Data Warehouse Modernization

Project Manager: Carrie Jester
Project Sponsors: Julie Carpenter-Hubin, Dolan Evanovich

ELEVATOR PITCH
The 3-year vision for this project is to implement a high performance data warehouse and business intelligence tool (BuckIQ) that can be leveraged by colleges and units to create their own interactive dashboards and reports, and can be relied on for consistent, accurate institutional data.

In FY15, we will:
• identify the modernization steps we need to take in order to prepare the environment for the university’s more advanced analytics needs
• start implementing modernization steps
• partner with units on data consistency and advanced analytics roadmaps for HR, Finance, SIS and other institutional data.

RATIONALE
An updated data warehouse will improve accuracy and comparability of university data, providing consistent and reliable data to facilitate strategic, tactical, and operational decision-making.

This project will leverage university investments to reduce the data collection and reporting burden on the colleges and units by providing a central data warehouse with clean, reliable, consistent data sets enabling “one version of the truth.”

It will establish a reporting “Community of Practice” to provide leadership, best practices, support and training to colleges/units.

RESULTS
Optimized Data Warehouse architecture/environment (Netezza appliance), providing the foundation for expanding central data warehouse.
Dimensional data models for SIS data in Data Warehouse, enabling use of reporting and analytical tools in colleges/units
BuckIQ Business Intelligence tool rolled out to colleges/units for descriptive and diagnostic reporting using the central data warehouse
Business Intelligence tool rolled out to colleges/units to support local data sources (i.e. Tableau)
Reporting Community of Practice to provide guidance to colleges/units, facilitating flexible and targeted reporting

Milestones
• Netezza/DataStage architecture review – Dec 30, 2014
• Additional Milestones (Dates will be determined after architecture review)
• implement recommended architecture changes
• Requirements/Design of Student Subject Area Dimensional Models
• Student Data Warehouse Implementation on Netezza
• SIS Reports transitioned to BuckIQ (eReports retired)
• Integration with business intelligence tool that supports local data sources (i.e. Tableau)

Future Phase Milestones:
• Finance Data Warehouse Implementation on Netezza
• Retirement of all eReports
• Expansion of data sets to include other areas

RESOURCES
The OCIO Data Warehouse and Business Intelligence team will partner with the Office of Enrollment Services Analysis and Reporting (OESAR) and Institutional Research & Planning (IRP) on this initiative, working with college and unit representatives to confirm requirements.

The Executive Committee on Integrated Institutional Business Intelligence and Data Governance currently formed will continue to facilitate key decision making and issue resolution.

RESOURCES
• Executive Committee on Integrated Institutional Business Intelligence and Data Governance
Co-Past Chair: Julie Carpenter-Hubin, Dolan Evanovich
Sponsors: Mike Baker, Kim Devine, Brad Hasen, Manu Kohli

Example of BuckIQ Report/Dashboard (not OSU specific data)
End Result: Analytical Capabilities within Colleges/Units with flexible, intuitive reporting tools

Example of Tableau Report from Utah State University

Other resources
Consulting resources to review the Netezza/DataStage architecture

Example of BuckIQ Report/Dashboard (not OSU specific data)