Data Governance: Making Data Transparent and Trusted

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Key Takeaways

1. How to ensure strong organizations support for data governance
2. How to strike a mutually beneficial relationship between data governance and business intelligence
3. Lessons learned from operationalizing data governance and data quality at the George Washington University
• GW is the largest institution of higher education in the District of Columbia.
• We have more than 20,000 students—from all 50 states, the District and more than 130 countries—studying a rich range of disciplines: from forensic science and creative writing to international affairs and computer engineering, as well as medicine, public health, law and public policy.
• The university is currently ranked in the top 100 universities in the country.
• GW comprises three campuses—Foggy Bottom and Mount Vernon in Washington, D.C., and the GW Virginia Science and Technology Campus in Ashburn, Va.—as well as several graduate education centers in the metropolitan area and Hampton Roads, Va.
Business Need

- Timely access to trusted information
- Increase institutions efficiency and effectiveness
- Reduce operating cost of labor intensive manual data acquisition
- Better support regulatory compliance
- Help minimize risk
Data Challenges

1. Lack of data quality roles and accountability
2. Information silos create data inconsistencies
3. Data quality and governance value not easily understood
4. Limited benchmark/measurements of current state
5. Reactive and tactical approaches
Solution

GW Data Governance Framework
Find out who the Data People are

People are the heart and soul of Data Governance. It starts with the right people.

Who is creating the data?
Who is responsible for the data?
Who manages the data?
Who is using the data?
Who needs access to the data?
Who is ensuring data quality?
Who is modeling the data?
Who is building reports using the data?

DATA
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## Roles

No one person, department, division, school or group "owns" data, even though specific units bear some responsibility for certain data.

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<th>Role</th>
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<td><strong>Data Trustee</strong></td>
<td>Data Trustees are defined as institutional officers, (i.e. Vice Presidents, Vice Provosts, Deans, Chancellors, etc.) who have authority over policies and procedures regarding business definitions of data, and the access and usage of that data, within their delegations of authority. Each Data Trustee appoints Data Stewards for their specific Subject Area Domains.</td>
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| **Data Steward**            | A Data Steward is a person that defines, produces or uses data as part of their job and has a defined level of responsibility for assuring quality in the definition, production or usage of that data. Data Stewards responsibilities include:  
  • Developing and maintaining data classification policies.  
  • Developing, implementing, and managing data access policies.  
  • Ensuring that data quality and data definition standards are developed and implemented.  
  • Resolving stewardship issues and data definitions of data elements that cross multiple functional units. |
| **Data Custodian**          | Data Custodians are system administrators responsible for the operation and management of systems and servers which collect, manage, and provide access to institutional data. Data Custodian responsibilities include:  
  • Maintaining physical and system security and safeguards appropriate to the classification level of the data in their custody.  
  • Maintaining Disaster Recovery plans and facilities appropriate to business needs and adequate to maintain or restart operations in the event systems or facilities are impaired, inaccessible, or destroyed.  
  • Managing Data User access as prescribed and authorized by appropriate Data Stewards.  
  • Following data handling and protection policies and procedures established by appropriate Data Stewards. |
| **Subject Matter Expert**   | A subject-matter expert (SME) are those individuals that support and consult the business and the technical professionals with their knowledge of business operations and the data that is necessary to operate and perform analysis. These people can be Business Analysts, Reporting Analysts, Data Architects, Data Modelers, and Project Management. |
| **Data Users**              | Data users are university units or individual university community members who have been granted access to institutional data in order to perform assigned duties or in fulfillment of assigned roles or functions within the university; this access is granted solely for the conduct of university business |
**Executive**
Endorses the program and approves policy related decisions.

**Data Governance Committee**
Provides oversight and decision making authority over data related issues.

**Data Trustees**
- Proposes data policies and standards to the Data Governance Committee.
- Execution and maintenance according to the data policies and standards.
Formalizing Stewardship

Data Responsibilities Built into Job Descriptions

Clear Expectations for Data Stewardship

1. Responsibilities
   - Attend stewardship group meetings
   - Develop data definitions and access policies
   - Log and work to resolve data quality issues
   - Review data sharing requests
   - Ensure data definition implementation

2. Required Skills
   - Knowledge of business processes' relationships with data
   - Flexibility to view data as a university resource
   - Ability to work within a team
   - Ability to communicate effectively to create data policies, answer data questions, and encourage proper use of data

3. Personal Goal-Setting
   - Staff assessed on up to five individually-chosen goals that support the institution’s or their department’s goals and priorities
   - Data stewards include data governance-related goals for assessment in their annual reviews
Everyone has a seat at the table

The Data Governance Committee meets once a month to review data quality issues, discuss proposed business terms, review policies and discuss other institutional data related topics. This committee is comprised of functional data stewards from across all functions and departments of the university.
The DGO facilitates and supports data governance and data stewardship activities, including:

- Keeping track of data stakeholders
- Providing liaisons to other disciplines
- Collecting policies, standards and guidelines
- Facilitating and coordinating meetings
- Collecting metrics and success measures
- Administering metadata repository

We herd Cats
Process, Policies and Rules

- Policies (The What) Statements on how data should be handled
- Standards – The Rules to implement a policy
- Process (The How) Instructions to implement a standard
Data Policies provide a broad framework regarding how decisions should be made regarding data.

The university’s institutional data is a valuable asset and must be maintained and protected as such.

It is vital to have accurate and trusted data in order to make sound decisions at all levels of the institution.

Data Governance helps to provide transparency into data and results in confidence among faculty, staff, and management of the university to trust and rely on data for information and decision support.

An excerpt from the GW Data Governance Policy
Processes

- Data Sharing Agreements formalize the intended use of data. Data Sharing agreements govern the content, access method, security, and frequency for data maintained by the Granting Organization provided to the Requesting Organization.
- Business Intelligence Products Certification Process
Technology and automation

Technology is a key enabler to maturing a data governance program. The following areas play a part in advancing Data Governance at GW:

- Business Glossary
- Metadata Management
- Reference Data Management
- Policy Management
- Data Profiling
- Data Quality Management
The Data Governance Portal is the single source of truth of all our data governance activities.
Business Results/Metrics
Advice for engaging the business

If you build it, will they come?
Next Steps

1. Data Integration Governance
2. Data Quality Integration
3. Master Data Governance
Key Takeaways (Summary)

1. It is a journey so pace yourself. Start simple, engage those that want to be involved and grow.
2. Focus on the People and the Process first. Send out a survey to find out who should be involved and assign roles.
3. Formalize Stewardship and build responsibilities into job description
4. Tie data governance to business intelligence to show the value, than expand
5. Make data governance somebody's job - Implement a Data Governance Office and staff appropriately
6. Technology is what takes you to the next level
7. Brand and promote your Data Governance Program

"It's not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change" - Charles Darwin
Questions
Thank You

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