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Global Business Consulting

Building Sustainable Data Governance Programs with Agile Concepts

Sustainable data governance programs are key to managing rapid data growth

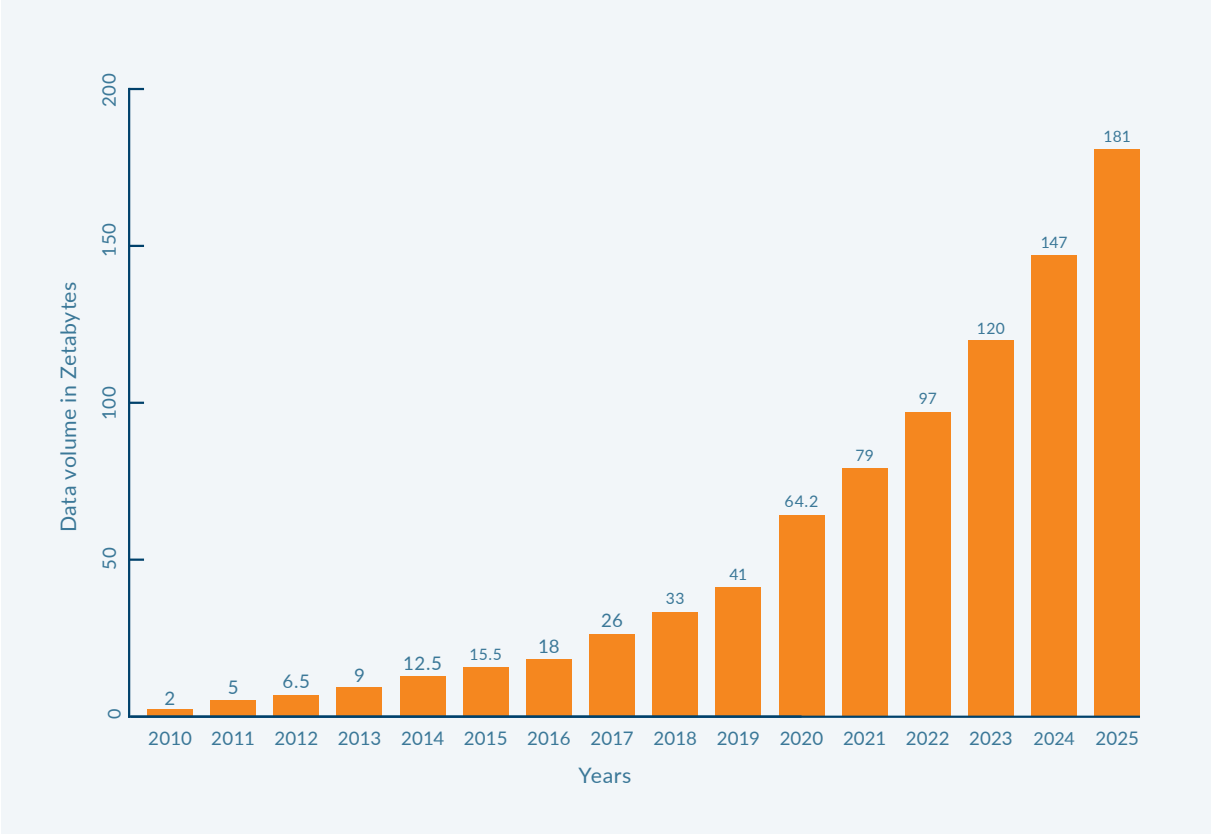
The digital revolution has led to an explosive growth in the amount of data created and collected, driving businesses to seek new ways to manage and discover value in the data they hold. In turn, the growth of stored data has been a longstanding management problem, which if not addressed can lead to potential vulnerabilities, data misuse, and possible data loss.

The need for sustainable data governance is increasing as data grows exponentially and shows no signs of stopping. According to research firm Statista, the volume of data/information created, captured, copied, and consumed worldwide will grow to more than 180 zettabytes by 2025, from approximately 79 zettabytes in 2021.

Sustainable data governance is focused on being agile, proving out the model through quicker iterations of smaller data sets, organising and simplifying data management, and leveraging technology to sustain the investments. These investments will allow companies to be more flexible in how they present, use, and consume data and enable more rapid adoption and compliance with data governance controls.

What's more, the demands of analytics and the expected value garnered from data require that companies get a much better handle on data, while also protecting it and making it easier for authorised users to access. This is where sustainable data governance comes into play.

Although it is not a new concept, data governance is on an evolutionary path, where demands placed on data drive changes in how data governance is performed and quickly modified to address new challenges. Themes such as data privacy, digital transformation, monetisation, and regulatory supervision are driving enhanced needs for governance while further highlighting the costs and risks of ignoring the topic.



'Sustainable governance' is an imperative for organisations looking to establish a single source of data truth. It requires proper, reliable maintenance of both the underlying characteristics and guiding principles supporting an organisation's critical data assets. Sustainable data governance requires technical integration, buy-in from process leaders, adoption from the user base, and certification over areas that are not automatically verifiable. As data inventories expand, so does the need to automate verification (field/table relationships, lineage, use of data, etc.) to ensure governed data repositories are trusted sources, reducing challenges with versioning or accuracy of contained data.

Additionally, a growing demand for automated and responsive data governance is being driven by both regulatory changes and customer expectations. Regulatory needs are expanding to cover aspects related to consumer data privacy, internal and external data use, data sharing practices, and data usage requirements. Some of those new regulations have given customers more control over their data than ever before. Today, customers expect assurances on how their data sets are used and demand transparency in the process, while also requiring organisations to protect sensitive information.

Data governance requirements are further complicated by additional needs driven through business imperatives such as digitalisation and data monetisation, which in turn drive requirements for further efficiencies in managing data. This proves especially important as it relates to data that may be integrated or aggregated multiple times between different business units or departments where consistent definitions are essential to ensuring the

data's trustworthiness and fit-for-purpose. Those demands, complexities and other elements highlight the importance of bringing agility to data governance.

In a perfect world, a sustainable data governance program built on agile concepts is:

- Aligned to the business' strategies, goals and priorities
- Championed and universally supported by all of the organisation's executives
- Institutionalised with a data asset-oriented philosophy as part of the company's decision-making culture
- Formalised in its operationalisation via defined responsibilities, functions, protocols, processes and metrics
- Enacted by an engaged staff empowered with the competencies, authorities, compensation and rewards system necessary for its support
- Enabled by a portfolio of technologies to support the extensible automation of its ongoing implementation.

Leveraging Agile Concepts

Overcoming barriers presented by legacy data governance processes means taking a different approach, namely adding agile concepts to the process. Traditional data governance often times has been very resource intensive, requiring upfront investments of time for the initial capture of core assets such as data dictionaries along with continued maintenance of those assets. Additionally, many historic data governance programs have had challenges in managing scope and delivering value on shorter timelines. Combining agile best practices with traditional data governance brings forth the opportunity to use a framework that accelerates governance tasks, potentially offsetting the resourcing and time to value challenges.

Agile brings a collaborative, iterative and evolutionary approach to the governance development cycle. This allows both data producers and consumers to work together on smaller elements of a project where issues can be mutually remedied and verified before moving on to future modifications. That breaks down establishing governance into smaller, much more easily attainable steps that simplify the process while also instituting quality control and adaptability.

Changing the Perception of Data Governance

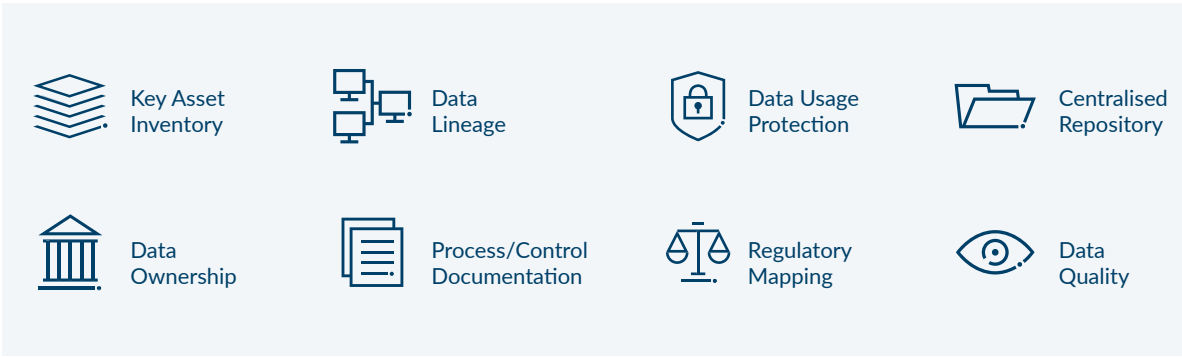
For far too long, businesses have responded to the mounting pressures of data control by forming committees to delve into the intricacies of data governance. Those committees focus on attempting to understand data relationships to develop policies to better manage data. However, our experience shows that most of those efforts fail, simply because it takes too long to develop criteria or developed policy lags far behind current needs. Modern data governance cannot be solved through a simple policy or committee, but rather requires innovations in technology and agile approaches to keep up with the volumes of new data.

The committee or group approach usually results in building monolithic data governance programs, where the unattainable task of trying to solve all data problems for all users becomes the goal. However, as in nature, monoliths are easily toppled, and monolithic data governance programs prove far too rigid to succeed, often pulled down by competing priorities and project creep, both of which wreak havoc on critical measurements, such as return on investment (ROI) and total cost of ownership (TCO). It has become essential that companies be flexible to ongoing demands, while also not drowning the business in detail related to every data asset captured. In our experience, companies succeed by changing the perception of data governance from a monolithic undertaking to bite-sized and achievable components that will ultimately focus on a small, but meaningful, segment of data first and allow the related results to help fuel interest, commitment, and overarching involvement into an expanded governed data universe. Here we explain how to unlock early and repeatable value in the data governance journey.

Leveraging Technology to Optimise Data Governance

Technology is a critical enabler in any modern data governance program. Common data governance processes that are supported by tools include data catalogs, inventories of key assets (e.g., data entities, databases, applications, and servers), and mechanisms to track and maintain data quality. Tools increasingly are relied upon to automate maintenance of data inventories through periodic recollection of metadata, apply logic for data classification and perspective definitions, and identify potential gaps in data quality. With effective tool use and training, organisations can greatly simplify the storage and management of enterprise governance concepts and allow for greater adoption rates by individuals throughout the firm. Tools should be added after processes have been defined, as a tool alone may produce more complexity in an ever-changing environment. Ultimately, technology will support both speed to implementation, as well as the longer-term sustainability of the program.

Example of where technology can be leveraged



Accountability and Leadership are Key to Success

It is fundamental for the C-suite to participate in establishing a network of individuals across an organisation that will own, lead, drive, and support governance initiatives. Although the CIO is critical for any initiative, we are increasingly seeing a data governance organisation report to a chief data officer (CDO); however, in lieu of a CDO role, this organisation may roll up to the chief financial officer (CFO), chief operations officer (COO), or chief risk officer (CRO), based upon prioritisation of data governance needs.

Another important concept is that leadership at the executive level for data governance may change as organisations' programs evolve. The initial skills to build out the program will evolve into requirements for management and maintenance of the controls over time.

CDO	CFO	COO	CRO
Prioritised projects may include:			
Overseeing data management, data analytics, and data governance Spearheading data and information strategy Analysing and deriving insights from data for business strategy	Financially critical systems inventory Key data element traceability and calculations for financial reporting Ensuring reliable master data quality	Business process to data usage maintenance Common data definitions/terms Ensuring reliable master data quality	Data classification and retention standards Regulatory risk and compliance Data access and security

The Importance of KPI and KRI Measurements

For the most part, measurements can be broken down into KPIs (Key Performance Indicators) and KRIs (Key Results Indicators), which represent two different types of measurement, yet have a symbiotic relationship. KPIs are used to measure the direct results of strategic decisions and help to determine the potential direction of an organisation. KRIs are considered trailing indicators, which means that they are business outcome-based measurements which are determined by looking at past statistics. In other words, KPIs give a vision of the potential future, while KRIs provide an analysis of the past. Relevant and timely metrics that are agreed upon with senior leadership will ultimately enable and accelerate the growth of Data Governance programs by allowing practitioners to focus on developing the program versus spending administrative time in attempting to show growth in different forms period over period.

Organising the Data Governance Team

Once executive sponsorship and alignment has been specified, it is important to clearly define the structure of the data governance organisation, key supporting roles and the responsibilities and engagement model expected between key roles. An example organisational model is illustrated below and defined further for each role; however, please note that the quantity of roles and participants may need to change based upon organisational needs. We recommend initially building out a core team within data governance and then expanding into a data governance council with specific ownership and stewardship roles into the business as program coverage grows.

Example Organisational Model

DATA GOVERNANCE COUNCIL	DATA OWNER
Direction & Scoping Championing Consistency	Define Standards Approve Related Use Cases
DATA GOVERNANCE TEAM	**DATA STEWARDS**
Oversight & Monitoring Training & Enforcement	Investigate Issues Evaluate Quality & Maintain Trust
DATA USERS (ALL EMPLOYEES!)	
Utilise available resources to ensure data is accessed appropriately and fit for use.	

Data Governance Core Team

- The data governance leader (DG lead) is the sole decision maker related to governance strategy and execution decisions.
- Data governance analysts should be engaged to support the DG lead based upon organisation size.
- Team member(s) should develop an enterprise view, based upon performing a survey across the organisation. That collateral is used to build a foundational approach for developing data governance activities.

Data Governance Council

A council of business and IT leaders drives data governance and management decisions. There are three main responsibilities for members on the data governance council.

- Provide recommendations related to decisions which will ultimately be made by the DG leader.
- Advocate on governance topics to their teams.
- Raise any items requiring governance discussion (e.g., issues identified, or challenges with underlying data set usage).

Data Owners and Data Stewards

The underlying business unit or department representatives (data owners as accountability and management leads and data stewards which generally support the execution of required tasks), from both the business and IT, are responsible for executing on day-to-day activities associated with data usage standards, data consistency, and ultimately data quality monitoring.

These roles are necessary to ensure data governance goals are clearly defined, vetted, and executed upon. Furthermore, it is critical that all users of data in-scope for governance activities are given the right level of awareness and training related to any governance items developed.

Adopting Sprints for Quicker Wins

Properly defining the scope of data governance is critical for the success of the overarching program. For example, a two-month period of activity proves to be a good yardstick to establish and organise the foundation. This period is intended to act as a base to help survey organisations in a timely fashion and may need to be adjusted based on complexity and organisational size. Ultimately, we recommend this process can be timeboxed to not exceed one quarter's worth of discovery, as information gathered should be surface level as deeper information related to each group is always subject to change over time.

The first month of post-foundation should be focused on an identified issue for a manageable data set as decided by the DG leader, based upon advice recommended from the DG council (e.g., one table within a data warehouse, one report, etc.) — this month will act as the first 'data area sprint' and clear timelines should be established to ensure takeaways and next steps are documented at the end of the sprint. Furthermore, the structures that are applied should continue past the end date of the sprint – this just indicates the time where data stewards are no longer focused directly on investigation and process adjustment areas. Post an initial sprint, a separate (similarly small, but significant) area should be evaluated for a one-month period.

After two complete sprints, the team should focus its third sprint on identifying ways to augment automation and/or additional analytics/ reports to proactively identify issues based upon lessons learned. This pattern can ensure that data governance is created from an enterprise perspective but is applied in a localised manner where change agents are identified and prioritised. Ultimately, this will allow for the organisation to have quicker wins (and occasionally losses) that will allow for tangible examples of the benefits of data governance performed within earlier iterations, while also allowing for quicker adjustments or pivots that should be managed if challenges are discovered.

Agility Allows for Flexibility

Stronger governance implemented in an agile manner will allow organisations to focus attention on their core business drivers. Ultimately, agile concepts allow organisations the ability to baseline the most meaningful and impactful data sets — this does require upfront attention and time; however, it saves significant effort going forward as the structure and foundation of data governance can be leveraged on all projects and changes in the future, bolstering sustainability within the data governance model.

How Protiviti Can Help

Managing the amount of data being collected and utilised while protecting against potential vulnerabilities and data loss, takes strong data governance and management processes to help organisations continuously monitor the effectiveness of their data governance policies and procedures.

Our subject matter experts work with our clients to customise a repeatable approach to data governance activities that will support each organisation's goals. While we work first to make sure processes are independent of tools, we do have technology partnerships that can help optimise a data governance program once fully defined while accelerating future growth and business value.

Our specific capabilities include:

- Assessing your current data governance processes and determining the maturity level of your program
- Developing a practical data governance roadmap that you can easily follow
- Evaluating the quality of your data providing visibility into data quality challenges and mechanisms to track, report and fix issues
- Establishing a data champion network to ensure proper business involvement
- Carving out bite-sized segments of prioritised data to focus on short, iterative cycles enabling the most meaningful data sets to receive governance quickly
- Staffing support resources for business-as-usual functions or gaps in your program to meet your on-going needs

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