Navigating terrain and discovering insights into UOWs Sphere of Influence

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Abstract
The Performance Indicators Unit is utilising its strong analytical foundation and is extending their BI capabilities into areas of prescriptive analytics. Rather that reporting on what has happened we must inform and influence what will happen which is a dramatic shift. With a robust analytical foundation the opportunity to leverage these assets is the new focus that is providing insights into the extent, strength and interactions of our complex relationships.

Keywords
navigating, terrain, insights, influence, discovering, sphere, uows, into

Disciplines
Arts and Humanities | Social and Behavioral Sciences

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Navigating terrain and discovering insights into UOWs Sphere of Influence

Craig Napier
Performance Indicators Unit
22nd August 2013
GLOBALLY CONNECTED

KEY FACTS

- **Live in**: 143 Countries
- **213 Institutions**: Formal Links
- **166 Institutions**: Global Links
- **3,167 Students**: Have Studied Overseas
- **9,466 Students**: Studied at UOW

![Map](file)

- **UOW Campus/Programs**
- **Academic/Research Collaboration**
  - (Number of Institutions)
- **Study Abroad/Exchange**
  - (Number of Institutional Collaborations)
- **Alumni**
  - (Number of UOW Graduates)
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+
Student Benchmarking Mobile reporting Network Analysis Portal Redesign

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

Four Cadets leave team!
## Business Intelligence Supporting UOW Strategy

<table>
<thead>
<tr>
<th>Strategic Plan Goals</th>
<th>Business Intelligence Perspectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOAL 1: Research &amp; Impact</td>
<td>Research</td>
</tr>
<tr>
<td></td>
<td>Staff &amp; Workplace Satisfaction</td>
</tr>
<tr>
<td>GOAL 2: Learning &amp; the Student Experience</td>
<td>Students Teaching &amp; Learning</td>
</tr>
<tr>
<td></td>
<td>Community &amp; International Focus</td>
</tr>
<tr>
<td>GOAL 3: Connecting Communities</td>
<td>Research</td>
</tr>
<tr>
<td></td>
<td>Students Teaching &amp; Learning</td>
</tr>
<tr>
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<td>Community &amp; International Focus</td>
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<tr>
<td>GOAL 4: Staff &amp; Culture</td>
<td>Research</td>
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<tr>
<td></td>
<td>Staff &amp; Workplace Satisfaction</td>
</tr>
<tr>
<td>GOAL 5: Sustaining a Vibrant University</td>
<td>Finance</td>
</tr>
<tr>
<td></td>
<td>Business Processes &amp; Operations</td>
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<tr>
<td></td>
<td>Environmental Sustainability</td>
</tr>
<tr>
<td>GOAL 6: Change &amp; Transformation</td>
<td>Finance</td>
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<tr>
<td></td>
<td>Business Processes &amp; Operations</td>
</tr>
<tr>
<td></td>
<td>Environmental Sustainability</td>
</tr>
</tbody>
</table>
Information as an Asset
Leveraging our Assets

Source: 2012, Gartner BI Maturity Model
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

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
Changes to the Network
Highly collaborative academic
Changes to the Network

An external is now a key piece in our network
<table>
<thead>
<tr>
<th>Academic</th>
<th>Collaborations (people)</th>
<th>Number of Papers</th>
<th>Internal Academics</th>
<th>External Academics</th>
<th>Institutions</th>
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</thead>
<tbody>
<tr>
<td>Researcher 1</td>
<td>208</td>
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<td>98</td>
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<tr>
<td>Researcher 2</td>
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<td>13</td>
<td>3</td>
<td>4</td>
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<td>39</td>
<td>20</td>
<td>17</td>
<td>22</td>
<td>8</td>
</tr>
</tbody>
</table>
Why do we need this information?

- Better coordination of outreach activities
- Relationship management
- Risk management and mitigation
- Develop opportunities and alliances
Executive Sponsor

Professor Judy Raper DVC Research

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
- Institutional Synergies
- Information as an Asset
research
relationships
UOW
develop
application
mitigation
Therefore
University
institutions
innovation
Evidence
Collaboration
people
successful
born
support
broader
people
manage
information
network
collaborations
existing
potential
individuals
evidence
build
direction
extent
Network
discover
identify
driver
success
capacity
used
innovative
strategic
Analysis
way
provide
institute
sustain
risk
opportunities
opportunity
critical
assist
bringing
common
grow
new
together
changes
networks
ideas
born
sustain
Thank you
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