Data Management

Idea In Short

Data Management is the practice of collecting, keeping, and using data securely, efficiently, and cost-effectively. The goal of Data Management is to help people, organizations and connected devices optimize the use and diposal of data within the bounds of policy and regulation. Data Management enables data-driven decision making to maximize the benefit to the organization. A robust Data Management strategy is becoming more important than ever as organizations increasingly rely on intangible assets, such as Data to create value.

data Management is the process of ingesting, storing, organizing and maintaining data that an organization creates and collects.

An algorithm is a rules and associated process that allow computers to solve problems and complete tasksEvery application, analytics solution or algorithm used in a business depends on seamless access to data. Data Management helps ensure that data is secure, available, and accurate.

Effective Data Management also is central to deploying critical IT and data processing systems, especially ones that process customer or financial data. Business applications and analytical systems that support organizational decision-making and strategic planning by corporate executives, business managers and other end users rely on trustworthy data.

Managing data in an organization involves a broad range of activities, policies, procedures, and practices. The Data Management process includes a combination of different functions that collectively aim to make sure that the data in corporate systems is accurate, available and accessible. IT and Data Management teams execute most of the required Data Management activities, but business users also participate in Data Management process to ensure that the data is fit for their purpose [utility] and caters to their needs [warranty].

Business value drivers

Across industries, organizations increasingly view Data as a strategic, corporate asset. Organizations seek to make more informed, data-driven business decisions, launch effective marketing campaigns, better understand their customers, optimize business operations, improve process efficiencies, and reduce costs. Ultimately, organizations seek to increase revenues and profits, while decreasing costs by leveraging data.

However, lack of proper Data Management can saddle organizations with data silos, inconsistent and unreliable data and poor data quality. The shortcomings range from inability to run even basic business operations to worse, deliver misleading insights from Business Intelligence [BI] and Analytics applications that could result in long-term, irrepairable decisions that could jeopardize organizations very existence.

Recently, Data Management has also grown in importance as organizations are obligated to comply with an increasing number of regulatory compliance requirements, including data privacy and protection laws such as GDPR and the California Consumer Privacy Act. And when those protections are to be proven or audited, having solid data management policies and procedures in place is essential.

While several organizations have forged a data strategy, a majority of those organizations are yet to become fully data-driven. Most organizations don''t treat data as a business asset to help them successfully compete in the marketplace. As a result, there''s a massive opportunity for organizations that recognize the importance of creating a holistic data infrastructure.

In addition, companies are capturing ever-increasing volume and variety of data. Without proper Data Management, both the technical and business environments could quickly become complex, unwieldy and hard to navigate. By implementing a combination of data virtualization, master data management [MDM], metadata management, and other essential data management technologies, organizations can better meet business objectives and place data at the center of their business.

Digital Transformation

It''s often said that data is the lifeblood of digital transformation. The common denominator in any digital transformation project is data. Before organizations can transform processes, take advantage of new technologies, and become intelligent enterprises, they need a solid

data foundation that a holistic Data Management program offers. With data''s new role as business capital, organizations are discovering what digital startups and disruptors already know: Data is a valuable asset for identifying trends, making decisions, and taking action before competitors. The new position of data in the value chain is leading organizations to actively seek better ways to derive value from this new capital.

Disciplines

Data Management comprises of separate disciplines that address the entire lifecycle of data, from data ingestion, through data storage and processing to overall data governance. In other words, Data Management emcompasses a variety of interrelated functions, both technical and business. Some functions are core to Data Management :

- Data Strategy
- Data Architecture
- Data Modeling
- Data Sourcing
- Data Lifecycle Management
- Data Accessibility
- Data Infrastructure and Technology
- Data Lineage
- Data Integration
- Meta and Master Data Management
- Data Remediation
- Data Governance
- Data Security
- Data Stewardship
- Data Visualization, etc.

Characteristics

When it comes to efficiently managing your organization's data, a unified and holistic approach is crucial to establish a strong data infrastructure. For a start, a data management program implementation should have the following characteristics:

- Established data governance controls that provide security by limiting access to

data to only authorized users, making it easy to identify the data you're looking for with clear metadata;
- Easily accessible data, including streaming, transactional, structured and unstructured data;
- An infrastructure that can evolve as business needs change;
- The ability to work with existing and legacy technologies without having to go through the expensive task of ripping and replacing;
- Consistent and controlled data sharing across business domains, allowing for data use in operations, analytics, and governance.

Summary

A well-executed Data Management can help companies gain potential competitive advantages over their business rivals, both by improving operational effectiveness and enabling better decision-making. Organizations with well-managed data can also become more agile, making it possible to recognize market trends and quickly exploit new business opportunities. Effective Data Management can also help companies prevent data breaches, data privacy issues and regulatory compliance problems that could damage their brand reputation, add unforeseen costs and put them in legal jeopardy. Ultimately, the biggest benefit that a solid approach to Data Management can provide is better business performance.