Data Governance Structure Proposal

Draft Approved as a Working Document by Provost and VP of IT and CIO on October 16, 2023

Draft Approved by Provost and VP of IT and CIO on November 10, 2023

Updated January 10, 2024, to offer clarifications and additional detail

Updated on February 14, 2024, based on Feedback from January 30, 2024, DGISC meeting

"The Data Governance & Integrity Steering Committee (DGISC) provides on-going cross-functional expertise and guidance for data-driven decision-making at Loyola. This cross-functional committee will enhance the understanding and quality of institutional data through coordinated efforts of campus stakeholders. In addition, this group has established a framework for appropriate access to, use of, and accountability of, institutional data.

The **DGISC** charge is to empower the provost to:

- Ensure that University decision makers have shared data visualizations, analysis, and reports they need to inform their decisions.
- Ensure that the data visualizations, analysis, and reports provided are presented within the context of varying business practices that may or may not be consistent across units and schools.
- Ensure the data visualizations, analysis, and reports provide relevant data definitions, source of origin documentation, analysis documentation (if relevant), and denote any limitations of data that should be conveyed prior to use in decision-making.
- Recommend and/or establish data-related business processes, standards, strategies, and/or
 direction through drafting and recommending policies and practices to relevant leaders that will
 ensure data governance and integrity across the university.
- Develop procedures and controls in alignment with university information security policies and guidelines for appropriate access, extraction, use, storage, and publication of data.
- Define department and individual contributor responsibilities for the management and accountability of university data.
- Encourage data governance and data integrity transparency, as appropriate given Human Subjects Protection, Right to Privacy, and other research and data related policies and procedures that may be relevant to remove barriers for collaborative data informed decision-making.
- Establish data literacy through frequent, timely, and appropriate training, support, and knowledge-sharing opportunities for and across the broader user communities.
- Foster buy-in and promote data governance, data quality improvements, responsible and ethical management of and use of data, and documentation of business process within various areas of the university.
- Develop a shared understanding of the roles and responsibilities for various units' business processes and varying data needs.
- Monitor and assess the Data Governance and Integrity processes periodically to evaluate effectiveness and/or areas in need of improvement. "

Please note that this process does not govern Research Compliance. That process governance model can be found here.

Extracted from

https://www.luc.edu/its/aboutus/itsgovernance/datagovernanceintegritysteeringcommittee/ on August 27, 2023 with editing added on August 28, 2023

Data Governance Accountability

The Provost is responsible for data governance. The proposed Data Governance Accountability structure will ensure university compliance of the DGISC charge. Please see <u>DG Structure .pptx</u> for details.

To accomplish each area of DG compliance, a cross-institutional working group will be formed and charged accordingly. The following section overview lists each area's initial charge and also includes some of the DG work already completed. The Chair and/or co-chairs of each working team will report progress directly back to the Data Governance Director who will regularly meet with the Associate Provost and Director of OIE in collaboration with the Associate Vice President of Data Security and Architecture to ensure progress on all DG working group deliverables. The Associate Provost and Director of OIE will serve as Interim DG Director until the DG Director can be hired and properly onboarded.

The implementation timeline can be found <u>here</u>; however, it is dependent on the hiring and onboarding of a competent <u>DG Director</u>, which will report to the Associate Provost and Director of OIE.

Section Overview

Data Integrity/Quality:

Ensuring data integrity and the quality of data is imperative to data governance. This working group will ensure that the data reported is accurately defined, has the source of origin for each data element reported accurately, is mapped correctly to the data warehouse, and that business processes are established to maintain continued data integrity/quality. What follows are a few of the items that we have in progress and those we have yet to complete.

- 1 OIE Required Documentation Information .docx
- Data Glossary
- Data Extractions Timelines and Process for Internal and External Reporting
- Add analysis and reporting calendar in progress
- Add business processes to maintain data integrity we have some completed, this is an example Business Process for Updating Plan Key Table.docx
- Add data integrity oversight group and monthly meeting draft agenda

Data Literacy/Data Use:

Once data integrity frameworks have been established, ensuring that data visualizations, analysis, and reports are effectively and ethically used is also an integral part of data governance. For Loyola, this also means defining what is publicly reported data versus what is used for internal discussion only. This team will support responsible use of publicly reported data and internally reported data across many constituents. This team will advance an understanding of limitations of all data representations and cultivate clarity of what data are and, as importantly, what they are not.

- OIE Data Dissemination Protocol
- See <u>Data Discernment Initiative Champions</u> Charge
- Publicly Reported and Internally Reported Data Use Policies and Practices are forthcoming

Data Management and Access:

Data management is another core requirement of data governance. Ensuring data collection, storage, reporting documentation, the sharing of raw data, as well as the sharing of reports, analysis, and visualizations are responsibly managed with integrity and in full alignment of ethical standards is crucial. This team will ensure that the following pieces are in place for Loyola.

- Data Management Plan Requirements
- Data Access Protocols and Policies
- Data Analytics and AI Use and Policy Formation

Data Security & Architecture:

Data Security refers to the practice of protecting data from unauthorized access, use, disclosure, disruption, modification, or destruction. It encompasses various systems, controls, processes, and measures that aim to ensure the confidentiality, integrity, and availability of data.

- Perform a data protection security assessment of the current state of data extracts & data storage
- Update the security policies in reference to institutional static data repositories

Data Architecture refers to the structure, design, and organization of Loyola's data assets and the systems that manage and store these assets. It involves planning how data integrates across systems, how it is processed, and how it is stored. It also defines the relationships between different data elements. A well-designed data architecture facilitates efficient data management, access, and analysis, while also ensuring data security and compliance.

- Document the infrastructure to collect, store & analyze data
- Define the source of origin, integrations, and translations for each data component/data set
- Create a roadmap and standards for data extraction & data storage

Data Retention:

Data retention defines the policies of persistent data and records management for meeting legal and business data archival requirements. This team will create and maintain the following policies and practices, ensuring that various compliance reporting processes are put in place.

Update Data Retention Policy

- Add Business Process to Review Compliance with Data Retention
- Support the creation of a data retention compliance archive

University Business Processes:

The IPEDS Data Integrity project (launched in October 2022) revealed several opportunities to tighten and refine university business processes, such as standardizing definitions for academic programs, certificates, etc. and creating guidelines for CIP code assignments. Other business process opportunities involved creating processes to identify and document students who withdraw from the university and exploring attendance policies and practices within classes during the first 14 days (about 2 weeks) of each term. Still others involved creating a standardized schedule for static data extracts, clarifying the definition of First-Generation student, international students, and making more transparent definitions for new transfers and new students. Other business processes may seek to standardize how we label religious preferences. Such university business process refinements ensure ongoing data quality and integrity and enhance reporting practices. These kinds of business processes are necessary for data governance.

This working group will field business process refinement requests from the previous working groups and may also recommend some business process standardization across the university to tighten data governance. Utilizing the existing Academic Operations Group (AOG) as the source of where these business processes are discussed and prioritized for implementation will ensure shared governance processes are followed as well as ensure that all relevant parties have a say in what needs to be prioritized and created.

Appendix A

DGISC Partners

To support the work of the DGISC, the DGISC will work with several LUC partner entities to ensure the charge is met. Those partners will include colleagues within ITS, OIE, and Registration and Records. In addition, it will include members of the EDW Datawarehouse and BI team, Advancement, EMSS, Research Services, IRB, Faculty Affairs, Finance, Human Resources, Student Development, and the Schools/College. These colleagues will not be members of the DGISC, but rather will be brought together as DGISC Partners to advise the work of the DGISC and to implement those policies and practices approved by the Executive Leadership.

Each of the working teams below has their own initial charge with expected deliverables (see links below).

Data Integrity/Quality:

- Establish business processes to assure data integrity/quality
- 1 OIE Required Documentation Information .docx
- Data Glossary
- Data Extractions Timelines and Process for Internal and External Reporting
- Add analysis and reporting calendar

Data Literacy/Data Use:

- OIE Data Dissemination Protocol
- Data Discernment Initiative Champions Project Description and Charge
- Publicly Reported and Internally reported Data Use Policies and Practices

Data Management and Access:

- Data Management Plan Requirements
- Data Access protocols and policies
- Data Analytics
- Use of AI

Data Retention:

- Add Data Retention Policy
- Add Business Process to Review Compliance with Data Retention

Data Security & Architecture:

Data Security refers to the practice of protecting data from unauthorized access, use, disclosure, disruption, modification, or destruction. It encompasses various systems, controls, processes, and measures that aim to ensure the confidentiality, integrity, and availability of data.

- Perform a data protection security assessment of the current state of data extracts & data storage
- Update the security policies in reference to institutional static data repositories

Data Architecture refers to the structure, design, and organization of Loyola's data assets and the systems that manage and store these assets. It involves planning how data integrates across systems, how it is processed, and how it is stored. It also defines the relationships between different data elements. A well-designed data architecture facilitates efficient data management, access, and analysis, while also ensuring data security and compliance.

- Document the infrastructure to collect, store & analyze data
- Define the source of origin, integrations, and translations for each data component/data set
- Create a roadmap and standards for data extraction & data storage

University Business Processes:

 Several suggested refinements have been recommended and establishing a process to vet those recommended processes, prioritize them and institutionalize them will become a part of the AOG

DGISC Timeline for Deliverables

DGISC Implementation Timeline can be found here.