Campus-Wide Reporting and Business Intelligence Discovery
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ANALYSIS BACKGROUND

“Here’s a list of 100,000 warehouses full of data. I’d like you to condense them down to one meaningful warehouse.”
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Why are we talking about Reporting and Business Intelligence?

<table>
<thead>
<tr>
<th>Challenge/Opportunity</th>
<th>Concerns</th>
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<tbody>
<tr>
<td>❖ Stand alone shadow databases and Excel spreadsheets</td>
<td>❖ Key information scattered across many platforms</td>
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<tr>
<td>❖ Requests to purchase new reporting &amp; BI tools</td>
<td>❖ Software is not a quick fix. Don’t fall prey to vendor hype and high price tags</td>
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<td>❖ Data sharing in dissimilar systems</td>
<td>❖ Data silos, data consistency and audit trail</td>
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<tr>
<td>❖ Lack of data integrity, untimely reports and labor intensive reporting processes</td>
<td>❖ Higher education has undergone profound transformations and grown much more competitive. This has created urgent needs for ad-hoc reporting and presentation of data for fast decision-making purposes.</td>
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ANALYSIS APPROACH
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Discovery Phase

- Pain Points
- Current Processes and tools
- Challenges
- Future requirements

43 Stakeholders
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Pain Points

- Changing Demographics
- Data Security
- Move to Cloud
- Modern User Experience
- Skills Shortage
- Managing Identity
- Building Consensus
- Constitute Expectations
- Vendor Health
- Over Time
- Cost Reduction
What are the challenges?

- No comprehensive data governance principals
- No single data source
- No established data dictionary and definitions
- Lack of data management experience in some areas
- Lack of confidence in data integrity
- Unclear records retention period
SHORT TERM RECOMMENDATIONS
Steps toward long term solutions

**Establish a campus-wide Data Governance Body**
- Develop Policies
- Determine Data Ownership
- Document Standards
- Maintain institution-wide data dictionary
- Set data definitions
- Provide guidance for sharing data

**Establish Argos as the interim reporting tool**
- Currently implemented and used by several departments
- Assign proper resources to support training and rollout of this existing tool

**Minimize the use of Microsoft Access to query Banner**
- Use an enterprise solution that is centrally managed
- Security concerns with direct connection to Banner Production environment
- Individual Oracle accounts are costly
- Optimized load on mission critical Banner ERP
- Similar queries can be performed in Argos
Steps toward long term solutions (cont.)

**Replace BI Query**
- BI Query has been end of support by the vendor for many years
- Due to turnover, institutional knowledge is fading
- Migrate users to Argos or other existing tools to meet needs

**Limit direct connections to Banner and data warehouse**
- Creates unnecessary maintenance for desktop support
- Might impact performance of other systems
- Additional maintenance for EAS on account access and permissions

**Interim BI & data presentation tool**
- Microsoft Power BI features are available with WWU’s enterprise license
- More economical
- No additional license required for view only
Long Term Sustainability

- Reporting and BI tool
- Analysis of campus reporting and BI needs
- Compare existing reporting solutions
- Compare existing BI & data presentation tools
- Assess current data warehouse environment
- Make recommendations for long term solutions
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One day a University President wondered…

We need data governance!
Data Governance
What is the purpose?

“The exercise of decision-making and authority for data-related matters.”

1. Integrity
2. Transparency
3. Auditability
4. Accountability
5. Stewardship
6. Checks-and-Balances
7. Standardization
8. Change Management
What is the goal for Data Governance at WWU?

- Achieve WWU Mission
  - Pursuit of excellence, in an environment characterized by principles of shared governance, academic freedom and effective engagement
  - Integrity, responsibility and accountability in all our work
- Foundation of all reporting
- Getting answers quickly
- Build trust in our data
- Timely reporting
Data Governance helps define:

- Who can make the decisions about data
- When they make decisions
- How to communicate the decisions
- What are the decisions:
  - Set the data rules
  - Set the data definitions
  - Researches the industry standards
  - Verify compliance requirements
Why is Data Governance important for WWU?
Data Governance best practices

- Identify an Executive Sponsor
- Dedicate resources
- Involve technical and functional subject matter experts
- Align data governance with data analytics efforts
- Implement a data governance tool
Data Governance Framework

DATA-DRIVEN DECISION-MAKING

INFORMATION LITERACY

- Policies & Standards: Establish Decision Rights
- Compliance & Security: Assess Risk and Define Controls
- Information Quality: Stewardship and Data Integrity
- Architecture & Integration: Consistent Data Definitions
Long Term Foundation

- Collaboration
- Understanding
- Consensus
- Trust
Next Steps for WWU

- Identify the Executive Sponsor:
- Form the Data Governance Body: technical & functional SME’s and data stewards from core areas

Chair the DG Body
Delegate and Take action
Have authority Make Decisions

URM  BFA
AA  ESS  UA
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**Data Governance: A Sustainable Environment**

Data Governance Framework

**Governance Bodies**

Documents and Standards

Data Consumers

Data & Reporting Initiatives

- uses data & reports
- prioritizes & guides

Data Owners, Mgrs, SMEs, Technicians, Report Writers

- design, write & maintain
- write & maintain
- prioritizes & guides