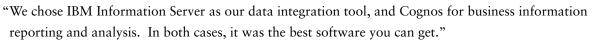
Deakin University





Michael Gibson, Data Warehouse Manager, Deakin University



Deakin University holds a unique place among Australia's academic institutions. Established in the 1970s, it is one of the nation's youngest universities. It is also one of the largest with more than 32,000 students across four campuses in Geelong, Melbourne and Warrnambool.

The university's relative youth has helped to foster a commitment to progressiveness and innovation in teaching, research and in its development of international programs. Courses are designed for maximum flexibility, enabling students to choose between off-campus, online and part time study options. It's an approach that obviously resonates with students. Deakin has twice won the prestigious University of the Year award and in 2008 received five citations for Outstanding Contributions to Student Learning in the Australian Learning and Teaching Council Awards

Management by Spreadsheet

By 2004, Deakin's reputation was well-entrenched. It had a track record of high quality educational results and a growing body of local and international students. However, behind the lectures and labs, Deakin's management systems were struggling to keep up.

Deakin's Data Warehouse Manager, Michael Gibson explains, "We have a large number of systems across the university capturing data about almost every aspect of our student enrolments including course information, academic results, lecturers and locations.

"The data is used to fulfil a variety of statistical and reporting requests that help the university to create policy, manage demand and meet government reporting requirements. Up until 2005 that data was maintained manually, usually within Microsoft Excel spreadsheets and Microsoft Access databases. While it was a partial solution, it was error prone and time consuming."

First steps

In late 2004, Deakin's Planning Unit decided it was time for a more efficient and accurate solution to the problem of managing student data. It was time for a data warehouse.

Industry:

• Education

Geography:

• Melbourne, Australia

Information Needs:

- · Access and manipulate data from data warehouse
- · Reporting and analysis

Platforms:

Windows

Solution:

- IBM Cognos 8 BI
- IBM Information Server

Benefits

- Accurate and timely management information to support policy development
- Ability to coordinate university and third party data for government compliance reporting
- Modelling, analysis and institutional research to support enrolment planning, budgeting, resource allocation and related activities

After selecting an Oracle database staff searched for software to help source and manipulate the data, and to enable presentation and analysis of the information. Gibson continues, "Deakin's approach is to work with best of breed tools so that's what we looked for when constructing the data warehouse. We chose IBM Information Server as our ETL [extract, transform and load] or data integration tool and Cognos for business information reporting and analysis. In both cases, it was the best software you can get."

More flexibility, more functionality

Two years later, with the data warehouse delivering on its initial promise, the university extended its analysis to report human resources and financial information from several transaction systems residing outside the data warehouse.



At the same time it upgraded to IBM Cognos 8 Business Intelligence (BI). The move has delivered new flexibility in filtering and building ad-hoc reports to support decisions across the entire university. It makes it possible, for example, for a faculty to look at data on student load and slice the data in any dimension to focus on specific student characteristics. It has become an integral tool for student load planning.

Modeling, analysis and research to support enrolment planning, budgeting and resource allocation have become faster and easier. Statistical data plus standard and ad hoc reports are accessed daily faculty analysts, administrative staff and the senior executive.

The combination of IBM Information Server and IBM Cognos 8 BI has also made it possible to import third party data and to coordinate more comprehensive submissions to government organisations such as the Department of Education, Science & Training.

Gibson says, "Universities are required to undertake a lot of government reporting. We use IBM Information Server and Cognos to assist with the data validation. For example we provide reports on our student load four times a year and the data has to be correct and it must conform to strict government compliance regulations. That's where these two tools excel. They have given us the ability to make better management decisions by accessing information related to university-wide planning, infrastructure, staffing, and marketing."

Performance Management

Four years after its first implementation, Gibson and the Deakin team are still working with Cognos and still expanding its role. The software is currently being rolled out to administrative divisions to provide management and staff with access to up-to-date human resources and financial data. The result is expected to extend the benefits of speed and accuracy of decision making throughout the university's management chain.

Performance management is another area that Gibson is working on. It's a critical process for the university which uses goals and key performance indicators to assist in the allocation of budget resources, and as essential elements in the institution's reporting, accountability and evaluation cycle.

"A data warehouse," Gibson concludes, "must have three elements: a database; a data integration tool, and business intelligence. IBM Information Server and Cognos both do their job extremely well. They complement each other in a way that has enabled us to achieve exactly what we need."

About Cognos, an IBM company

Cognos, an IBM company, is the world leader in business intelligence and performance management solutions. It provides world-class enterprise planning and BI software and services to help companies plan, understand and manage financial and operational performance. Cognos was acquired by IBM in January 2008*. For more information, visit http://www.ibm.com/software/data/ and http://www.cognos.com.

*As a result of the acquisition, product names have now changed to reference IBM at the beginning of the software or service.