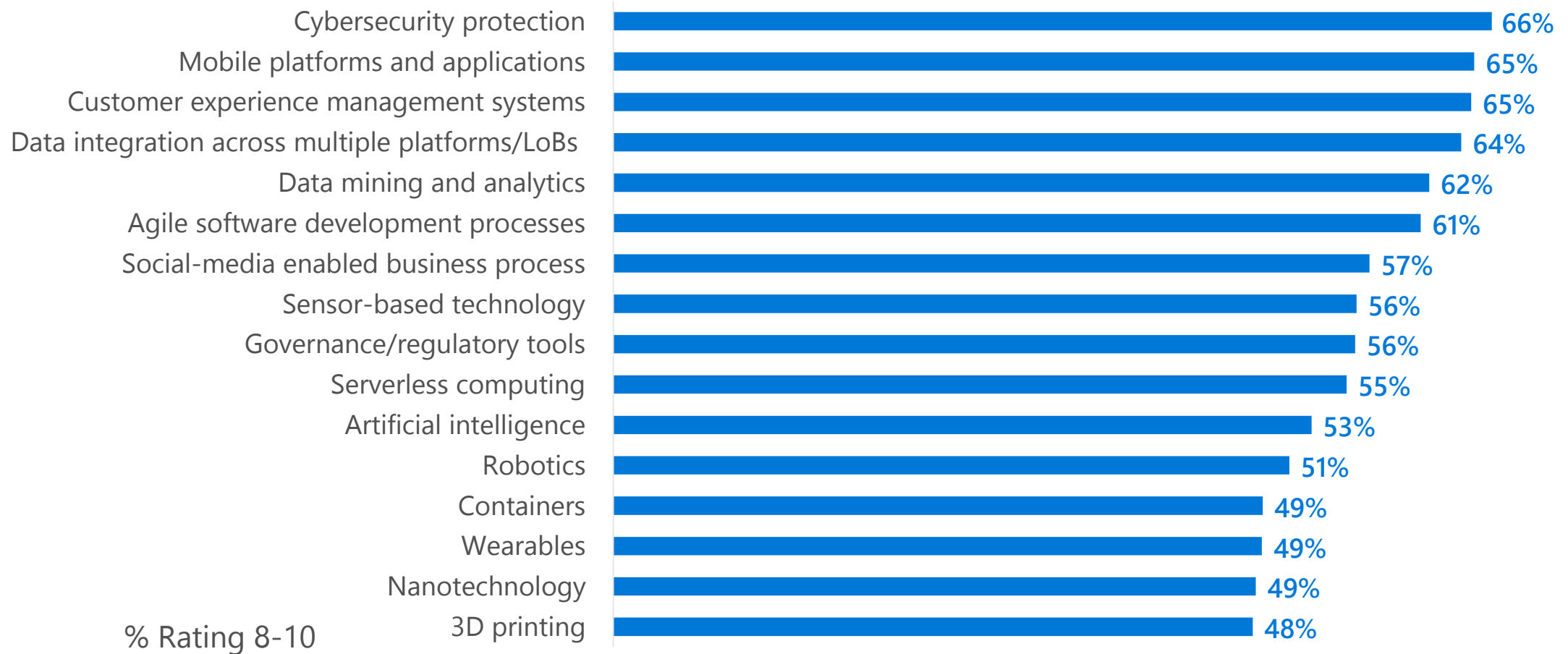
70%

of Organizations Develop and Initiate Digital Transformation Projects Without IT Input

Key Technologies Driving Business Transformation

Follow the Investments

Q. Rate the level of investment in the following technologies over the next 5 years in terms of meeting your business goals where 0=no investment and 10=significant investment. (n=1738)



Getting into the Digital Transformation Driver's Seat

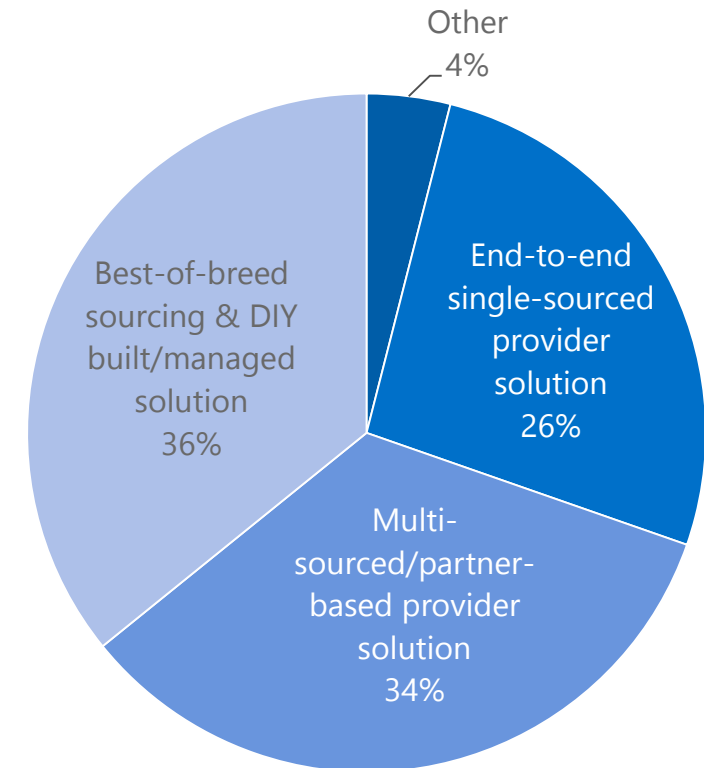
Hefty Premiums On the Table for End-to-End Solutions

Organizations Will Pay Considerable (2x) Premium for End-to-End Digital Transformation Solutions

(Infrastructure, Applications/Software, and Services (Managed/Security/Professional))

- Larger Organizations
- Application Developer and Marketing/LoB IT Decision Markers
- Key verticals: Retail, Resources, Infotech, and Government
- Pre-production cloud adopters/implementers

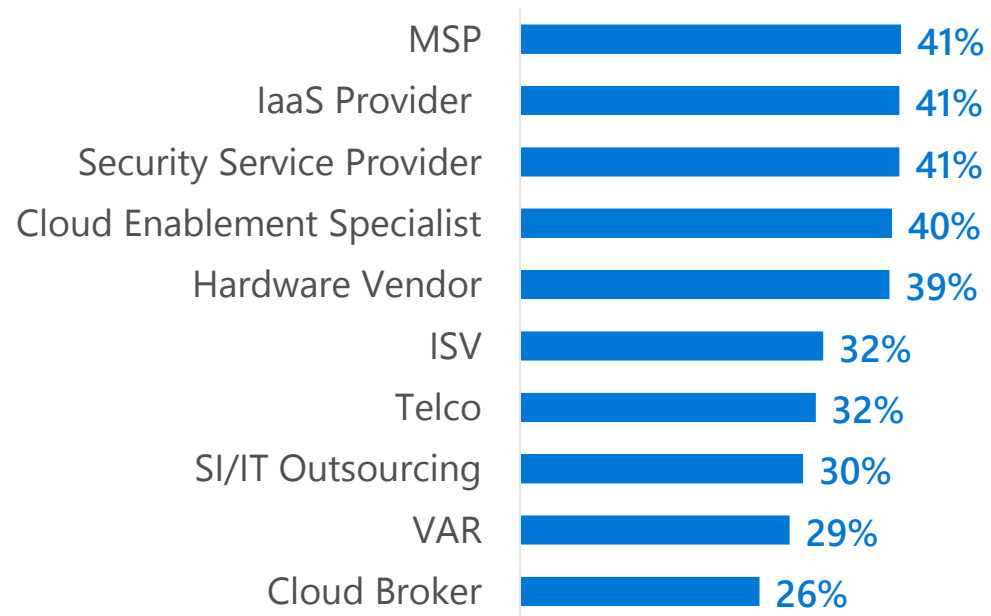
Q. Which of the following best describes your organization's approach to dealing with hosting/cloud service providers to obtain the IT services needed for digital transformation projects? (n=773; base: engaged in or planning digital transformation projects; preference for obtaining IT expertise from service providers)



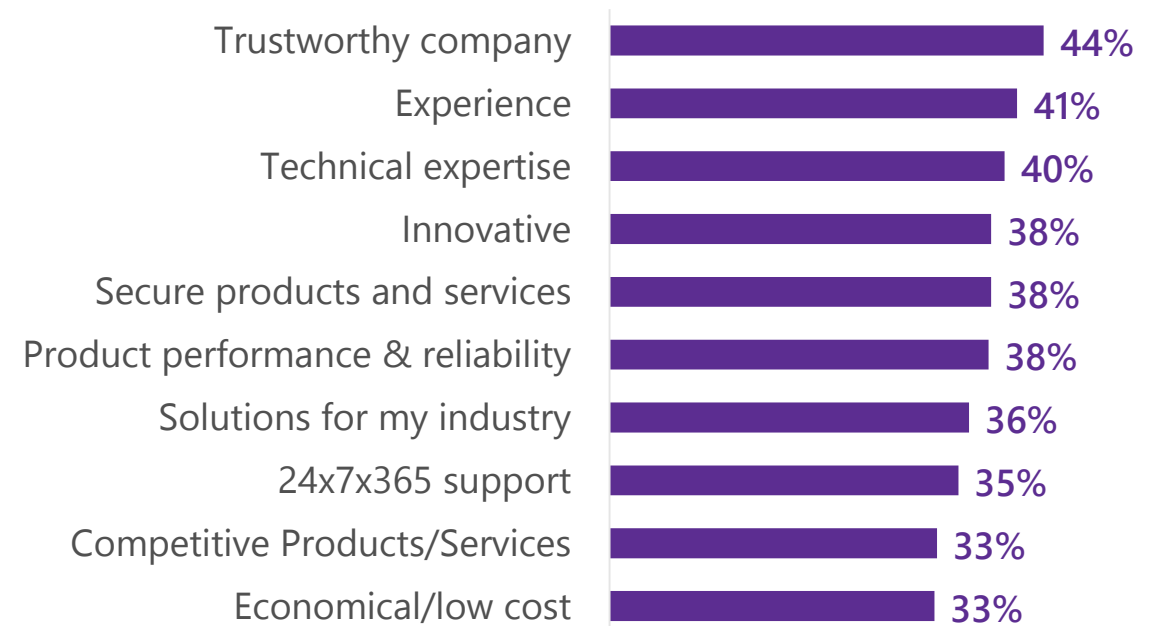
Partnering for Success: It Takes A Village

Broad awareness of primary hosting/cloud providers partnering for service delivery
Partner ecosystems expand with digital transformation complexity
Trusted Expertise is the key to successful digital transformation partnerships

Q. Which of the following best describes the type(s) partner(s) that your organization's primary hosting/cloud service provider works with? (n=1117)

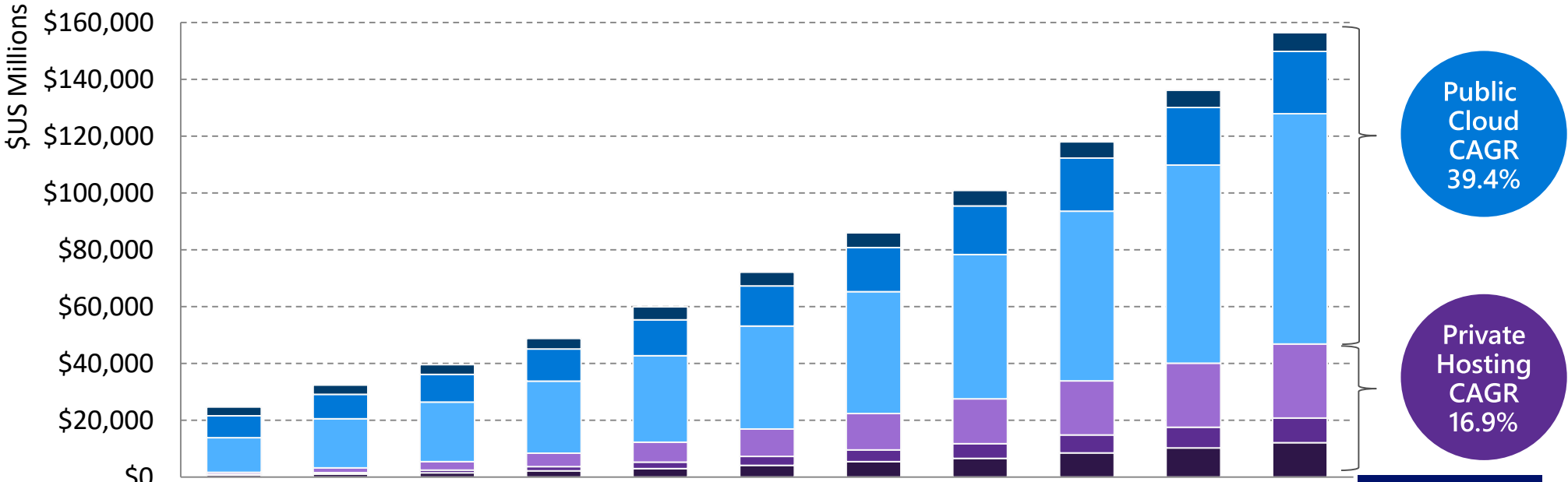


Q. In your opinion, which of the following attribute apply to the partners your organization's primary hosting/cloud service provider works with? Please select all that apply.? (n=1117)



Worldwide Hosting & Cloud Market Size, 2010 – 2020

Cloud Share Increases from 7% to 43%



| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | CAGR '10-'20 |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|--------------|
| Dedicated Hosting | \$3,050 | \$3,257 | \$3,436 | \$3,690 | \$4,562 | \$4,844 | \$5,123 | \$5,414 | \$5,718 | \$6,033 | \$6,534 | 7.6% |
| Shared Hosting | \$7,734 | \$8,640 | \$9,727 | \$11,256 | \$12,632 | \$14,045 | \$15,528 | \$17,071 | \$18,666 | \$20,293 | \$21,997 | 11.0% |
| Managed Hosting | \$12,150 | \$17,270 | \$20,954 | \$25,367 | \$30,434 | \$36,256 | \$42,962 | \$50,756 | \$59,663 | \$69,712 | \$80,998 | 20.9% |
| Infrastructure as a Service | \$717 | \$1,633 | \$2,994 | \$4,764 | \$6,995 | \$9,698 | \$12,724 | \$15,840 | \$19,082 | \$22,496 | \$26,092 | 43.2% |
| Platform as a Service | \$283 | \$549 | \$940 | \$1,516 | \$2,279 | \$3,148 | \$4,144 | \$5,172 | \$6,271 | \$7,294 | \$8,615 | 40.7% |
| Infrastructure Software as a Service | \$695 | \$1,054 | \$1,539 | \$2,176 | \$3,004 | \$4,111 | \$5,476 | \$6,592 | \$8,564 | \$10,288 | \$12,162 | 33.1% |
| Total Hosting + Cloud | \$24,629 | \$32,402 | \$39,590 | \$48,760 | \$59,906 | \$72,102 | \$85,956 | \$101,206 | \$117,964 | \$136,216 | \$136,216 | 20.3% |

Key Takeaways: The Digital Transformation Race

Managed: The New Normal

Professional Services for Cloud-Enablement: the next "Beyond Infrastructure" opportunity

Cloud Will Not Be One-Size Fits All: the hybrid cloud world is real

Organizations are on-board the digital economy express and need skills, expertise, and partners

Leverage Provider Loyalty: digital transformation solutions for strategic customer engagement

Thank You!

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Essential insight for leaders
of the digital economy.



