Business Intelligence at UW-Madison
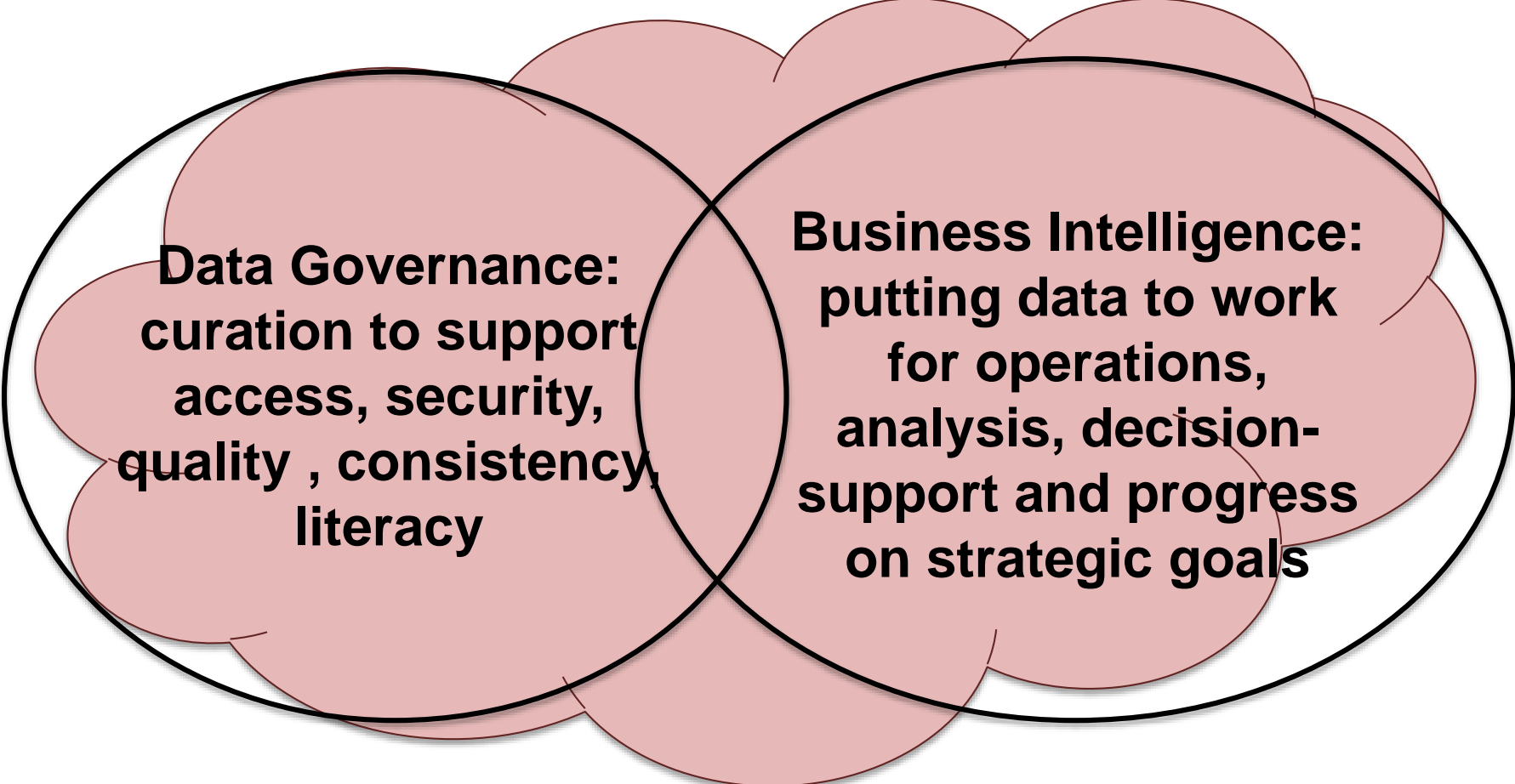
"Data-for-Everyone"

January 2016

Jocelyn Milner, Associate Provost, Academic Planning and Institutional Research
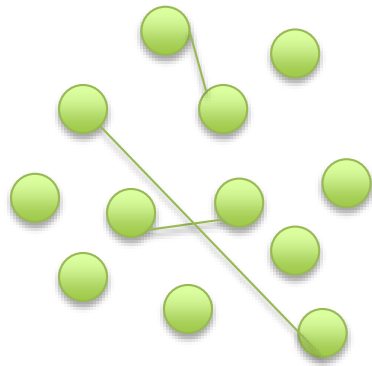Jason Fishbain, Chief Data Officer

Data On Your Own

- Robust institutional data creation systems
- Centers of skill in reporting, analysis
- Connectivity and coordination in pockets
- Good access for *cognoscenti*
- Weakness in connectivity, planning
- Weakness in data literacy, training, documentation
- Uneven access to useful reports, analysis

Data for Everyone

- Robust institutional data creation systems
- Robust data warehouse structures
- Centers of skill in reporting, analysis
- Connectivity and coordination
- Systematic decisions and processes for report delivery
- Stronger planning for reporting needs, data to support operations
- Coordinated training, documentation

Different Forms of BI

Business Intelligence: putting data to work for operations, analysis, decision-support and progress on strategic goals
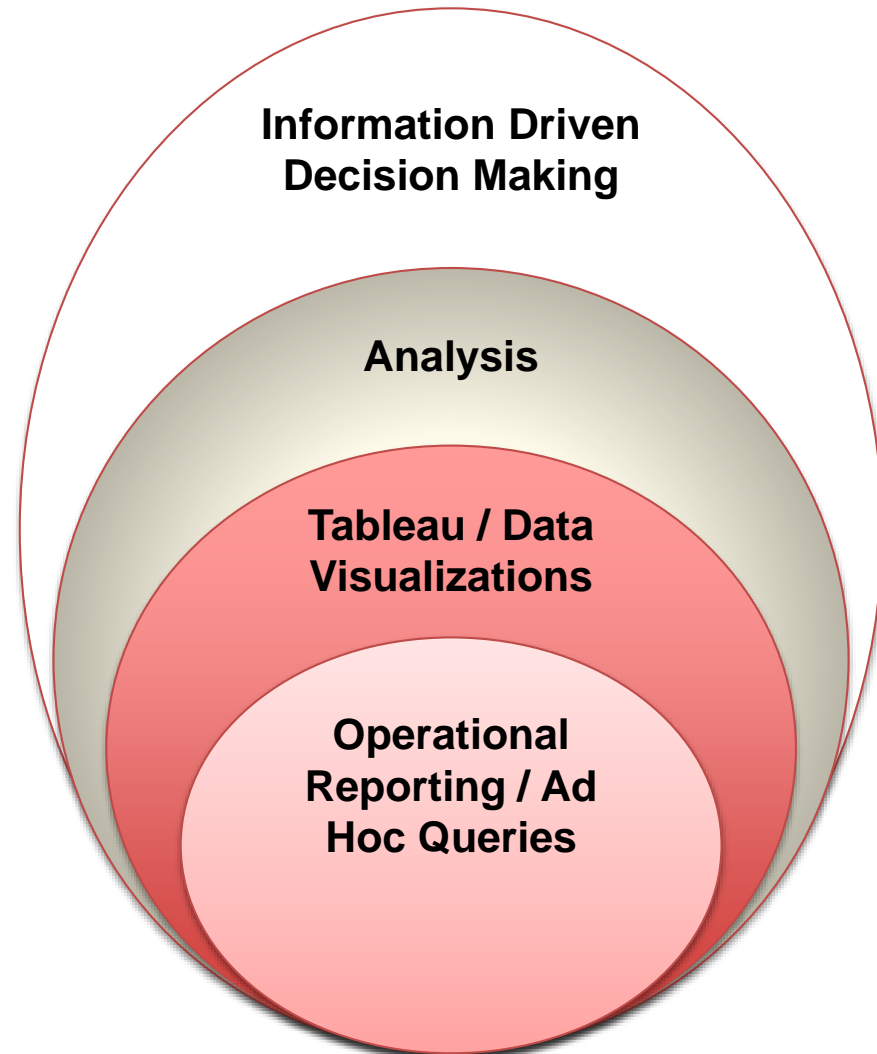

Information Driven Decision Making

Analysis

Tableau / Data Visualizations

Operational Reporting / Ad Hoc Queries

Why now?

- Changing demands for data, analysis, information to stay competitive

- Expectation, demand to make better use of our institutional investment in data collection infrastructure

- Demands for using data for smarter decision-making

- Integrated otherwise silo-ed BI projects

  - Oracle (Interactive Reporting Replacement Project)

  - Tableau / Data Visualizations

  - Advisor Gateway

  - Uncoordinated and duplicative approaches to local reporting needs

- Opportunity to link data governance program (data access data literacy, data quality, data security) to the BI approaches (data-use-for-doing-a-better-job, data-for-everyone)

Why Now?
Consistent Approaches

- Prioritization of content to deliver, format for delivery

- Access roles – identity, work roles, lists

- Training

- Documentation

- Security

- What else?

One Part of BI Program – Implementation of Oracle

- Creation of institutional semantic layers

- Analysis of existing reports to understand, prioritize and determine how to develop necessary content and how best to deliver information to those who need to know

- Education program for users on the use of the new tool; for report users on where to find information in the post-Hyperion (data-for-everyone) environment

- Resources to make it all happen

A Semantic Layer …

- Is a Business representation of transaction data where users

  - Are insulated from technical details, e.g., creating data models

  - Are able to ask questions using familiar terms

  - See data **not** as a collection of tables (needing joins) but rather an organized list of business fields from multiple sources

- Provide exposure of data definitions

- Promotes data literacy

- Supports 'data-for-everyone'

- Supports common definitions & consistent sourcing of data

Another Part of BI Program -- Tableau Software/Server

- A specialized data visualization software tool; Tableau Server allows for data security

- UW-Madison Phase 1 in progress; Phase 2 broadened access expected Spring 2016

- See https://dataviz.wisc.edu

- Sponsored by Educational Innovation; Project leadership in APIR, RO, and CIO/DoIT

Information and updates at: http://apir.wisc.edu/tableau.htm

Comprehensive planning for a BI environment will provide:

- Repository detailing what reports and/or content are available

- Mechanism for identifying and prioritizing broad data needs; Prioritization for reporting & analytical requests

- Pooling resources to implement strategic BI initiatives

- Processes to share data definitions across multiple BI tools

- Reduced redundancy

- Wider data literacy, data-for-everyone, so that data, reports, analytics can be used to make decisions, advance priorities

UW-Madison Data Governance / BI Program Structure

Institutional Leadership

Data Stewardship Council

BI Program Leadership Team

Data / Metric Definitions Team

- Officially convened by Data Stewardship Council
- Define & document officially sanctioned definitions

BI Community of Experts

- Project Core Team
- Membership from APIR, RO/DEM, GS, OHR, a/c/depts, operational units, InfoAccess

UW-Madison BI Program Structure

Institutional Leadership: Sarah Mangelsdorf, Provost; Darrell Bazzell, VCFA

BI (OBIEE) Executive Leads: Bruce Maas, CIO; Jocelyn Milner, AP/APIR

BI Project Leads: Jason Fishbain, CDO; Jocelyn Milner, AP/APIR

BI (OBIEE) Project Coordinator: Jeff Shokler
BI (OBIEE) Project Manager: Patrick Hare

BI Program Leadership Team
-Leadership from major operations units/sites of internal data creation
- InfoAccess leadership
- Substantial overlap with Data Governance advisory group

BI Community of Experts
Expert analysts and data practitioners from operational units, APIR, InfoAccess, S/C/Depts

Business Intelligence Community of Experts (BICoE)
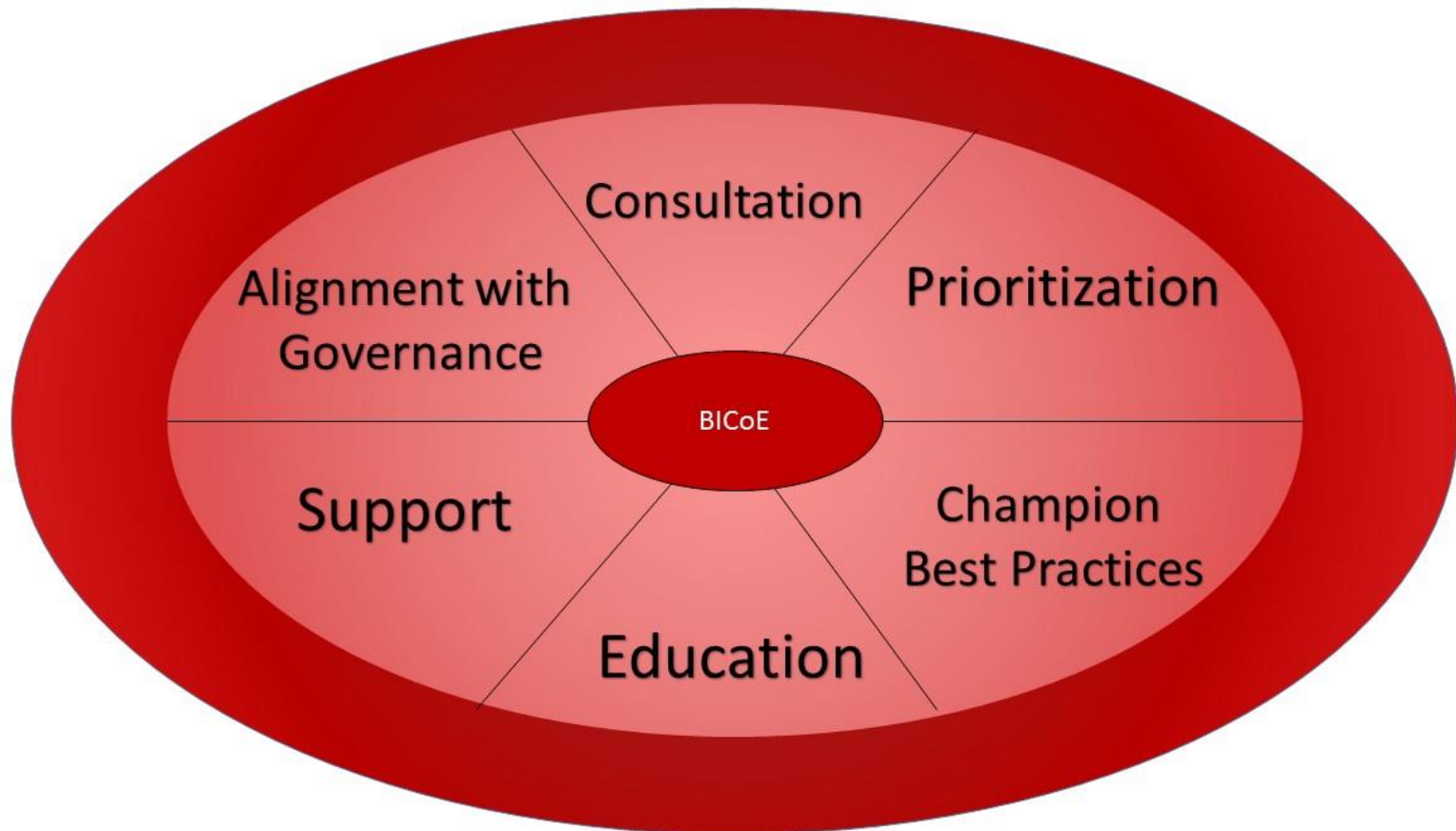
NEXT STEPS?

Plan for BI program is emerging…

What feedback do you have?
We plan to convene the BICoE in January 2016 – any feedback?