A BI Strategy to deliver actionable insights and improve decision making at University of Wollongong

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Abstract
In 1999 the University of Wollongong embarked on a BI initiative through the establishment of a BI Centre of Excellence. With a vision to improve University performance through enhancing business decisions, UOW has delivered a comprehensive suite of strategic reporting and improved the transparency, availability and dissemination of information by breaking down operational silos. Today a revitalised view of BI takes effect that extends and builds upon this strong foundation that has uncovered hidden insights. The session will explore; The redefined BI strategy that supports the strategic plan The importance of visualisations to deliver actionable insights Leveraging our assets to deliver value to stakeholders Relationship analysis to enhance our sphere of influence.

Keywords
actionable, strategy, insights, improve, decision, making, university, wollongong, deliver, bi

Disciplines
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Performance Indicators Unit
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Our Projects

2006
Staff-Demographics, Leave, Training, OH&S, Recruitment & Equity

2007
Financial Reporting, Student Demographics/Performance, Research Publications

2008
Research Income, Student Institutional Attrition

2009
Faculty Planning, Curriculum Review, Cross Indicators, Environmental, Student Equity

2010
Student Course Transfer, Cook’s Compass (Dean’s Dashboard) AUQA Review Packs, ERA, Direct Admissions, Survey Faculty Data Packs

2011
Library Usage, HDR Student Reporting, Student Accommodation, UAC

2012
Staff Timesheets Research Benchmarking HDR Network Analysis

2013+
Network Analysis Portal Redesign Learning Analytics Marketing Analytics

BI Centre of Excellence created at UOW, the “Performance Indicators Unit”

Four Cadets leave team!
Business Intelligence Strategy

Increase the dissemination and volume of Information Assets

Project Productivity Strategy
- Introduce new Revenue Sources
- Create more project capacity
- Incorporate relevant features to improve user experience

User Growth Strategy
- Enhance Customer Value
- Utilise Staff in the most effective manner

Customer Value Proposition
- Core capabilities: Relevant, Accurate, Timely, Access
- Productivity Attributes
- Relationship
- Image

Assets
- Employee Competencies: Attract, develop and retain key personnel who desire innovation and learning
- Technology: Leverage technology to adopt leading BI capabilities and visualisations
- Organisational Culture: Create and promote an analytical culture diffused across key business processes, faculties and Divisions

Information Management
Dashboard Visualisation

**DEST Publications Per Academic FTE**

- 2003: 0.00
- 2004: 1.00
- 2005: 1.50
- 2006: 3.00
- 2007: 3.50

**Research Income per Academic FTE ($000)**

- 2003: $20
- 2004: $30
- 2005: $40
- 2006: $30
- 2007: $30

**Publication Breakdown 2006**

- UOW, 2006
- UOW Publications: 30%
- DEST Publications: 30%
- GENERAL Publications: 40%

**Research Income ($000)**

- 2003: $15,000
- 2004: $20,000
- 2005: $25,000
- 2006: $30,000
- 2007: $35,000

**Income Won**
- 2003: $10,000
- 2004: $15,000
- 2005: $20,000
- 2006: $25,000
- 2007: $30,000

**Income Received**
Improving the way information is presented,
- remove the noise
- remove overbearing colours
- Remove 3D and use the correct charts

We don't need more information! It needs to be discoverable, insightful and actionable

Where are we now?
Descriptive to Prescriptive

Value

Complexity

What happened?

Diagnostic Analytics

Why did it happen?

Predictive Analytics

What will happen?

Prescriptive Analytics

What Should We Do?

Optimization

Foresight

Insight

Hindsight

Information

Customer Intimacy

Source: 2012, Gartner BI Maturity Model
A Network Analysis visualisation

- Network Relationship Analysis
- Person centric paradigm
- Research Linkages
- Degrees of connectedness
Network Relationship Analysis
A research and International Perspective

• Publications data
• Where do we collaborate and who with?
• What is the extent of our Collaborations?
• Who are our highly collaborative academics?
• Changes underpinning a Network
What is the extent of our Collaborations?

Degrees represent the number of links between institutions

Interactive Map of Collaborations
An Individual Network
Highly collaborative academic
Why do we need this information?

• Better coordination of outreach activities
• Relationship management
• Risk management and mitigation
• Develop opportunities and alliances
Collaboration is a driver of **research success** ...to be a successful research institution it is critical the University **understands and manages** the relationships between individuals and other institutions ...

Network Analysis is an **innovative** way to **discover insights** into the extent of our research relationships.
Network Relationship Analysis future

• Endorsed by Senior Executives
• Extends BI capabilities
• Continue to leverage information
• Information as an Asset
Thank you

For further Information

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