



# BUSINESS INTELLIGENCE PROGRAM CHARTER

MARCH 2010

## VISION STATEMENT

The Business Intelligence Program aims to deliver the right information to the right people at the right time.

## APPROACH

The Business Intelligence Program aims to further the University of Western Sydney's strategic plans by providing information to support strategic and tactical decision-making. The program is oriented to the three areas of strategic focus identified in its 'Making the Difference' strategy:

1. Creating a superior and engaged student experience
2. Developing focused, relevant and world-class research
3. Building organizational and financial strength.

The Program aims to deliver information to managers, directors and executives in an easy-to-access manner in fulfillment of these three strategic goals.

In order to deliver this information in a manner that is consistent, timely, authoritative and meaningful the Program will integrate data from various operational systems. Data from the operational source systems will be integrated into an enterprise data warehouse, which will function as the 'single source of truth' for management information at UWS.

The Program will deliver reporting and analytical tools using the data in the data warehouse across the three subject areas of the student experience, research, and organizational and financial strength (incorporating human resource data, financial data, and other performance data as appropriate). The primary tools will be the delivery of static reports by email and the provision of an online portal for analysis and customized reporting.

The Program will be managed using an agile development process to enable regular delivery of functioning components to end users. This approach will also encourage frequent and ongoing consultation with end users to ensure that the deliverables accurately reflect the needs of the organization.

## SCOPE

There are two components to the scope of this Program: developing the enterprise data warehouse and providing reporting and analytical tools to end users.

## THE DATA WAREHOUSE

The key principles in developing the data warehouse are to appropriately integrate data from transactional systems and to preserve the history of those transactions by taking once-daily snapshots. The integration of data in the warehouse will be achieved by prescribing the use of common data definitions. The approach taken will be that of the Kimball data warehousing methodology.

Key systems include:

- Callista (student data)
- Alesco (staff data)
- Oracle Financials (financial data)
- TM1 (budget and forecast data)
- Rhesys (research data)
- Archibus (capital works data)
- PlatformWeb (timetabling data)

By integrating this data in the data warehouse and aggregating it to provide summary reporting at multiple levels, the following benefits are gained by the University:

- A single source of truth for management information
- Information captured in time-series snapshots, enabling trend analysis and minimizing confusion over rapidly changing data in operational systems
- Comprehensive management reporting that combines information from all the University's activities

## REPORTING TOOLS

The data in the warehouse will be delivered to end users using reporting tools that support online analysis as well as mass distribution of standard static reports. The reports will be designed in close consultation with end users.

## STRATEGY

### THE DATA WAREHOUSE

The data warehouse will be built incrementally by incorporating new data on a system-by-system basis.

Data will be modeled and captured when it is required for an identified end user requirement.

The interfaces between operational systems and the data warehouse will be built using WherescapeRed as the standard ETL tool.

## REPORTING AND ANALYTICS

Reports (both email and online) will be designed in consultation with end users. A representative business-facing person will be included on any project team.

Development of reports will proceed incrementally, starting with relatively simple email-distribution reports that require only a single source system's data. Complexity will be built out gradually by including additional source systems over time and integrating the data from those systems.

Online analytical tools and reports will also be developed incrementally, beginning with limited scope single source 'portals'. Over time these can be integrated and aggregated to provide dashboards and KPI-based reporting.

The reporting platform is the Cognos BI toolset.

## RESOURCING

The Program is organisationally situated within the Office of the Deputy Vice-Chancellor (Corporate Strategy and Services). The program will require executive sponsorship through the Deputy Vice-Chancellor, high level program management, project management and a project team.

The project team will require skills in Cognos BI report development (including Report Studio, Analysis Studio, Metrics Studio and Framework Manager), ETL skills using WherescapeRED and Oracle Data Integrator, and data profiling and modeling skills.

## RELATED PROJECTS

The Program depends on the establishment of a data governance program to manage issues of data quality in the source systems and to provide the framework for the development of standard definitions of data elements to facilitate data integration.