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Data Governance Center of Excellence:

Why You Need a Data-Driven Culture and How to Create It

Executive Summary

As businesses continue to accumulate ever-growing volumes of data, effective data management and data governance become increasingly critical. Against this backdrop, a Data Governance Center of Excellence (CoE), also known as a Data Governance Council, can provide a centralized, cross-functional approach to data governance and management, ensuring that data is accurate, consistent, and reliable. It also ensures the right data is available to the right people at the right time.

This white paper will explore the benefits of a Data Governance Center of Excellence (CoE), including improved data quality, increased data security and compliance, greater operational efficiency, and better data-driven decision-making. Also included are practical insights and best practices for implementing a data governance center of excellence...data quality management with an eye to achieving frictionless commerce experiences for your customers.

Whether you are a C-suite executive looking to drive revenue growth, a data governance leader seeking to improve data management practices, or an IT leader responsible for implementing and maintaining IT infrastructure, this white paper is essential reading for anyone looking to maximize the value of their organization's data.

The Importance of Effective Data Governance

Data governance is a collective word for the policies and processes used to manage, utilize, and protect data. With a confluence of people, processes, and technology, data governance covers the end-to-end data lifecycle, from collection and storage to normalization, enrichment, organization, protection, and distribution. The primary goal of data governance is to ensure that organizations are always in control of their data assets, keeping the data clean, consistent, up-to-date, secure, and accessible to all the right stakeholders.

Data Governance

PEOPLE

PROCESSES/
POLICIES

TECHNOLOGY
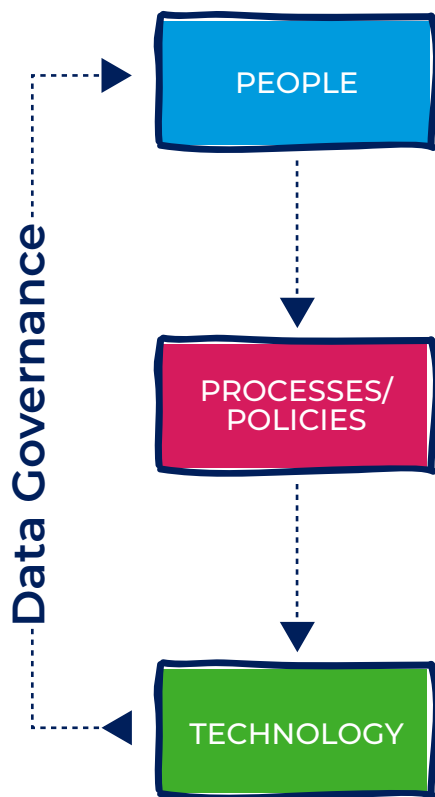
The importance of data governance becomes clearer when considering the high cost of poor data governance.

Poor data quality costs companies an average of
$15 million
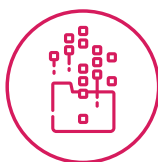annually in losses.

65%
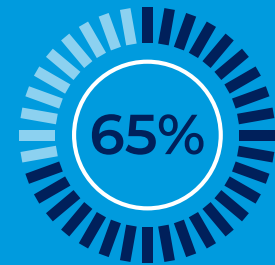
Around
65%
of the world's population will be covered by GDPR-like regulations, making compliance a deal-breaker.
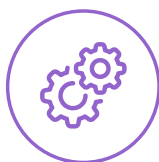
Data breaches cost companies an average of
$4.35 million
between May 2020 and March 2021.

Three key issues caused by poor data governance

BUSINESS FAILURE
Caused by poor
data quality

COMPLIANCE ISSUES
Caused by inadequate
mechanisms to enforce
compliance

SECURITY ISSUES
Caused by imperfect
safety and security
measures.

When tracking the roots of these issues and challenges, all roads lead to Rome, or in this case, data governance. In fact, effective data governance is not very different from good design – when it's done well, you don't always notice it. At the basic level, data governance ensures that data is in good shape to drive business objectives and outcomes. However, data governance can go a step further and help organizations make better decisions based on analytics. Here are a few key areas in which data governance can benefit a business:

IMPROVED DATA QUALITY AND INTEGRITY
With defined standards, validation rules, and cleansing mechanisms, organizations can ensure clean and consistent data across the board.

COMPLIANCE
Data governance drives compliance with privacy regulations and data privacy standards such as the General Data Protection Regulation (GDPR), the Health Insurance Portability and Accountability Act (HIPAA), and others.

SECURITY AND RISK MANAGEMENT
Established processes for access control and multiple checkpoints built within data governance processes help organizations mitigate data security risks such as data breaches, unauthorized access, data loss, etc.

COLLABORATION
Data governance frameworks help eliminate data silos and make it easier for teams to collaborate and share data. They help create a data-driven culture that drives innovation and agility.

ANALYTICS AND INSIGHTS
Data governance doesn't just make data available; it also helps stakeholders make the most sense of it to make informed decisions. By establishing clear definitions, standards, and documentation, sound governance sets the backdrop for stakeholders to get consistent reports and analyses for improved decision-making.

Data Governance Center of Excellence (CoE) – The Nerve Center of a Frictionless Commerce Experience

A Center of Excellence is a team of subject matter experts that provide strategic guidance to organizations regarding best practices for a particular area of interest. Organizations may establish a CoE as a temporary or ongoing initiative targeting a specific competency that impacts business results.

A Data Governance CoE is no different. Rather than driving data governance as a scattered "activity" that occurs sporadically across data touchpoints, the Data Governance CoE aims to create an organized team or organizational unit that drives governance as a ubiquitous set of best practices that are always in action. It unifies all the tenets and best practices of data governance under a common umbrella.

The primary role of a Data Governance CoE is to study the current state of the organization's data governance practices and design, develop, and implement frameworks, policies, and processes that align with the organization's strategic vision, regulatory requirements, and security needs. It is central for organizations seeking to create a data-driven culture for the future.

Scope of a Data Management CoE

The scope of a Data Governance Center of Excellence entails a mix of strategy, design, implementation, and analytics – to ensure that an organization's data is clean, up-to-date, accessible, secure, and compliant. This includes standardizing best practices for organization-wide adoption with ongoing guidance on strategic planning, decision-making, and execution.

The key objectives or outcomes of developing a Data Governance CoE include ensuring data quality, driving data accountability, promoting collaboration, and improving decision-making. These objectives, once achieved, play a central role in giving strategic direction to organizations and serve as benchmarks to measure the success of CoE initiatives.

STRATEGY AND PLANNING

The CoE defines an overarching data governance strategy aligned with the organization's goals and objectives, establishing a concurrent vision, mission, and roadmap for data governance initiatives. This step involves a current-state analysis, identification of issues and areas of improvement, and defining a desired future state.

POLICY AND STANDARDS DOCUMENTATION

The CoE sets and documents policies, standards, and guidelines for data governance, outlining best practices and mandates for data management, data quality, data privacy, data security, and other related areas.

DATA STEWARDSHIP

The CoE identifies data stewards across the data lifecycle to ensure quality, integrity, and compliance. At this stage, the committee clearly defines the roles and responsibilities of data stewards and establishes a clear line of control.

DATA ARCHITECTURE

The CoE works with enterprise architects to build data frameworks and models, ensuring that data governance principles are embedded in the design and implementation of data infrastructure, systems, and integration processes.

TECHNOLOGY SELECTION AND IMPLEMENTATION

The CoE evaluates, selects, and implements data governance and data management tools for data quality management, data lineage, data cataloging, and metadata management, among others.

STAKEHOLDER COMMUNICATION AND ENGAGEMENT

As the central point of contact for all data-governance related queries, the CoE communicates the value of governance and drives collaboration between key organizational stakeholders.

PERFORMANCE MEASUREMENT AND MONITORING

The CoE establishes monitoring mechanisms and key performance indicators (KPIs) to evaluate the efficacy of data governance initiatives. They achieve this by performing periodic audits to ensure compliance and identify areas of improvement.

Building a Data Governance CoE

Develop a Robust Governance Framework

A Data Governance CoE's foundational activity involves formulating a robust framework based on the organization's data predisposition, scope for improvement, and objectives. The first step for a CoE is to perform a present-state analysis of the organization's data management tools and practices and to identify strengths, weaknesses, and gaps.

With a clear view of the organization's data assets, the CoE can now define the objectives, scope, and governance structure, and identify key roles and responsibilities towards fulfilling these objectives. The framework also includes a definition of the governance processes, identification of the required tools, and establishing the success metrics necessary to assess the effectiveness of the initiative.

Write the Rulebook of Policies and Procedures

Policies and procedures give stakeholders and employees much actionable direction to keep data governance practices consistent and on track. Fundamentally, these policies outline the overarching principles and goals of the initiative, and these set the tone for the finer details – policies for data classification, access, quality, privacy, security, and

stewardship, amongst others. The key here is to ensure that these policies and procedures are objective and actionable. Take data classification for an example. The process should document every step of data classification, covering every expected scenario, and also present a model of "what good looks like."

Again, as data in an organization keeps changing and evolving, policies and procedures should do too. The CoE should ensure periodic reviews to finetune policies to meet evolving requirements. While the governance framework gives a skeletal structure to drive successful CoE initiatives, policies and procedures help teams with the finer details of how to get there.

Data Governance Metrics – What To Measure, What Does Good Look Like?

A crucial step for a Data Governance CoE is to define success metrics that are quantifiable and achievable. But here's the big question – what should the CoE be tracking as a quality metric? What does good data quality look like?

✓ DATA QUALITY METRICS

Accuracy: The percentage of data free from errors and inaccuracies that determine data integrity

Completeness: The extent of data completeness, with all required fields and values populated

Consistency: The measure of data coherence and uniformity across systems

Timeliness: The measurement of how much data is current and up-to-date

Relevancy: An evaluation of data alignment with business objectives

✓ SECURITY METRICS

Access Control: Assessing the efficacy of permissions and access controls to uphold data security.

Data Breach Tracking: The count and severity of data breaches, security incidents

Data Encryption: A measure of encryption of sensitive data to protect confidentiality.

✓ PROCESS EFFICIENCY METRICS

Governance Costs: A measure of the costs associated with data governance activities

Governance Maturity: An evaluation of an organizations maturity in data governance implementation

Project Timelines: An assessment of project timelines adherence

✓ STEWARDSHIP METRICS

Ownership Details: An evaluation of the assignment and clarity of data ownership responsibilities

Stewardship Engagement: A measure of the levels of participation and engagement of data stewards

Resolution Time: A quantification of the time taken to resolve data quality and governance issues.

✓ POLICY COMPLIANCE METRICS

Adherence: The extent to which data governance standards and policies are followed

Classification Compliance: An assessment of compliance with data classification policies

Privacy: An evaluation of adherence to data privacy regulations and policies such as CCPA and GDPR

✓ DATA USAGE & VALUE METRICS

Usage Statistics: A measure of the amount of frequency of data utilization across departments

Decision-Making: An evaluation of the impact of data governance initiatives on decision-making

Value Realization: An assessment of the value and benefits derived from improved data governance practices

While some of these metrics can be quantified through direct results, the impact of others may be implied or seemingly abstract. Good data governance drives all these results collectively, riding the cusp of the directly measurable and the abstract. This is why it is imperative to develop a data governance strategy that first focuses on defining these metrics. For example, what is data integrity, what does one measure when assessing compliance, how does one assess robust security mechanisms, and so on.
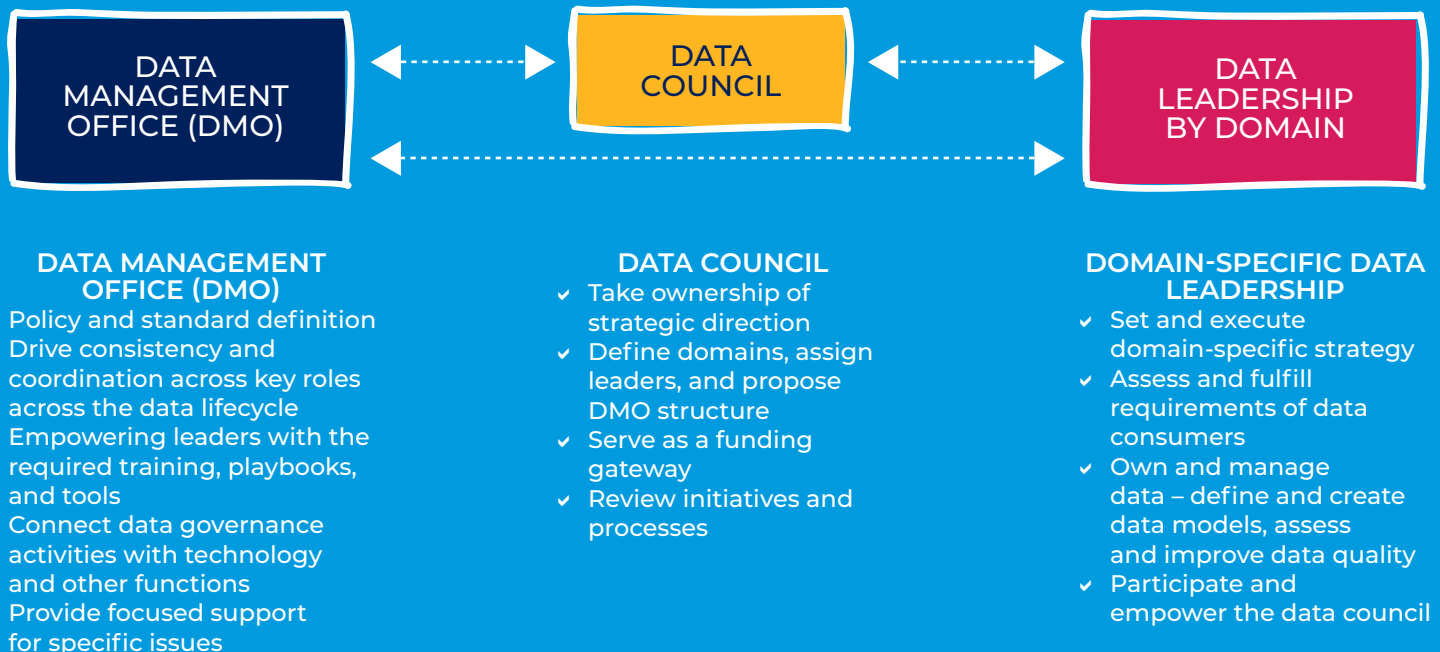
Best Practices for Improving Data Quality

A recent IBM survey estimated that the US GDP loses as much as $3.1 trillion due to bad data, and 1 in 3 business leaders don't entirely trust their own data. This "bad data" is often a result of organizations' lack of readiness to manage this data and the problem is exacerbated when high volumes kick in. Lack of processes for ingestion, enrichment, or distribution; excessive manual intervention; the absence of validation mechanisms etc.; are all signs of missing data governance. This results in reduced efficiency, plummeting revenue, and missed opportunities.

A Data Governance CoE equips your business with a host of best practices for improving data quality. They include:

- Establishing robust data quality standards by defining metrics for accuracy, completeness, consistency, relevancy, and timeliness
- Data profiling to understand the structure, contents, and patterns of your data

- Data cleansing to identify and address inconsistencies, errors, and missing values
- Creating a data governance framework to ensure that maintenance of data quality is not a one-off activity but an ongoing process
- Data quality monitoring with tools and dashboards that give real-time visibility of data quality
- Driving high-integrity processes for data integration and transformation to ensure that quality is maintained as it moves through the value chain
- Data audits and sampling to identify data quality issues and areas of improvement
- Archiving and deletion to ensure that obsolete or outdated data is removed to declutter repositories
- Awareness and training activities to ensure teams are always on top of data quality requirements and best practices

The Anatomy of a Data Governance CoE

DATA MANAGEMENT OFFICE (DMO) ⟷ **DATA COUNCIL** ⟷ **DATA LEADERSHIP BY DOMAIN**

DATA MANAGEMENT OFFICE (DMO)
- Policy and standard definition
- Drive consistency and coordination across key roles across the data lifecycle
- Empowering leaders with the required training, playbooks, and tools
- Connect data governance activities with technology and other functions
- Provide focused support for specific issues

DATA COUNCIL
- Take ownership of strategic direction
- Define domains, assign leaders, and propose DMO structure
- Serve as a funding gateway
- Review initiatives and processes

DOMAIN-SPECIFIC DATA LEADERSHIP
- Set and execute domain-specific strategy
- Assess and fulfill requirements of data consumers
- Own and manage data – define and create data models, assess and improve data quality
- Participate and empower the data council

Building a Data Governance CoE Team

Roles and Responsibilities of a Data Governance CoE – Who Owns It?
While the composition of Data Governance CoE teams may differ depending on organizational requirements, these are some key roles that organizations should aim to fill while setting the team up.

ROLE	RESPONSIBILITY
Data Governance Manager/Lead	To create and oversee data governance strategy, manage the CoE team, and drive data governance across the organization. To ensure alignment with business objectives, manage resources, and streamline communication between the senior management and CoE.
Data Stewards	To manage data for specific functional areas or business units. This includes ensuring data quality, defining data standards, enforcing data governance policies, and advocating data governance across the board.
Data Analysts	To develop data governance frameworks, policies, and processes. They perform data analysis, profiling, and quality checks to identify issues and recommend improvements. They could also overlook metadata management, classification, and data lineage.
Data Architects	To undertake data management tasks such as data modeling, integration, and architecture while aligning them with data governance principles to ensure consistency, scalability, and interoperability. They work with the CoE to establish unique governance requirements for specific integration and implementation projects.
Data Security and Privacy Specialists	To ensure compliance with data privacy regulations by establishing data protection mechanisms to safeguard sensitive data. They must also work with security and legal teams to create privacy policies, implement required protocols, assess risks, and manage data breaches.
Compliance and Audit Specialists	To monitor and ensure compliance with regulatory requirements and data governance policies. These personnel must conduct regular audits to assess data governance maturity, identify gaps, and make recommendations.
Training Specialists	To develop and deliver training programs about data governance concepts, policies, and practices. They create educational material and conduct workshops to promote data governance literacy and advocacy across groups. They also facilitate campaigns to drive a data-driven culture amongst stakeholders.
Data Quality Manager	To establish quantifiable data quality metrics, implement data quality rules, monitor data quality improvement initiatives, and oversee overall data integrity. The individual works closely with data stewards, analysts, and IT teams to identify and resolve data quality efforts and implement improvement initiatives.
Governance Steering Committee	To provide strategic guidance, drive decision-making, and ensure alignment of data governance initiatives with organizational objectives. Comprising key stakeholders from different business units/functions and senior management, the committee reviews and approves all major CoE initiatives and activities.

Establishing Communication Channels

Like any other aspect of achieving business objectives, clear and well-defined communication channels are key to the success of a Data Governance CoE. Subject to the availability of resources, the CoE can create a dedicated communication team to manage all efforts. The team may or may not comprise dedicated resources to handle communications. In fact, depending on skill and ability, you can pick a few members from the core CoE team to play dual roles and handle communications as required.

Once this is done, you can get things moving with a centralized platform, such as a collaboration tool or intranet portal, to facilitate communication, share updates, and collaborate on governance initiatives. Regular meetings and workshops to discuss progress and address challenges also go a long way in keeping communication going. Additionally, you may also consider chat groups and discussion forums to encourage ongoing knowledge sharing and collaboration. Doing so will make it easier to proactively drive data governance efforts in the right direction.

Training and Development

The core team is key to the success of any Data Governance Center of Excellence (CoE) initiative, and this is where training and development are imperative. Start by identifying key roles to fill in order to drive CoE initiatives with a focus on specific skills and knowledge required to execute these initiatives. Offer a combination of internal and external training sessions, workshops, and webinars to address these needs. Training topics may include data governance principles, data quality management, data privacy regulations, data stewardship, and data management tools.

Either way, adoption is key. CoE members must be encouraged to participate in industry conferences and webinars to stay updated on emerging trends and best practices. Doing so goes a long way in carrying out data governance initiatives that make business sense. Additionally, promote a culture of continuous learning by providing access to self-paced online courses and resources. Encourage cross-functional collaboration and knowledge-sharing within the CoE to foster a dynamic learning environment. Finally, to make sure this "continuous learning and improvement" is a part of your CoE's DNA, regularly assess the effectiveness of the training programs through feedback and evaluations to make necessary improvements.

Why Your Company Needs a Data Governance CoE

Through the evolution of digital commerce, technology has come and gone. But data has remained the big constant. That said, even today, when companies look to scale up, grow, or even address existing challenges, it is always technology that is summoned first. Not only does this lead to burgeoning technical debt; you also can end up with multiple systems and siloed data that's hard to track and rarely reliable. The focus remains on bigger, better technology, while the real asset to work on is always going to be data.

This is where a Data Governance Center of Excellence (CoE) is crucial to creating a data-driven culture within an organization. As a centralized and cross-functional entity, the CoE ensures that data is treated as a valuable strategic asset, and it establishes a systematic approach to data governance across the entire organization. By defining and implementing data governance frameworks, policies, and best practices, the CoE sets the foundation for data quality, consistency, and accessibility. This instills confidence in the data, encouraging teams and stakeholders to rely on data-driven insights for decision-making.

The CoE also promotes collaboration and communication between different business units, breaking down data silos and facilitating data sharing. It empowers data stewards to take ownership of data quality and integrity, fostering a sense of responsibility and accountability throughout the organization. By monitoring and measuring data quality metrics, the CoE ensures continuous improvement and identifies areas for optimization.

Pivotree: Your Partner for Data Governance Excellence

A commitment to data governance cultivates a culture of data-driven decision-making, where insights and analytics are trusted, relied upon, and deeply ingrained in the organization's strategic planning as well as day-to- day operations. Pivotree offers best in class data management services backed by years of industry experience and data experts who can help advise on building your CoE team.

Contact us for more information on how we can help solve your data challenges.
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Pivotree designs, builds, and manages frictionless commerce experiences for brands and their customers around the world. When customers trust they can find, buy and get the products they want, when and how they want them — we call that experience frictionless commerce. And Pivotree is leading the way.

As a global collective of talented people passionate about shaping the future of frictionless commerce, Pivotree provides end-to-end solutions and services in Commerce, Data Management, and Supply Chain for hundreds of brands worldwide.