

Uma Gupta • San Cannon



# A PRACTITIONER'S GUIDE<sup>TO</sup> DATA GOVERNANCE

A Case-Based Approach

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A Case-based Approach

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# FOUNDATIONS OF DATA GOVERNANCE

## INTRODUCTION

Data governance looks deceptively simple on paper. It is not. It is difficult. It is complex. It is often abstract and ambiguous. It is a long road where leaders must remain committed to continuous improvement even as they face several roadblocks to achieving their goals. It is a game of persistence and creativity where those who understand the power and potential of data work diligently to tame the ocean of data in their organizations with the ultimate goal of leveraging data to achieve organizational excellence, market power, and exceptional customer service.

There are many hundreds of books and white papers, journal and magazine articles, and internet resources on data governance. Research and theories are essential to advance an emerging, interdisciplinary, and fast-moving field like data governance. Many of these resources are vital to helping researchers and practitioners advance the field of data management and governance. Leaders need education and training on a diverse set of strategies to implement data governance in their specific industry since each industry has its own data



challenges and regulatory and compliance requirements. Frameworks are necessary to help organizations implement data governance, particularly those that are just embarking on this journey. A rich and diverse set of knowledge resources and outlets are absolutely essential to the advancement of any field.

However, mainstream resources on data governance can sometimes lead one to believe that there is a simple formula to achieve overnight success. How-to articles may give the impression that implementing data governance is nothing more than following a set of logical steps as it relates to people, processes, and technology. But data governance practitioners know better. They face a unique set of challenges in the field that extend beyond the immediate scope of cutting-edge research and theoretical frameworks. Those who are in the data governance arena know all too well that success is slippery at best, and that the road to achieving optimal governance through excellence in data governance execution will forever remain an ongoing challenge.

We recognize that while theoretical knowledge is essential and foundational, it does not always neatly translate into success in the real world. Our focus, therefore, is to help the data governance practitioner in the field with tools and tips to navigate the unique challenges that he or she faces. Our goal is to leverage and utilize the rich foundation of data governance research, strategies, tools, techniques, and frameworks that exist today to deliver a portfolio of practical ideas that can assist data governance practitioners and leaders to create and implement successful data governance initiatives and programs in their organizations.

## WHY INVEST IN DATA GOVERNANCE?

It may be tempting to treat data governance as another passing fad. After all, the history of business is filled with

fads. The reason why data governance cannot be sidelined as a fad is that regardless of the business unit or the industry or the geographical location of an organization, every company, institution, and society rely on data to make progress. Today, data have moved from a backdoor operation to be the central nervous system of an organization. Relevant and timely data dictate the growth, survival, success, and sustainability of an organization. We know that organizations manage and monitor their financial resources with care and attention. Since data are the drivers of revenue, even more care and attention need to be paid to data and their integrity and management. It is a dangerous idea to treat data as a secondary resource that does not deserve its own dedicated and knowledgeable team. Furthermore, today there is evidence showing a direct link between how well an organization manages its data resources and its financial performance. This should come as no surprise because data are the back belly of effective decision-making, which, in turn, drives financial performance.

Finally, employees need data to make good decisions. When employees don't have the right data at the right time or they cannot find the data or have the wrong data, the quality of decisions is affected, and this can have a reverberating effect on the entire organization. It leads to employee frustration and loss of productivity. For this reason alone, if nothing else, data governance is here to stay. And organizations that embrace data governance will benefit and leapfrog those who ignore the value of data as a resource.

## WHAT IS DATA GOVERNANCE?

There is no universal definition of data governance. Why? Because data governance, by its very nature, cannot be defined

in isolation. It is like a tailored suit that must fit the person. Like creating a bespoke suit, designing data governance for an organization takes time and effort. It may make sense to start with something off the rack that sort of fits and tailor it to suit the wearer. But even suits on the rack have variations in color, fabric, and style. The suit that is chosen depends on the wearer and the occasion. Similarly, the creation of a data governance program depends on the organization: programs and initiatives must align with its unique cultural characteristics and data needs. In other words, the validity of any definition of data governance is intimately and intricately tied to a variety of organizational characteristics such as the organization's vision, values, and strategic priorities; portfolio of risks; people and culture; organizational structure; stakeholder demands; regulatory and compliance requirements; data management guidelines and protocols; maturity stage of data governance within the organization; and market dynamics, to name a few. These factors make it essential for data governance leaders and senior management to develop a tailored definition of data governance. We, therefore, recommend that every organization carefully craft its own definition of data governance that takes into account all critical and relevant factors to ensure stakeholder engagement and buy-in. The process may start with an "off the rack" definition but it should not end there. Without a customized definition of data governance, it may be difficult to ensure the success and sustainability of data governance strategies and initiatives in an organization.

How an organization defines data governance will determine how successful it is in creating and executing its data governance agenda over the short and long term. Why? Because data governance is the responsibility of the entire organization, not just the C-suite or the IT department. Although senior leadership is largely responsible for setting

the tone for how data and their usage are valued in an organization, a clear, concise, and customized definition of data governance brings the message about the value and power of data to all employees. Every employee who relies on data for performing his or her professional tasks directly or indirectly contributes to the data governance pie, whether it is a small slice or a significant one, or a formal or informal role in data governance initiatives and projects. Every employee therefore has a professional obligation to ensure that data governance programs and initiatives in the organization succeed. Hence, defining data governance within the organizational context should not be taken lightly nor should it be rushed as it plays a crucial role in winning employee buy-in and commitment. We, therefore, recommend that all data governance initiatives begin with a customized definition of data governance. We also recommend that organizations periodically review their definition of data governance to ensure that it remains strategic and current given that all organizations are living organisms.

What are the critical elements that should go into a customized definition of data governance? This question is best answered by looking at all the key factors that impact and influence data as an asset. As we know, there are many dimensions to leveraging data for the long-term success of the organization. These include data accessibility, quality, consistency, and integrity; roles and responsibilities of individuals with access to data, policies, and procedures that govern who has access to what data, when, and why; and processes that mandate how data are to be used in an organization. Not all data that reside in an organization are the same type. Given that there are many types of data (master data, big data, and reference data, to name a few), the definition of data governance must be flexible to include all types of organizational data.

We present below several popular definitions of data governance as a starting point for developing a customized definition that takes into account the elements we mentioned before. Consider these some of the suits on the rack:

1. Data Governance is a collection of practices and processes which help to ensure the formal management of data assets within an organization. (DATAVERSITY)
2. Data governance is defined as the exercise of authority and control (e.g., planning, monitoring, and enforcement) over the management of data assets. (DAMA DMBOK)
3. Data Governance is a discipline that provides clear-cut policies; procedures; standards; roles; responsibilities; and accountabilities to ensure that data is well-managed as an enterprise resource. (DGPO)
4. Data governance is a data management concept concerning the capability that enables an organization to ensure that high data quality exists throughout the complete life cycle of the data. The key focus areas of data governance include availability, usability, consistency, data integrity and data security and includes establishing processes to ensure effective data management throughout the enterprise such as accountability for the adverse effects of poor data quality and ensuring that the data which an enterprise has can be used by the entire organization. ([Wikipedia](#))
5. Data Management International (DAMA) defines data governance as “the exercise of authority, control and shared decision-making (planning, monitoring and enforcement) over the management of data assets. Data Governance is high-level planning and control over data management.”

6. ISO defines data management as “the activities of defining, creating, storing, maintaining and providing access to data and associated processes in one or more information systems.”

Key terms in these definitions include practices, procedures, standards and processes, roles and responsibilities, data consistency, integrity and management, formal management, data assets and enterprise resource, authority, and accountability and control.

By integrating the above foundational terms of data governance with the unique characteristics and needs of data in a given organization, such as accessibility, quality, consistency, integrity, maturity, and compliance requirements, the beginnings of a customized definition of data governance start to emerge.

The challenge facing data governance leaders is to make standard definitions of data governance come alive within their organizational context with the sole purpose of winning the support and commitment of all stakeholders. The purpose of this exercise is not to create a technical definition of data governance that only those who are intimately involved with data can understand or accept. The goal is to define data governance in such a way that all users of data will understand the full implications of data governance and be willing to commit to doing their part to protect the data assets of an organization, which is a precious resource.<sup>i</sup>

## WHY IS DATA GOVERNANCE DIFFICULT?

There are many reasons why data governance is a daunting task for organizations, governments, and societies. Achieving a reasonable level of data governance sophistication and

maturity is a long road with many ups and downs. The final destination is one that is continuously shifting and emerging. Failures are common, even though one rarely hears about it in the news or in popular trade magazines.

### Data Control Is Not Easy

First, at its core, data governance is about understanding and leveraging one of the most valuable assets of an organization, namely, data. This is not as easy or simple as it sounds because there are many moving parts to every organization. This includes establishing strategic priorities as it relates to data, their integrity, usage, and accessibility; creating a bold, yet flexible, baseline of data management frameworks and systems; continuously scanning and identifying opportunities in the marketplace by leveraging the data the company owns; monetizing the data either through upward or downward channels or both; and ensuring that there is a strong bridge between the data assets the company owns and decision-making at all levels within the organization, to name a few.

### Data Problems Are Usually Business Problems

The second reason why data governance is difficult is because what appears as data-related problems are rarely that. Instead, evidence shows that most data problems are usually business problems. Data problems are like a leaky pipe – something is broken somewhere in the business and the source of the leak must be identified and fixed. Data problems cannot be ignored, although organizations do this frequently because they lead to increased cost and decreased revenue. It can lead to employee frustration and loss of productivity.