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Building a Framework for Reliable Data

Your Guide to Data Governance

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Govern and protect your most critical data

Data governance plays a vital role in organising and protecting your internal data. Think of it as a form of insurance that demonstrates every piece of information you collect is stored and distributed correctly within your organisation.

Without good data governance, there's no way of knowing when inaccurate data enters your systems, where it came from, or who is using it. This leads to poor data quality, inconsistency in data interpretation and reduces your stakeholders' trust in your data.

Data issues also increase the risk of non-compliance with government and industry regulatory requirements, such as the Global Data Protection Regulation (GDPR). That's why high-quality data governance practices that ensure data privacy and compliance have become so essential for business success.

In this guide we show you how to combat these issues and build a reliable framework for your data using the best data governance practices.

This guide covers

- What is data governance
- Barriers to achieving data governance objectives
- Why a data governance strategy is needed
- Implementing data governance in your organisation
- The tools you need to implement effective data governance

What is data governance

All areas of your business rely on quality data, from senior managers who need accurate data to make strategic business decisions, to marketing and sales professionals who need trustworthy data to understand your customer.

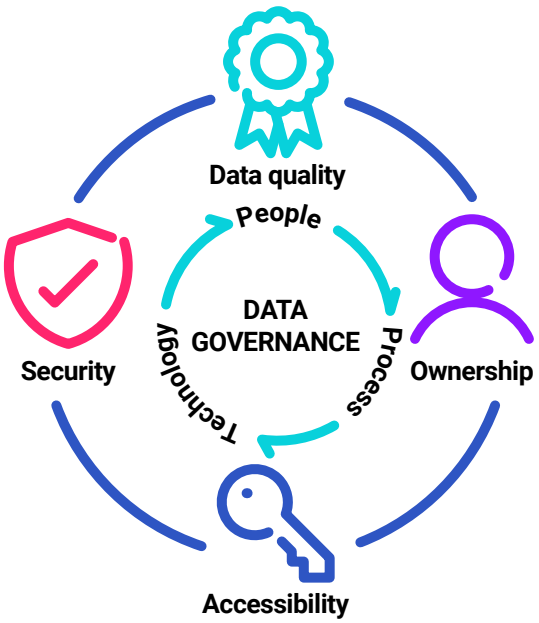
In many companies today, data governance has become increasingly important but what exactly is it and what does data governance mean? Some use data governance to refer to the standards and guidelines that govern data management. Others use the term data "governance" to refer to how data is stored and maintained. In the simplest terms data governance is about ensuring that the data being used in your core business operations, reports and analyses is protected and can be trusted.

Every organisation needs data governance and as businesses in all industries adopt digital transformation, we need to look at the key components that make up good data governance.

Key areas of data governance

Data governance involves the creation of the processes and policies that guide the collection, storage and usage of data within an organisation. It helps to shape the framework you will use going forward.

It all comes down to having robust data governance practices. Organisations can vastly improve their decision-making processes, enhance operational efficiency and mitigate risks with good quality data. So how do we do this? To ensure high-quality and reliable data, there are several key components of a data governance framework which are important to understand so let's get started.



Data quality

Like the saying goes, put garbage in, get garbage out – which is exactly why data quality is a key component of effective data governance. You want good quality data that's easy to maintain and will provide you with accurate, clear insights. This can be achieved by implementing robust policies and procedures like codification and can be measured through data quality metrics. Details can be worked through by conducting regular audits and implementing processes to address any issues that arise. The better the data quality the more you can rely on any decisions made upon it.

Clear ownership and accountability

When you're measuring your data quality you need to know what actions to take when it doesn't meet the quality thresholds you've set. This is where ownership comes in.

The actions to take to correct or improve data are often linked to business processes and may span a company or organisation. It's not the owner's job to fix the data everywhere, but they need to be involved in the conversations and own any changes that happen as a result.

Data cataloging

A data catalog is an organised inventory of data assets in an organisation. It uses metadata to help organisations manage their information and make it more accessible. It also helps data professionals collect, organise, access and enrich metadata to support data discovery and governance.

Think of it as a library but on a much bigger scale. When you need a book, you use a catalog to find out almost every detail to decide if you want it and where to get it. That's what many object stores, databases and data warehouses offer. If you then expand the power of that catalog to cover every library that has the copy of the book you want, you can find all the details relating to it. That's what a data catalog does for all of your data. It gives you a single, overarching view into your data, not just one data store at a time.

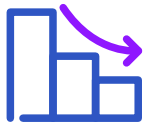
Data security

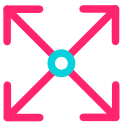
Data security is largely about knowing where your data originated, where it currently is, who has access to it, how it's used and how to delete it. To keep your data secure you should be able to identify your systems and touchpoints that would be easy to access for cyber criminals.

The right level of protection should be in place to prevent any loss of data and you should have a response and disaster recovery strategy to help you get back on track if something were to go wrong.

Why you need a data governance strategy

A data governance strategy gives structure to your processes and a base to manage it all. Without a framework, organisations may develop policies around issues reactively and randomly, rather than in a systematic fashion. We can break it down into the following areas:



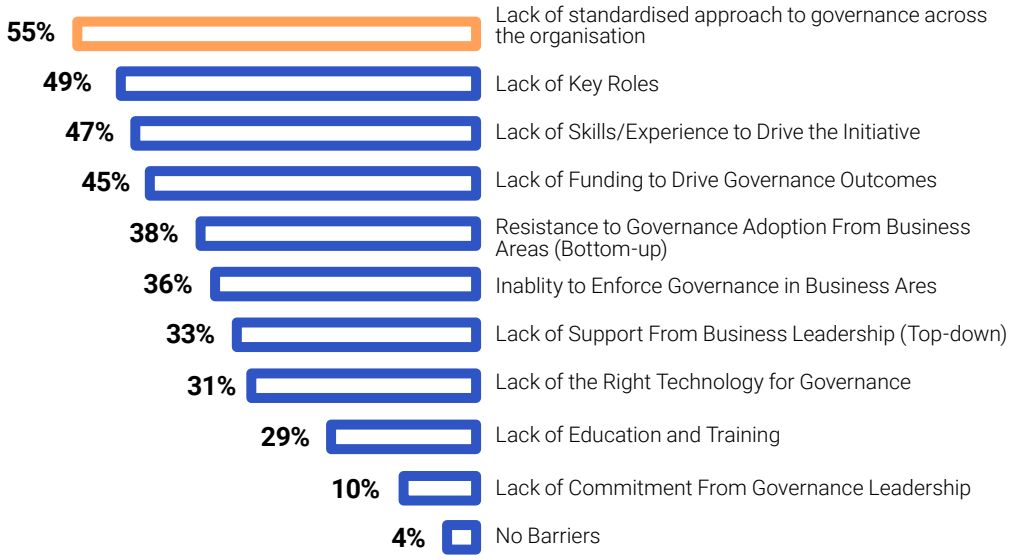


- **Data protection:** Having data governance in place helps prevent data breaches before they happen. Sharing of confidential files and deleting files by accident are just some risks that can be prevented if your data governance strategy is in good shape.
- **Streamlines your processes:** If you're integrating data from a separate system this is when some data issues can arise. In too many cases IT professionals take charge of the data which doesn't always match up across the business. This leads to inefficient management and can leave you vulnerable to security threats. By streamlining your governance processes, you create one picture that provides clear information for everyone to follow.
- **Improves business decision making:** Bad data in means bad data out which produces unreliable results. Only a strong foundation of data insights will get risk-averse stakeholders to take a chance on an opportunity. Decision making improves when people trust the data and the insights that come from it.
- **Supports business objectives:** Is your data doing what it's expected to do? With data governance in place, your data becomes more transparent and can improve operational efficiency. This leaves you with more time to focus on other business tasks.
- **Supports data security:** A well-defined data governance program helps deal with the challenges related to the safety, privacy and compliance of data in today's complex business environment. For example, to pass compliance audits, companies must ensure sensitive data is defined and protected across all locations.

Barriers to achieving data governance objectives

In all companies today, the expectation amongst stakeholders is that a data-driven approach will drive competitive advantage. Which is why we're seeing more and more businesses exploring various initiatives, in their determination to become more data driven. However, for these strategies to become effective, the data being used needs to be trusted. Think of a data governance strategy as a foundational layer for AI or other initiatives to work.

However, this is easier said than done. A traditional one-size-fits-all approach to data and analytics governance cannot deliver the value, scale and speed that many digital businesses demand. There are several barriers to achieving data governance as illustrated by a Gartner report shown below. Adaptive and flexible governance will help to enable leaders in data to select the governance style for their business scenarios.



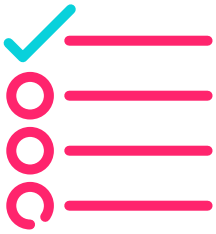
Source: Gartner

n = 55 All Respondents

Q07. Which of the following are barriers to achieving data and analytics governance objectives?

Implementing data governance in your organisation

If you're embarking on a data governance implementation, you need to make sure that your rollout is smooth, well-coordinated and effective. Ultimately, if you spend your time planning your project now, it will likely pay off with significant cost savings later. Keep reading to learn how to set your organisation up for success as we highlight 5 key stages to help you plan your data governance implementation.



Set clear objectives and focus on your data governance

1. Requirements

Before embarking on a data governance initiative, it's important to have a clear understanding of the goals and objectives you hope to achieve. Do you want to improve data quality? Increase transparency and accountability? Improve decision-making? These goals must serve as the foundation for the broader project and provide the structure for the next step. These objectives can include these fundamentals for example:

- Improve the agility of data-driven business decisions
- Seamlessly share knowledge across the organisation
- Eliminate uncertainty and instill trust in data
- Drive value through collaboration in current workflows
- Make security and privacy compliance effortless

Ensure everyone in the organisation is kept in the loop. Many companies wrap up these aims into a strategy that can be shared across the organisation enabling everyone to understand the journey ahead.

2. Analysis

Understand your data landscape and challenges

Organisations today want to be data-driven but are often overwhelmed not only by the amount of data they have, but also by the ever-increasing complexity of their data landscape. Different systems, organisation silos, and physical locations all mean getting visibility of all of your data is a challenge. This needs to be overcome to have any hope of gaining control of it. The aim at this stage is to understand what data you have, what your current set up looks like and to gain visibility of your data. You should consider starting with data sources, data quality and your people and processes.

Data sources

For data sources that are in scope of your governance project you need to understand as much as possible about them. The type of data they hold, how up to date it is, how well controlled it is, how it gets there, and how much you can trust it. The results are likely to be significantly different between an ERP system and a spreadsheet. At this stage you would start to classify it into type, e.g. Customer data, so that it can be grouped with customer data that's contained in other systems, and you can treat all customer data consistently.

Data quality

The data quality component of a data governance framework focuses on establishing and maintaining the accuracy, completeness, consistency, and reliability of data. This includes identifying and putting into place the processes, tools, and automation needed to minimise error, identify inaccuracies, and direct corrections throughout the data lifecycle. Elements of the data quality component of a data governance framework include:

- Data collection
- Data entry
- Data cleaning
- Data profiling
- Data validation
- Data monitoring
- Data auditing

People and Processes

Think about the people in your organisation and how they use data to make increasingly better decisions. Assess the current state of people and their roles in data governance by asking the following questions:

- What is the capability with data within your organisation?
- Who owns each data source and system?
- What is the culture of collaboration and change?
- Is data governance considered as part of data/digital strategy owners?

Many companies rely on "gut feel" when making decisions. To become data driven means moving away from that and building processes which rely on data and analytics which are factored into those decisions. Proper data and analytics processes (data validation and data quality processes) help make better business decisions and better business decisions lead to a better ROI. Building proper processes that provide rules for data quality help build a better understanding of metrics definitions. Improper use of data can lead to unwanted litigation (regarding GDPR, privacy, or security), churn, and loss of market share.

3.Design & mapping

Start creating your data governance strategy

At this stage in your data governance journey take a step back and look at the information you have. What are your objectives? Do these need to be refined? Is your data in a manageable state? From this point your strategy should be closely aligned with your organisation's broader business goals and data strategy. Use a framework as a guide to prioritise based on strategic objectives, pain points, risk factors, regulatory requirements, and readiness for change. The creation of the strategy is your chance to make sure that everyone in the organisation understands what you're trying to achieve.

Prioritise data landscape findings with data governance objectives

Design and data mapping is an essential, foundational process for organisations that desire a comprehensive and compliant governance strategy. The process of data mapping involves tracking, documenting and integrating the various data elements that we have mentioned above (data sources, data fields, data systems, data warehouses, etc.) a company controls and uses to collect data, along with all internal and external third-party systems that hold the collected data.

You want to ask yourself what changes you want to make and how you aim to solve any issues. At this stage master data management can be incredibly useful for solving problems that have been identified before.

Master data management

Master data management is a set of processes and technologies used to ensure the accuracy and consistency of critical data across an organisation. MDM is important for businesses because it helps to improve decision making, reduce costs and boost efficiency. By ensuring that master data is accurate and consistent, businesses can be confident that they are making decisions based on the best available information which should lead to better decision making.

There are many challenges when it comes to managing master data. Some of the most common challenges include data fragmentation, data inaccuracy and even data duplication. MDM can help businesses to overcome these challenges by providing a central repository for master data. This repository can be used to cleanse, standardise, and integrate master data from multiple sources before supplying it back to the key systems that need it. MDM can also help to enforce data governance policies and procedures. Let's take a bookshop as a use case.

This bookshop has a number of systems:

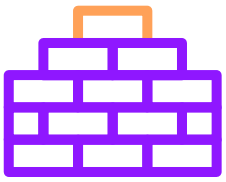
- An in-store system where people can come to browse and buy books
- A smaller order system which is linked to a website and is used to sell books
- A second online system where books can be purchased in bulk for freight shipping

Any customer can purchase books through any of these routes. But let's say more than one 'Mr Smith' has shopped with the company and each one has subtly different details that are now in the system. How can you tell which matches up to each order?

MDM can also be used to:

- Target marketing campaigns more effectively
- Identify and prevent fraud
- Improve customer service
- Reduce the risk of errors in financial reporting
- Make better decisions about product development and pricing

Master data management is a critical business discipline that can help organisations to reduce risk, improve their data quality, decision-making, and overall efficiency. By implementing MDM at the design and mapping stage, businesses can gain a competitive advantage and improve their bottom line.



Implement changes across your organisation

4. Build

Implementing structured change management for data is a crucial component of any data governance program. It ensures that changes to data are properly managed, tested, and approved, and helps organisations maintain data integrity and compliance with regulatory requirements.

Master data management approach

Use master data management to create a single source of truth. Ideally create a master data management/data warehouse platform that takes data from all your data sources, and feeds data in and out of these systems to create one single source of truth across all platforms.

Technology

When selecting data governance tools and technology, there is no one-size-fits-all solution. You need to choose the ones that best suit your data governance needs, budget, and culture.

Common types of data governance tools and technology include data catalogs, which enable data discovery, collaboration, and governance; data quality tools, which measure and monitor the accuracy and completeness of your data; data security tools, which protect your data from unauthorised access; and data integration tools, which move, transform and combine data from different sources.

Data governance tools can help you understand and trust your data, identify and resolve data issues, enforce quality rules and standards, comply with regulations such as GDPR create pipelines and ETL processes for analysis and reporting needs, as well as manage data dependencies.

Tracking

Once you have implemented data governance tools and technology in your organisation, it is essential to monitor and measure their impact on your data governance performance and maturity.

To do this, you can use various indicators such as data governance metrics, audits, and maturity assessments. Data governance metrics are quantitative measures that track and evaluate the progress of your data governance activities. Audits verify the compliance of your data governance policies with the tools and technology you have adopted.

Lastly, maturity assessments measure and compare your data governance maturity level over time. Introducing data governance tools and technology can be a complex process, but it can also bring significant value to your data assets and business outcomes. By following these tips, you can select and adopt data governance tools that suit your needs and goals, as well as enhance your data governance framework and maturity.

Evaluating your new processes/estate

5. Review and monitor

The data governance framework is a cyclical process and by that we mean it should be an asset that you constantly come back to. You should implement and monitor all progress and refine it where necessary. At this point in your data governance journey, you are ready to assess actual operational behaviours and results against expectations and address issues. Here you should begin to look at the following issues:

- Use automated workflow processes and risks thresholds to drive behavioral change
- Evaluate the impact of governance policies on business outcomes and identify areas of improvement
- Track data related issues and ensure timely and effective routing and resolution
- Devise new enterprise processes roles and skills plan informed by maturity culture and risk appetite
- Reassess strategy and model and conduct controlled testing before the wider company launch

The tools you need to implement effective data governance

Once you have a data governance framework in place, consider how you will accomplish your goals. Good data governance is created using a collection of tools and approaches that work together. Here are some Microsoft tools that we recommend that will help you on your way.

Microsoft Purview

Microsoft Purview is one of the more recent additions to Microsoft's security portfolio. It combines the former Azure Purview and Microsoft 365 compliance solutions and is an excellent tool to incorporate within your data governance strategy. Here are just a few ways Microsoft Purview can help with your data governance objectives:

Centralised Data Catalog – Microsoft Purview provides a central data catalog to give you a comprehensive view of your data landscape. It automatically scans and catalogs data assets from your entire IT estate. Purview's built-in classification capabilities allow organisations to define and apply data classifications based on sensitivity levels, compliance requirements, or custom business rules. This ensures that sensitive data is properly identified and adequately protected, reducing the risk of data leakage or unauthorised access.

Sensitive Data Detection - Data sprawl is a common challenge for organisations, making it difficult to locate and manage sensitive data effectively. Microsoft Purview employs artificial intelligence and machine learning algorithms to analyse data patterns and detect sensitive information, such as personally identifiable information (PII), credit card numbers, or intellectual property. By automatically identifying sensitive data, Purview assists IT professionals in implementing appropriate security controls and encryption measures to protect sensitive information from unauthorised access or inadvertent exposure.

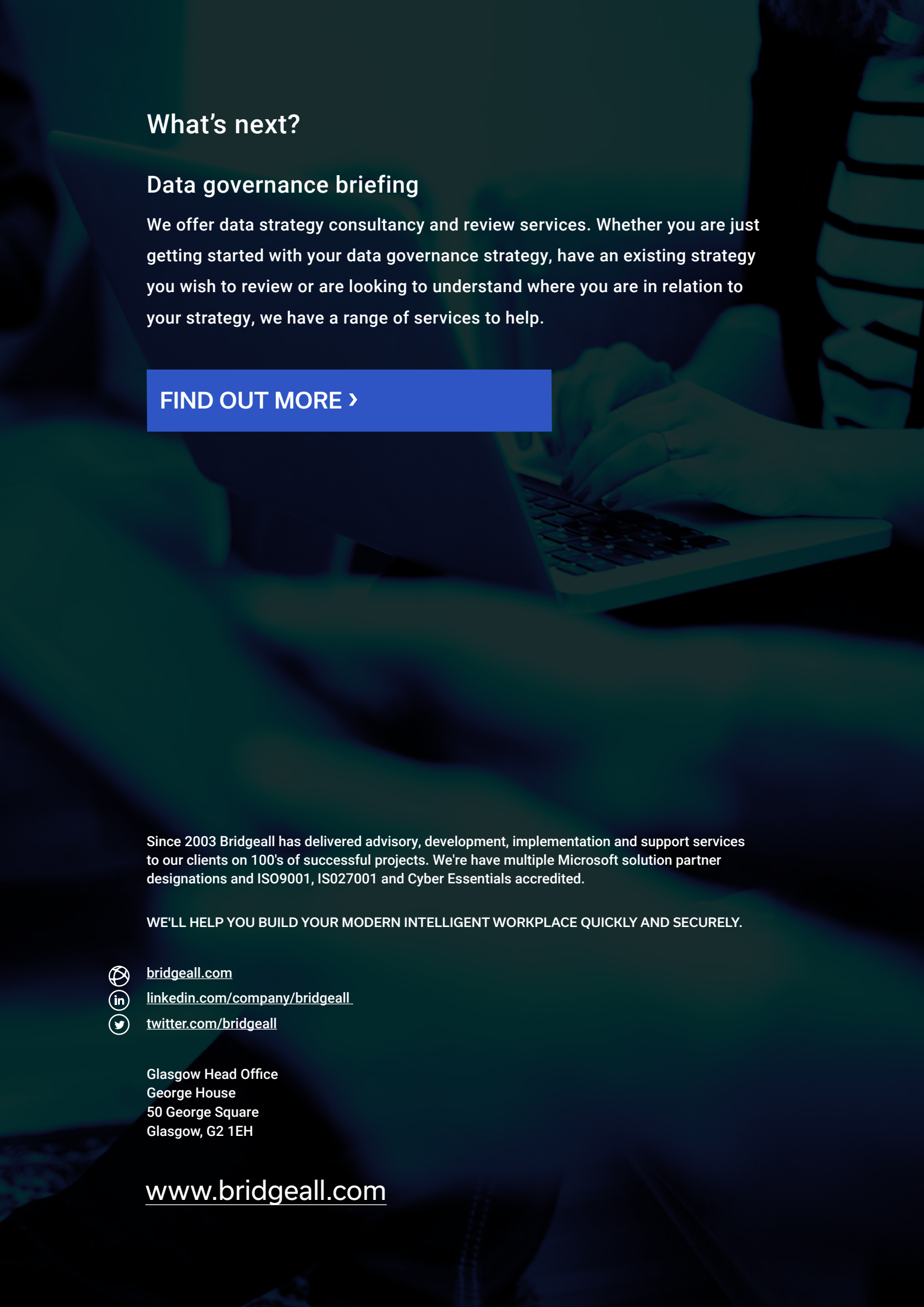
Data Lineage – Understanding the flow of data is key when considering data governance. Microsoft Purview provides data lineage capability that tracks the origin, movement and transformation of data across your data landscape. You can use this to trace lineage and identify potentially vulnerabilities.

Compliance and Audit Readiness – Compliance with data protection regulations is a critical aspect of data security. Microsoft Purview helps organisations maintain compliance and audit readiness by providing a centralised platform to manage data governance policies and procedures. With Purview, you can define and enforce data access controls, monitor data usage and access patterns, and generate comprehensive audit trails and reports.

Power BI

Part of the Microsoft Power Platform, Power BI is the suite of cloud-based apps and software services enabling you to analyse business data via an incredibly user-friendly interface. With Power BI you can easily connect your data sources, visualise and discover what's important and share the data with anyone in your organisation. There is so much you can do with Power BI.

Managing data from various sources can be a headache for many organisations but the strength of Power BI lies in its ability to render data into coherent, interactive visualisations and insightful reports. If you want to gain snapshots of exactly how your organisation is performing, see that information presented clearly and then share it with members of your team, Power BI can help with your data quality, data governance KPI's as well as data sources.



What's next?

Data governance briefing

We offer data strategy consultancy and review services. Whether you are just getting started with your data governance strategy, have an existing strategy you wish to review or are looking to understand where you are in relation to your strategy, we have a range of services to help.

FIND OUT MORE ›

Since 2003 Bridgeall has delivered advisory, development, implementation and support services to our clients on 100's of successful projects. We're have multiple Microsoft solution partner designations and ISO9001, IS027001 and Cyber Essentials accredited.

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