OneWSU: Initiative for Data-Informed Decision-Making
Data Governance Workshop
WSU is engaging in an assessment to develop a **Data Management and Analytics** plan, including a roadmap to build a **Data Governance** structure, and an enhanced analytics framework to support and advance a data-informed culture throughout the WSU institution!

The goal of the Workshop sessions are to gather information about both the **current state** of Data Management and Analytics at WSU as well as the desired **future state**, and to tailor a strategic plan to reach the desired future state.

**REPORT MISALIGNMENT**
Common line items do not tie out, results differ based on report source, resulting analysis is incomplete and out of date.

**DATA EVERYWHERE**
Data is ungoverned and has many sources; takes a long time to gather and prepare for reports.

**DATA ACCESS**
Users struggle to get needed data or are unsure where to go for data and reporting.

**NO LINEAGE**
Where is the data coming from? What happened to it along the way?

**TIMING & SYNC ISSUES**
Systems are out of sync thus report timing can vary. Low confidence in report results vary during monthly reporting cycles.

**NO DEFINED STANDARDS**
Reports have varying formats, locations, and accessibility.
### Roadmap Outcomes

<table>
<thead>
<tr>
<th>Insights Strategy</th>
<th>Reporting Organization Model</th>
<th>Data Governance and MDM Plan</th>
<th>Technology Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Develop roadmap to address operational, management and analytics needs</td>
<td>• Determine model for delivering reports across the institution (central vs. decentralized model)</td>
<td>• Develop framework and roadmap for Data Governance Implementation</td>
<td>• Assess data management, reporting and analytics gaps in future state</td>
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<td>• Identify key required dashboards &amp; reports</td>
<td>• Determine process for sharing information</td>
<td>• Establish Data Governance objectives</td>
<td>• Rationalize and consolidate existing technologies</td>
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<td>• Define how data is consumed</td>
<td>• Determine alignment of reporting organization with data stewards, and analytics goals</td>
<td>• Identify Master Data Domain Approach and Prioritization</td>
<td>• Recommend and evaluate technologies to address gaps</td>
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<td>• Define the prioritization approach for development and requirements gathering</td>
<td>• Recommend who should participate in the reporting organization</td>
<td>• Recommend standardized and repeatable processes</td>
<td>• Determine impact of moving to new technologies</td>
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<td>• Define and align on the key metric definitions</td>
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<td>• Determine project vs. institution Data Governance Goals</td>
<td>• Develop roadmap for implementation of new technologies</td>
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### Today’s Focus

- Develop framework and roadmap for Data Governance Implementation
- Establish Data Governance objectives
- Identify Master Data Domain Approach and Prioritization
- Recommend standardized and repeatable processes
- Determine project vs. institution Data Governance Goals
Agenda

1. What is Data Governance?
2. What is Master Data Management?
3. Data Governance Organization
4. Workshop
5. Implementation Timing and Sequencing
Common Data Management Challenges

- Organization struggles to gain access to the information it needs.
- Relatively high percentage of time spent on data collection and manipulation vs. data analysis.
- Measurement of organization performance difficult to assess.
- Silos of information resulting in conflicts in data accuracy.
- Analytics investments not delivering expected impact.
- Maintenance and licensing costs are high due to an overly broad tool footprint.
- Existence of shadow Analytics technical groups within the organization compensating for lack of core capabilities.
- High percentage of analysis performed reactively vs. proactively.
- Data/analysis/reporting environment is difficult to navigate.
- Frequent confusion regarding organization metrics (multiple definitions and data sources, conflicting measures, etc.)
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<td>Shared responsibility</td>
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<td>Align Data Strategy with Institutional Strategic Intentions</td>
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**Data Governance Guiding Principles**

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- Equitable and ethical data use
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- Align Data Strategy with Institutional Strategic Intentions
- Data democratization
- Self-Service
“Data Governance is the formal execution and enforcement of authority over the management of data and data-related assets.”

– Robert Seiner
**Master Data Management Defined**

**Master Data Management** delivers and synthesizes domains for 360-degree view of any data and any relationship, including interactions and transactions, regardless of instruction silo or source system, on-premises or in the cloud.

**Domain:** High-level category of institutional data in which the exercise of authority and control (planning, monitoring, enforcement) of the management of those applicable data assets may occur.

**Sub-Domain:** Subcategories within the larger data domains that require further control and management.
What does Data Governance deliver?

Data Governance has three main deliverable pillars that are supported by and accountable to a joint Business and Technology stakeholder group.

1) **PLAYBOOK**
   - **Alignment:** Maintain alignment of data domains to enterprise business and technical capabilities.
   - **Policies, Standards and Processes:** Support creation, tracking, and enforcement of Data Governance policies, standards, and processes.

2) **STEWARDSHIP**
   - **Advisorship:** Source of truth for data source and lineage, business glossary, data dictionary, and data privacy, access, security, and regulatory questions.
   - **Curation:** Develop, maintain, and execute processes for data intake, analysis, and issue remediation.

3) **INTELLIGENCE**
   - **Actionable DG Measurements:** Track, monitor, measure, and report on health of the data landscape via dashboards and scorecards.
   - **Data Knowledge Repository:** Establish and maintain a centralized portal to allow all users to learn, train, use, and share data artifacts and collateral.

**CROSS FUNCTIONAL PARTNERSHIPS**

- **Decision Framework:** Identify the optimal decision pathway to escalate issues and concerns via a defined operating model and forum.
- **Data Engagement Model:** Align stakeholder engagement processes, expectations, SLAs, and deliverables.
- **Shared Enablement Tool:** Implement a software application for Data Governance efficiency, effectiveness, and sustainability.
# The Relationship of IT, Data and Analytics

<table>
<thead>
<tr>
<th>Analytics</th>
<th>Data</th>
<th>IT</th>
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<tbody>
<tr>
<td>• Derive Meaning</td>
<td>• Data Quality</td>
<td>• Master Data Management (tech)</td>
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<tr>
<td>• Master Data Management (outcomes)</td>
<td>• Data Definitions</td>
<td>• Risk Management, Compliance and Security (Secured availability)</td>
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<td>• Data Literacy</td>
<td>• Infrastructure</td>
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<tr>
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<td>• People, Processes, Policies &amp; Culture</td>
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<td>• Model definitions</td>
<td>• Data Security</td>
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<td>• Data Architecture</td>
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<td>• Machine Learning</td>
<td>• Data Integration</td>
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<td>• Determining truth of the data</td>
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**To Date**

- Risk Management, Compliance and Security (Access)
- Data Architecture (derived)
- Security, Integrity, and Privacy

**Going Forward**

- Domain strategy & prioritization
- Removal of bias
The **User** represents the knowledge-sharing analytics user community.

The **Analytics Committee** provides sponsorship for overall analytics priorities, vision, and initiatives. Aligns to overall institution strategic goals.

The **Data Governance Council** provides stewardship of the metadata, data lineage, data sourcing and data definitions.

The **Development Group(s)** deliver(s) analytics design, development, and delivery expertise and support for analytics projects and maintenance.

The **User** represents the knowledge-sharing analytics user community.
Enterprise Data Stack Example

Master data forms the foundation for all other institutional data; the higher the data quality the better the trust which ultimately results in fewer issues and requisite rework to achieve institutional outcomes.
Disparate Master Data
Diminished Data Quality = Higher Cost

- Hours spent on reconciliations of inconsistent reports and dimensions
- Inconsistent communication and responsibilities hinders change management
- Reduced confidence in management reporting and decision-making

Governed Master Data
Monitored, Measured, Improved

- Monitor processes, drivers and frequency of enterprise data changes
- Increase data accuracy, completeness and timeliness
- Improve data value, layer in additional attributes and associations

Attain and Sustain Master Data Quality
Data Governance Timing and Sequencing

Data Governance First Approach:
Data Governance Enables the outcomes of Digital Transformation

Pre-Digital Transformation
- Establish Strategy and Goals

During Transformation
- Design and Implement Governance Organization and Processes
- Align current data governance initiatives and strategic projects
- Determine Technology Roadmap

Post-Transformation
- Implement DG Team and Processes for Priority Domain
- Iteratively Establish Institution-Wide DG Model
Discussion Questions

1. What Data Governance processes, policies and technologies currently exist?
2. Is effective Master Data Management important for the University? Why? What are the key current challenges?
3. What are the key obstacles to implementation and change?
4. What key metrics should the University prioritize to ensure successful Data Governance?
5. What artifacts should the University prioritize creating (e.g. Data Stewardship Model, Master Data Definitions?)
6. What outcomes would you like to see from additional investments?
7. What efforts should the University prioritize first?
8. Who needs to be involved in Data Governance and Master Data Management decisions? Who needs to be involved in implementation and testing?
9. What level of change management will be needed to implement changes?
10. What do you wish you could do in the future related to data governance that you cannot do today?
Questions

• Reach out to us at onewsu.data@wsu.edu
• Website can be found here: https://strategicplan.wsu.edu/initiative-for-data-informed-decision-making/
  • Will Update with Content as the Project Evolves
  • Unanswered Questions and Recording from this Session
  • FAQ