

Data Management vs Data Governance

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Abstract:- Data management is the practice of gathering, organizing, protecting, sharing and storing data so it can be analyzed for business decisions. It helps improve data scalability, visibility, security and reliability. With the vast quantity of data available to organizations, it has become essential for organizations to use data management to generate maximum value from the data available to them. Data governance is a discipline of data management. It ensures that data is high quality by making it secure, available, usable and consistent. One of the primary goals of data governance is to create harmony between data across various business units. Another goal is to ensure data is used properly through the implementation of data governance policies and procedures.

Keywords: data management, data governance, management, storing data, secure data storage.

I. INTRODUCTION

- **Data governance:** - Data has become the lifeblood of today's world – essential to running key company operations, driving decisions, and informing responses in almost all industries. As its scope expands, so too must the organizations that manage it. The ability to effectively create policies, procedures and defined responsibilities surrounding this growing reality will lead to sustainable success in any organization. This success is realized by reducing the operational costs of managing data, mitigating the risks associated with incomplete and inaccurate data, and enabling the utilization of data as information to drive decisions.
- **Data management:** - Data management plays a significant role in an organization's ability to generate revenue, control costs, and mitigate risks. Successfully sharing, storing, protecting and retrieving the ever-increasing amount of data can be the competitive advantage needed to grow in today's business environment. Management of data generally focuses on the definition of the data element, and how it is structured, stored, and moved. Management of information is more concerned with the security, accuracy, completeness, and timeliness of multiple pieces of data. These are all concerns that accountants are trained to assess and help manage for an organization.

II. PRIMARY DATA MANAGEMENT FUNCTIONS INCLUDE

- Data management architecture: -
- A data architecture describes how data is managed, from collection to transformation, distribution, and consumption.
- Data development: -
- Data development is the process of building a data set for a specific purpose. The process includes identifying the required data and how feasible it is to obtain it.
- Data operation management: -
- Data operations is an Agile approach to designing, implementing, and maintaining a distributed data architecture that will support a wide range of open-source tools and frameworks in production.
- Data Security Management: -
- Data security management is the practice of ensuring that data, no matter its form, is protected while in your possession and use from unauthorized access or corruption

III. BENEFITS OF DATA GOVERNANCE

Having a robust data governance program can empower your business and IT teams to interact with data—with both the agility the business demands and the data security IT needs. Imagine that an analyst or a team leader can find, access, and explore accurate and reliable data that they need, when they need it—confidently creating visualizations and reports to share with their teams. Every benefit of having actionable insights comes from having sound data governance.

A. Software

This is the brain of your entire system. Right now, it could include your core, or possibly an interface platform installed to communicate with your main data pool (which may include your LOS).

None are cheap. Plus, of course, it means a full due diligence process ensuring the software meets your security standards. Then, you have to verify it works with your existing systems both in theory and practice (trust me, those can vary).

We also need to include the time required from your IT team to install it across your network. I'm sure they have nothing on their plate now.

Then, it will have to be integrated into your existing data flow. Without changing your processes, it might just be a "pretty face" to the same functionality you have today. And

with the migration to software as a service, it may even be an annual subscription.

So, you're paying on an ongoing basis, just as you would with a service partner, but without getting the partner.

Data governance can help companies

- greater efficiency
- better data quality
- better compliance
- better decision making
- improved business performance
- enhance business reputation

IV. BENEFITS OF DATA MANAGEMENT

A. Visibility

Data management can increase the visibility of your organization's data assets, making it easier for people to quickly and confidently find the right data for their analysis. Data visibility allows your company to be more organized and productive, allowing employees to find the data they need to better do their jobs.

B. Reliability

Data management helps minimize potential errors by establishing processes and policies for usage and building trust in the data being used to make decisions across your organization. With reliable, up-to-date data, companies can respond more efficiently to market changes and customer needs.

C. Security

Data management protects your organization and its employees from data losses, thefts, and breaches with authentication and encryption tools. Strong data security ensures that vital company information is backed up and retrievable should the primary source become unavailable. Additionally, security becomes more and more important if your data contains any personally identifiable information that needs to be carefully managed to comply with consumer protection laws.

D. Scalability

Data management allows organizations to effectively scale data and usage occasions with repeatable processes to keep data and metadata up to date. When processes are easy to repeat, your organization can avoid the unnecessary costs of duplication, such as employees conducting the same research over and over again or re-running costly queries unnecessarily.

V. TYPES OF DATA MANAGEMENT

Data management plays several roles in an organization's data environment, making essential functions easier and less time intensive. These data management techniques include the following:

- Data Preparation
- Data pipelines
- ETLs (Extract, Transform, Load)
- Data catalogues

- Data warehouses
- Data Governance
- Data Architecture
- Data security
- Data modelling

VI. CONCLUSION

We conducted a structured literature review, provided an overview of the state of the art of data governance and data management. Data has become the lifeblood of today's world. It also plays a significant role for data.

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