witboost

LOOKING AHEAD:
2024 DATA MANAGEMENT STATUS REPORT

Exploring Challenges, Priorities, and Innovations in Modern Enterprise Data Management

Introduction

Purpose of the Report

This report captures the results of a **comprehensive survey conducted to assess the current state of data management in enterprise environments**. The insights aim to guide organizations in refining their data management strategies and addressing the most pressing challenges.

Survey Methodology

Data was collected from 152 data practitioners during September 2024, representing large multinational organizations in banking, insurance, financial services, manufacturing, logistics, and utilities sectors.

Disclaimer

None of the survey respondents are affiliated with Witboost or Agile Lab in any capacity. This includes, but is not limited to, being clients, representatives, partners, or stakeholders. The findings presented in this report are based solely on the independent responses collected during the survey.

Results Overview

The findings reveal that while organizations recognize the critical role of data management, challenges persist in governance, compliance, discoverability, and interoperability. The survey also highlights a growing emphasis on aligning data practices with business objectives to foster innovation and efficiency.

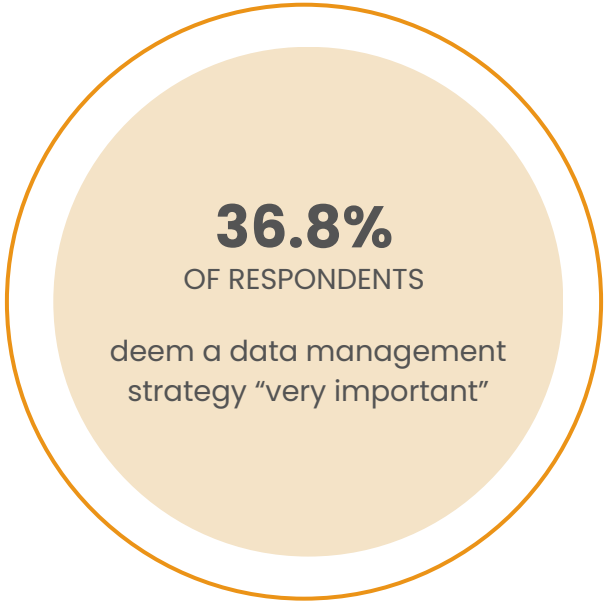
Furthermore, while the majority of respondents recognize that data strategy is essential, almost a quarter (21%) do not have a data strategy. In addition, siloed teams and data, frustrations arising from these inconsistencies, and not knowing how to derive insights from the “mountains of data” that organizations have, led to inefficient decision-making as the primary negative impact (over 2/3 of respondents), as well as the inability to derive value from data (44%).

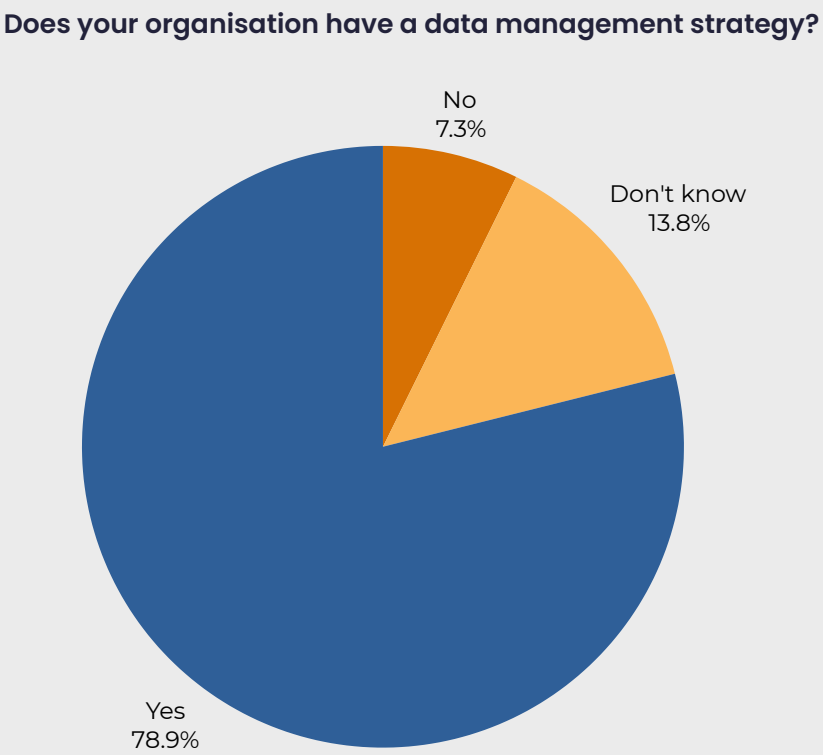
While most respondents were aware of these challenges and their negative outcomes, 62% claimed their organization had not suffered financial losses from data management practices not being followed. A further 27% did not know whether financial losses were incurred by their corporations, and only 11% confirmed this outcome.

Data governance was a constantly recurring theme in various answers from the respondents, emerging as a crucial part of data management. A significant number of respondents rated governance processes as being a key contributor (to their data management strategy) and/or a major challenge.

The State of Data Management Today

Survey Highlights




Does your organisation have a data management strategy?
No
7.3%
Don't know
13.8%
Yes
78.9%

These results underline the **essential role data management plays in achieving operational efficiency, compliance, and gaining a competitive advantage**.

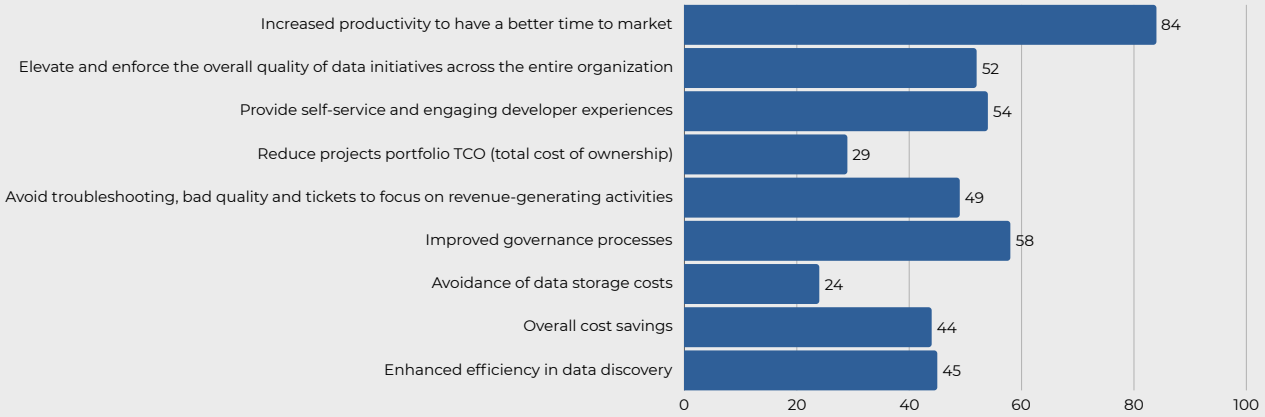
Data Management strategy is the foundation of any data management practice and activity. Data indicates that widespread acknowledgement of a data management strategy drives its implementation. The vast majority of respondents recognized its importance, with 86% considering it important or very important. This percentage dropped slightly to 79% when respondents were asked about having a strategy in place. An equal number of responses (11) rated the importance of a data management strategy as neutral and having no strategy, representing 7% of respondents.

Respondents who reported their organizations having a data management strategy in place reported better outcomes. Those without a strategy likely suffered from more inefficiencies and risks.

Four factors emerged as being most beneficial for organizations' data management strategy. These received between 34%-55% of responses. Ranked in order of preference, these were:

1. Increased productivity for better time-to-market
2. Improved governance processes
3. Provide self-service and engaging developer experience
4. Elevate and enforce the overall quality of **data initiatives** across the entire organization

Which of the following do you consider most beneficial for your company's data management strategy? (Select up to three)



Productivity is crucial especially for data producers since delays in their activities can have a knock-on effect on other stakeholders, such as data consumers who are the beneficiaries of these activities. **Using so many disparate tools and a lack of interoperability creates cognitive load** for data producers and this strain impacts team happiness. The more unified and automated the work of data producers can be, the better.

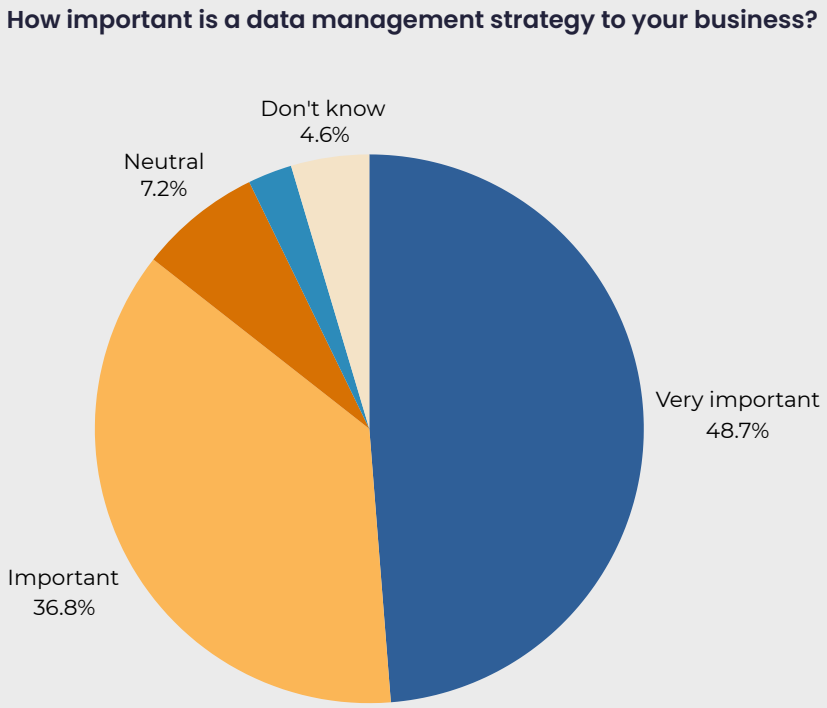
Governance processes are also crucial. These are also affected by the excessive workload as the governance team becomes a bottleneck whenever a new regulation requires new policies to be implemented. These policies often apply retroactively for existing data assets, increasing the risk of human error and creating delays in the entire delivery process. The ever-growing **governance processes must also be streamlined and automated** as much as possible which would **significantly increase time-to-market and reduce risks**. Any error in data governance can lead to quality and security risks, bringing potential data loss, theft, and/or hefty fines from regulators.

A self-service developer experience, as well as the quality enforcement of data initiatives, are closely tied to all the selected options. **A self-service platform that can handle the entire lifecycle of data products could not only unify the entire broad process of building, governing, and discovering under one roof but also enable the automation of certain steps within the lifecycle.**

While these four responses were selected by at least 1/3 of respondents, other options were also deemed as significant contributors to a data management strategy.

The avoidance of troubleshooting and ticket resolutions freed up data practitioners to focus on revenue-generating activities. On the data consumers' side, enhanced efficiency in discovering data also contributed significantly, according to 30% of responses. Costs, representing Total Cost of Ownership (TCO), overall costs, and data storage costs were the least cited factors, however together they represent an average of 21% of respondents.

Ultimately, the findings revealed that while organizations are making strides in their data management strategies, achieving true excellence requires a cohesive approach and preferably a self-service platform that aligns strategy, tools, and practices.



Data Management Top Priorities

Core Priorities

The survey identified the following as the most important outcomes of data management. It's worth noting that responses also include the respondents who mentioned not having or not knowing of having a data management strategy:

1. Organizational Efficiencies and Streamlined Decision-Making

Organizational efficiency (49%) and streamlined decision-making (45%) are logical outcomes of an optimized data management approach. Every organization aims to extract value from the petabytes of data they have available, and data management is key to this. Slightly over 30% of respondents complained about organizational issues being a data management challenge, which correlates with the efficiency they wish to prioritize.

Another couple of indicators that affect organizational efficiency for the respondents were:

- Data practitioner time spent on non-revenue generating activities
  - 25% -
- Control/visibility over ensuring data creation and management rules are followed across the organization
  - 22% -

Some of the impediments to organizational efficiency and streamlined decision-making include:

- **Disparate data sources**: resulting in data consumers not knowing where to find the data and often having to wait too long to access the data. This leads to the following impediment.
- **Slow time-to-market**: Business moves at a speed which data can't keep up with. This can be attributed to multiple causes, one of which is centralization in large enterprises.
- **Excessive centralization**: While a centralized approach can bring many benefits, it also has disadvantages, especially at the enterprise level, where multiple cross-functional teams exist, and approaches are as diverse as the countries the organizations are present in. At this point, the very centralization seeking to optimize processes becomes a bottleneck, as teams await to get the nod from the central decision-makers.

The keyword that organizations are looking for when discussing organizational efficiency and streamlined decision-making is **speed**. To achieve it at scale, organizations need a combination of centralization and decentralization and enable agility and innovation within their teams. A possible roadmap for this could be:

A. A **solid platform foundation** that includes an interoperable data stack, a data catalog, and a **Software Development Lifecycle (SDLC)**

B. **Data Product Management**, which includes a **Control Plane** and **Market Plane** which can manage data products, from their development through standardized templates, to governance, using computational policies that guarantee compliance, and finally discovery, through a **marketplace which data consumers can comprehensively explore** and discover these data products.

C. **Well-defined data practices** which ensure that each decentralized team respects quality, security, architectural norms, governance, business knowledge, and delivery.

2. Regulation and Compliance

Compliance initiatives are fundamental to adhering to laws like GDPR, HIPAA, CCPA, and DORA. Effective compliance ensures data integrity, availability, and usability while minimizing risks associated with breaches or mismanagement. The **improved governance processes cited by 38.2%** of respondents contribute heavily to these efforts.

Roadblocks that data practitioners can face when it comes to compliance include:

- **Regulatory Complexity**: Expanding regulatory landscapes demand sophisticated systems for monitoring and compliance that sometime apply to already finalized initiatives, leading to a massive overhaul that create chaos within an organization.
- **Legacy Systems**: Outdated infrastructures often fail to meet current compliance needs, creating bottlenecks in modernization and "duct tape" solutions that can fail with each new update.
- **Data Governance Gaps**: Robust governance frameworks are needed to define roles, responsibilities, and standards across the data lifecycle (more on this below).

Organizations should address these challenges by integrating governance frameworks that enforce compliance policies through automation. This approach reduces human errors and ensures alignment with global standards.

3. Fix Data Governance Framework

Modern enterprises face the dual challenge of managing vast data volumes while ensuring their data governance framework is agile, accurate, and efficient.

Some of the key obstacles that respondents have faced include:

- **Inconsistent Data Quality (59.9%)** Errors and inaccuracies lead to costly delays and inefficiencies. The underlying issue is in fact data governance being applied after data has been pushed into production. A comprehensive application of a data governance framework should result in good quality data.
- **Manual Processes**: Traditional governance relies on manual checks, increasing time to production.
- **Compliance Violations**: Poor governance can result in regulatory penalties, further requiring fixes and an endless cycle of incomplete projects.

Organizations should consider governance frameworks that bring the governance aspects into production. One such methodology is **Governance Shift Left**, which automates governance through policies embedded in code, and shifts the responsibility to the data producers. By aligning data governance with development lifecycles, organizations can reduce operational overhead, accelerate innovation and efficiency, and become truly agile.

4. Achieve Technology and Data Interoperability

Interoperability is critical for breaking down silos and fostering collaboration. Enterprises are moving towards platforms that integrate data from diverse sources to deliver actionable insights.

Barriers to interoperability include:

- **Data Silos**: Fragmented systems hinder comprehensive data access.
- **Legacy systems**: These have outlived their adoption curve but remain indispensable because of the large amounts of data and potential insights that they still hold.
- **High Integration Costs**: Custom solutions demand significant resources and expertise.
- **Inconsistent Metadata**: Poor metadata standards impact data discovery and usage.

As a first step, organizations should adopt open-source technologies which could increase interoperability. However, when considering scale, even these tools can present problems. The ideal solution is a self-service data platform that can unify and integrate all these tools through APIs which could break down data silos, integrate data from legacy systems and ensure that all the data of an organization can be leveraged.

When thinking about data management, what do you consider to be the most important outcomes?

Challenges and their Impact in Enterprise Data Management

Respondents identified three major categories of challenges in data management: Governance, lack of trust in data, data & analytics not keeping up with the business pace of new initiatives, and difficulty in deriving insights from large amounts of data.

1. Governance - Quality, Security, and Metadata

- **Poor Data Quality: Reported by 59.9% of participants as a critical challenge.**
- **Data Security: 23.7% reported it as a critical challenge.**
- **Outcome: 26.3% Policy Inconsistencies, where inadequate governance frameworks lead to fragmented data practices.**

A key pillar of data governance, data quality is cited as a critical challenge for the survey respondents. The challenge of data quality stems from the different definitions that data producers and data consumers have. Even with a project manager in place for each data initiative, these differences can happen. The importance of proper data governance and its knock-on effect on its core elements such as data quality, data security, metadata, etc. cannot be overstated.

The best solution to fix data quality, as well as other issues that resolve expectations on both the data producer and data consumer side are **data contracts**. With data contracts in place, organizations can **fully define what needs to be delivered**, fostering a culture of trust and guarantees that what is promised is indeed delivered.

2. Lack of trust in data and business metadata & Data & Analytics not keeping up with the business pace of new initiatives

- **45% - Lack of Trust in Metadata**
- **45% - D&A not keeping up with the business pace**
- **Outcome: 33.8% - team frustration**
- **Outcome: 35% - slow development timeline**

The same number of respondents, 68, reported these two challenges. The connection is clear, as the very lack of trust in business metadata requires extra reviews, often after the project has closed. This adds to Data & Analytics teams lagging when it comes to business pace. Data consumers need relevant data in real time and the data often fails to live up to this expectation.

What's more, often times **business metadata** is either lacking or incomplete, requiring it to be filled in ex-post. This complicated situation can also be solved with the use of data contracts which could set the requirements of having business metadata for each data product in stone. Data contract implementation would also solve the trust issue, as well as the business speed required, since the deliverables could be defined within the data contract. The project could only be completed when all the specifications in the data contract are fulfilled.

All these factors lead to understandable frustration, as 34% of respondents confirm.

3. Difficulty in deriving insights from large amounts of data

- **Fragmented data storage/lakes that offer no insight - 34.2%**
- **Continuous cost increase for operations – 33%**
- **Outcome: Not being able to derive enough/any insights from large data sets – 44%**
- **Outcome: Extra work to locate original data set – 32%**

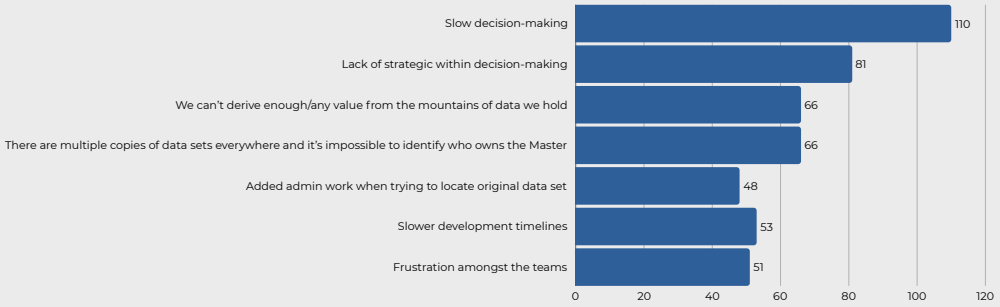
The outcome tied to this challenge was attributed to **not deriving enough or any value from the mountains of data, with over 43.7% of respondents selecting it** as an impact for the cited challenges.

This challenge goes back to interoperability. The lack of a unified view of the data, the lack of or incomplete metadata and siloed teams and data storages all contribute to data siloes. While separate data storages are common, the lack of a designated place in which data consumers can search and discover data leads to data duplication and "puzzle pieces" which don't seem to fit or require too much time to put together to form the required business insights.
In fact, 44% of respondents mentioned the difficulty of finding the original data source because of the multiple copies they had come across. Almost 32% also mentioned the extra work to locate the original data set as an outcome of this challenge. Pairing this information with the lack of speed that respondents confirmed (and 35% complaining about slow development) leads to the need for a solution that offers trusted and readily available data at a fast pace.

The solution could be a Data Product Marketplace as part of the Market Plane, in which all data products are validated by data contracts, are searchable and discoverable, and can be used to derive insights. This requires a self-service data platform which would also solve the speed requirement that the business side is pushing. Ultimately, the speed gained to discover, access, and derive insights from the data would also increase decision-making speed, with a significant impact on data strategy.

What do you think are the main challenges organisations face when it comes to managing enterprise data?

What is the potential impact of these financial challenges on an organisation?



Data Management Practices for Innovation and Financial Impact

Innovation Potential of Proper Data Management Practices

When asked to rate their data management practices for their ability to leverage data for insight and innovation:

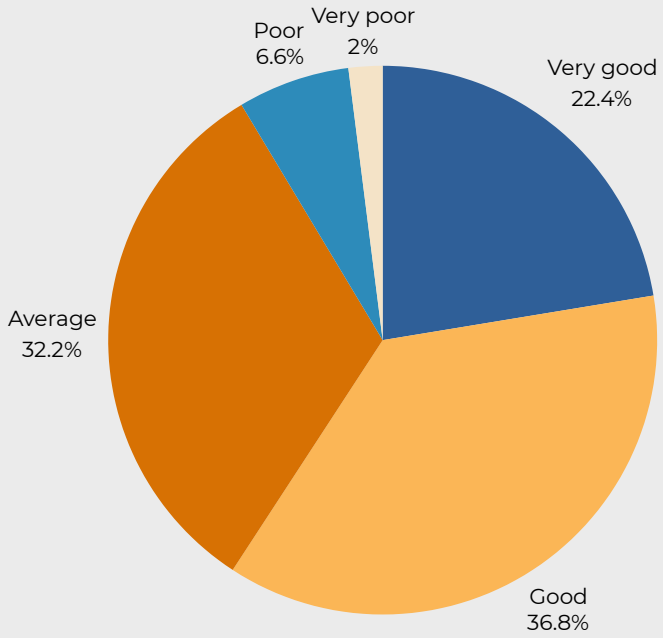
- Over half, **59.2%**, described them as either “very good” or “good”.
- Only **22.4%** described them as “average.”
- Only **8.6%** described them as “poor” or “very poor”

This data is particularly interesting when compared to the main challenges considered by the respondents, as 1/3 claimed that deriving insights from data was a major challenge. Furthermore, **almost half (45%) mentioned the lack of trust in metadata and data & analytics not keeping up with the pace of the business**, further contrasting with the confidence in their organization’s ability to leverage data management practice for insights and innovation.

Adding the regulation and compliance, and **data governance framework** top priorities also gives further context since they all impact the trust and discoverability that data consumers require to derive insights.

Data discovery platforms like internal data marketplaces are emerging as pivotal tools for driving innovation. By promoting accessibility and collaboration through a self-service platform, organizations can unlock new opportunities.

How would you rate your organisation’s data management practices for its ability to leverage data for insight and innovation?



Negative Financial Impact as a direct result of lacking Data Management Practices

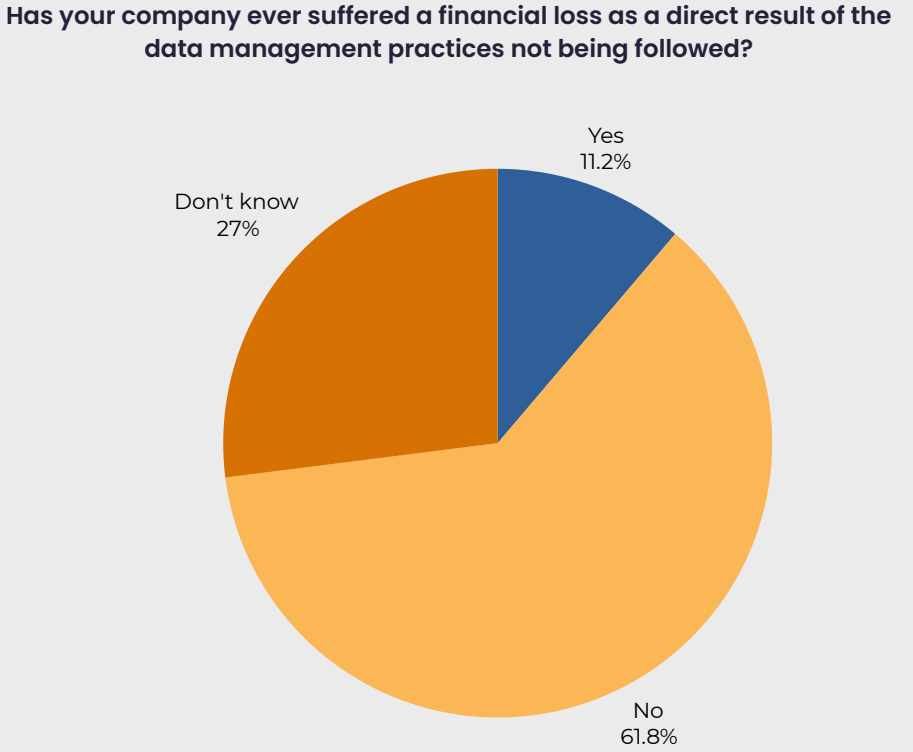
- **Yes – 11.2%**
- **No – 61.8%**
- **Don't know – 27%**

Responses revealed a mixed understanding of the financial repercussions associated with inadequate data management practices. While a majority of respondents (62%) reported no direct financial loss, a significant 27% were unsure, indicating a lack of visibility into how poor data management affects organizational outcomes. Furthermore, 11% confirmed that their organizations had suffered financial losses due to likely lapses in data governance, quality, or compliance (based on other responses factored here).

This uncertainty reflects a broader challenge in quantifying the tangible impact of subpar data management. Many organizations fail to connect inefficiencies—such as delayed decision-making (72.8%), inability to derive value from data (43.7%), and slow development timelines (35.1%)—to financial outcomes. Issues like fragmented data storage (34.2%) and inconsistent governance policies (26.3%) exacerbate these inefficiencies, leading to indirect costs that are often overlooked.

The findings emphasize the critical need for **robust data management platforms** that address data development, governance, provisioning, interoperability and discovery challenges. With such a platform, organizations can reduce inefficiencies, foster trust in data, and mitigate financial risks.

Ultimately, the survey highlights that while direct financial losses from poor data management practices may not always be apparent, **the cumulative effects of inefficiencies, compliance failures, and operational delays significantly impact an organization's bottom line**. Proactive investment in data governance and strategic alignment is essential for minimizing these risks and unlocking sustainable growth.



ABOUT WITBOOST

Witboost is a pioneering platform that simplifies Data Product Lifecycle Management with Automated Governance and Data Sharing. This approach empowers you to increase **speed, reduce complexity, and apply governance automation**.

It seamlessly blends business-relevant information, **data governance processes**, and **IT delivery**, ensuring sound data products aligned with strategic objectives. **Witboost facilitates data-driven decision-making** through data sharing while maintaining data security, ethics, and regulatory compliance.

Moreover, **Witboost maximizes data potential through automation, freeing resources for strategic initiatives**. Apply your data for growth, innovation, and competitive advantage.

Find out more at: **witboost.com**

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