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All-flash Object Storage

Learnings from North America-based
Respondents in Enterprise Businesses

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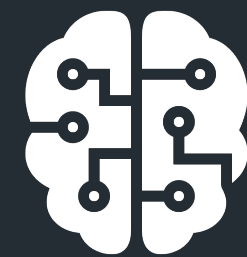
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Research Introduction and Methodology

INTRODUCTION

The digital era of business has been upon us for years now. As more businesses derive some portion of revenue from information-based products and/or services, the volume of data that must be created and stored increases. Simply storing data is not enough; successful digital initiatives require that organizations can effectively leverage data as quickly as possible. As a result, all-flash storage architectures are increasing in popularity for object storage.

Designed to support massive scale data environments, object storage delivers the scale that high-growth digital organizations require. With the integration of flash storage, these object storage environments can provide the performance to support data-intensive workloads while also supporting a wide variety of applications for consolidation.

METHODOLOGY

In 2021, ESG conducted research to understand the current, and future, landscape of all-flash object storage use on-premises. In the third quarter of 2021, ESG conducted a double-blind survey of 363 IT management professionals currently responsible for their organization's storage decisions and forward-looking infrastructure strategies. Organizations represented large enterprises (1,000 or more employees) and industry verticals, including technology, retail/wholesale, healthcare/life sciences/research-focused higher education, and finance, among others. Respondents must have adopted all-flash object storage or indicated that adoption was likely in the next 24 months.

All-flash Object Storage Provides the Foundation for the Data-centric Enterprise

All-flash Object Storage Delivers the Foundation for Growing Digital Businesses

On average, organizations say

34% of their data
resides on object storage.

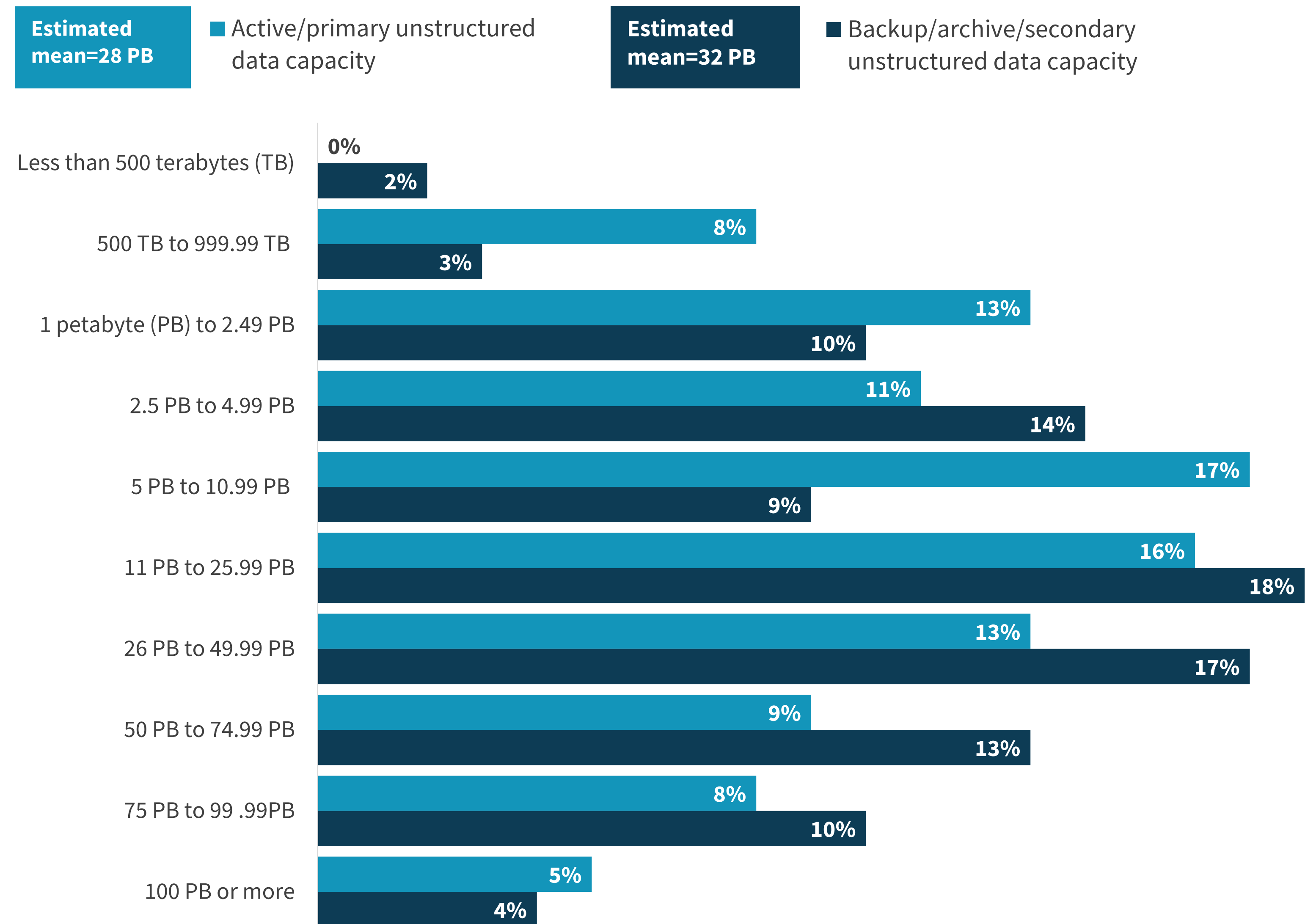
And... **40% of their object
storage capacity** (~13.6% overall)

is estimated to be **all-flash.**

**~38% estimated mean
annual growth rate**

Three years from now, **all-flash capacity**
will have grown by **~2.6x.**

Unstructured data storage capacity among respondents.



Advantages of All-flash Object Storage

All-flash object users highlight advantages to throughput, flexibility, price/performance, and scalability over other storage options. Object storage also provides advantages for application development and container-based application environments.

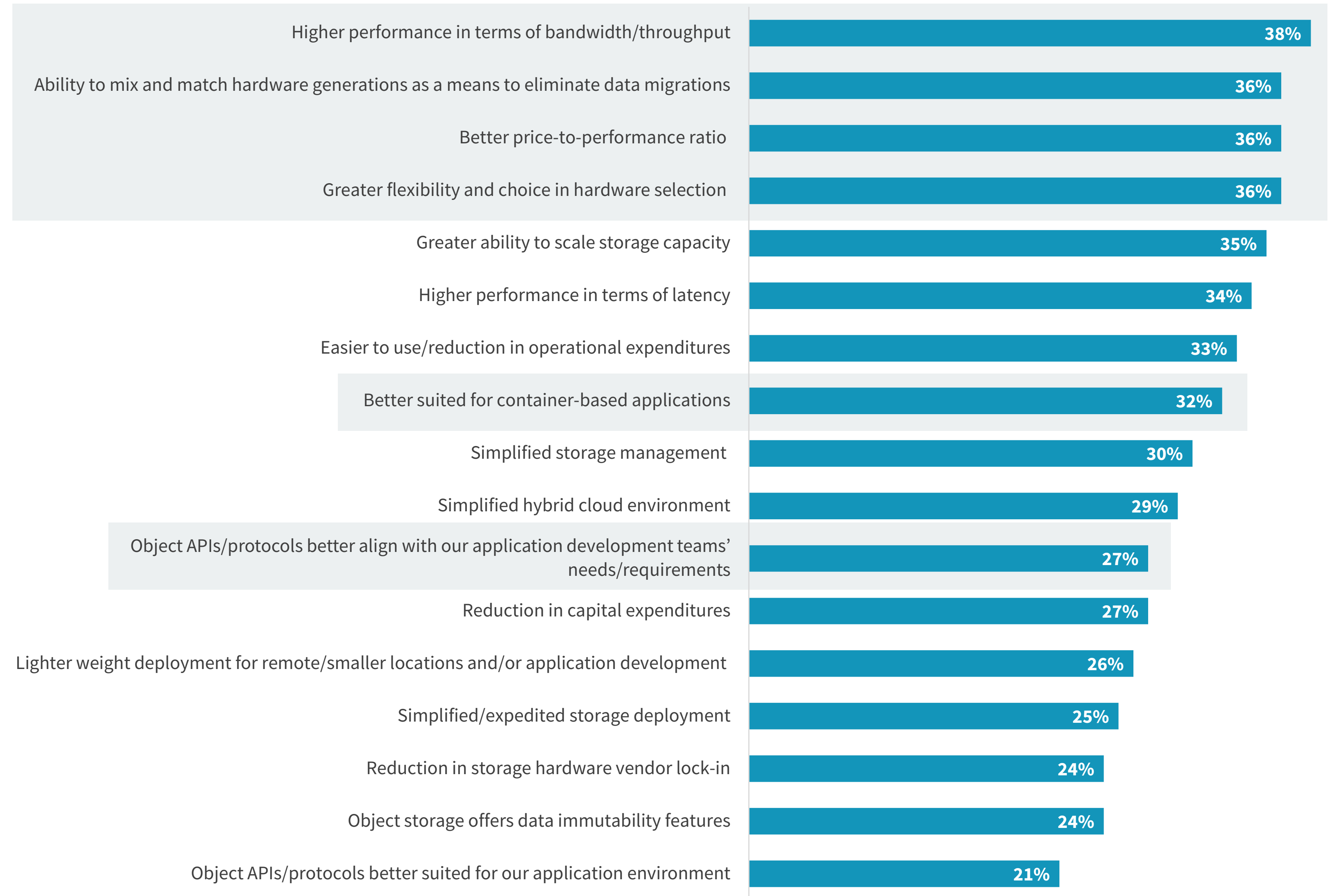


95%

of respondents say all-flash object storage solutions

met or exceeded their ROI expectations.

Top advantages of all-flash object storage.



Data Portability and Protection Are Top Existing Challenges for On-prem Object Storage

VERTICAL INSIGHT:



41%

of finance-related respondents cite **data movement**



41%

of telecommunications-related respondents cite **complexity**

SENIORITY INSIGHT:



49%

of senior IT executives say **data movement across hybrid cloud environments**

Common challenges with object storage.



Where All-flash Object Storage Is Used Today



Where All-flash Object Storage is Used Today: Consolidation of Multiple Workloads, while providing the Foundation for Data-intensive Workloads

CONSOLIDATION:

On average, organizations are running

5.7 different workload types on their all-flash object storage and...

that average is expected to increase to

9.6 workload types in the next 24 months.

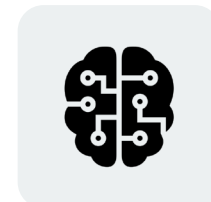
DATA-INTENSIVE WORKLOADS:

For organizations leveraging all-flash object storage or indicating adoption is likely in the next 24 months:



56%

leverage all-flash object storage for data lake/analytics initiatives, expected to increase to **89% in 24 months.**



45%

leverage all-flash object storage for artificial intelligence/machine learning, expected to increase to **84% in 24 months.**

Among technology & manufacturing organizations:



42%

leverage all-flash object storage for electronic design automation (EDA) today, **84% in 24 months.**



38%

leverage all-flash object storage for smart factory workloads, **80% in 24 months.**

Among research organizations:



44%

leverage all-flash object storage for medical images today, **82% in 24 months.**



35%

leverage all-flash object storage for digital pathology research today, **68% in 24 months.**



35%

leverage all-flash object storage for pharmaceuticals research today, **68% in 24 months.**



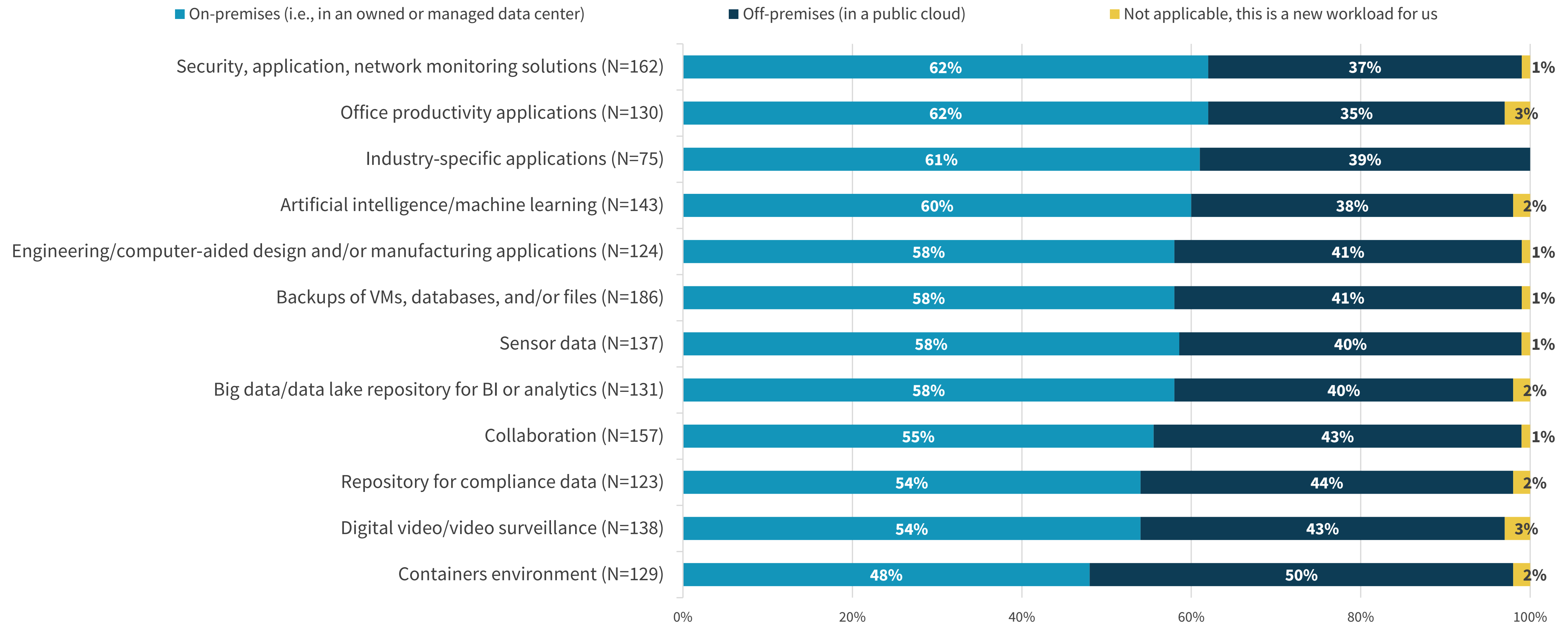
12%

leverage all-flash object storage for genomics research today, **68% in 24 months.**

All-flash Object Storage Able to Consolidate Data from Any Location

When organizations considered the data types expected to be migrated to on-premises, all-flash object storage, the answers included data located from both on- and off-premises locations. All-flash object storage is an option for data regardless of its current location.

| Current location of applications expected to be deployed/migrated to on premises object storage.



How All-flash Object Storage Is Transforming Artificial Intelligence Environments

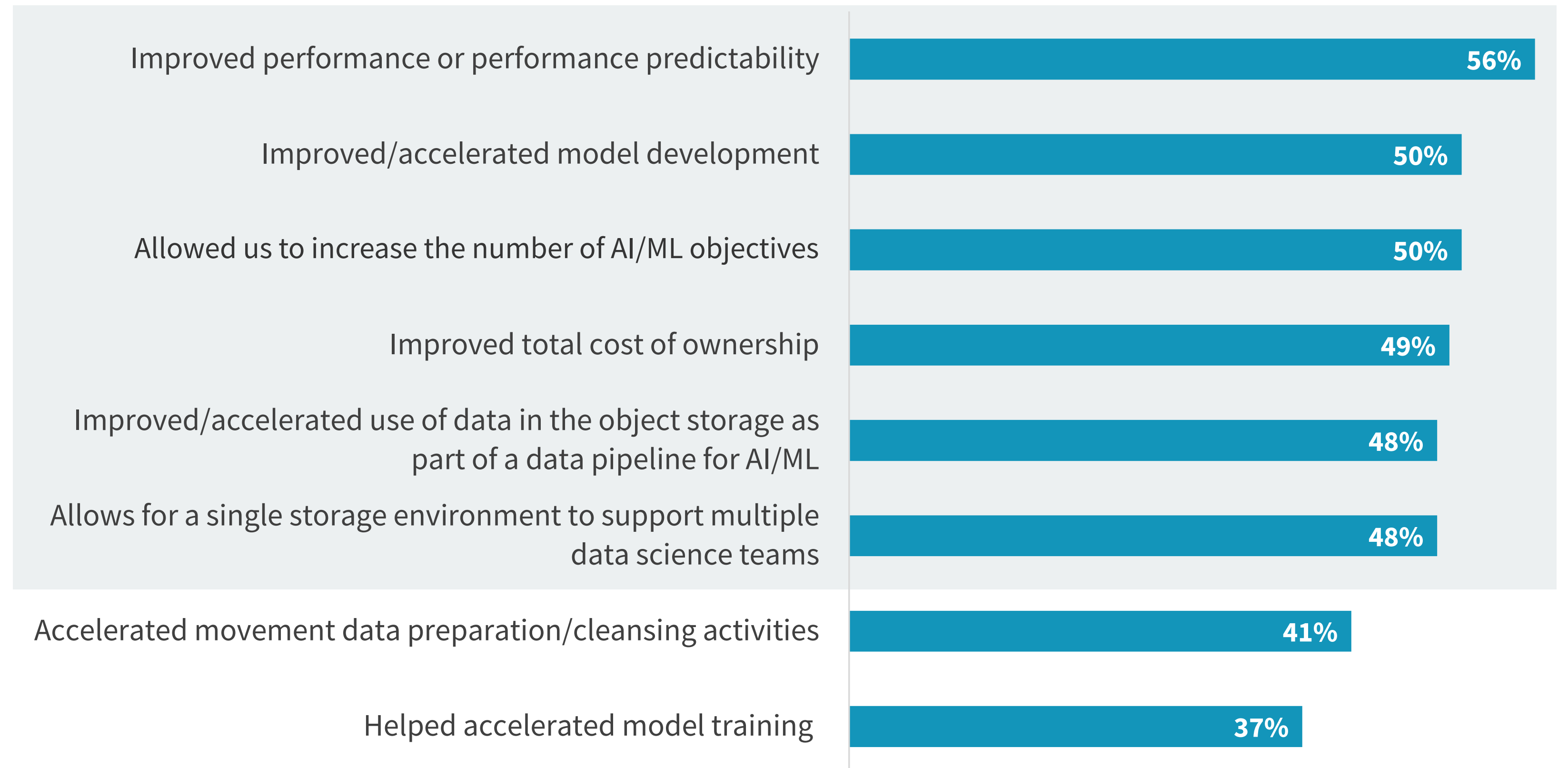


All-flash Improves Performance and Time to Development for AI/ML Initiatives

Businesses rely on all-flash object storage for better, faster AI/ML model development. Given the importance that AI initiatives present to the business, leveraging a storage architecture that accelerates development translates into more success for the business.

“Businesses rely on all-flash object storage for better, faster AI/ML model development.”

Realized benefits from using all-flash object storage.



Conclusion

As numerous businesses and industries are transformed through the effective use of data, their competitive success depends on the effective and accelerated use of larger pools of data. Object storage technology is designed to store and protect massive pools of data.

From this research, ESG identified that organizations that leverage all-flash object storage are reaping multiple benefits beyond simple performance enhancements. The use of all-flash object storage improves the price-performance ratio of storage while also improving flexibility, agility, and the ability to scale with organizations' storage infrastructure. These benefits help simplify the storage environment, which reduces organizations' risk while also reducing both operational and capital costs. Digital organizations need to consider all-flash object storage technology to provide a high-performance, massive-scale data storage foundation to consolidate and simplify their application storage environments.

Dell Technologies is a leader in IT infrastructure and storage technology. Its object storage portfolio includes ECS, a leading object storage platform offering massive levels of scalability, high performance, enterprise-level resilience, optimized to reduce the economic burden of data storage. ECS is available as an appliance or in a software-defined model. It offers S3 compatibility on a globally distributed architecture, empowering organizations to support enterprise workloads such as cloud-native, archive, IoT, AI, and big data analytics applications at scale.

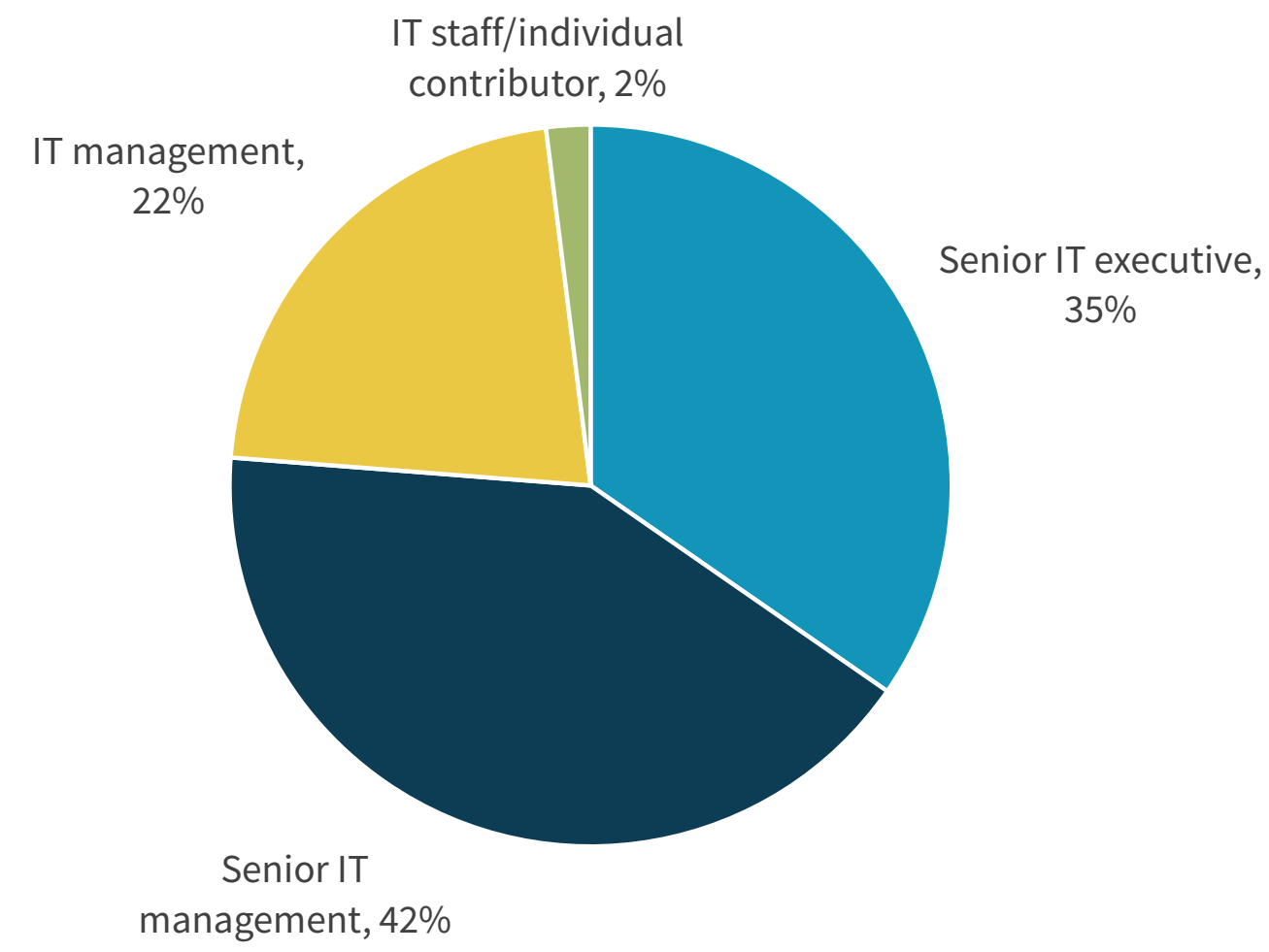
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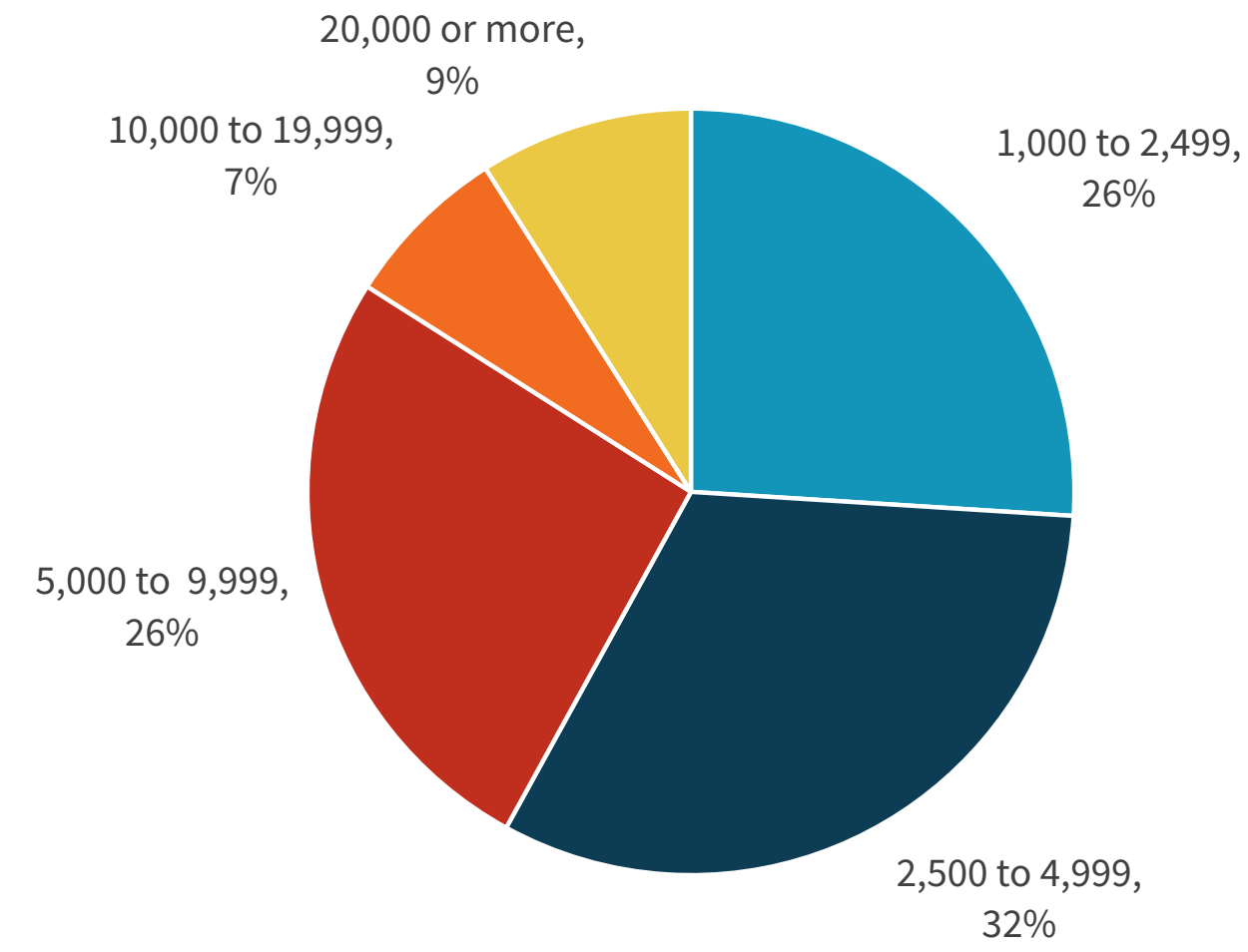


Demographics

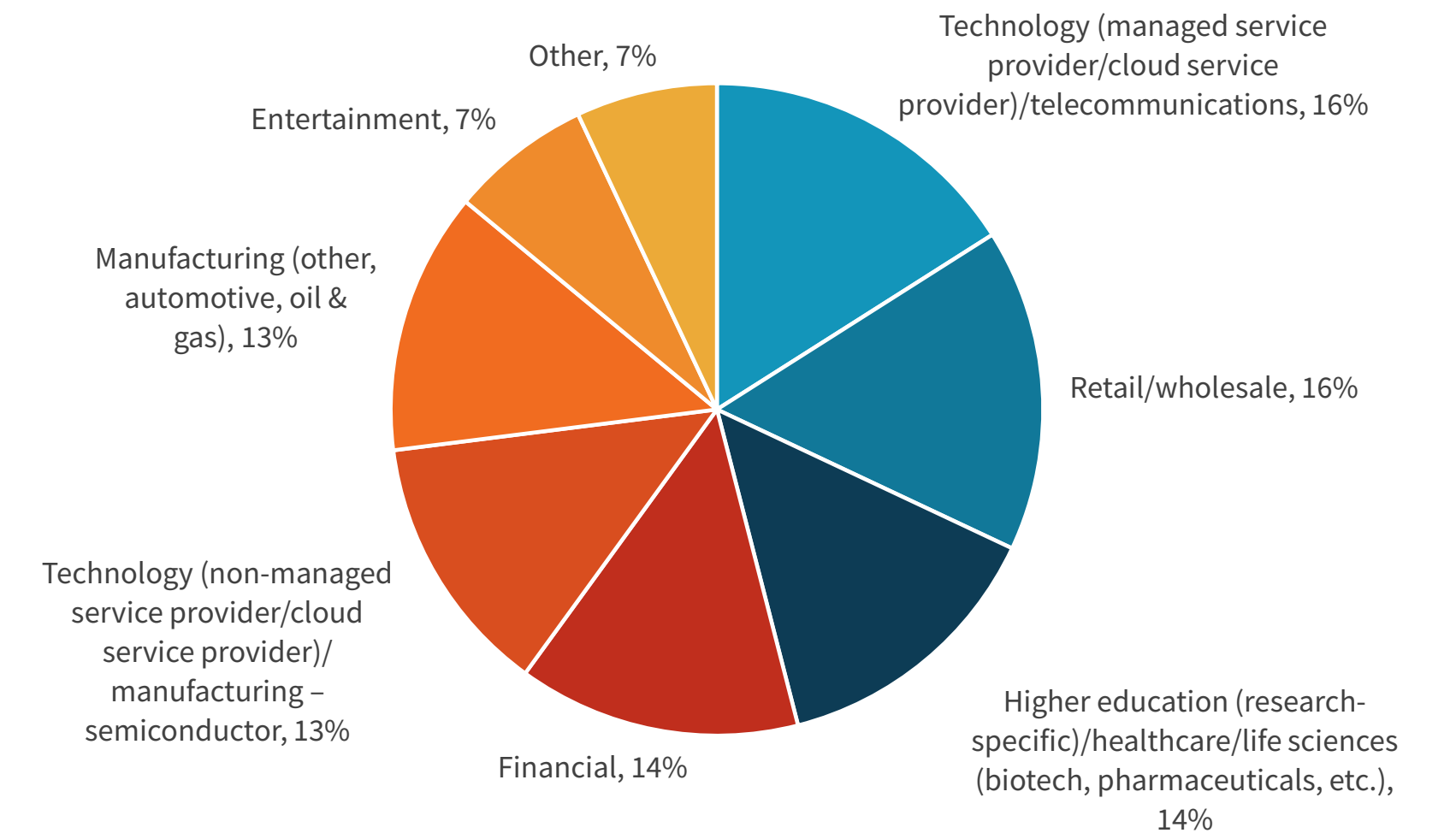
RESPONDENTS BY ROLE



BY NUMBER OF EMPLOYEES



RESPONDENTS BY INDUSTRY



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