



# IT TRENDS REPORT 2016: THE HYBRID IT EVOLUTION

NORTH AMERICA



solarwinds 

# IT TRENDS

# REPORT 2016:

## THE HYBRID IT EVOLUTION

WHAT WE  
COVER IN  
THE REPORT

Introduction

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Key Findings

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Recommendations

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Full Survey Results

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# INTRODUCTION



This report not only reveals the hybrid IT reality the vast majority of organizations are experiencing, but also explores the barriers to greater adoption of cloud technology.

We are in the midst of a once-in-a-decade shift in the technology landscape. This reality has become known as hybrid IT: migrating some infrastructure to the cloud, while continuing to maintain some critical services onsite. At the center of this shift is the need to ensure always-on application performance—regardless of location.

The rise of business-critical applications has created this heightened awareness for performance. End-users expect a seamless experience, keeping them blissfully unaware of the changes happening in their IT environments. For IT professionals, their job has become increasingly pressured, complex and forever changed.

This report not only reveals the hybrid IT reality the vast majority of organizations are experiencing, but also explores the barriers to greater adoption of cloud technology, as well as the challenges of migrating to the cloud and managing the performance of hybrid IT environments.



# KEY FINDINGS



IT infrastructures have evolved from traditional on-premises-only to a hybrid strategy that links internal and external IT services driven by the existence of the cloud.

IT professionals are faced with a dual mandate: increase efficiency through cloud services while also ensuring critical systems, databases and applications are secure.

**92%** of IT professionals say adopting cloud technologies is important to their organizations' long-term business success; **27%** say it's extremely important.

**Only 43%** estimate that half or more of their organizations' total IT infrastructure will be in the cloud within the next 3-5 years.

**60%** say it's unlikely that all of their organizations' infrastructure will ever be migrated to the cloud.

**Only 9%** have not migrated any of their organizations' infrastructure to the cloud.

Small businesses that have not migrated anything to the cloud went from **18% in 2015** to just **6% in 2016**.

**Top three** hybrid IT benefits\*:

- 1) Infrastructure cost-reduction
- 2) Increased infrastructure flexibility/agility
- 3) Relieving internal IT personnel of day-to-day management of some infrastructure

**62%** say security is the biggest challenge of managing current hybrid IT environments.

**Top three** barriers to greater cloud adoption\*:

- 1) Security/compliance concerns
- 2) The need to support legacy systems
- 3) Budget limitations

**Top three** areas of infrastructure already migrated to the cloud:

- 1) Applications
- 2) Storage
- 3) Databases

**Top three** priorities for continued or future migration\*:

- 1) Applications
- 2) Databases
- 3) Storage

\*By weighted rank

IT professionals require new skills, tools and resources to successfully drive the hybrid IT migration forward and enable their organizations to better meet business objectives.

**Only 27%** are certain their IT organizations currently have adequate resources to manage a hybrid IT environment.

**Top five** skills needed to better manage hybrid IT environments:

- 1) Hybrid IT monitoring/management tools and metrics
- 2) Application migration
- 3) Distributed architectures
- 4) Service-oriented architectures
- 5) Automation and vendor management

**56%** feel they have the level of support needed from leadership and the organization as a whole to develop/improve skills needed to better manage hybrid IT environments.



# RECOMMENDATIONS



As illustrated in the study's findings, IT professionals need to arm themselves with a new set of skills, products and resources to succeed in the hybrid IT era. They should consider the following recommendations:

## ESTABLISH AN END-USER FOCUS AND SERVICE ORIENTATION

The ultimate goal of modern IT is to deliver greater Quality-of-Service (QoS) for end-users to ensure business productivity. To that end, minimizing friction across departmental silos will speed updates, changes, deployments and time-to-resolution for problems, all of which deliver a better end-user experience. IT professionals operating in hybrid IT environments should consider leveraging the principles of a DevOps approach to achieve faster and more provisioning choices, greater agility and organizational efficiency. Doing so will enable them to quickly make updates and changes to infrastructure, which makes IT services, whether on-premises or in the cloud, more agile, lean and scalable.

## OPTIMIZE VISIBILITY

With both on-premises and cloud resources to manage in a hybrid IT environment, a management and monitoring toolset that surfaces a single point of truth across those platforms is essential. The normalization of metrics, alerts and other collected data from applications and workloads, regardless of their location, will enable a more efficient approach to remediation, troubleshooting and optimization.

## APPLY MONITORING AS A DISCIPLINE

In a hybrid IT world rife with new complexities, monitoring can no longer be an afterthought. By establishing monitoring as a core IT function (a.k.a. monitoring as a discipline), organizations can benefit from a much more proactive IT management strategy, while also streamlining infrastructure performance, cost and security.

## IMPROVE BUSINESS SAVVY

As more IT services become provided by vendors, IT professionals must improve upon the following trifecta: business savvy for contract negotiation, technical expertise to understand and use the available cloud services and project management. These will all require the ability to effectively manage project budgets, workflows and deadlines; dissect terms and conditions; and understand service-level agreements.

## FOCUS ON DEVELOPING OR IMPROVING KEY TECHNICAL SKILLS AND KNOWLEDGE

Today's IT professionals need to reach across traditional roles and become polymaths in order to be successful in the hybrid IT world as they pivot across multiple domains. The most important skills and knowledge IT professionals need to develop or improve to successfully manage hybrid IT environments are service-oriented architectures, automation, vendor management, application migration, distributed architectures, API and hybrid IT monitoring and management tools and metrics.

Learn more about how SolarWinds can help IT professionals better monitor and manage their infrastructure from on-premises to the cloud [here](#).





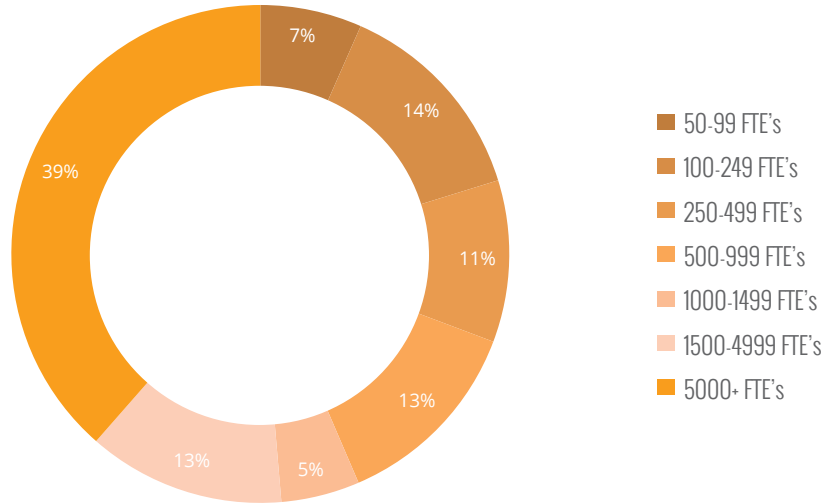
# FULL SURVEY RESULTS



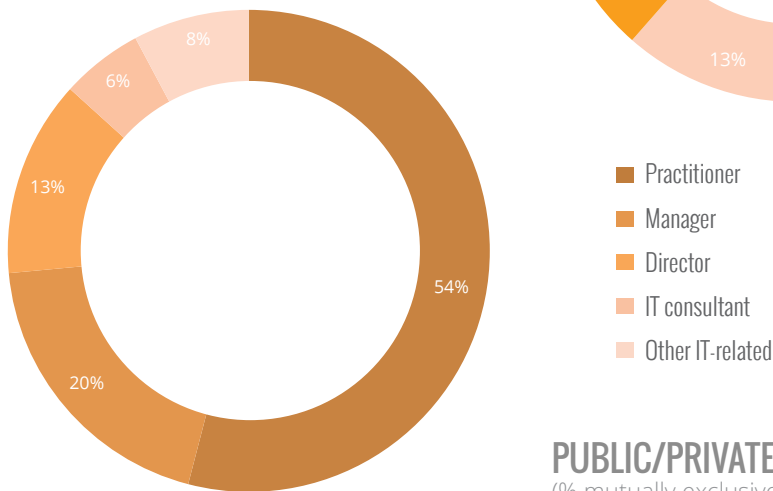
# DEMOGRAPHICS

257 IT practitioners, managers and directors in the U.S. and Canada from public and private sector small, mid-size and enterprise companies participated in the December 2015 survey.

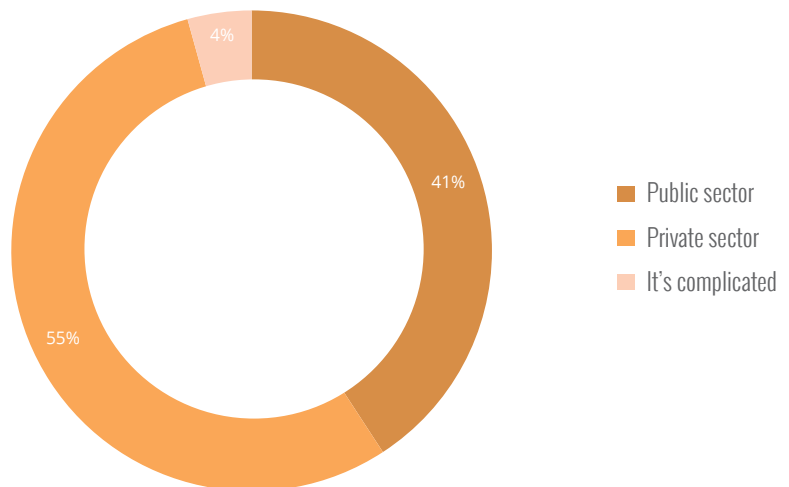
**SIZE OF COMPANY**  
number of employees



**IT PRO'S ROLE**

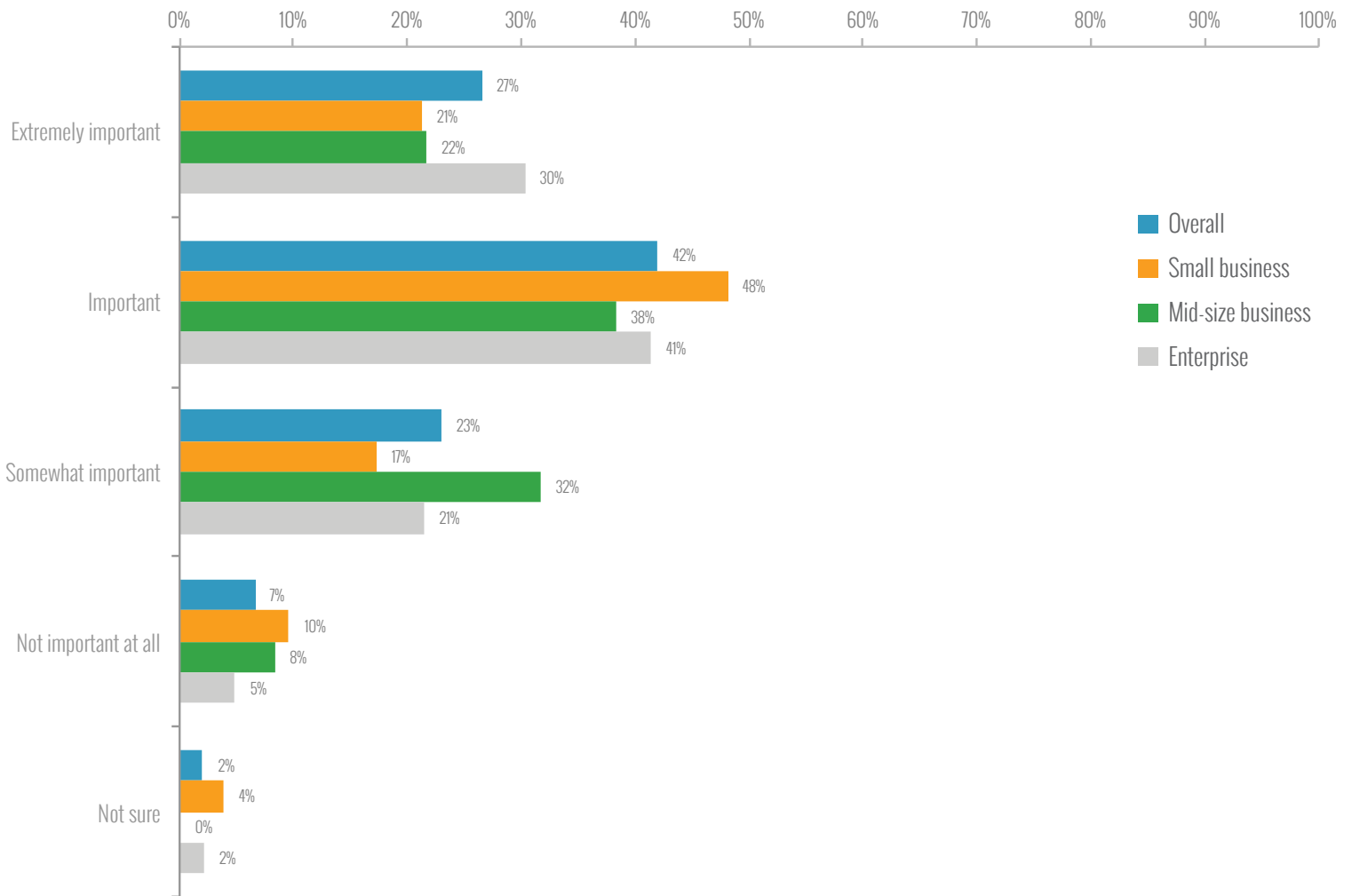


**PUBLIC/PRIVATE SECTOR SPLIT**  
(% mutually exclusive)



## BENEFITS & BARRIERS TO ADOPTING CLOUD

# IMPORTANCE OF ADOPTION

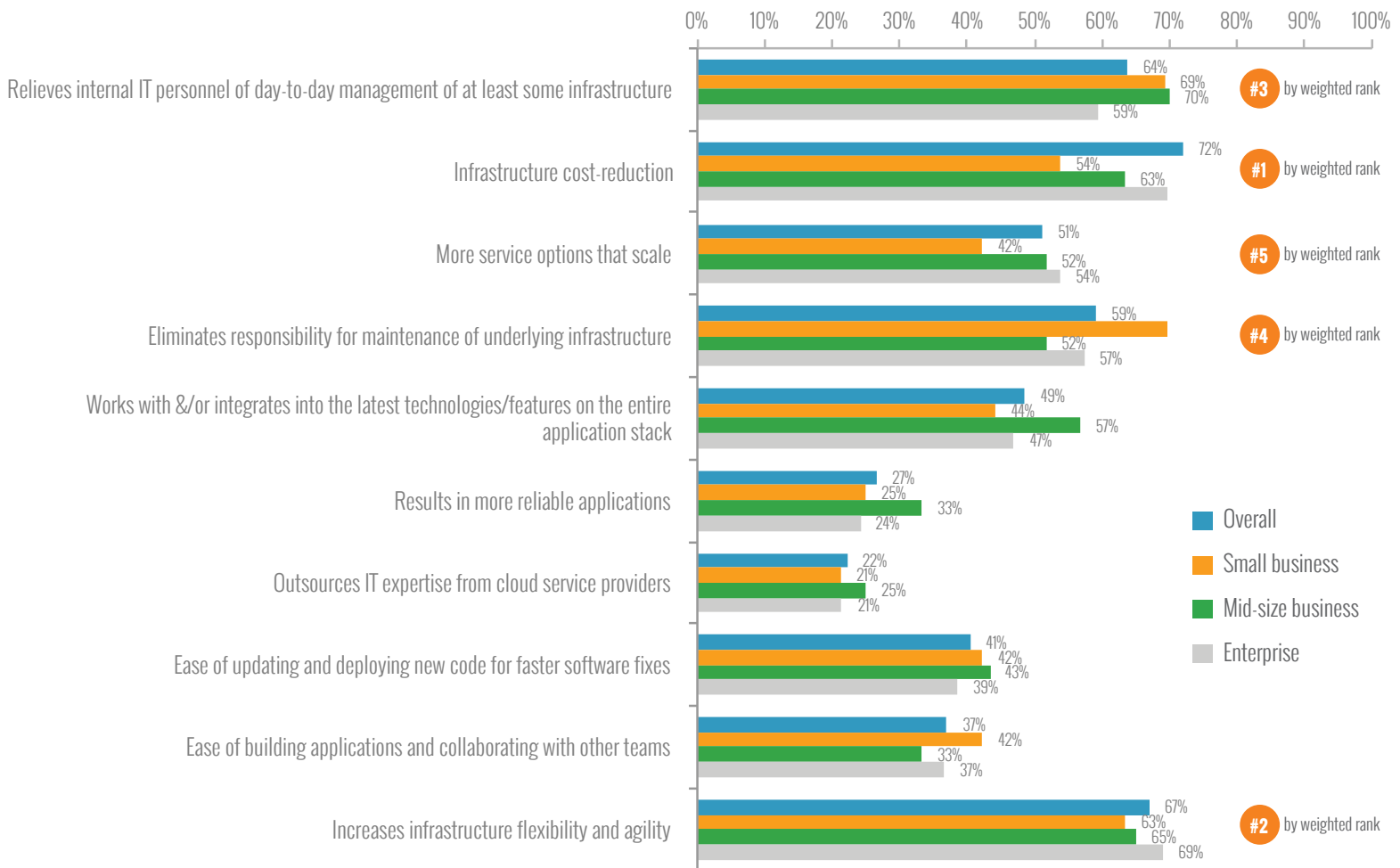


### SURVEY QUESTION:

In general, how important is adopting (the process of acquiring and implementing) cloud technologies to your organization's long-term business success?

# BENEFITS & BARRIERS TO ADOPTING CLOUD

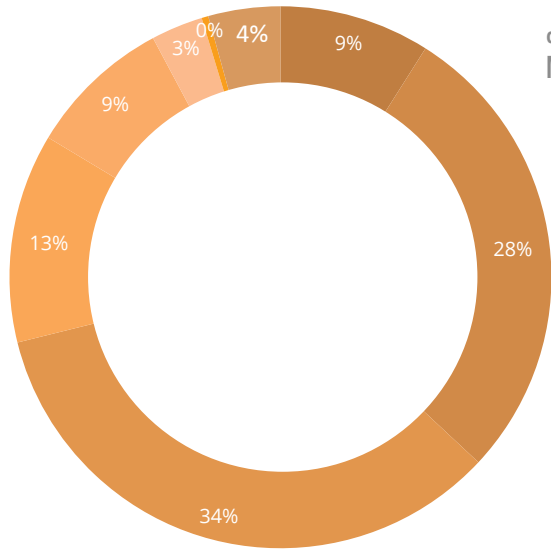
## FIVE BIGGEST BENEFITS



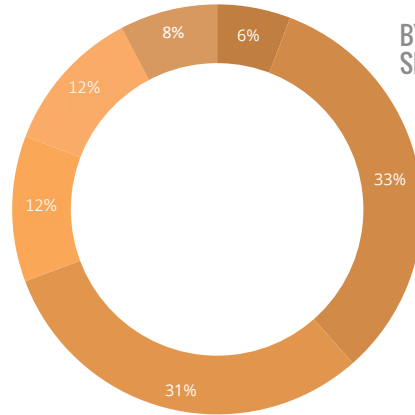
### SURVEY QUESTION:

What do you feel are the five biggest benefits of adopting cloud technologies?

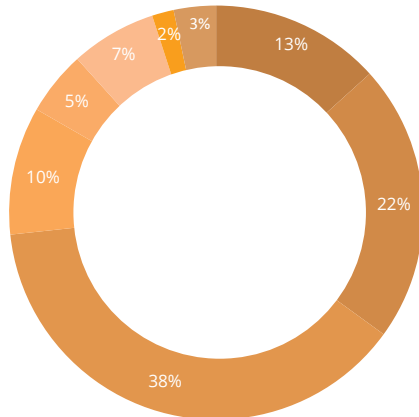
# BENEFITS & BARRIERS TO ADOPTING CLOUD INFRASTRUCTURE MIGRATION



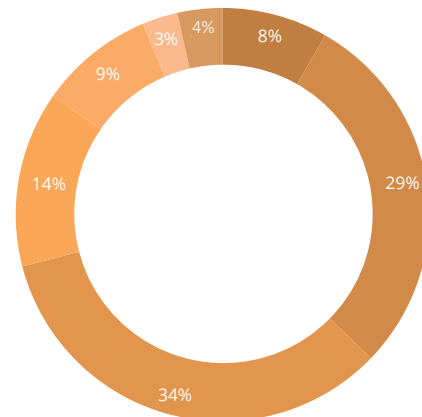
% OF IT INFRASTRUCTURE MIGRATED TO CLOUD (OVERALL)



BY BUSINESS SIZE: SMALL



BY BUSINESS SIZE: MID-SIZED



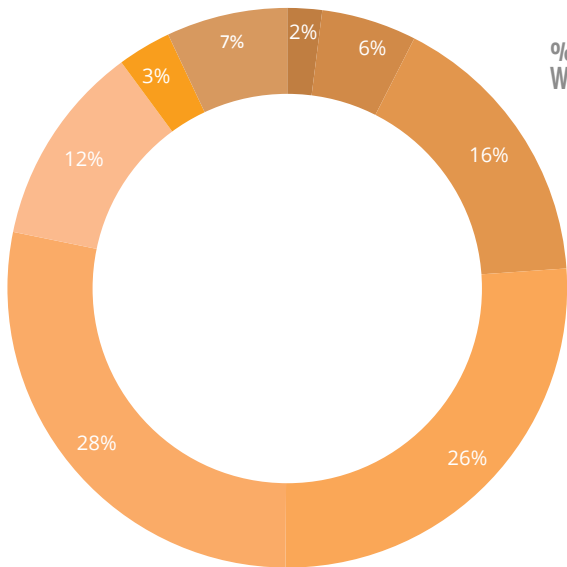
BY BUSINESS SIZE: ENTERPRISE

- 0% migrated
- 1-9% migrated
- 10-24% migrated
- 25-49% migrated
- 50-74% migrated
- 75-99% migrated
- 100% migrated
- Not sure

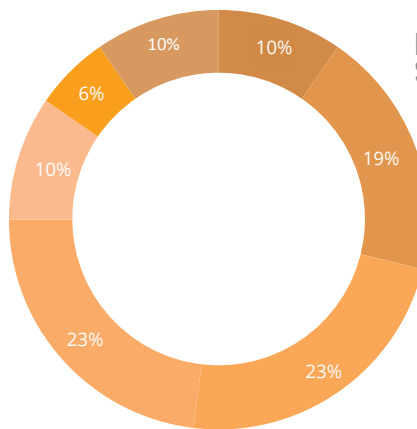
## SURVEY QUESTION:

What is your best estimate of the percentage of your organization's IT infrastructure that has already been migrated to the cloud (public or private)?

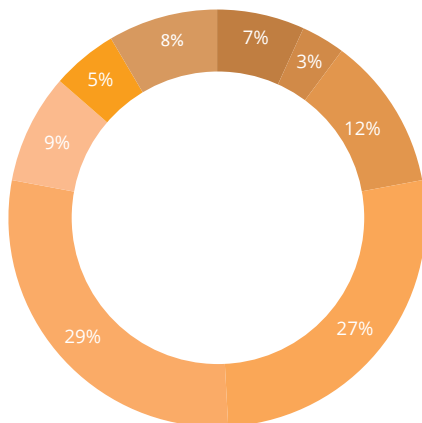
# BENEFITS & BARRIERS TO ADOPTING CLOUD INFRASTRUCTURE FORECAST



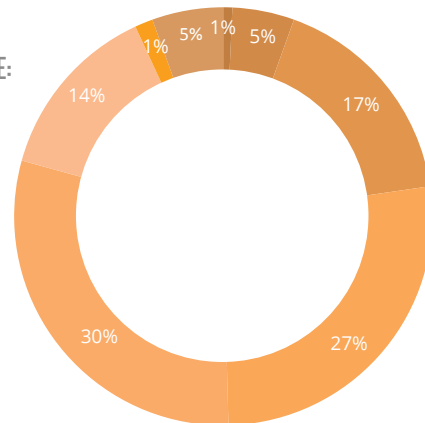
% OF TOTAL IT INFRASTRUCTURE IN CLOUD WITHIN NEXT 3-5 YEARS (OVERALL)



BY BUSINESS SIZE: SMALL



BY BUSINESS SIZE: MID-SIZED



BY BUSINESS SIZE: ENTERPRISE

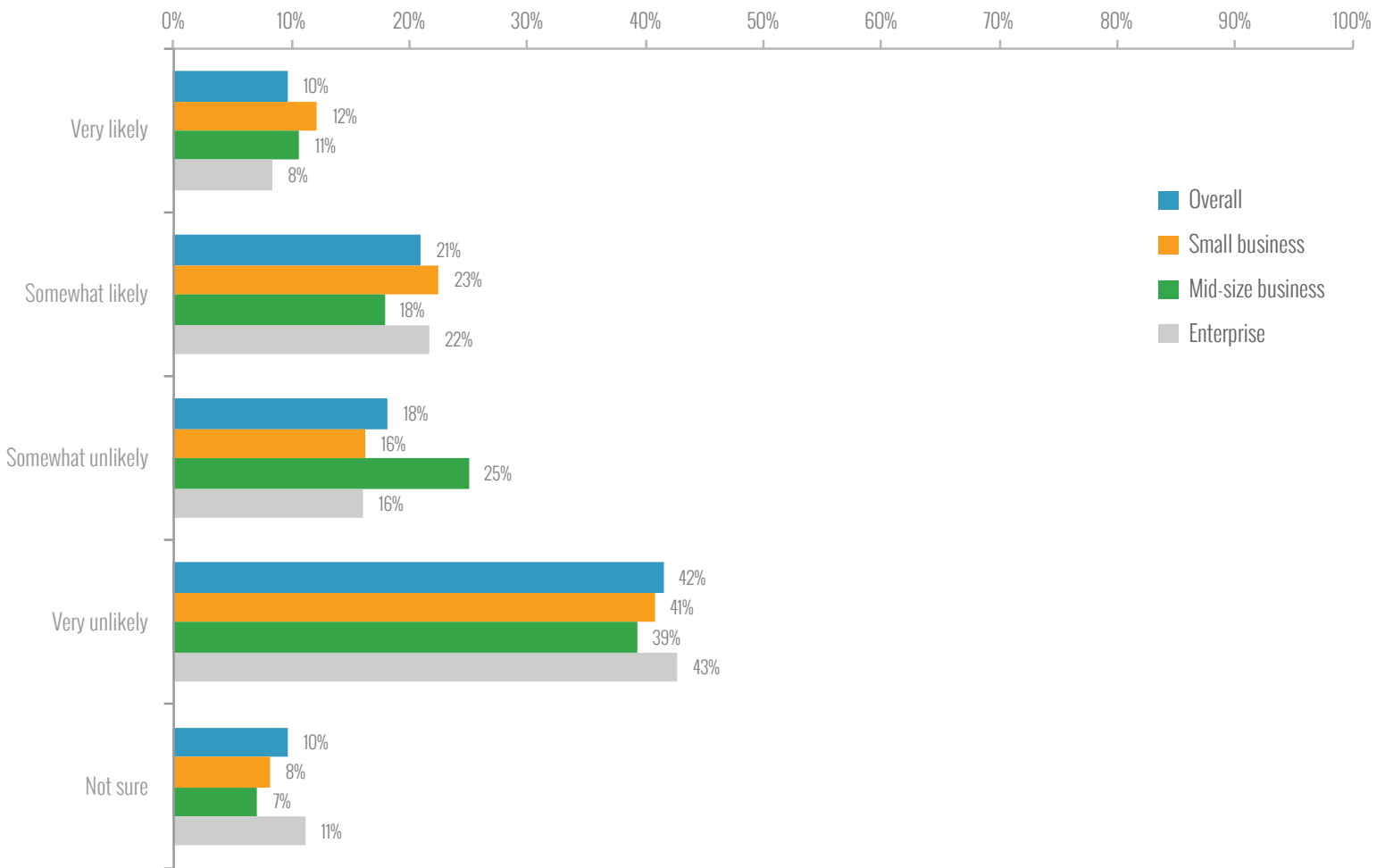
- 0% migrated
- 1-9% migrated
- 10-24% migrated
- 25-49% migrated
- 50-74% migrated
- 75-99% migrated
- 100% migrated
- Not sure

## SURVEY QUESTION:

Within the next 3-5 years, what is your best estimate of the total percentage of your organization's IT infrastructure that will be in the cloud (public or private)?

## BENEFITS & BARRIERS TO ADOPTING CLOUD

# LIKELIHOOD OF MIGRATING ALL TO CLOUD

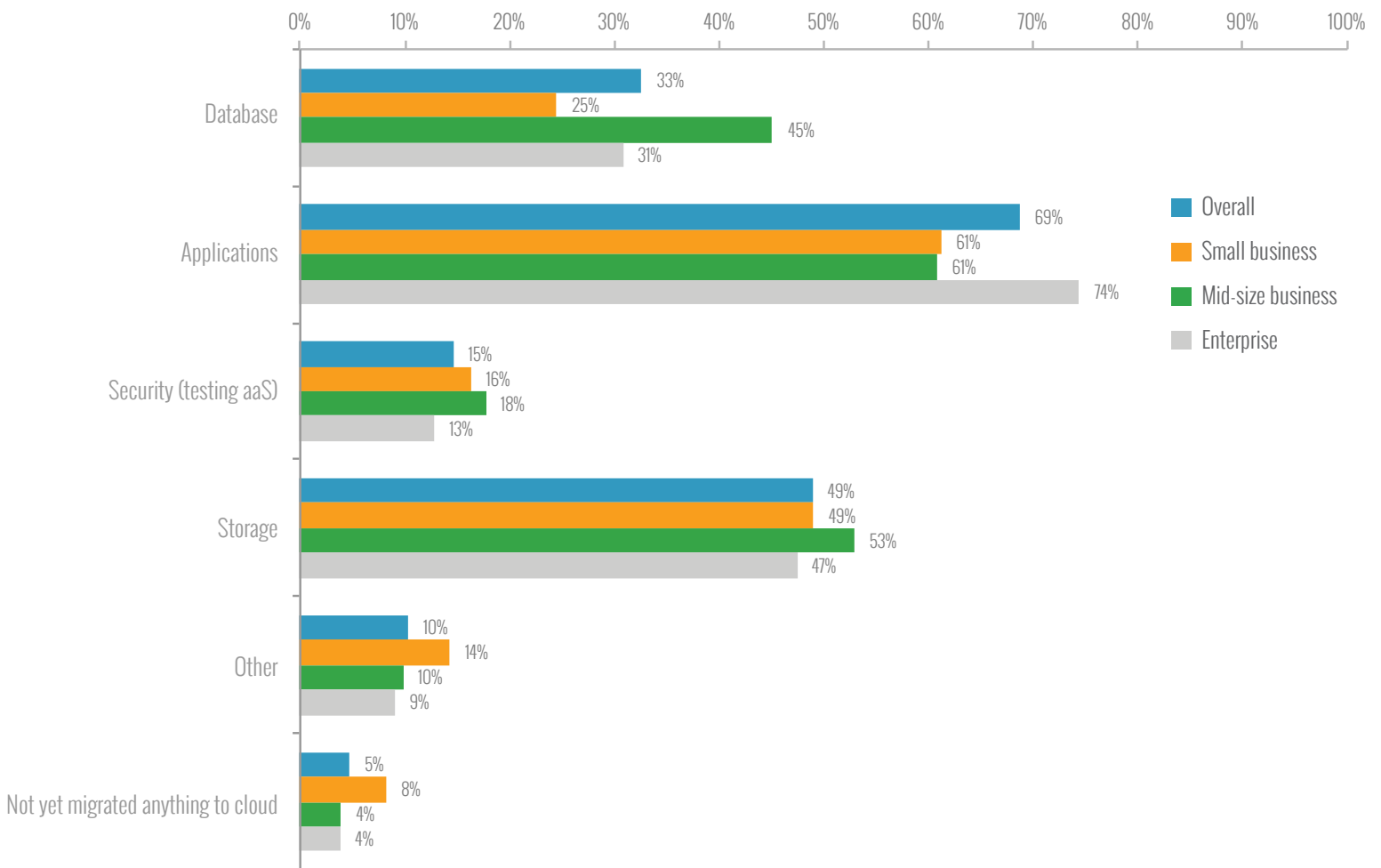


### SURVEY QUESTION:

How likely is your organization to migrate its entire IT infrastructure to the cloud at some point in the future?

## BENEFITS & BARRIERS TO ADOPTING CLOUD

# AREAS OF IT INFRASTRUCTURE MIGRATED

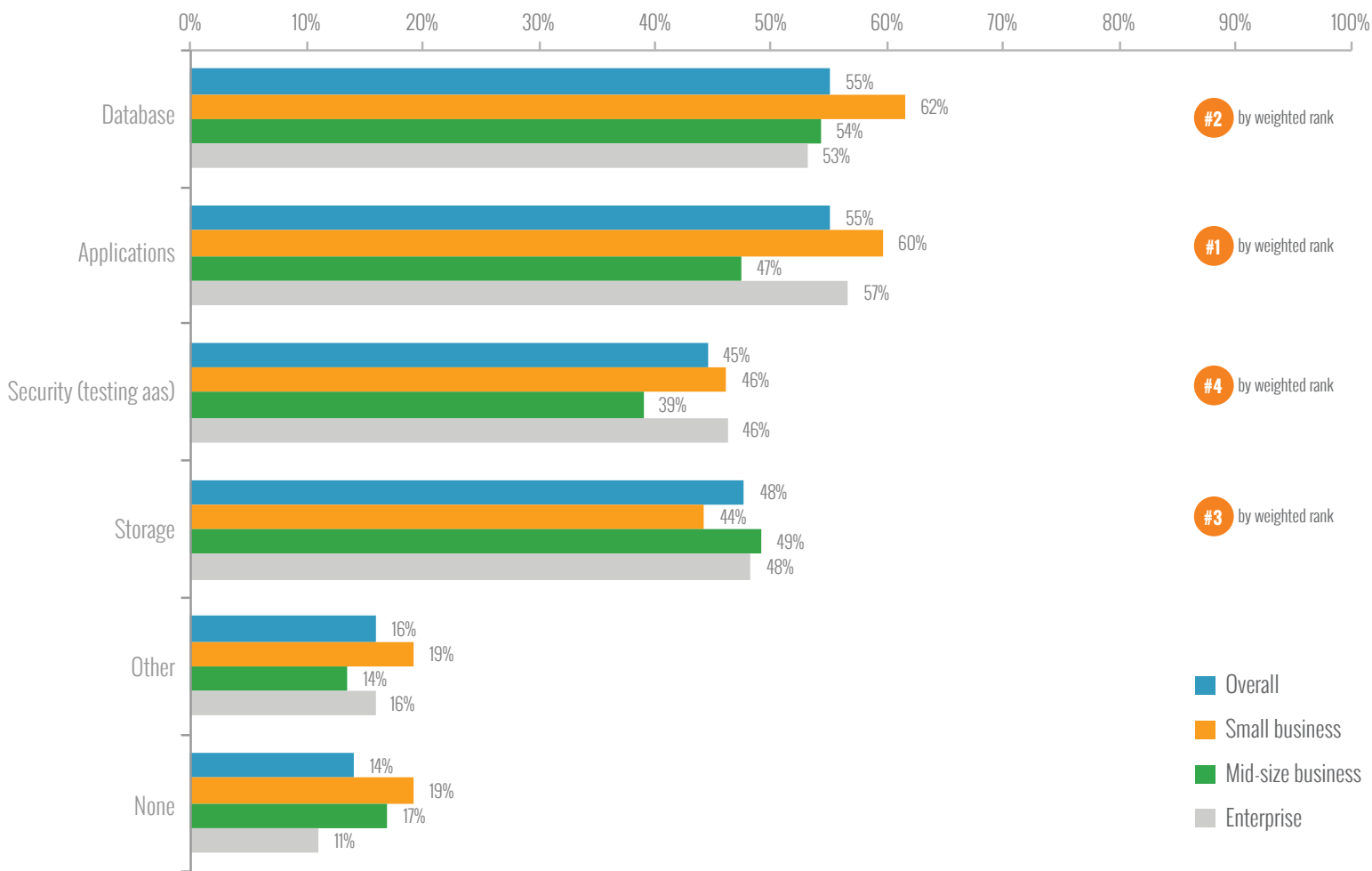


### SURVEY QUESTION:

Which area(s) of your organization's IT infrastructure have already been migrated to the cloud (public or private)?

## BENEFITS & BARRIERS TO ADOPTING CLOUD

# PRIORITIES FOR FUTURE MIGRATION



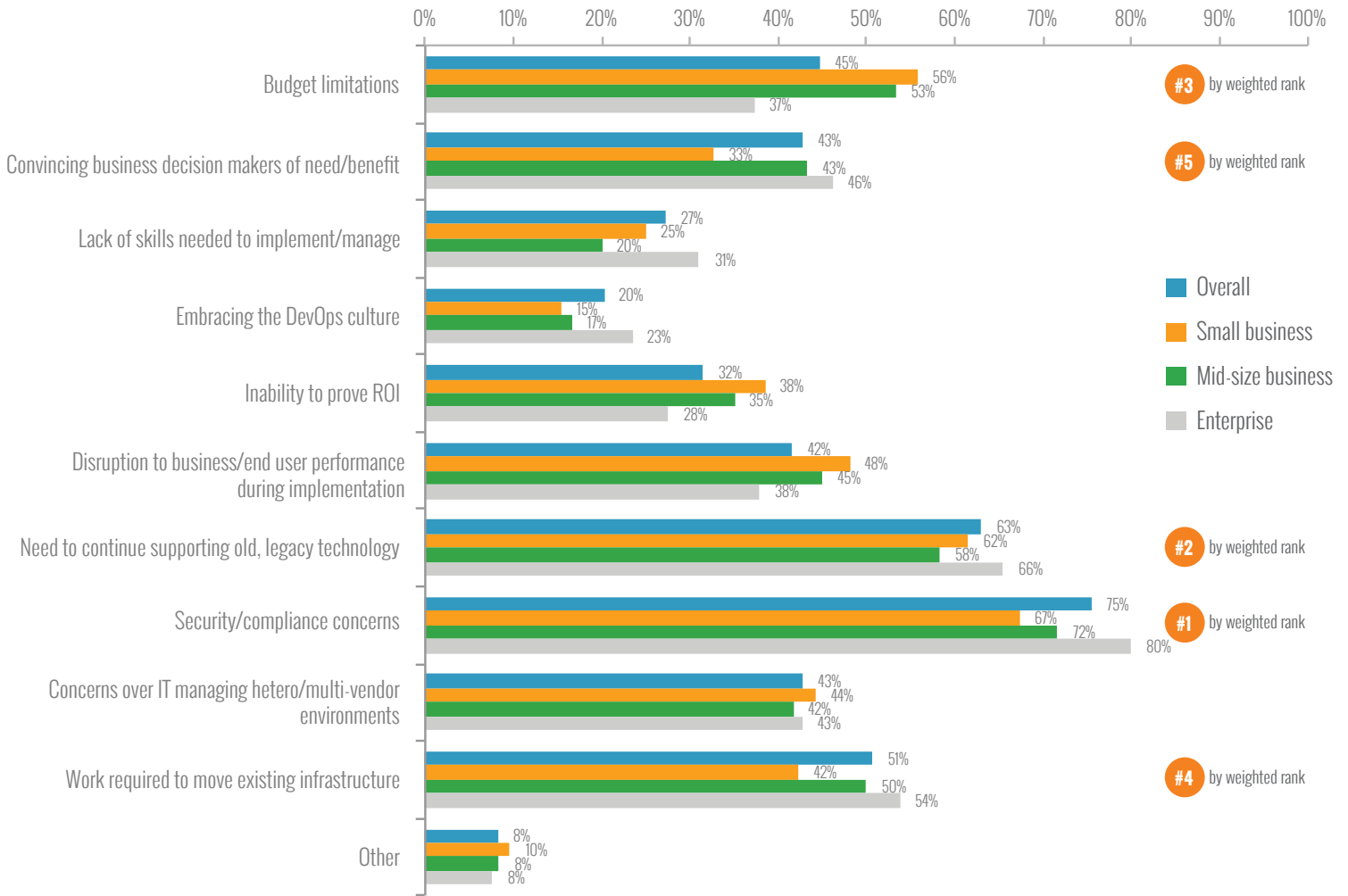
### SURVEY QUESTION:

For those area(s) of your organization's IT infrastructure that have not been migrated to the cloud, which have the highest priority for future migration to the cloud?



# BENEFITS & BARRIERS TO ADOPTING CLOUD

# FIVE BIGGEST BARRIERS TO CLOUD ADOPTION

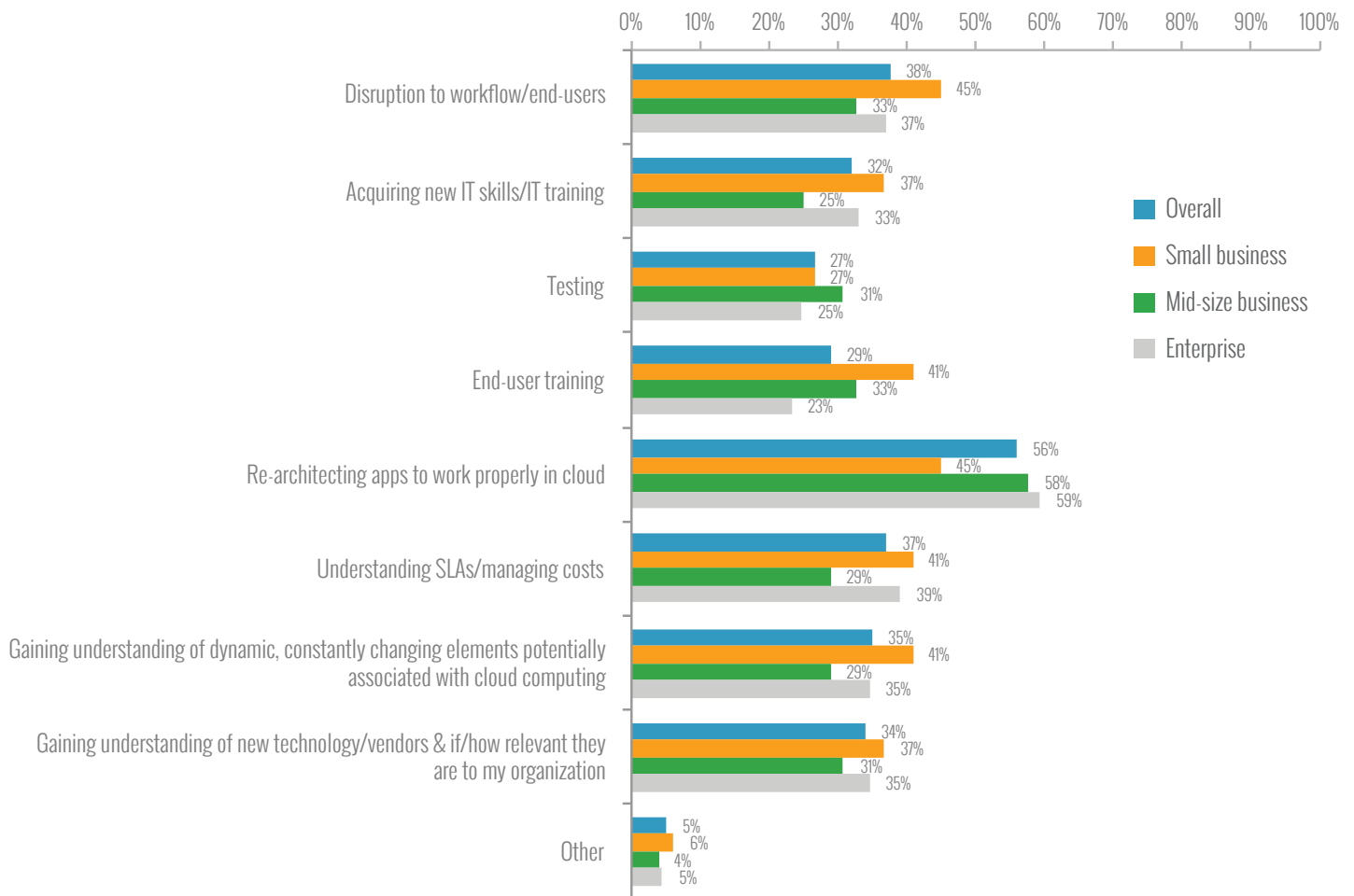


## SURVEY QUESTION:

What are/were your organization's five biggest barriers to adoption of cloud technologies?

## CHALLENGES OF MIGRATING TO CLOUD

# BIGGEST CHALLENGES FACED WHEN MIGRATING

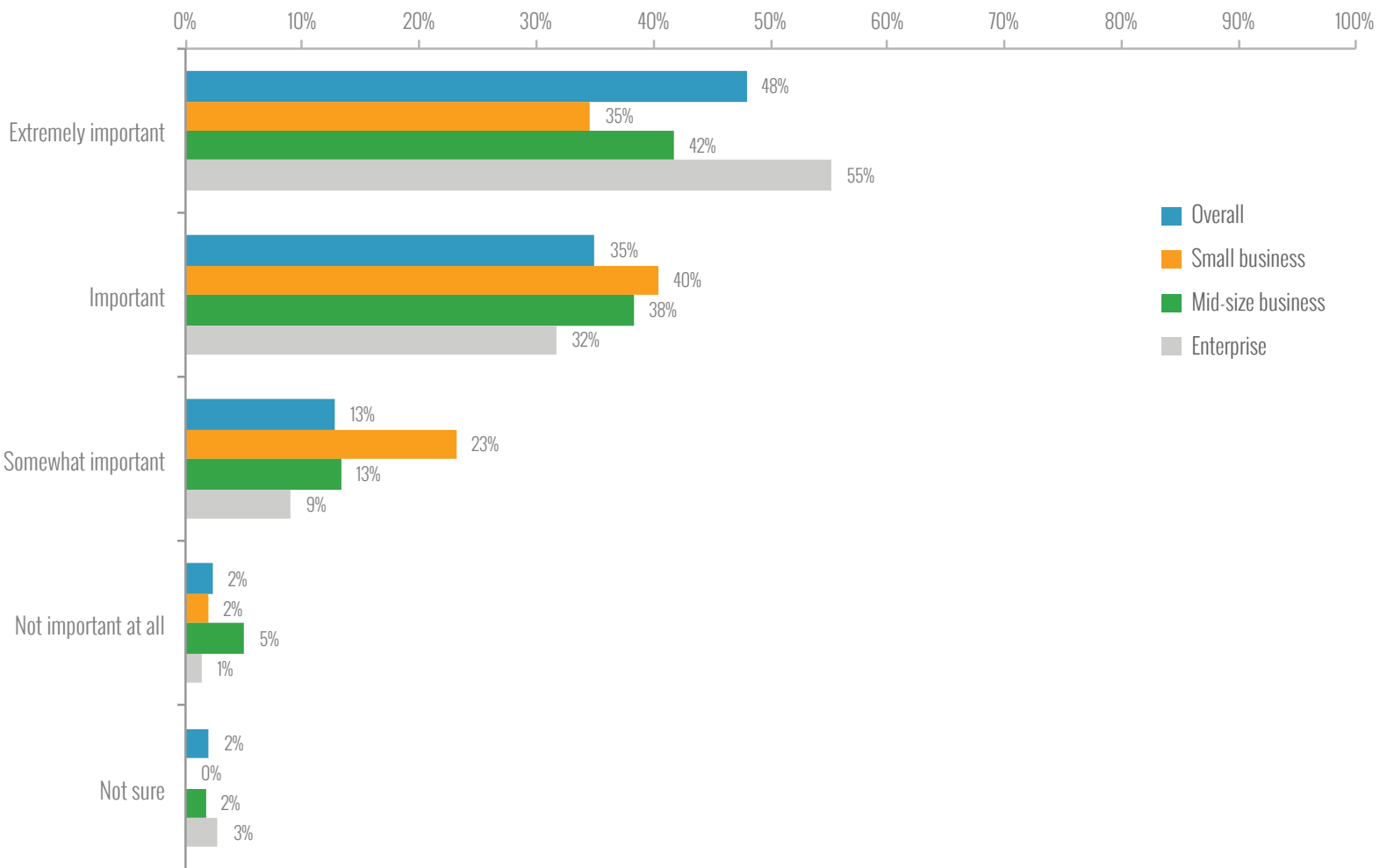


### SURVEY QUESTION:

Which of the following are the biggest challenges your organization experienced when migrating infrastructure to the cloud?

## CHALLENGES OF MIGRATING TO CLOUD

# IMPORTANCE OF WORKING WITH BUSINESS LEADERS

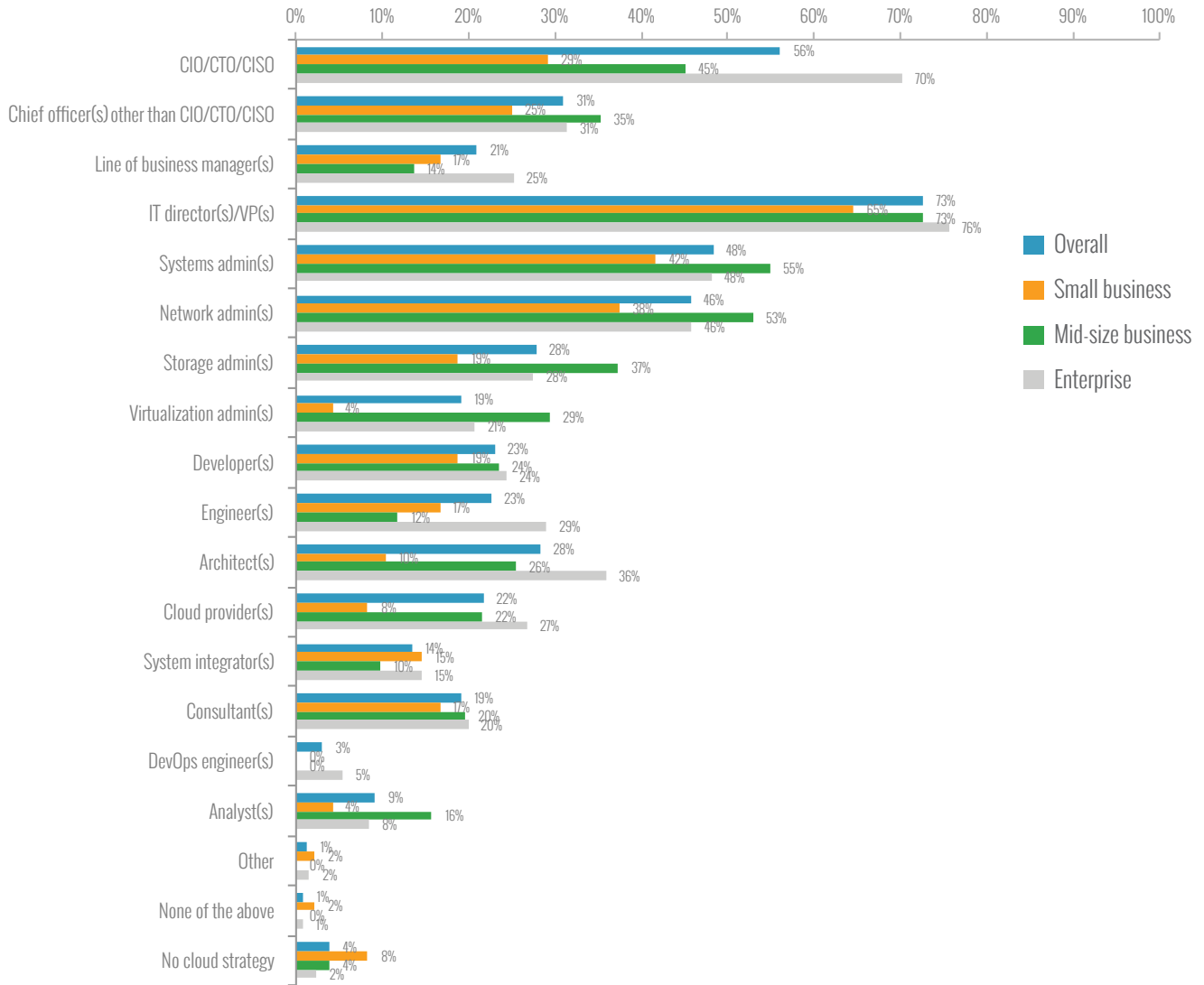


### SURVEY QUESTION:

How important is it to work with business executive leaders when developing and executing a cloud strategy?

## CHALLENGES OF MIGRATING TO CLOUD

# THOSE INVOLVED IN DEVELOPING CLOUD STRATEGY

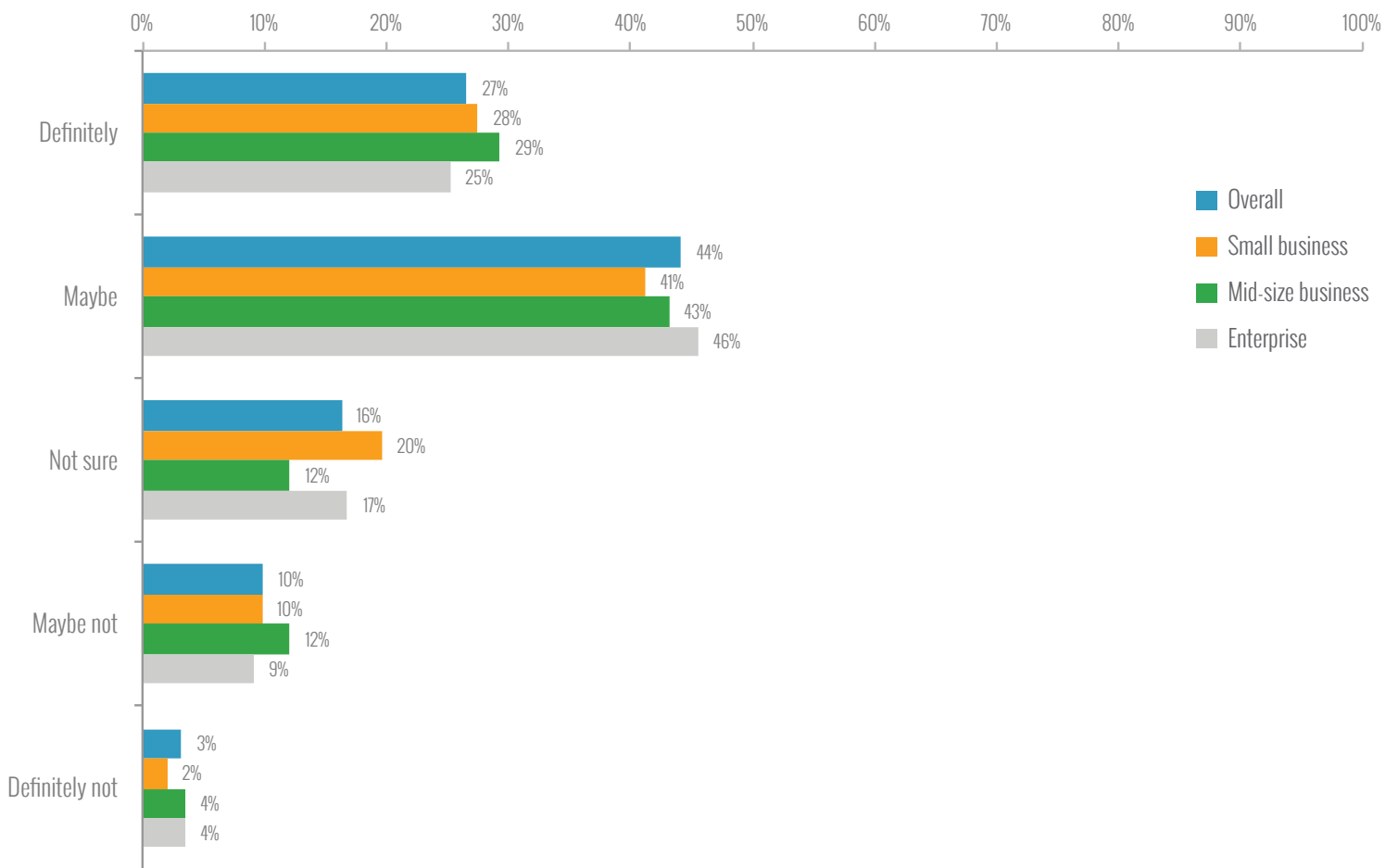


### SURVEY QUESTION:

Who was involved in developing your organization's cloud strategy?

## REALITIES OF MANAGING HYBRID IT

# RESOURCES TO MANAGE HYBRID IT ENVIRONMENTS

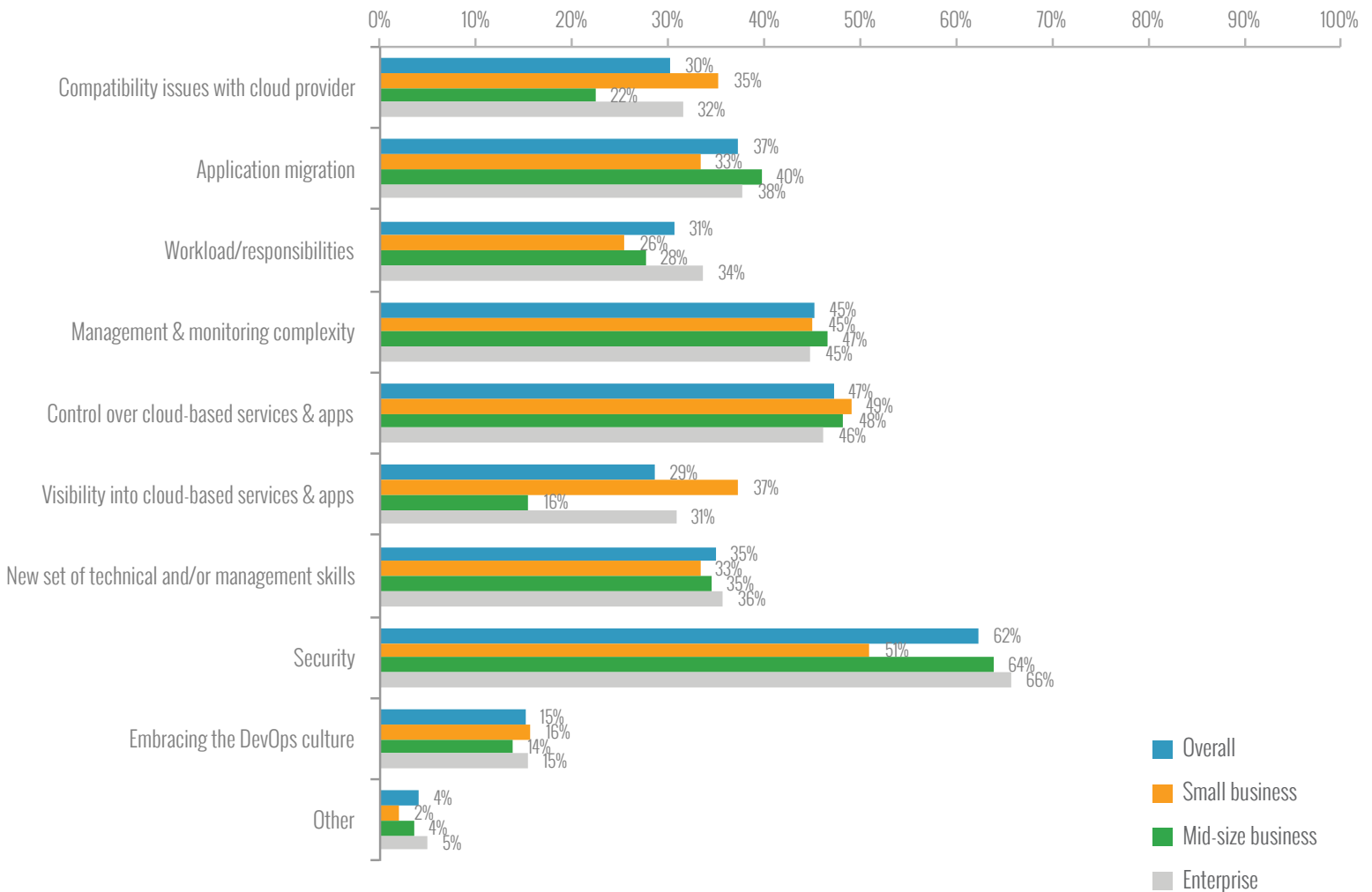


### SURVEY QUESTION:

Does your IT organization have adequate resources to manage a hybrid IT environment?

## REALITIES OF MANAGING HYBRID IT

# BIGGEST CHALLENGES WITH HYBRID IT ENVIRONMENTS

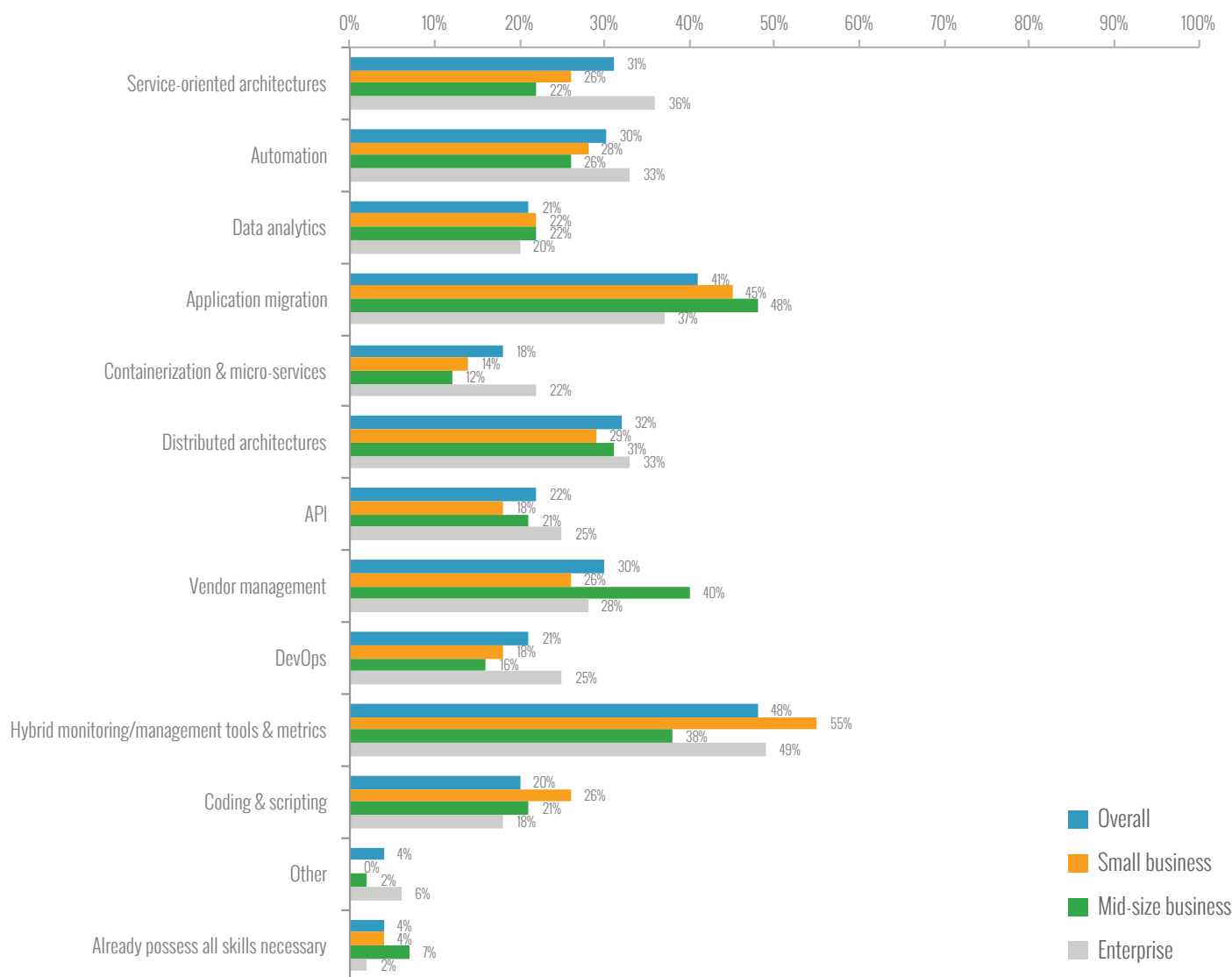


### SURVEY QUESTION:

Which of the following do you feel are the biggest challenges associated with hybrid IT environments?

## REALITIES OF MANAGING HYBRID IT

# SKILLS NEEDED TO BETTER MANAGE HYBRID IT

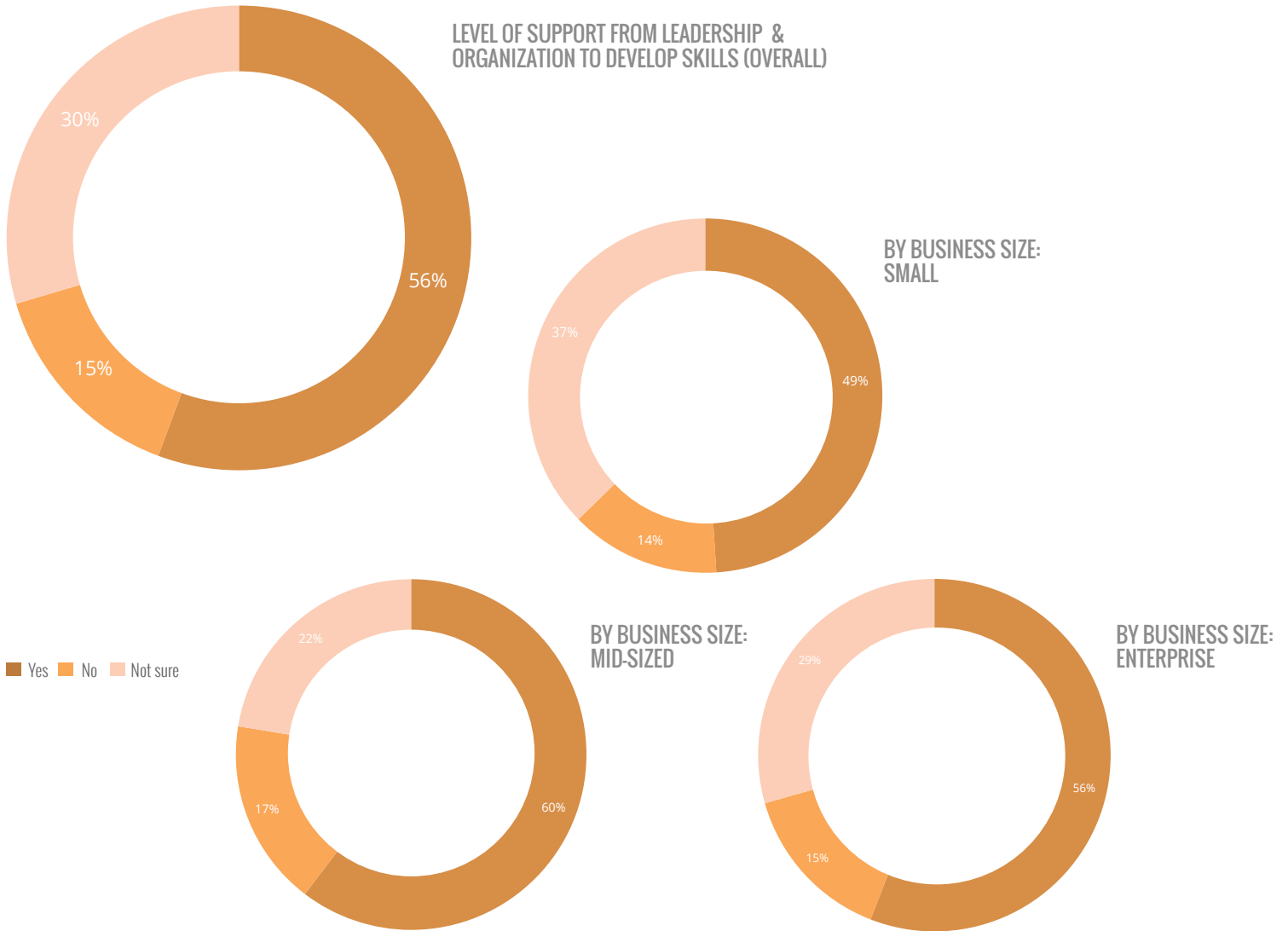


### SURVEY QUESTION:

What are the most important skills you need to develop/improve in order to better manage a hybrid IT environment?

# REALITIES OF MANAGING HYBRID IT

# SUPPORT FROM LEADERSHIP TO IMPROVE SKILLS




## SURVEY QUESTION:

Do you have the level of support you need from your leadership and the organization as a whole to develop/improve these skills?





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# IT TRENDS REPORT 2016:

## THE HYBRID IT EVOLUTION

view the study online at  
[it-trends.solarwinds.com](http://it-trends.solarwinds.com)

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