

ESG Research: The Hybrid Cloud Tipping Point

**Live Webcast
April 23, 2019
10:00 am PT**

Today's Presenters



Scott Sinclair
Enterprise Strategy
Group



Michelle Tidwell
IBM



Mike Jochimsen
Kaminario



Eric Lakin
Univ. of Michigan



Alex McDonald
NetApp

- The material contained in this presentation is copyrighted by the SNIA unless otherwise noted.
- Member companies and individual members may use this material in presentations and literature under the following conditions:
 - ◆ Any slide or slides used must be reproduced in their entirety without modification
 - ◆ The SNIA must be acknowledged as the source of any material used in the body of any document containing material from these presentations.
- This presentation is a project of the SNIA.
- Neither the author nor the presenter is an attorney and nothing in this presentation is intended to be, or should be construed as legal advice or an opinion of counsel. If you need legal advice or a legal opinion please contact your attorney.
- The information presented herein represents the author's personal opinion and current understanding of the relevant issues involved. The author, the presenter, and the SNIA do not assume any responsibility or liability for damages arising out of any reliance on or use of this information.

NO WARRANTIES, EXPRESS OR IMPLIED. USE AT YOUR OWN RISK.

SNIA-At-A-Glance



185
industry leading
organizations



2,000
active contributing
members



50,000
IT end users & storage
pros worldwide

What We Do



Educate vendors and users on cloud storage, data services and orchestration



Support & promote business models and architectures: OpenStack, Software Defined Storage, Kubernetes, Object Storage



Understand Hyperscaler requirements
Incorporate them into standards and programs



Collaborate with other industry associations



Enterprise Strategy Group | Getting to the bigger
truth.™

State of IT and the Cloud in 2019

Scott Sinclair, Senior Analyst

April 23, 2019





Enterprise Strategy Group is an IT analyst, research, validation, and strategy firm that provides market intelligence and actionable insight to the global IT community.

ESG helps clients achieve business results through a comprehensive portfolio of research and advisory services, consulting, and custom content solutions.

Research Objectives



Determine IT budget outlook for 2019, overall and for specific technologies



Establish key business and technology priorities driving 2019 plans



Identify technology challenges and shortcomings impeding business objectives



Monitor YoY trends with respect to technology adoption and changing preferences

Survey Details

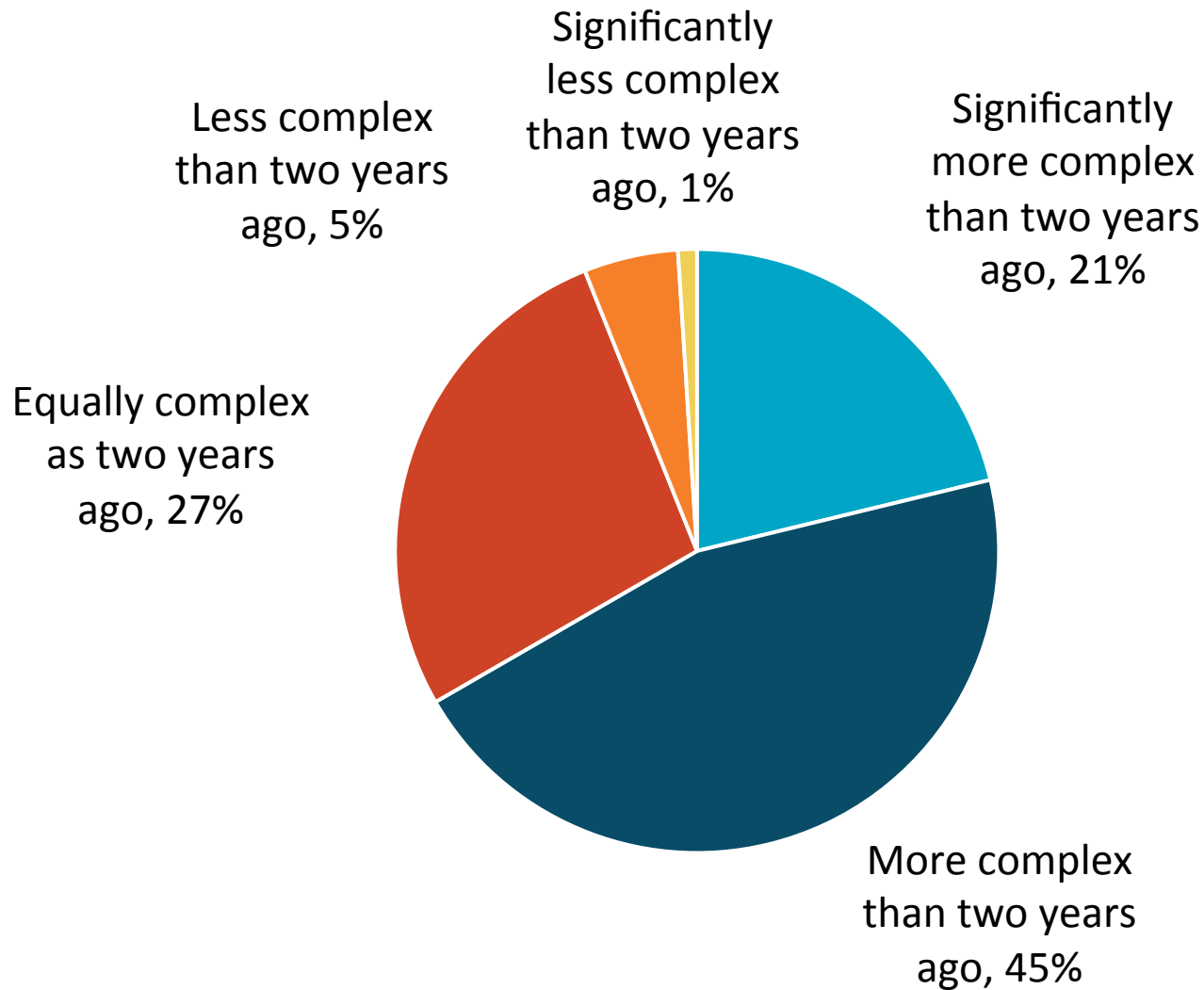
QUANTITATIVE WEB-BASED SURVEY

- N=600 qualified completes
- North America (US & Canada) and Western Europe (UK, France, and Germany)
- Field dates: 11/1/18 – 11/30/18

RESPONDENTS

- 600 Senior IT professionals personally responsible for or familiar with their organizations' overall 2019 IT budget and spending plans
- Employed at organizations with 100 or more employees
 - 30% midmarket (100 to 999 employees)
 - 70% enterprise (1,000 or more employees)
- Multiple industry verticals including manufacturing, financial, communications & media, business services, among others

IT Isn't Getting Easier



**Two-thirds (66%)
say IT is more
complex
compared to two
years ago**

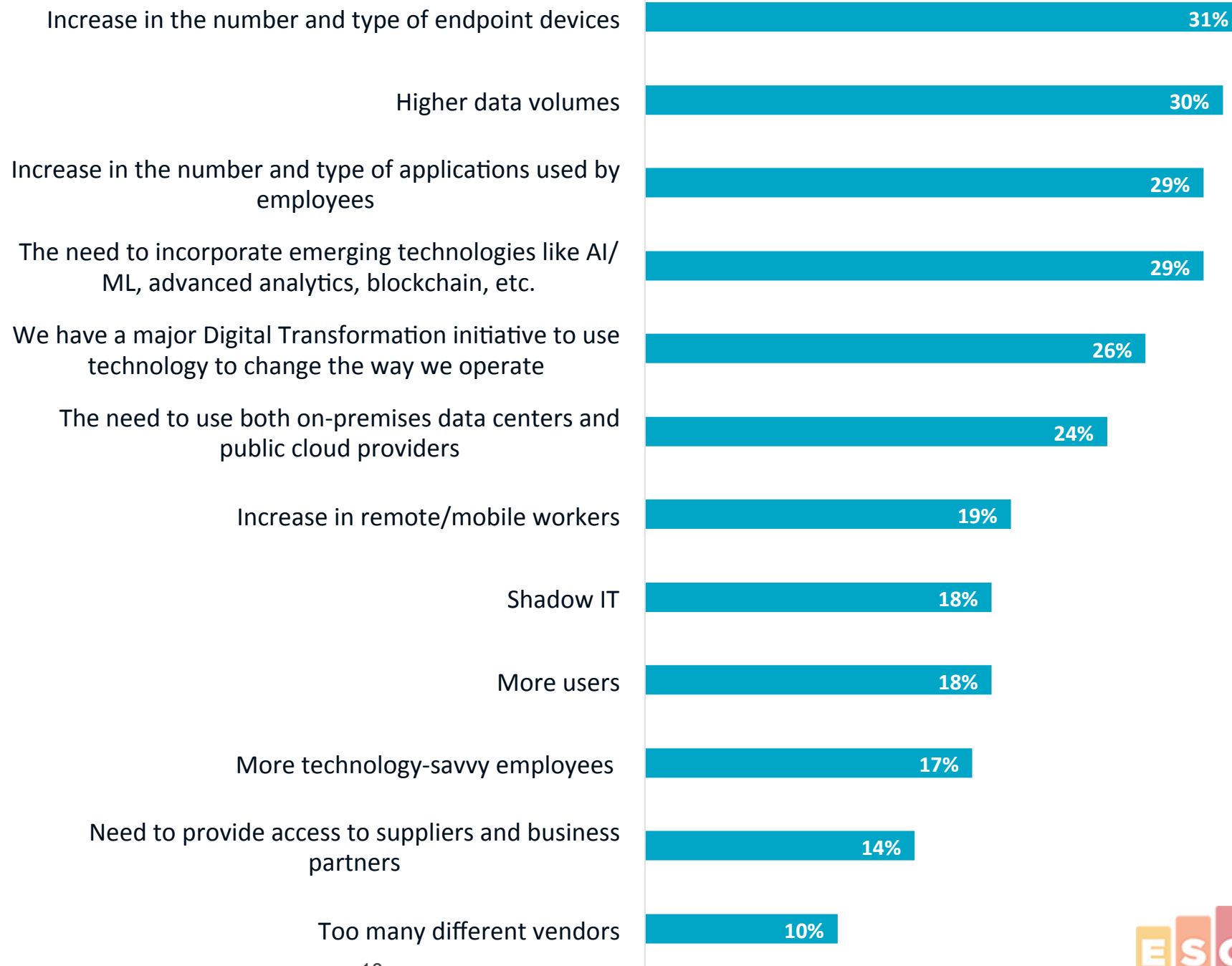
Question text:

In general, **how complex** is your **organization's IT environment** relative to two years ago? (Percent of respondents, N=600)

Scale & Innovation Driving IT Complexity

Question text:

What do you believe are the **biggest reasons** your organization's **IT environment has become more complex?** (Percent of respondents, N=400, three responses accepted)

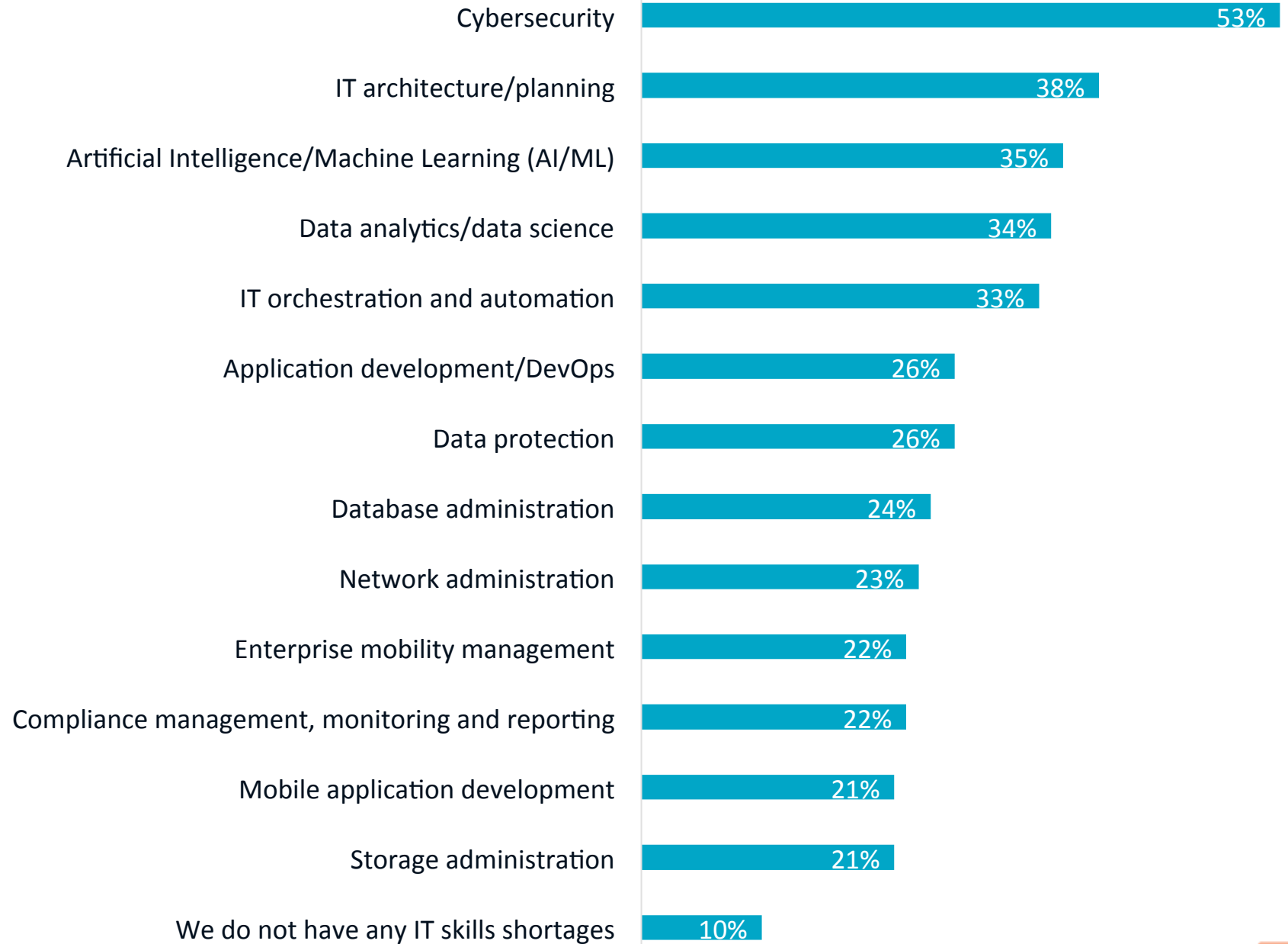


Can't Hire Your Way Out Of Complexity

Cybersecurity, IT Architecture, and Data Science Top Skills Shortages

Question text:

In which of the following areas do you believe your IT organization currently has a **problematic shortage of existing skills?** (Percent of respondents, N=586, multiple responses accepted)



2019 Public Cloud Trends

A low-angle, upward-looking shot of a modern glass skyscraper. The building's facade is composed of a grid of dark metal frames and reflective glass panels. The sky is a deep blue with scattered white clouds. A bright sunburst effect is visible in the upper right quadrant, casting a warm glow across the scene. The overall composition conveys a sense of height, modernity, and technological advancement.

Public Cloud Services by the Numbers



85%

Use public cloud services today



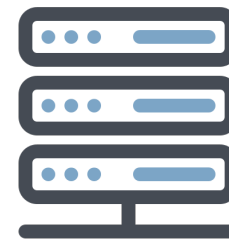
67%

SaaS accounts for more than 20% of all apps, 38% in 2013



56%

Of digital-native* companies have a cloud-first policy

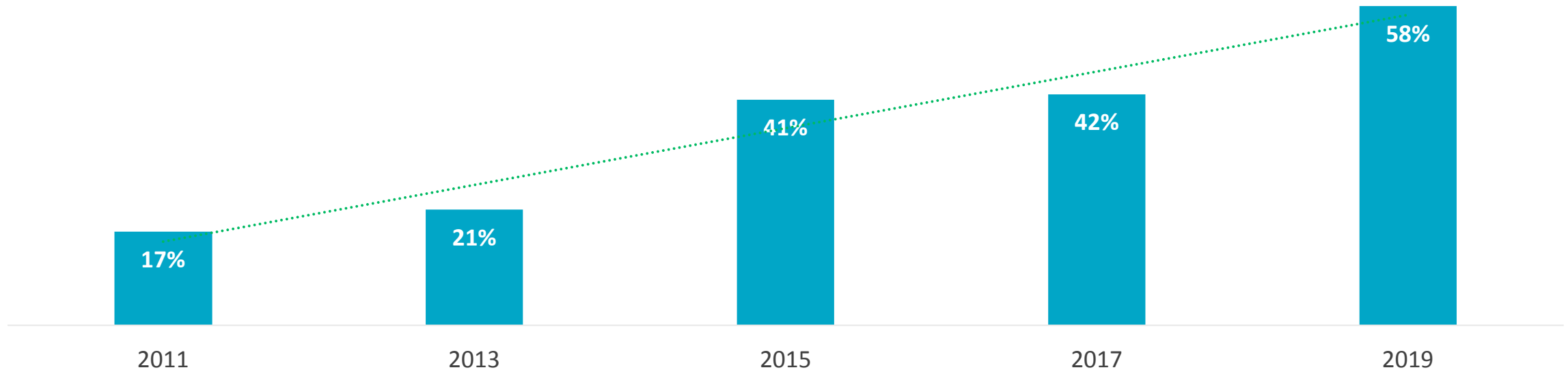


49%

Of IaaS users run production apps

2018 Brought a Significant Increase in Public Cloud Infrastructure Adoption

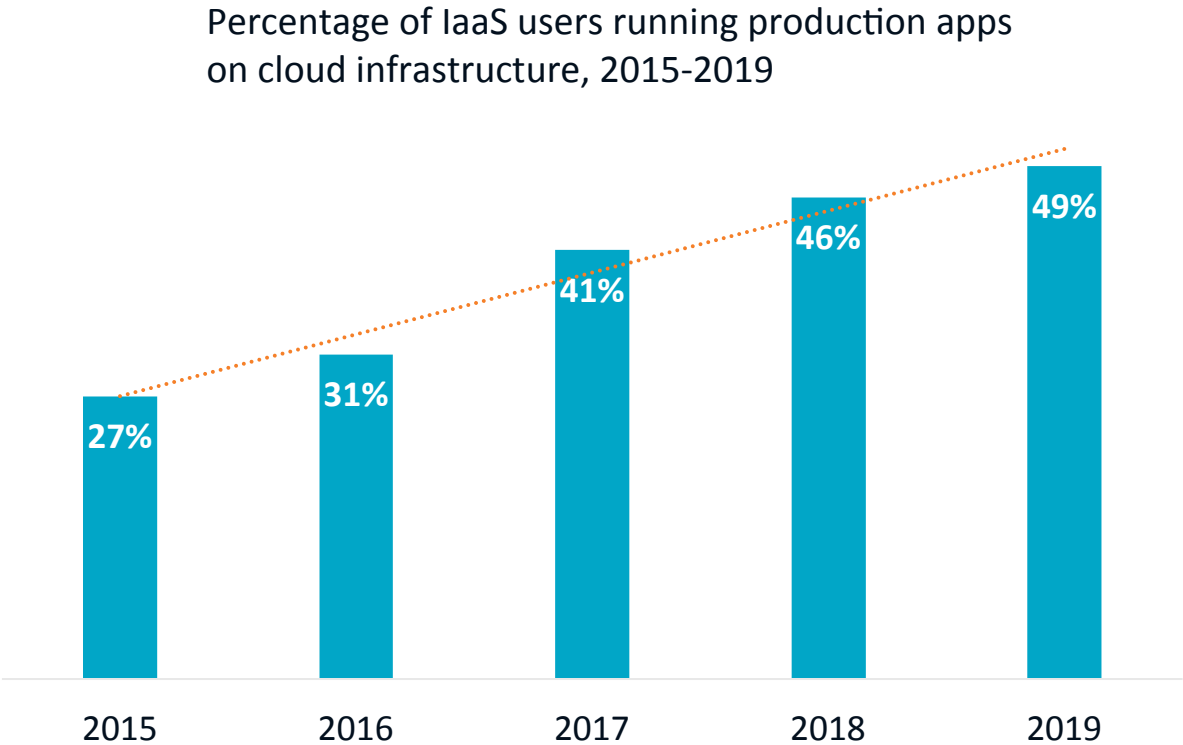
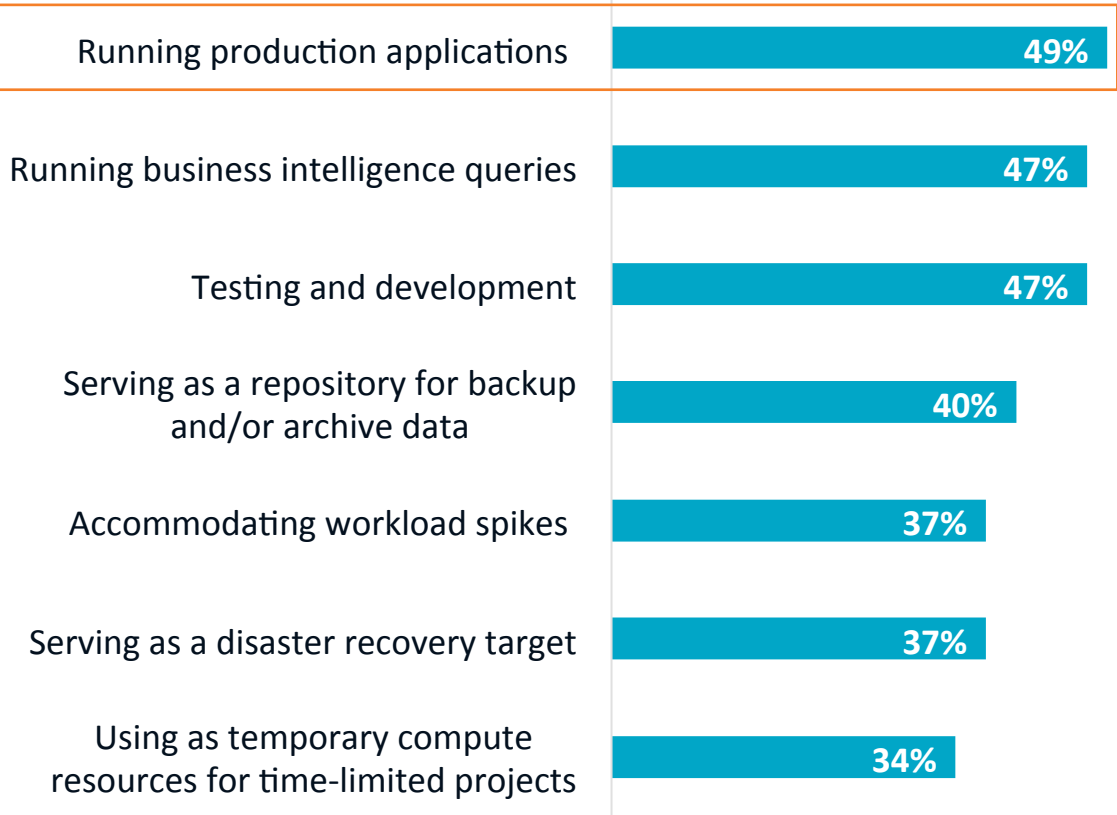
Percentage of organizations currently using infrastructure-as-a-service (IaaS), 2011-2019.



Question text:

Please indicate your organization's **usage of or plans for infrastructure-as-a-service (IaaS)**. (Percent of respondents)

IaaS Users Continue to Move Production Applications to Cloud



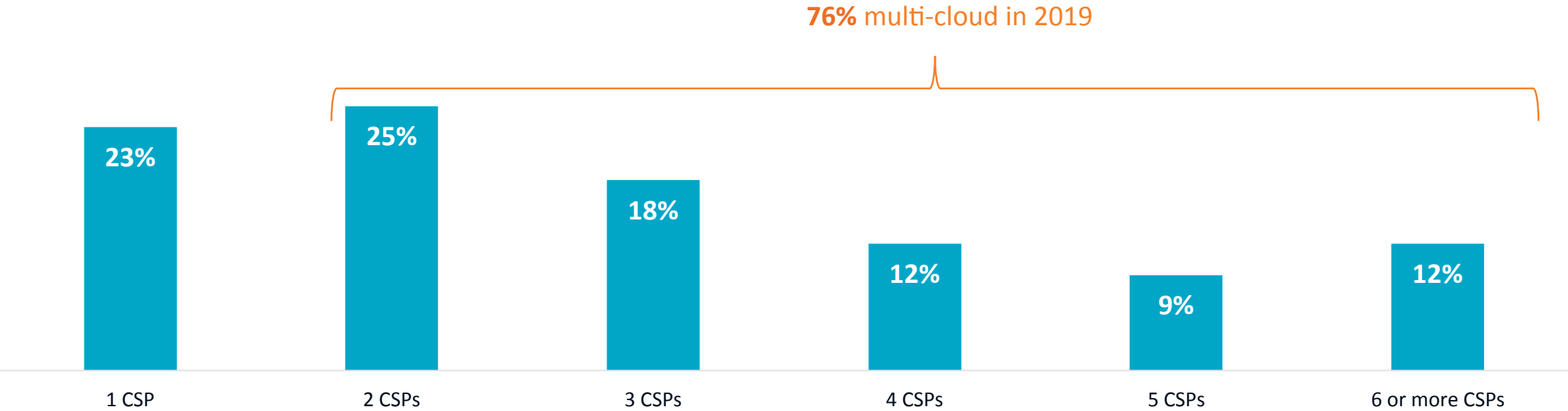
Question text:

For which of the following purposes does your organization use cloud infrastructure services (IaaS and/or PaaS)?
(Percent of respondents, N=438, multiple responses accepted)



Most IaaS Users are Multi-cloud, but Spending Typically Favors One Service Provider

Number of unique CSPs used by organization, 2017-2019



Question text:
Approximately **how many unique public cloud infrastructure service providers** (IaaS and/or PaaS) does your organization currently use?
(Percent of respondents, N=438)

Tipping Point: Finding the Hybrid Cloud Balance

Research Overview

Background:

In ESG's 2018 IT Spending Intentions study, 41% of IT organizations identified that they had pulled at least one workload back from public cloud infrastructure services.

Project Details:

- **350 completed online surveys** with IT professionals currently responsible for their organization's on-premises infrastructure along with knowledge of their organization's use of public cloud service. All organizations were current users of public cloud services.
 - **75% Enterprise, 25% Midmarket:** Enterprise (1,000 or more employees) organizations and Midmarket (100 to 999 employees) in North America
 - **Multiple industry verticals** including financial, communications & media, manufacturing, retail/wholesale, among others
 - In order to qualify, **ALL organizations moved workload(s) back on-premises from a public cloud service**
-

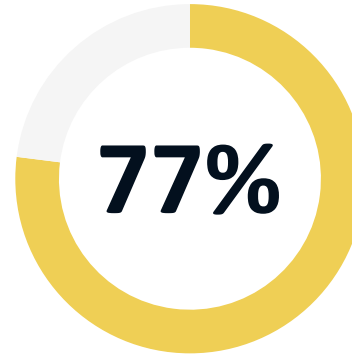
How to use this data:

- **This is NOT representative of all IT organizations**
- **This data is not anti-cloud, 86% of participants indicated they are completely or mostly satisfied with their cloud providers**
- **This data presents some common challenges with hybrid cloud journeys that can be remedied moving forward**

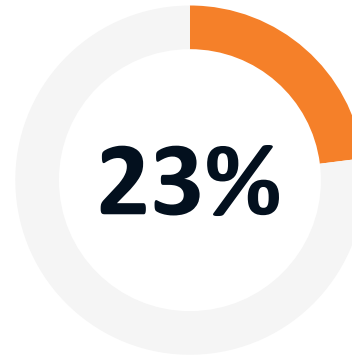
Workload Repatriation Summary



Hybrid Cloud Balancing
is **SELECTIVE**



of organizations pulled
a workload back a
handful of times

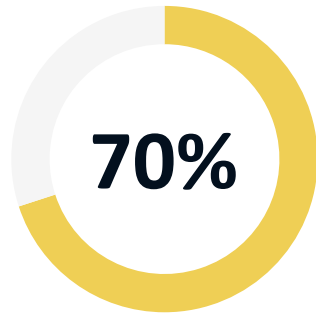


have pulled a workload
back from the cloud
many times

Workload Repatriation Factors



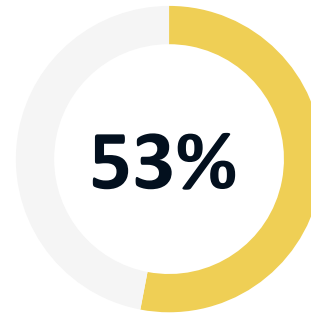
SHADOW IT PLAYS A
SIGNIFICANT ROLE



of organizations repatriated **at least one workload** back from a public cloud service originally procured by an individual or line-of-business group outside of IT



MORE THAN HALF ARE
CLOUD-FIRST



of organizations identified having a **cloud-first policy** for new workload deployments



CLOUD-FIRST SAW MORE
REPATRIATION

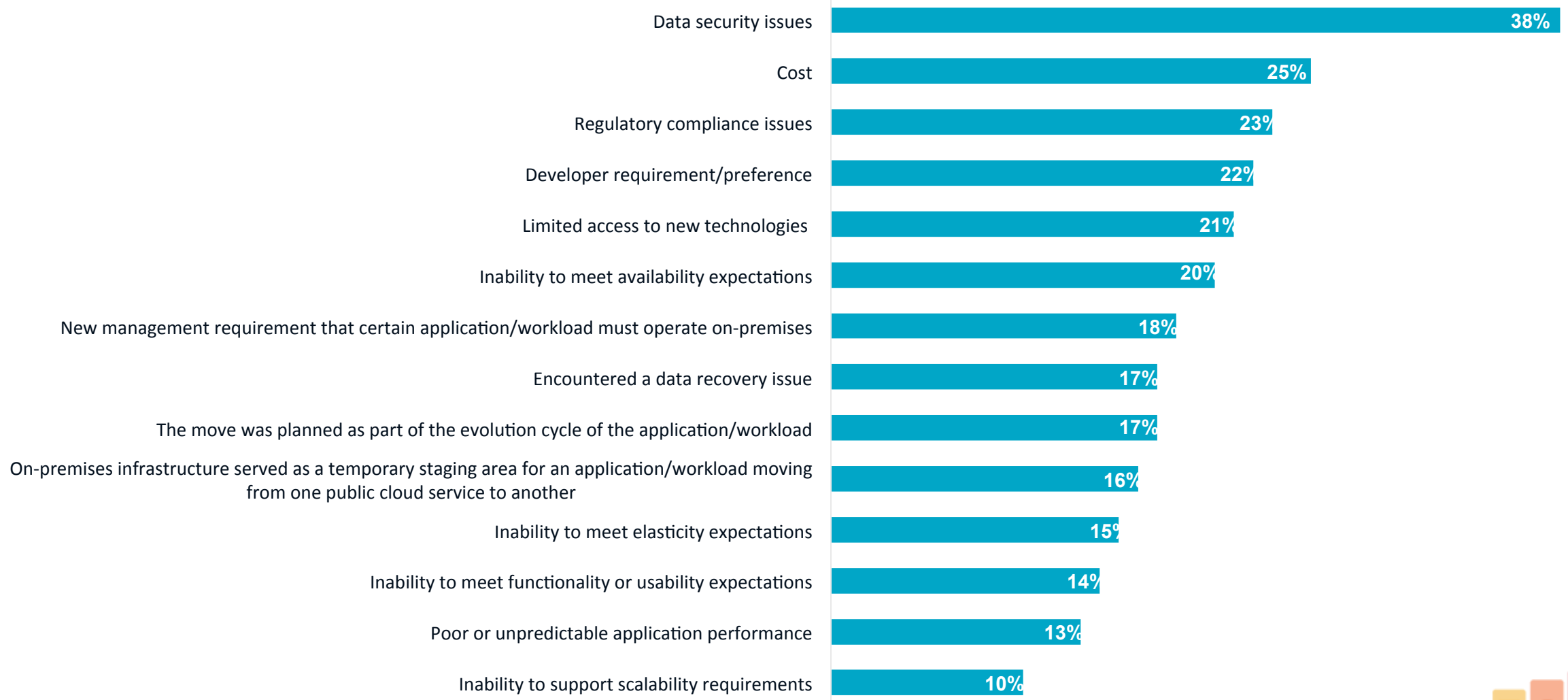
Cloud-first companies
were

3X

more likely to identify that they **pulled back many workloads**, than companies that identified that they equally consider on and off premises solutions

Top Rationale Behind the Move Back On Premises From IaaS

What were the reasons behind your organizations' decision to move an application(s)/workload(s) back to on-premises infrastructure, by cloud type (IaaS/PaaS ? (Percent of respondents, N=316, multiple responses accepted)



Top Rationale Behind the Move by Org Type (IaaS & SaaS)



MIDMARKET ORGANIZATIONS

1. Data Security (33%)
2. Cost (31%)
3. Regulatory Compliance (23%)
3. Encountered a Data Recovery Issue (23%)
3. Cloud Limited Access to New Technology (23%)

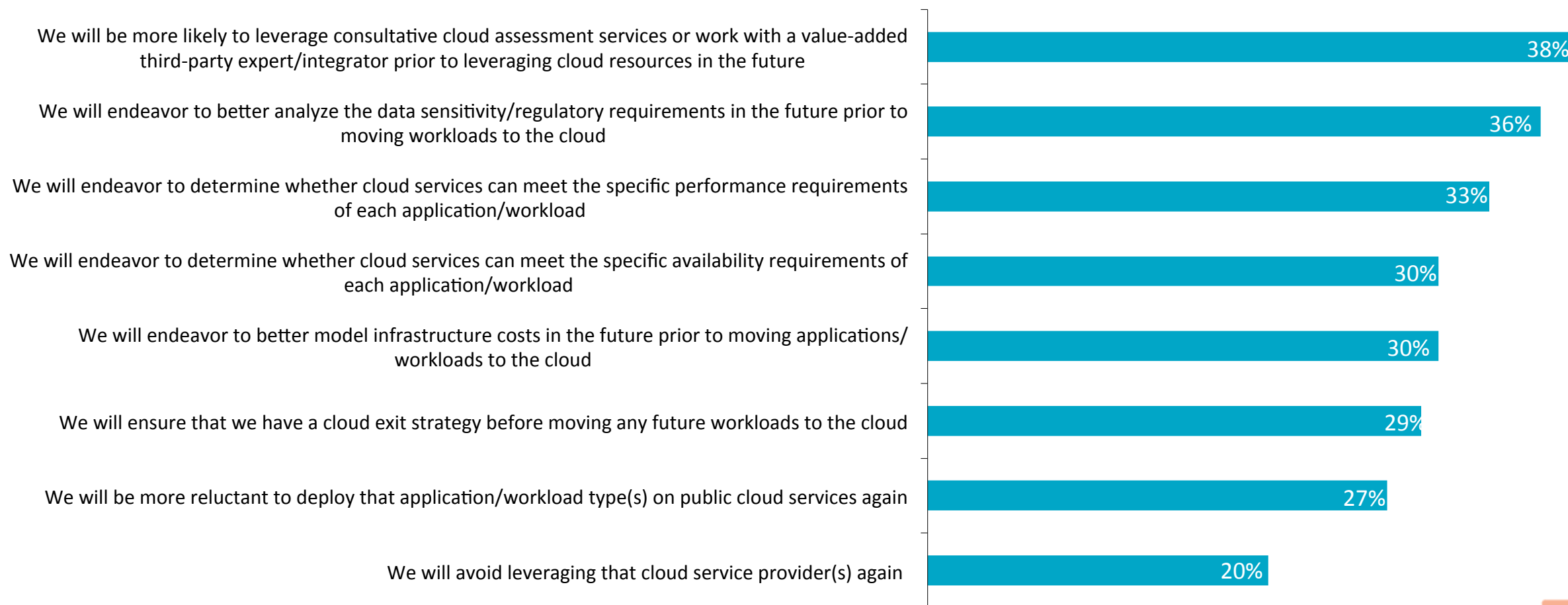


ENTERPRISE ORGANIZATIONS

1. Data Security (34%)
2. Inability to Meet Availability Expectations (25%)
2. Regulatory Compliance (25%)
2. Cloud Limited Access to New Technology (25%)
2. Developer Requirement/Preference (25%)
2. On Premises Serves as a Temporary Staging Area for a Move to Another Cloud Service (25%)

Specific Steps to Avoid Repatriation in the Future

What specific steps do you expect your organization to take to avoid future repatriation efforts applications/workloads back from public cloud services in the future? (Percent of respondents, N=338, multiple responses accepted)



After This Webcast

- Please rate this webcast and provide us with feedback
- This webcast and a PDF of the slides will be posted to the SNIA Cloud Storage Technologies Initiative website and available on-demand at <https://www.snia.org/forum/csti/knowledge/webcasts>
- A full Q&A from this webcast will be posted to the SNIA Cloud blog: www.sniacloud.com/
- Follow us on Twitter @SNIACloud

Thank You