



New Data Management Models Are Essential To Operate In The Cloud

Responsible Data Management Is Needed To Drive Business Outcomes In The Face Of Exponential Data Growth

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Data Migration To The Cloud Drives New Data Management Solutions

Data has become the currency businesses use to deliver value and build strong customer relationships. Companies that leverage data at scale are best positioned to win, serve, and delight customers. As companies move more data to the cloud, they will require new data management models to handle their exponentially increasing quantity and variety of data. New models that offer better self-service, integration, security, and clarity on cost will help firms drive efficiency and overcome the myriad of data management challenges they currently face.

Capital One commissioned Forrester to survey 157 data management decision-makers in North America to find out how their organizations manage their data estate to achieve key business outcomes.

Key Findings



Nearly three-quarters of data management decision-makers have yet to manage most of their organizations' data on the cloud.



Eighty-two percent of data management decision-makers find controlling and forecasting data costs challenging, making ecosystem management tools critical.



Talent challenges are the biggest barriers to data management excellence. Decision-makers do not have enough staff, in-house expertise, or collaboration between teams and tools to achieve their outcomes.

The Market Demands An Integrated Experience And A Mix Of Capabilities

Data management decision-makers understand partners are critical to help them manage their organizations' data. Eighty-seven percent of those surveyed are using commercial tools, while just over a quarter (28%) use a mix of homegrown or open-source tools.

To create a more diverse data estate, organizations must get their data from a variety of sources. Over the next two years, the majority of decision-makers plan to use multiple providers or different providers for different use cases. This is in stark contrast to decades prior where just a single provider delivered most functionality necessary to manage data estates. Today, only 10% of respondents use different vendors for different use cases. Over the next one to two years, multivendor use will increase nearly four-fold to 38%.

"Which of the following tools does your organization currently use to manage its data?"

(Select all that apply.)

28%

Open source or homegrown

87%

Commercial vendors

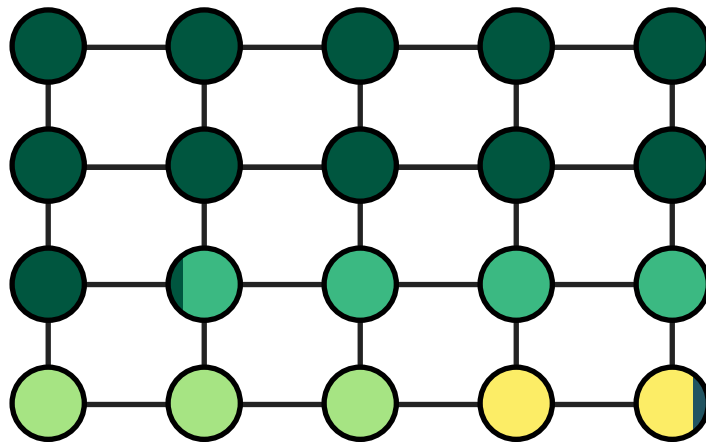
Data Estate Models Vary And Evolve As The Journey To The Cloud Progresses

Nearly three-quarters of data management decision-makers have yet to manage most of their organizations' data on the cloud. As they continue the journey to the cloud, they need vendors to support organizational models that require decentralized and federated data support.

More than half of decision-makers (56%) note their organizations maintain a centralized data estate that stitches most or all organizational data. However, a small percentage (15%) are federated, which means there is a central set of data policies and platforms, but lines of business manage data independently through self-service. A federated model supports the inevitable expansion of a data estate as data volumes, sources, and tools multiply, eliminating potential bottlenecks in the enterprise. However, while federating and enabling self-service, the data estate must still remain well-managed.

“Which of the following best matches how your organization has structured itself to successfully manage its data estate?”

- **56%** My organization is centralized.
- **19%** My organization is decentralized.
- **15%** My organization is federated.
- **9%** The majority of the IT organization is outsourced.
- **1%** Don't know



Data Usage And Financial Granularity Are Opaque

Today more than eight in 10 data management decision-makers (82%) cite forecasting and controlling costs as a data ecosystem challenge. Usage-based pricing models that coincide with cloud computing introduce month-to-month cost variability. What was once meticulously planned and budgeted on-premises, is now unpredictable.

As data volume and usage expands, opacity impedes both general accounting and opportunities to drive cost efficiency. Without the ability to predict and manage cloud costs, decision-makers can find themselves quickly over budget.

“How challenging are the following data and technology issues to your organization’s current data ecosystem?”

(Showing “Mildly challenging,” “Somewhat challenging,” and “Very challenging”)



82%

Difficulty controlling and forecasting data costs

Complex Data Estates Require A Compass To Navigate

One of the biggest data challenges decision-makers currently face is fully understanding the complexity of their organizations' data estates. Seventy-eight percent of decision-makers cite a lack of data cataloging as a top challenge. Without data cataloging, decision-makers struggle to understand what data they have, how the data is used, and who owns the data. This leads to other key challenges, such as poor data quality (80%), difficulty understanding data (76%), and a lack of data observability (74%).

Many organizations are lost in the weeds of their data sets and services and need quicker access with a low-code compass to find their way through.



“How challenging are the following data and technology issues to your organization’s current data ecosystem?”

(Showing “Mildly challenging,” “Somewhat challenging,” and “Very challenging”)

Poor data quality

80%

Lack of cataloging (e.g., understand what you have, how is it being used, and who are the owners)

78%

Difficulty understanding the data (e.g., interpretability)

76%

Lack of data observability

74%

Talent Shortages And Misaligned Tools Plague Companies And Exacerbate Challenges

Surveyed decision-makers cite talent challenges as the biggest barrier to overcoming obstacles, followed by issues with tools. The “Great Resignation” has made keeping and maintaining staff difficult. As skilled employees seek new opportunities, internal expertise leaves with them. Additionally, obstacles to onboarding and collaboration between teams and tools commonly cause delays and inefficiencies. Decision-makers need tools that are aligned to meet evolving business requirements and cater to a variety of roles. Onboarding and collaboration challenges are worsened when tools lack a simple user interface for different skill sets and areas of responsibility, and are not designed to work together.

Partners who can fill staff, coordination, and knowledge gaps, as well as make technology recommendations, are highly appealing.

“What’s preventing your team or staff from overcoming these challenges?”

(Select all that apply.)



Confusing Data Governance Policies Impede Progress

Data governance is critical to business success. Interacting with data is an experience. If users can't access data, they can't blend it; if the data is of poor quality and/or does not suit their needs or area of responsibility, they won't use it. Data governance makes data relevant and ready for analytics, insight, and action.¹

Yet a top challenge for data management decision-makers is tracking and enforcing adherence to data governance policies. Only 20% claim that they have no difficulty governing data at scale. Eighty-two percent note confusing data governance policies and 80% note a lack of entitlements and enforcing role-based access to specific data as top challenges.



“How challenging are the following data and technology issues to your organization’s current data ecosystem?”

(Showing “Mildly challenging,” “Somewhat challenging,” and “Very challenging”)

Confusing data governance policies

82%

Difficulty governing data at scale

80%

Lack of entitlements and enforcing role-based access to specific data

80%

Key Data Management Capabilities Drive Investment

Quick, responsible access to data, leveraged at scale, is a necessity. It helps businesses make better decisions, survive, and thrive. Data protection, data quality, and infrastructure management will remain key capabilities in the near future, but decision-makers anticipate a shift in the next one to two years. Most notably, investment in entitlements is expected to nearly double (17% today; 31% in one to two years).

Moving forward, data protection and security will remain a top priority for cloud data investments along with tools that make data easier to find and use and those that reduce and manage costs.

To stay competitive, companies must prioritize improving their cloud native capabilities, reduce costs, and have better operational control and efficiency.



“What are your organization’s top-five priorities for your cloud data investment?”

(Select up to 5.)



Data protection and security



Make data easier to find and use



Improve our products/services



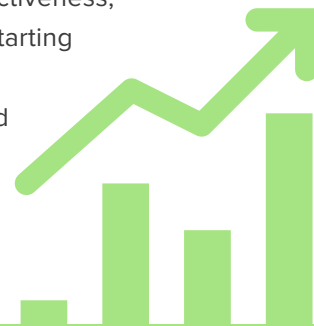
Reduce and manage costs



Accelerate our response to business and market changes

Key Opportunities Are At Stake In The Absence Of Data Management

To stay competitive, decision-makers must improve their organizations' data quality and consistency. Decision-makers also must improve their organizational data's effectiveness, better protect data, and reduce costs. As the 74% of decision-makers who are starting their organizations' cloud journey move more data to the cloud, they need to address key challenges to ensure they are getting the most out of their data and can leverage that data at scale, gaining agility, increasing cost efficiency, and making better informed decisions. Firms that fail to do this will miss the moment and fall behind.



“From a data perspective, what does your organization need to stay competitive?”

(Select up to 3.)



Improved data quality and consistency



Improved data effectiveness



Reduced costs



Better data protection



Cloud-native capabilities

Conclusion

As data management decision-makers continue their journey in the cloud, they need to address key challenges to understand what their organizations have, what they need, and how they share and exchange data to glean business value.

As organizations progress on their cloud journey, they must adjust how they balance global and local data use with a federated approach to ensure governance requirements are met and data access, quality, and observability is at its best.

Decision-makers must figure out how operating groups can work together in a seamless way and address skill gaps. Organizations can't hire themselves out of the skills shortage facing so many businesses. Vendors and partners can fill the expertise and best-practices gaps left by employees with automation and no-code/low-code self-service.

Organizations must invest in tools that control and forecast data costs. Inherent exponential costs associated with operating on the cloud need to be addressed early to ensure success.

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Methodology

This Opportunity Snapshot was commissioned by Capital One. To create this profile, Forrester Consulting supplemented this research with custom survey questions asked of 157 data management decision-makers in North America. The custom survey began and was completed in March 2022.

ENDNOTES

¹ Source: "How To Build A Data Governance Practice," Forrester Research, Inc., February 8, 2022.

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Demographics

COUNTRY	
US	83%
Canada	17%

TOP 4 INDUSTRIES	
Technology and/or technology services	17%
Manufacturing and materials	11%
Healthcare	10%
Financial services and/or insurance	10%

COMPANY SIZE	
20,000 or more employees	15%
5,000 to 19,999 employees	20%
1,000 to 4,999 employees	30%
500 to 999 employees	35%

TOP 6 JOB TITLES	
Director in IT	16%
VP in IT	11%
Manager in IT	11%
Senior-most IT decision-maker in the firm	10%
Business intelligence/analytics leader	8%
Infrastructure and operations	6%

The background is a dark, textured surface with a subtle network pattern of thin lines and dots. A large, faint, light-colored cloud shape is centered behind the text. The word "FORRESTER" is written in a white, serif, all-caps font, with a registered trademark symbol (®) to its upper right.

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