

Data Governance

Idea In Short

A Data Governance framework consists of the policies, rules, processes, organizational structures and technologies that are put in place as part of a Data Governance Program. It also enumerates things, such as a mission statement for the program, its goals and how its success will be measured, decision-making framework, roles and responsibilities for the various functions that will be part of the program. An organization should document and share the Data Governance Framework, especially among its internal employees, so that everyone in the organization understands the importance of the program, how it works and the benefits it will deliver.

Data Governance (DG) is the process of managing the availability, usability, integrity and security of the data in an organization. Data Governance is based on data standards, policies and procedures that control the entire scope of data within an organization. Data Governance could be based on internal, custom-developed artefacts, such as standard, policies, processes, etc., or based on an industry-wide framework.

Data Governance

Data Governance defines who can take what action, upon what data, in what situations, using what methods. Data Governance is a collection of processes, roles, policies, standards, and metrics that ensure the effective and efficient use of data in enabling an organization to achieve its goals. It establishes the processes and responsibilities that ensure the quality and security of the data used across a business or organization.

A well-crafted Data Governance strategy is fundamental for any organization that works with big data, and will explain how your business benefits from consistent, common processes and responsibilities.

Business value drivers

Effective Data Governance ensures that data is consistent and trustworthy and doesn't get misused. As organizations face new data regulations, Data Governance helps achieve compliance requirements, increase customer trust and enable innovations, such as Data Analytics, Artificial Intelligence and Machine Learning to help develop new products and services, expand customer base, optimize operations and drive business decision-making.

For example, a business driver for a healthcare organization is ensuring the privacy of healthcare-related patient data. This data should be secure as it flows through the organization. Retention requirements and historical metadata (e.g., of who changed what information and when) should be defined to ensure compliance with the regulatory mandates, such as HIPAA and GDPR.

IT value drivers

Data is at the heart of all computer and technology functions, such as Enterprise Resource Planning (ERP), Accounting and Finance, Sales and Distribution, Planning and Control, Order Management, Customer Service, etc. Accurate, reliable data is essential to the effective operation of these systems and functions. Given that good, reliable data is crucial to business, the IT organizations should ensure that the controls to data creation, quality management, usage and security are properly implemented. As a result, users can rely on the systems and data to make data-driven business decisions that deliver organizational success. In this regard, the IT department evolves in its standing as a truly transformational partner to business.

Personas

In most organizations, various people are involved in the Data Governance process. That includes business executives, data management professionals and IT personnel, as well as end users who are familiar with relevant data domains in an organization's systems. These are the key participants and their primary governance responsibilities.

A well-designed Data Governance program typically includes:

- A Data governance team
- The Steering Committee that acts as the governing body, and
- A group of Data Stewards

Ideally, executives and other representatives from an organization's business operations partake in Data Governance programs, in addition to IT and data management teams. Some common roles are:

- Chief Data Officer (CDO)
- Data Governance Manager (DGM)
- Data Governance Committee
- Data Stewards

Chief Data Officer

Often, the Chief Data Officer (CDO) is the executive that oversees a Data Governance program and has high-level accountability for its success or failure. The CDO's role includes:

- Securing approvals
- Funding and staffing the program
- Leading the Data Governance organization set up
- Monitoring the program's progress, and
- Advocating and catalyzing adoption internally within the organization.

If an organization doesn't have a CDO, another C-suite executive (usually, the Chief Operating Officer (COO)) usually serves as an executive sponsor and handles the same functions.

Data Governance Manager and team

In some cases, the CDO or an equivalent executive, such as the Director of Enterprise Data Management may serve as the Data Governance Program Manager at an operational level. Other organizations may appoint a dedicated Data Governance Program Manager or Lead to specifically execute the program. Regardless of the setup, the Data Governance Program Manager leads a Data Governance team that works on the program full time. Sometimes, organizations may stand up a formal Data Governance Office to coordinate the overall initiatives, establish processes, leads meetings and training sessions, monitor program performance, tracks metrics, manages internal communications and other management tasks.

Data Governance Committee

The Data Governance team does not make policy or standards decisions. Usually, that responsibility is assumed by the Data Governance Committee or Council. This committee comprises of business executives and other data owners. This committee approves the foundational Data Governance policy and associated policies and decide on items, such as Data Access, Data Usage, etc. and the procedures to implement them. It also reconciles disagreements among various business units over nomenclature, such as data definitions and formats, etc.

Data Stewards

Data Stewards oversee data assets and keep them in order. They enforce the the policies and rules approved by the Data Governance committee. Data Stewards ensure the proper implementation of policies, processes and procedures and that data users comply with them. Generally, personnel with deep knowledge of particular data assets and domains are appointed as Data Stewards. In some organizations, Data Stewardship is a full-time role, whilst others charter their employees with Data Stewardship responsibilities on a part-time basis. Furthermore, there can also be a mix of IT and business data stewards.

Other key roles

Roles, such as Data Architects, Data Modelers Data Quality Analysts, Data Engineers and Data Scientists are key personas involved in the Data Governance process. In addition, business users and analytics teams should be trained on Data Governance policies and data standards to prevent them from using data in erroneous or inappropriate ways.

Artefacts

The aforementioned personas collaborate to create the following artefacts for the appropriate sourcing, usage and disposal of data assets:

- Standards
- Policies
- Roles & Responsibilities
- Implementation guidelines, and
- Enforcement procedures

- Escalation mechanisms

Typically, the Data Stewards are chartered with the execution aspects of Data Governance, while the executive and steering teams provide the trajectory, guidance and inputs that determine the course of data programs.

Importance

Without effective Data Governance, organizations' systems and business processes will suffer from data inconsistencies. For example, customer names may be listed differently across Enterprise Resource Planning (ERP), Accounting and Customer Service systems. This complicates systems and business process integration efforts, resulting in additional costs. Furthermore, data inconsistencies result in data integrity issues that affect employee productivity, users' trust in data due to inaccuracies in Business Intelligence (BI), Enterprise Reporting and Analytics applications. Furthermore, poor Data Governance hampers regulatory compliance initiatives. An enterprise Data Governance program ensures common data definitions and standard data formats that are applied across systems and business processes, thereby boosting data consistency for both business, technical and compliance uses.

Benefits

A key goal of Data Governance is to break down data silos in an organization. Such silos commonly build up when individual business units deploy Shadow IT (i.e., separate data processing systems without centralized coordination or an enterprise data architecture). Data Governance aims to harmonize the data in those systems through a collaborative process, with stakeholders from the various business units participating.

Data Governance also ensures proper data usage to both, avoid introducing data errors and prevent potential data misuse (such as personal data about customers and other sensitive information). Through uniform policies and procedures on appropriate data usage, organizations can monitor and enforce the policies on an ongoing basis to ensure compliance with internal and external requirements. In addition, Data Governance can help balance data collection practices and privacy mandates.

Besides more accurate analytics and stronger regulatory compliance, the benefits that Data

Governance provides include improved data quality; lower data management costs; and increased access to needed data for data scientists, other analysts and business users. Ultimately, Data Governance can help improve business decision-making by giving executives better information. Ideally, that will lead to competitive advantages and increased revenue and profits.

Summary

Effective Data Governance is at the heart of a data-driven enterprise - an objective that many organizations are striving to evolve towards. Managing the data used in systems and business processes is a prerogative to this evolution. Data Governance is a central component of Digital Transformation initiatives based on Data Analytics, Artificial Intelligence (AI) and Machine Learning (ML). Moverover, Data Governance enables diverse corporate processes, such as risk management, business process management, Mergers & Acquisitions, to name a few.