

# **Data Excellence Program Charter**

## **Problem statement**

Memorial University faces challenges in managing and utilizing its data assets effectively. These challenges include limited data definitions and documentation, difficulties in obtaining organizational statistics, data quality issues, and a lack of central oversight. Additionally, manual reporting processes and the absence of reliable, accessible datasets, dynamic reports, and dashboards hinder decision-making. This results in duplication of efforts, shadow systems, reliance on spreadsheets, and the absence of a single source of truth. Addressing these issues is crucial to improving data management, enhancing data quality, and supporting effective decision-making across the institution.

## **Data governance**

Data governance involves exercising authority and control over the management of data assets through planning, implementation, monitoring and enforcement. Data assets encompass any data that holds value for an organization, including both structured data (such as databases, tables, columns, data warehouses, reports, and dashboards) and unstructured data (such as text documents, emails, social media content, and multimedia files). It standardizes how data is defined, produced, used, stored, and destroyed, ensuring that these assets are managed securely, with high quality and in compliance with relevant regulations to support decision-making, operations, and strategic planning (DAMA International, 2017).

## **Vision**

To establish a robust data governance framework at Memorial University, creating a cohesive and transparent data environment where data is managed as a strategic asset. By fostering a culture of data stewardship and innovation, the aim is to eliminate data silos, enhance data quality, create a single source of truth, while providing access to dynamic reliable data assets that support operational efficiencies, informed decision-making, and empower the entire institution.

## **Mission**

To ensure the integrity, security, compliance, and accessibility of data assets across Memorial University, enabling informed decision-making and fostering a culture of data-driven excellence that supports the university's commitment to innovation, inclusiveness and community engagement.

## **Scope**

This charter applies to all data assets essential to the university's operations and strategic goals. It encompasses all data generated, collected, stored and utilized across all campuses of Memorial University to support its academic, research administration, public engagement, and administrative functions, excluding scholarly research data.

## Guiding principles

- **Institutional priorities**  
Institutional strategies and priorities will guide data governance strategy and implementation.
- **Collaboration**  
Centralized oversight and management of data assets will be prioritized to reduce duplication of effort and foster a culture of data sharing and collaboration across the institution.
- **Standardize**  
Uniform data standards, definitions, policies, and procedures will be implemented to ensure consistent data management throughout the institution.
- **Accountability**  
All data users are responsible for maintaining the quality, integrity, privacy, and security of data.
- **Automate**  
Data management workflows will be streamlined and manual effort reduced.
- **Innovate**  
New ideas, methodologies, and technologies will be considered to continuously improve data management practices.
- **Document**  
Accurate, up-to-date documentation of data management policies, procedures, and standards will be maintained as part of the Data Excellence Program.

## Objectives

- **Eliminate data silos**  
  
Eliminate data silos and shadow databases by implementing a data governance framework, fostering collaboration with community stakeholders, and making data more visible.
  - i. **Data stewardship** – Implement an institutional data governance framework with clearly defined roles and responsibilities for agreed-upon data domains.
  - ii. **Institutional data hub** - Launch a Data Excellence Program webpage and an institutional data hub to make data more visible.

- **Enable discoverability**

Establish a framework that facilitates easy discovery of data and insights across the institution.

- i. **Data system catalogue** – Leverage data systems information from the application portfolio to create relationships between the definitions and data systems.
- ii. **Report inventory** – Inventory and catalog reports and find duplications and gaps.
- iii. **Data dictionary** – Define terms through business and technical definitions and create relationships between terms.

- **Establish trust**

Build processes that promote trust in data accuracy, completeness, and consistency.

- i. **Data quality** - Develop data quality processes, roles & responsibilities, and implement data quality procedures.
- ii. **Principal and reference data** - Define authoritative sources of data, manage principal data (e.g., person, organizational structure), and address gaps in reference data (e.g., gender, country codes).
- iii. **Data lineage** - Capture the flow of data from source through intermediary systems and data transformations to a final destination.

- **Support decision-making**

Timely and accurate data insights, clear data analysis processes, data-driven decision-making, and training support are essential to support decision-making.

- i. **Data warehousing** to support business analysis and decision-making.
- ii. Implement **data visualization tools and dashboards** that allow users to easily access and interpret data insights in a visual format.
- iii. Strive to utilize **predictive analytics models** and leverage **artificial intelligence** to drive innovation, uncover insights, and enhance decision-making processes.

- **Simplify access**

Streamline data access while maintaining data security and compliance.

- i. Implement a **self-service data access portal** that allows individuals to access data that is relevant to their needs.
- ii. **Role based access** – Standardize and streamline roles and access and define and implement role-based access and control methodology. Roles are dependent on accurate data classifications, and a well populated data system catalogue.

- **Enhance understanding**

Develop policies and procedures that improve data literacy and enable all working parties to make informed decisions based on high-quality data.

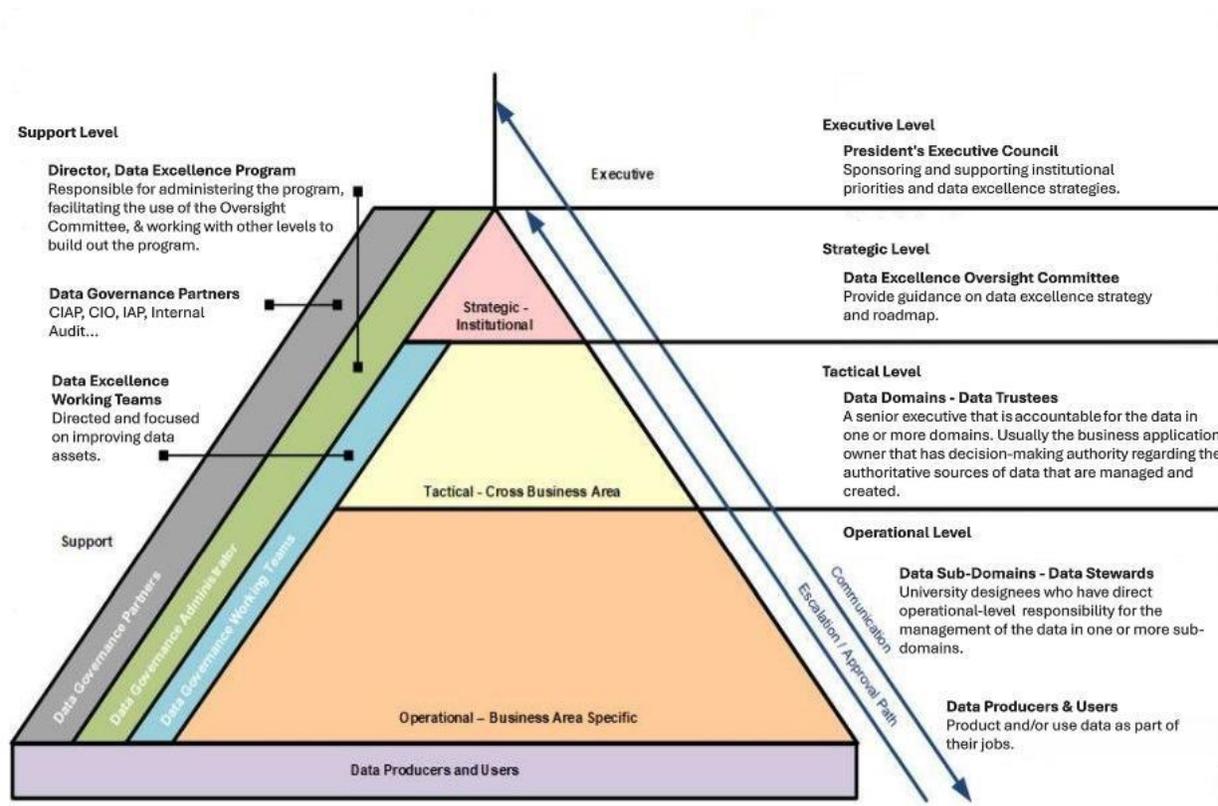
- i. Provide access to **self-service analytics tools** and training resources, allowing individuals to explore and analyze data on their own.
- ii. **Community of engagement** – Foster collaboration and knowledge-sharing through forums and communities of practice.

- **Ensure compliance**

Minimize legal and reputational risks by complying with legal and regulatory requirements, including data privacy laws and regulations.

- i. **Data classifications** – Draft and enact policies to assign proper classifications to data assets to protect data.
- ii. **Data retention** – Enact policies around data retention.
- iii. **Data collection and use** – Draft and enact policies around data collection and usage including the use of AI and Generative AI.

## Data Governance Operating Framework



Adapted from Robert Seiner's Non-Invasive Data Governance Operating Model Roles and Responsibilities

Memorial's Data Excellence Program is sponsored by the President. It will be guided by the President's Executive Council through a Data Excellence Oversight Committee. The data governance operating model will be structured based on *data stewardship*, which is an approach to data governance that formalizes accountability for managing information resources on behalf of others and for the best interests of the organization (McGilvray, 2008).

It will consist of the people, organization and processes needed to ensure that the appropriately designated stewards are responsible for the governed data (Plotkin, 2021).

Data stewardship will be organized using the concept of *data domains*, which are a tested way to govern data, people and processes across functional areas of the enterprise. A data domain is a logical construct that groups together data related by subject areas (e.g., Student and within this data domain, data subdomains across the student life cycle including, but not limited to, Recruitment and Admissions; Registration and Enrolment; Student Account; Student Life and Engagement). These groupings are often based on business process, business transactions, reference, or master data (e.g., Principal Person, Reference Geographic Locations, etc.), and products, but other groupings can be created that align to specific usage and/or business architectures (Plotkin, 2021).

[MUNCLASS](#) and other best practice university data domain mappings and higher education data reference models will be leveraged to build out Memorial's data domain structure.

*Data sub-domains must be granular enough so that the business data elements can be governed by membership in one and only one data sub-domain.*

## Data Excellence Program Roles and Responsibilities

- **President's Executive Council**  
Sponsor, approve and fund the Data Excellence Program vision, mission, priorities, strategies and roadmap.
- **Data Excellence Oversight Committee**  
Responsible for overseeing a data governance strategy and roadmap.

### Major responsibilities:

- **Review and guidance:** Evaluate and recommend data governance policies, standards, processes, frameworks and guidelines to ensure alignment with organizational goals and regulatory requirements.
- **Data domains and stewardship:** Develop, approve, and periodically review data domains and data stewardship roles to ensure clarity and accountability.
- **Issue resolution:** Address and resolve data-related issues escalated by data stewards, ensuring timely and effective solutions.
- **Data infrastructure:** Recommend and oversee revisions to data infrastructure to ensure alignment with institutional policies, strategic needs and best practices in data management.

- **Reporting:** Provide regular updates and strategic recommendations to the President's Executive Council, highlighting progress, challenges and opportunities.
  - **Working groups oversight:** Establish and oversee working groups focused on specific data assets or initiatives, ensuring alignment with the overall data governance strategy.
  - **Promotion of goals:** Advocate for the data excellence program, promoting high-quality data management practices and fostering a culture of data-driven decision-making.
- **Data trustee**  
A senior executive that is accountable for the data in one or more domains. Data trustees are usually the business application owner and have decision-making authority regarding the authoritative sources of data that are managed and created.

**Major responsibilities:**

- Work with the director of data excellence to build out the program.
  - Identify and appoint data stewards.
  - Ensure access to resources in support of data governance activities.
  - Approve and implement appropriate policies and practices to ensure the accuracy, integrity, accessibility and availability of Memorial's institutional data.
  - Oversee and approve data definitions, classifications and quality.
  - Resolve issues escalated from the data stewards.
- **Data steward**  
A senior manager that is responsible for the data in one or more sub-domains.

**Major responsibilities:**

- Work with the director of data excellence to build out the program.
- Recommend standards, procedures and guidelines for managing data assets.
- Manage and oversee data assets within a sub-domain.
- Lead the definition of data elements and document business rules, data standards, data flows, data processes and data quality rules.
- Manage data quality issues, coordinate data producers, and advise on data interpretation.
- Support the data classification process.
- Ensure compliance with applicable policies, procedures, and standards.
- Develop operational KPIs for their respective sub-domains and review quality metrics toward continuous improvements in data integrity and the resolution of data issues.
- Approve and ensure compliance regarding the release of, responsible use of and access to data for which they are responsible.

- **Data custodian**

The IT application owner who is responsible for the management of technical environments and database structures of a particular data system in one or more sub-domains.

**Major responsibilities:**

- Work with the director of data excellence to build out the program.
- Recommend standards, procedures and guidelines for managing data assets.
- Manage data quality issue resolution processes in partnership with data stewards.
- Ensure access to resources in support of data governance activities.
- Ensure solution design and implementation are done in accordance with policies and architecture principles for data and information security.
- Ensure data transformation is done in accordance with architecture principles.
- Ensure security practices are used effectively for all supported solutions and technologies.
- Ensure data content and changes can be audited.

- **Data users**

End users who collect, enter, use, create, access institutional data as part of their assigned duties or in fulfillment of their role at the university.

**Major responsibilities:**

- Understand the definition, quality and usage limitations of data.
- Ensure the accuracy of the institutional data and information they are responsible for entering, accessing and using.
- Safeguard their data access privileges.
- Adhere to data governance policies and standards.
- Report data quality issues to data stewards.
- Use data responsibly and ethically.

- **Director, Data Excellence Program**

Responsible for leading and administering the program, facilitating the use of the oversight committee, and communicating program components and value to the university. Working with other levels to build out the program.

**Major responsibilities:**

- Articulate the value of data governance and stewardship activities.
- Facilitate and coordinate meetings of data stewardship.
- Provide liaisons to other disciplines and programs such as data quality, compliance, privacy, security, architecture and IT governance.

- Collect and align policies, standards and guidelines from these data community groups.
  - Facilitate and coordinate data analysis and issue analysis projects.
  - Collect metrics and success measures and report on them.
  - Provide ongoing data community partner care in the form of education, communication, record keeping and support.
  - Provide centralized communications for governance-led and data-related matters.
  - Track and enforce conformance to data policies, procedures and standards
- **Data governance working teams** will be established by the Data Excellence Oversight Committee to focus on improving data assets. These teams will include the director of data excellence and other key data community partners identified by the committee.
  - **Data governance partners** are staff members from teams that provide business and technical advisory support for data governance activities. They will become actively engaged, as needed, to offer their expertise. This may include staff from, but not limited to, the following units or groups:
    - i. Center for Institutional Analysis and Planning
    - ii. Office of General Counsel
    - iii. Information Access and Privacy Office
    - iv. Office of Internal Audit
    - v. Enterprise Risk Management
    - vi. Marketing and Communications
    - vii. Project Management Office, Office of the Chief Information Officer (OCIO)
    - viii. Information Management and Protection, OCIO
    - ix. Technical Operations Committee, OCIO

**References:**

DAMA International (2017). DAMA-DMBOK: Data Management Body of Knowledge, 2nd Edition. Technics Publications.

McGilvray, Danette (2008). Executing Data Quality Projects: Tens Steps to Quality Data and Trusted Information. Morgan Kaufmann.

Plotkin, David (2021). Data Stewardship: An Actionable Guide to Effective Data Management and Data Governance, 2<sup>nd</sup> Edition. Morgan Kaufmann.