Denodo Global Cloud Survey Report 2022

Key Motivating Factors to Adopt Cloud Technologies
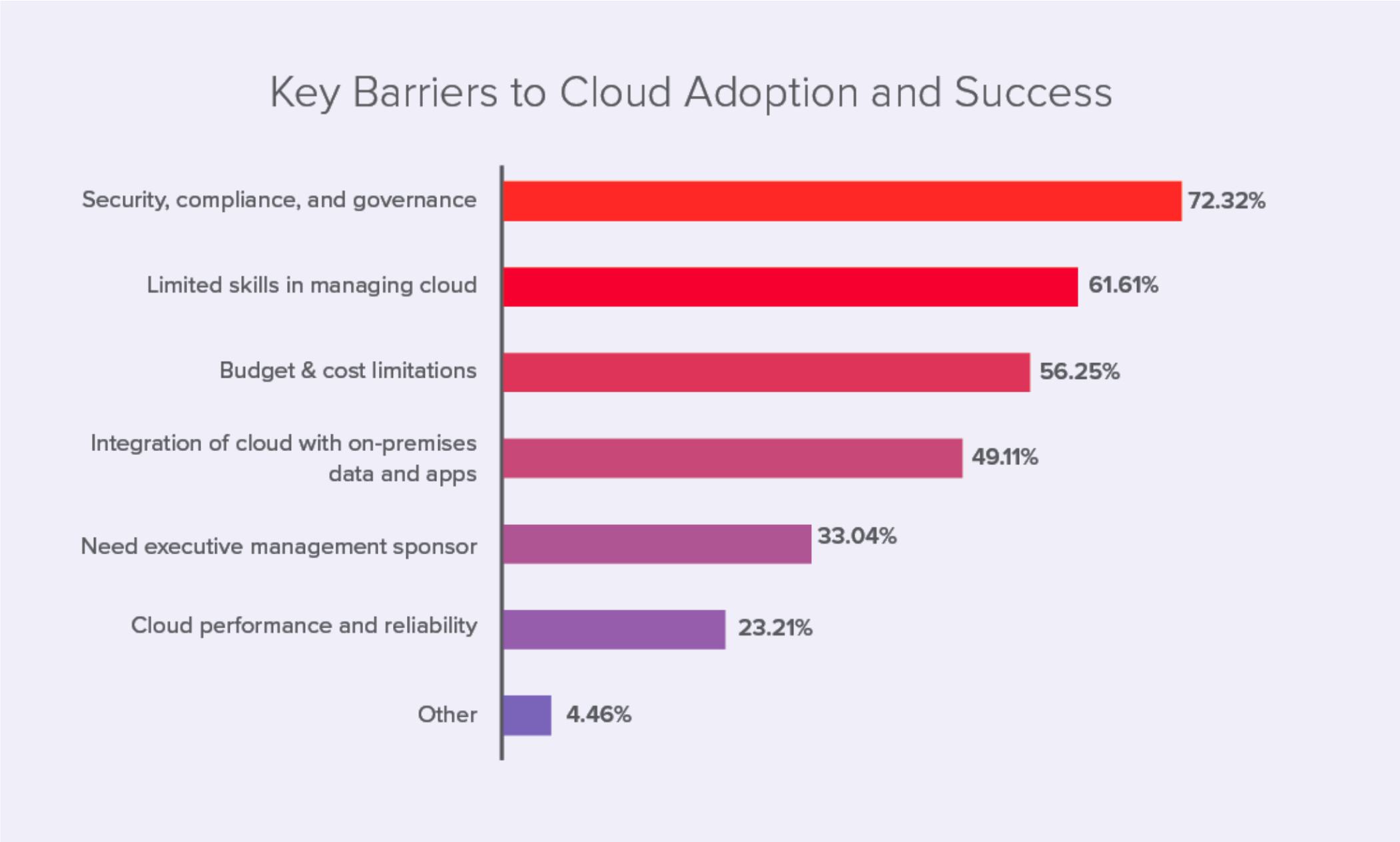
Despite the inevitable challenges, cloud technology has numerous well-known benefits

Key Motivation to Adopting and Moving Workloads to the Cloud

Factor	Percentage
On-demand performance and scalability	66.96%
Reduce data center maintenance and operational costs	59.82%
Improve security, visibility, compliance, and governance	45.54%
Better disaster recovery and backup	43.75%
Gains in business and IT operations management and savings	42.86%
Gains in time to value and impact (faster analytics)	40.18%
Other	0.89%

The top-two benefits that are motivating organizations to adopt cloud technologies are:

- On-Demand Performance and Scalability (chosen by 67% of respondents)

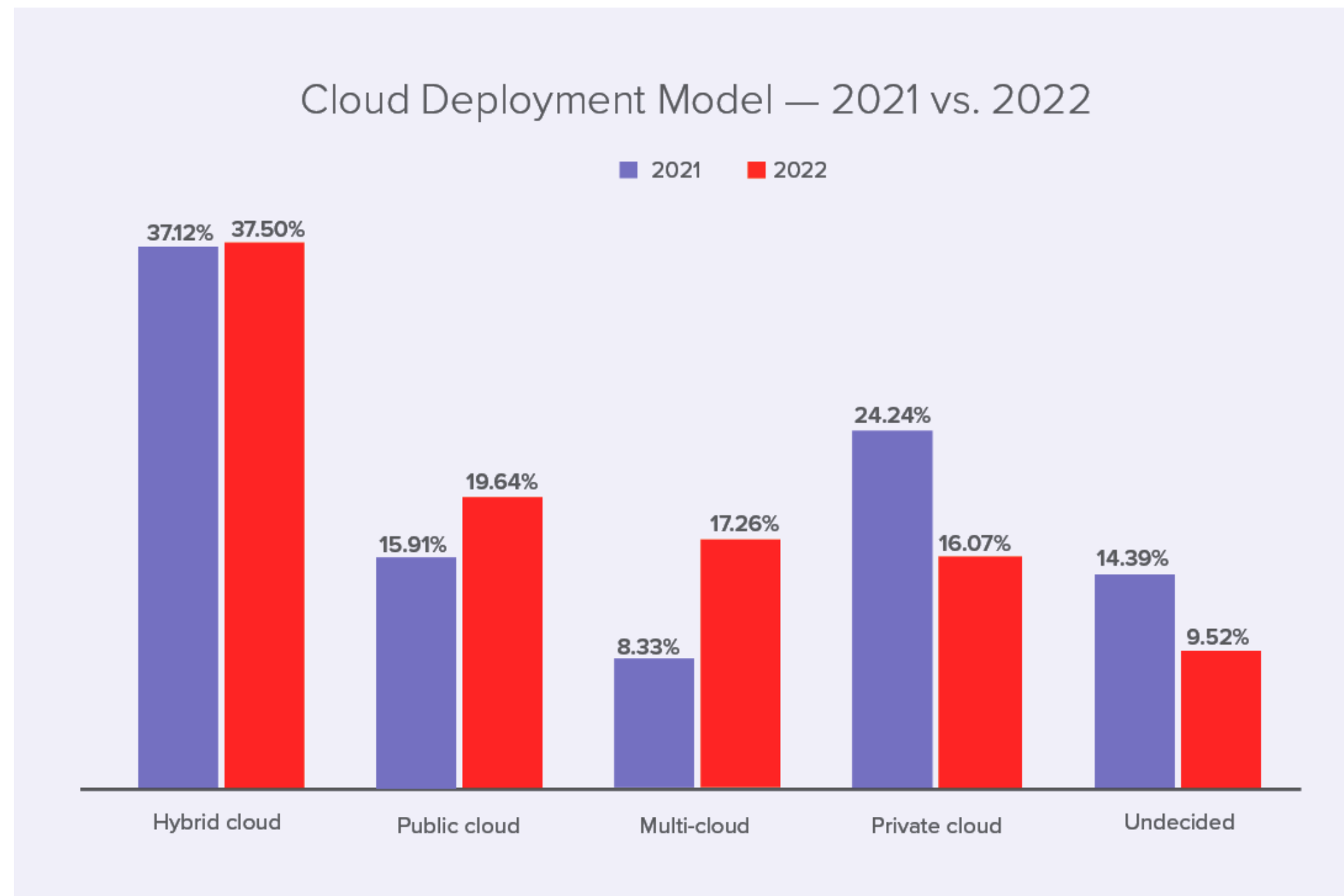- Reducing Data Center Maintenance and Operational Costs (59.8% of respondents).

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What Gets in the Way to Cloud Adoption and Success

Key Barriers to Cloud Adoption and Success

Barrier	Percentage
Security, compliance, and governance	72.32%
Limited skills in managing cloud	61.61%
Budget & cost limitations	56.25%
Integration of cloud with on-premises data and apps	49.11%
Need executive management sponsor	33.04%
Cloud performance and reliability	23.21%
Other	4.46%

Security, Compliance, and Governance still the top concern (identified by 72.2% of respondents), followed by Limited Skills in Managing Cloud Systems (61.6% of respondents),

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Hybrid Cloud Is Less a "Choice" but a "Necessity"

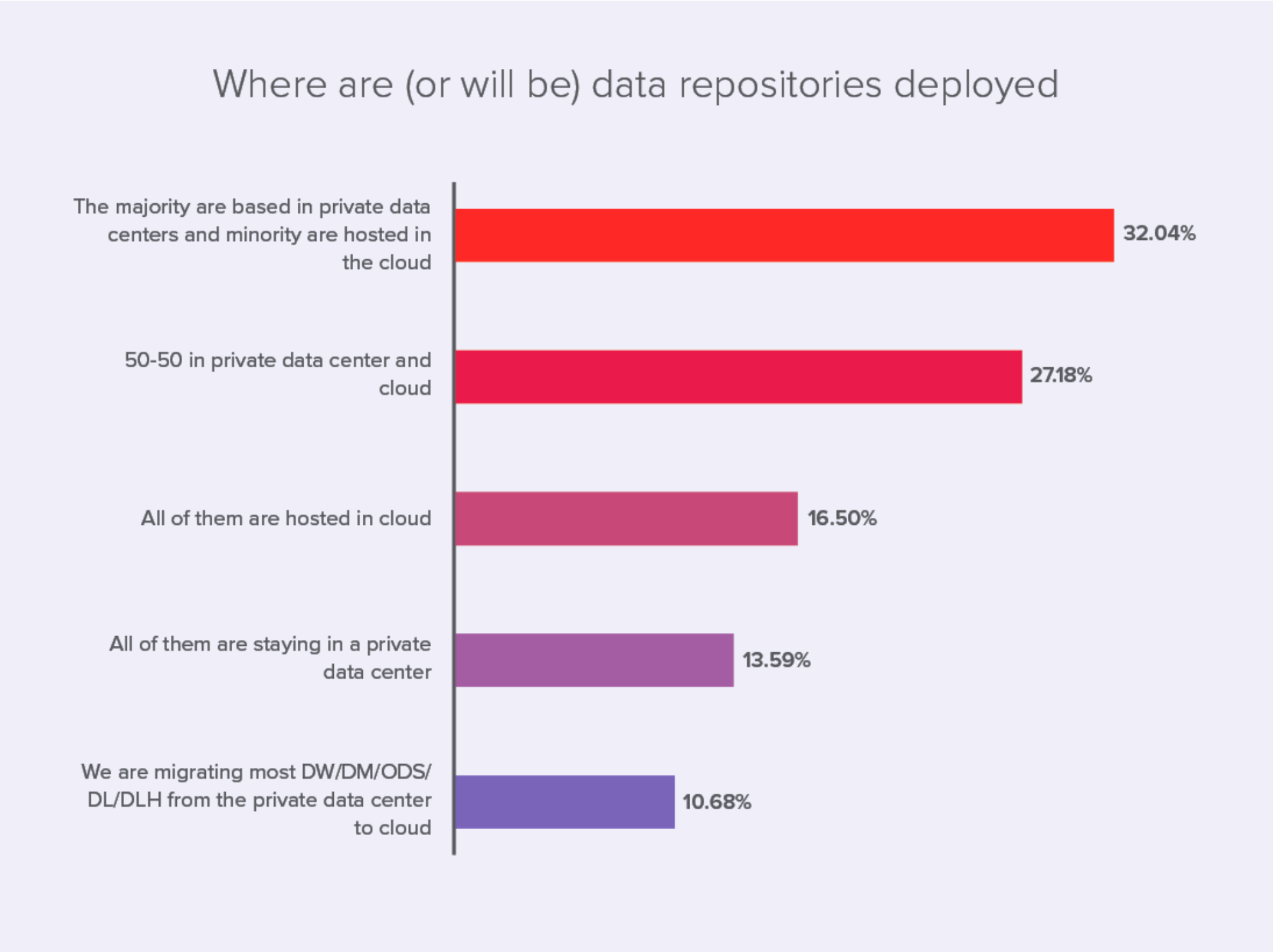Indicates that companies are not completely getting rid of their on-premises systems

Cloud Deployment Model — 2021 vs. 2022

Legend: ■ 2021 ■ 2022

Category	2021	2022
Hybrid cloud	37.12%	37.50%
Public cloud	15.91%	19.64%
Multi-cloud	8.33%	17.26%
Private cloud	24.24%	16.07%
Undecided	14.39%	9.52%

In 2022 survey:

- The gap between hybrid cloud and private cloud, the second choice, is dramatically wider.

- Hybrid cloud was chosen by almost twice the number of respondents (37.5%, compared with pure public cloud, at 19.6%).

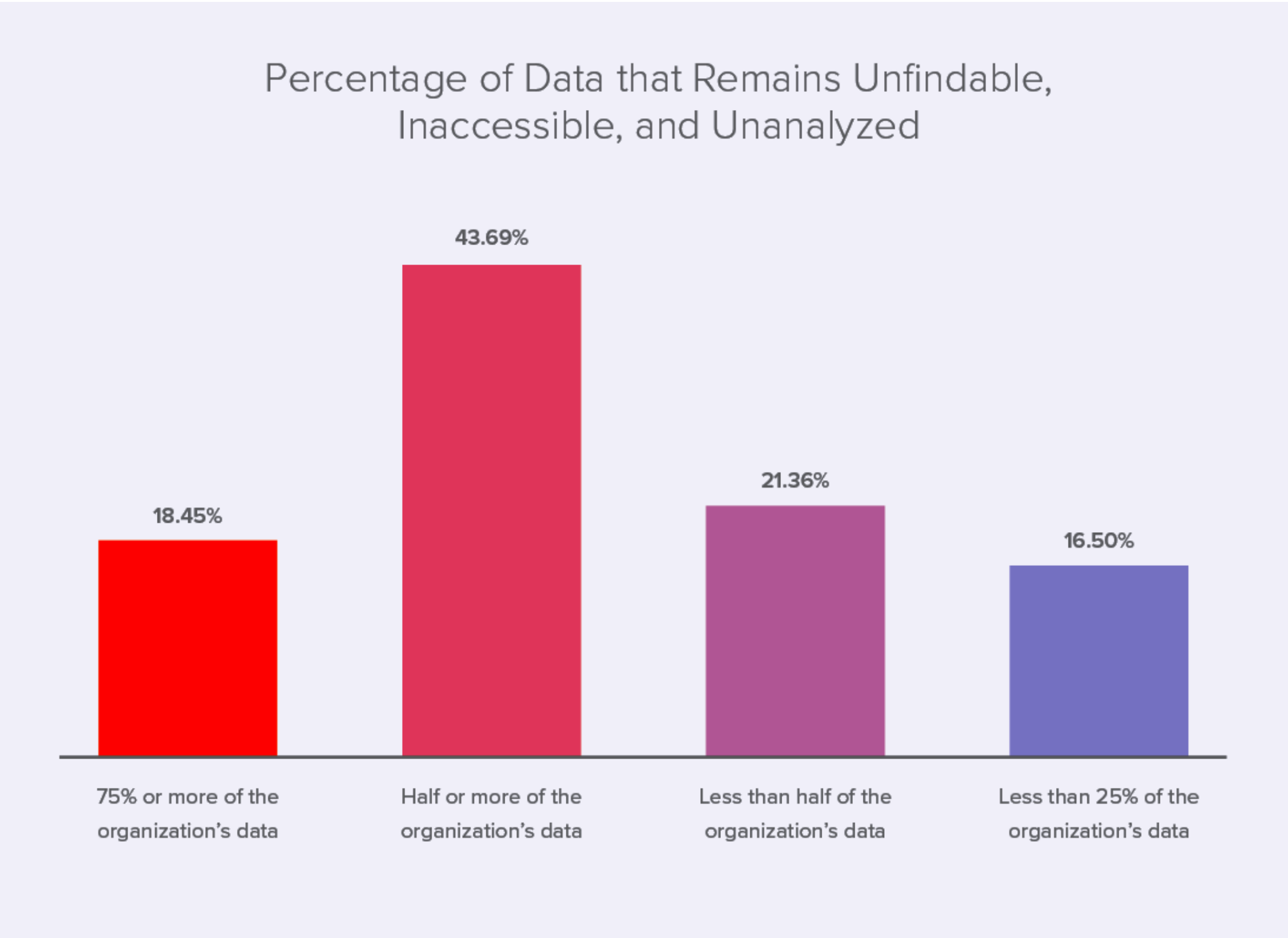denodo

Where Are Organizations' Repositories Deployed?

Survey sees 86.4% of organizations having some or all of their data repositories in the cloud

Where are (or will be) data repositories deployed

The majority are based in private data centers and minority are hosted in the cloud	32.04%
50-50 in private data center and cloud	27.18%
All of them are hosted in cloud	16.50%
All of them are staying in a private data center	13.59%
We are migrating most DW/DM/ODS/DL/DLH from the private data center to cloud	10.68%

The survey found that 59.2% of our respondents maintain some kind of blend between cloud and on-premises systems; 32% keep most of their data in private data centers and less in the cloud, while 27.2% maintain an even 50-50 split between repositories stored on-premises and cloud repositories.

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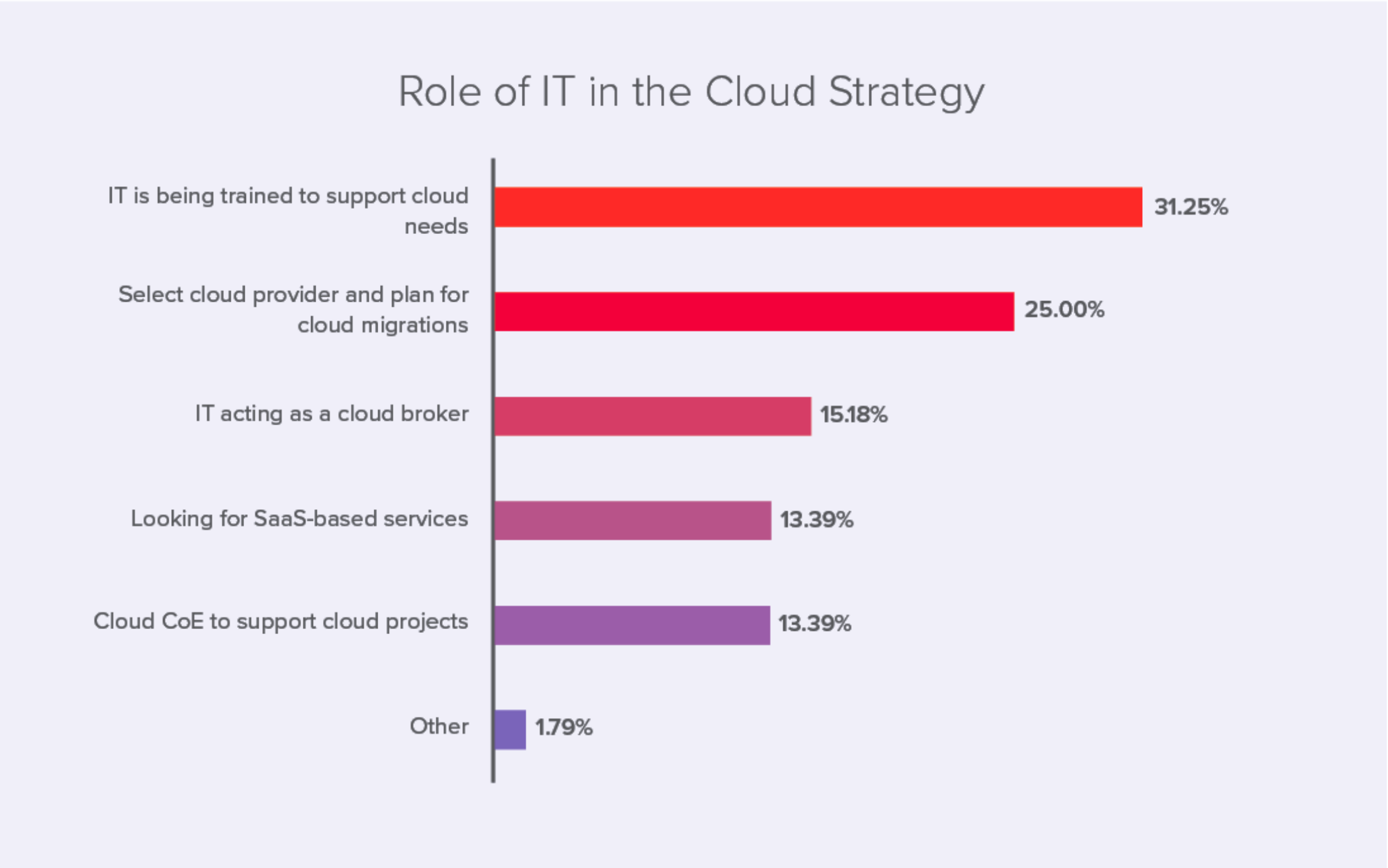
What Happens When Data is Spread in a Hybrid Cloud Fashion?

62.14% or organizations report more than half of their data is unusable

Percentage of Data that Remains Unfindable, Inaccessible, and Unanalyzed

- 18.45% — 75% or more of the organization's data
- 43.69% — Half or more of the organization's data
- 21.36% — Less than half of the organization's data
- 16.50% — Less than 25% of the organization's data

In this study, 43.7% of respondents were unable to find, access, and analyze half or more of their data after adopting cloud technologies, and only 16.5% were unable to leverage less than 25% of their data.
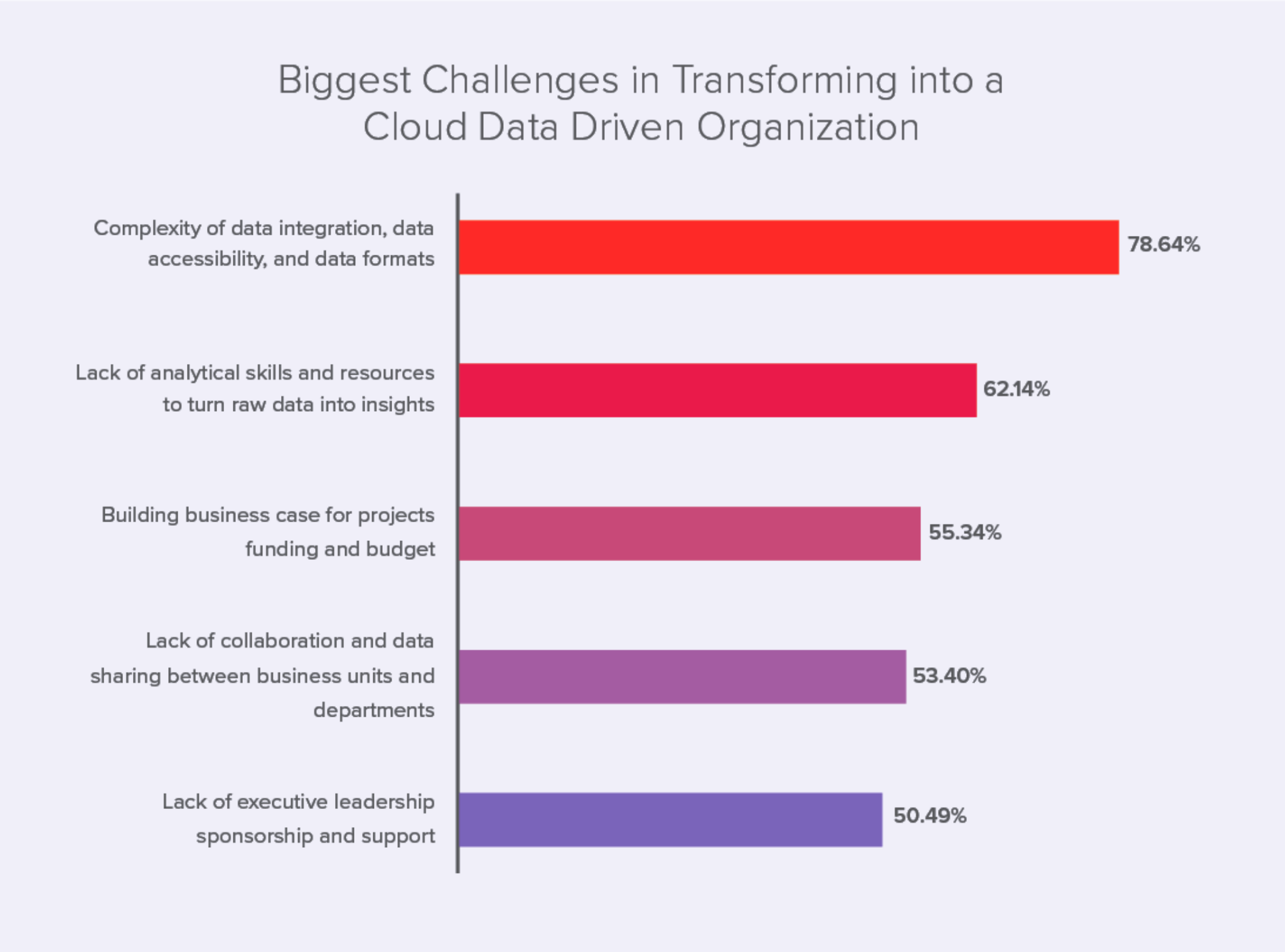
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The Role of IT in the Company's Cloud Strategy

IT is invested in getting trained to support business cloud needs

Role of IT in the Cloud Strategy

Category	Percentage
IT is being trained to support cloud needs	31.25%
Select cloud provider and plan for cloud migrations	25.00%
IT acting as a cloud broker	15.18%
Looking for SaaS-based services	13.39%
Cloud CoE to support cloud projects	13.39%
Other	1.79%

IT is no longer the "hired hand" of business; IT is a friend of the business, building bridges between IT, the lines of business, and executive management.

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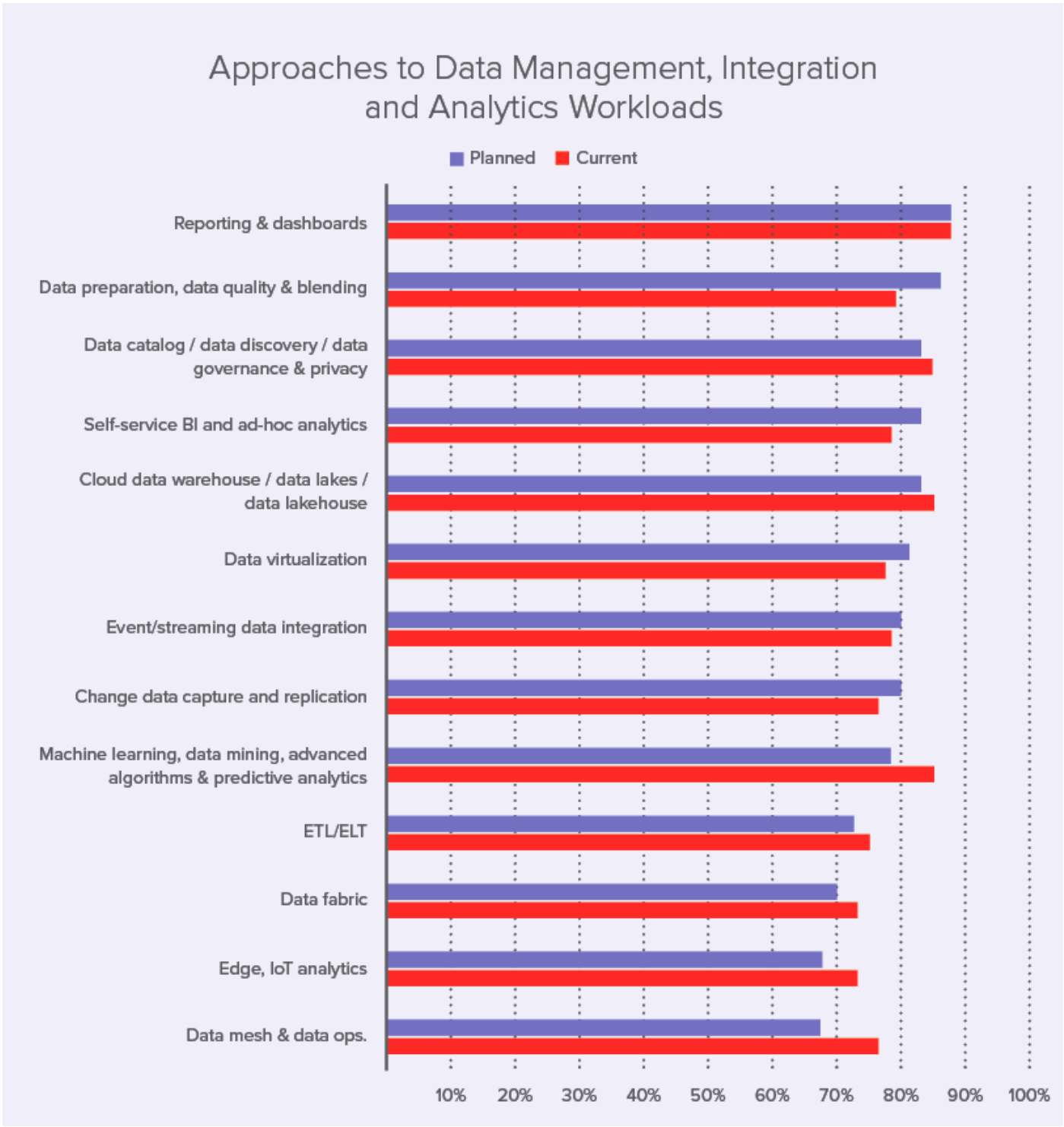# Challenges to Becoming Data-Driven While Moving to the Cloud

Complexity of data integration and lack of analytical skills are hurting organizations

Biggest Challenges in Transforming into a
Cloud Data Driven Organization

Challenge	Percentage
Complexity of data integration, data accessibility, and data formats	78.64%
Lack of analytical skills and resources to turn raw data into insights	62.14%
Building business case for projects funding and budget	55.34%
Lack of collaboration and data sharing between business units and departments	53.40%
Lack of executive leadership sponsorship and support	50.49%

By a large margin, respondents cite the Complexity of Data Integration, Data Accessibility, and Accommodating Different Data Formats (cited by 78.6% of respondents), with the Lack of Analytical Skills and Resources to Turn Raw Data into Insights (62.1% of respondents) another oft-cited challenge.

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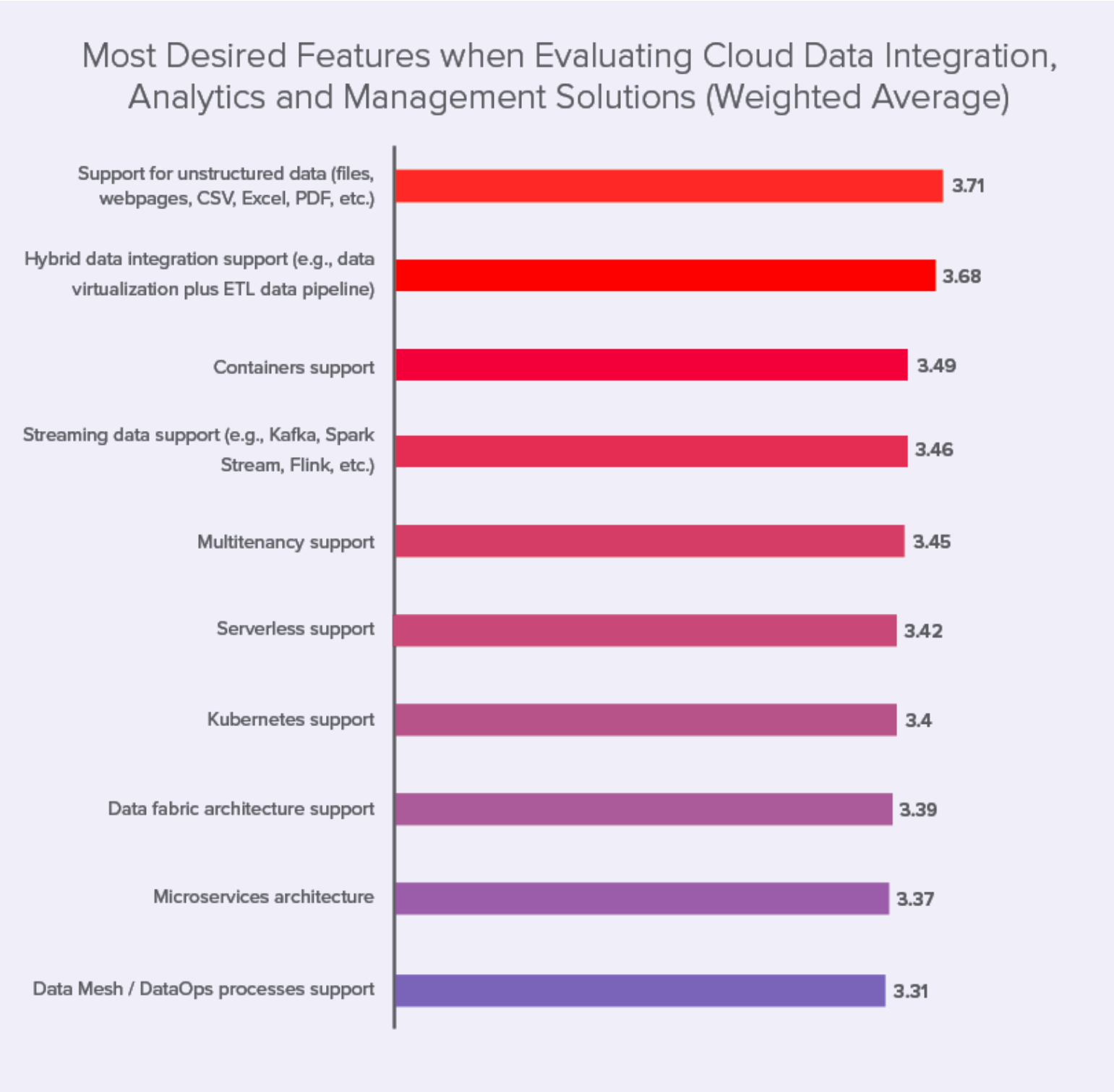# Approaches to Data Management, Integration and Analytics Workloads

Support for unstructured data and hybrid data integration are key to success for those surveyed

Approaches to Data Management, Integration and Analytics Workloads

■ Planned   ■ Current

- Reporting & dashboards
- Data preparation, data quality & blending
- Data catalog / data discovery / data governance & privacy
- Self-service BI and ad-hoc analytics
- Cloud data warehouse / data lakes / data lakehouse
- Data virtualization
- Event/streaming data integration
- Change data capture and replication
- Machine learning, data mining, advanced algorithms & predictive analytics
- ETL/ELT
- Data fabric
- Edge, IoT analytics
- Data mesh & data ops.

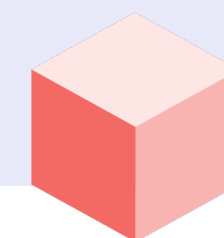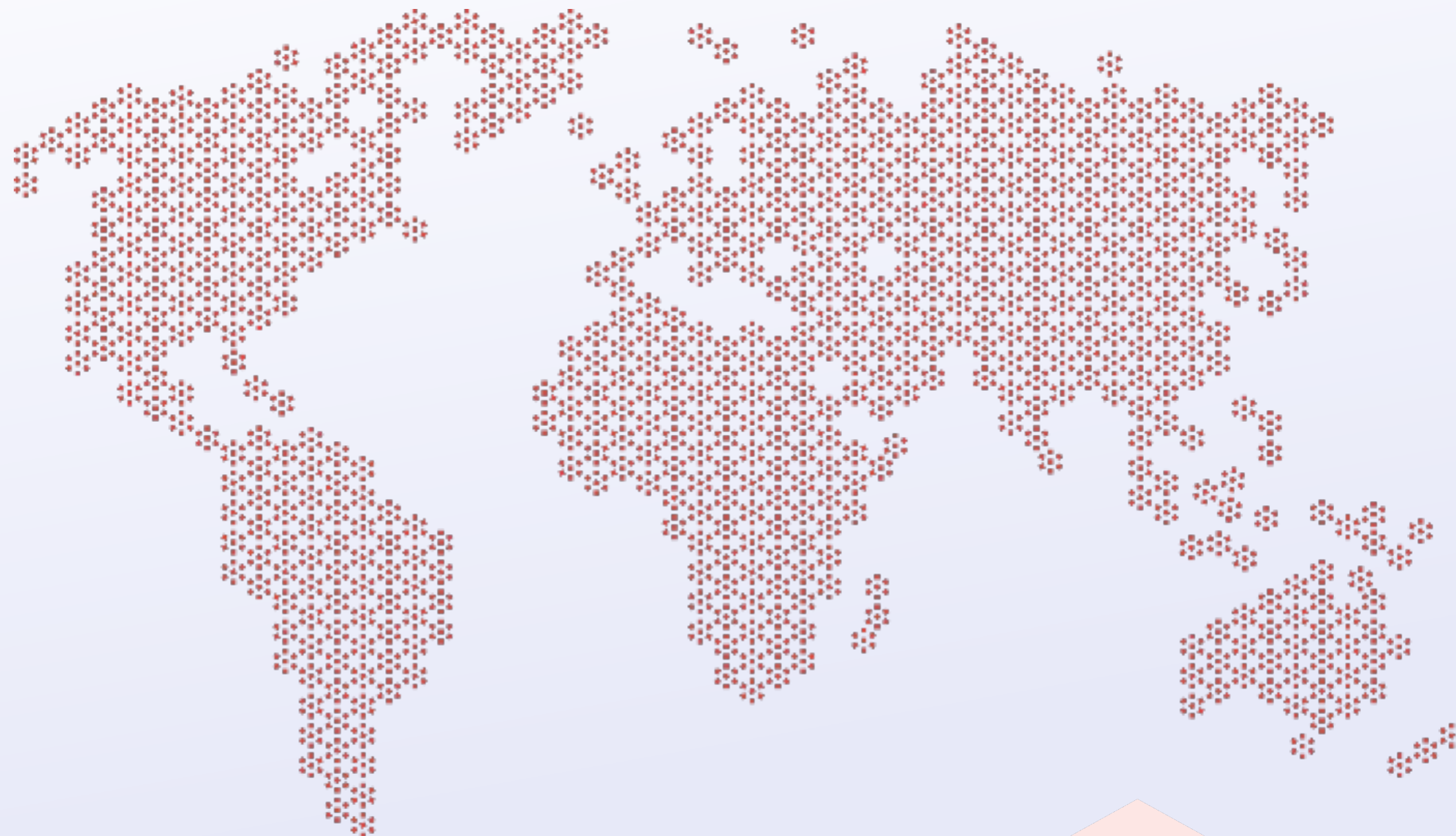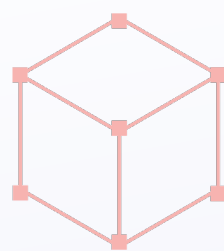10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Reporting and Dashboards remain top use case now and, in the future, but a shift towards Data Virtualization and Data Preparation, Data Quality and Blending are on the cards

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Most Desired Features of a Cloud Data Integration and Management Solution

Support for unstructured data and hybrid data integration are key to success for those surveyed

Most Desired Features when Evaluating Cloud Data Integration, Analytics and Management Solutions (Weighted Average)

Feature	Weighted Average
Support for unstructured data (files, webpages, CSV, Excel, PDF, etc.)	3.71
Hybrid data integration support (e.g., data virtualization plus ETL data pipeline)	3.68
Containers support	3.49
Streaming data support (e.g., Kafka, Spark Stream, Flink, etc.)	3.46
Multitenancy support	3.45
Serverless support	3.42
Kubernetes support	3.4
Data fabric architecture support	3.39
Microservices architecture	3.37
Data Mesh / DataOps processes support	3.31

The top-two desired features were Support for Unstructured Data (which was deemed Critical or Very Important to 60.2% of respondents) and Support for Hybrid Data Integration (deemed Critical or Very Important to 57.3%)

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Thanks!

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