Deputy Vice-Chancellor (Academic) - Papers   Deputy Vice-Chancellor (Academic)

2013

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

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

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.

A BI Strategy to deliver actionable insights and improve decision making at UOW

Craig Napier
Performance Indicators Unit
18th September 2013
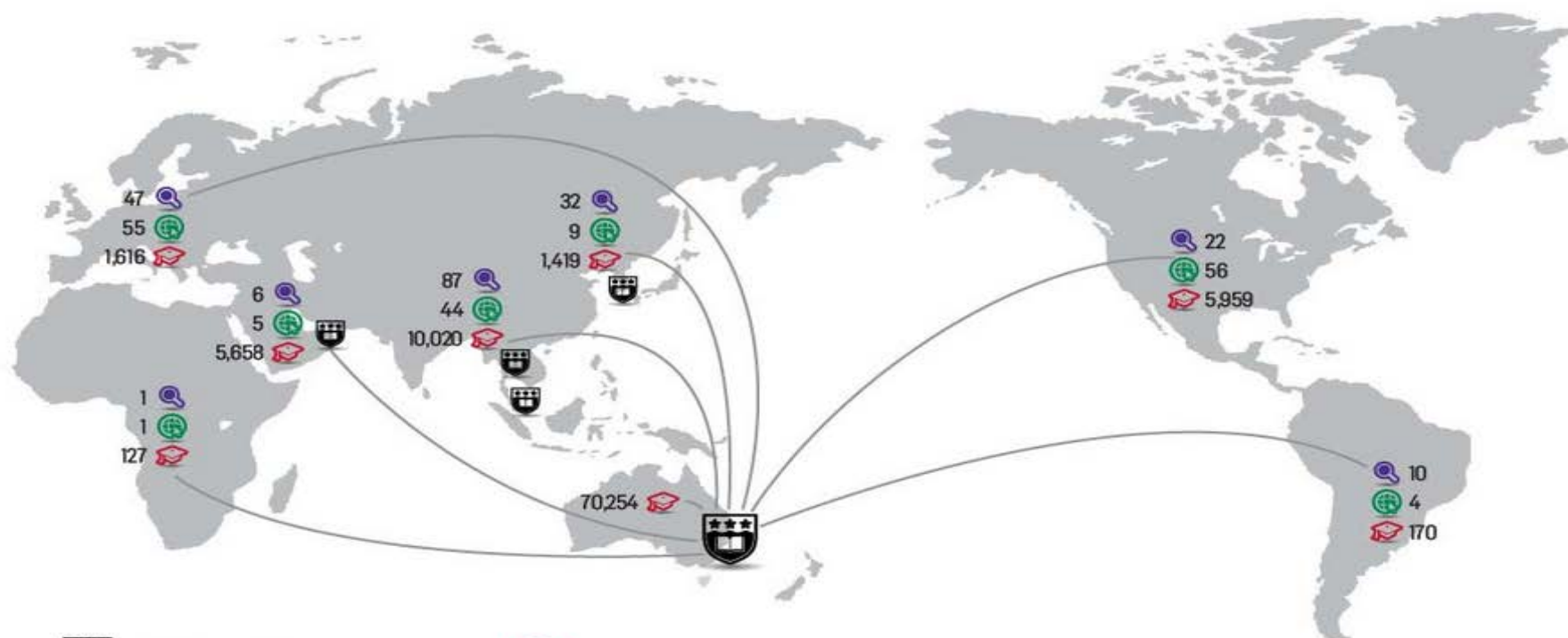
GLOBALLY CONNECTED

KEY FACTS

LIVE IN
143
COUNTRIES

213
INSTITUTION
FORMAL LINKS

GLOBAL LINKS
166
INSTITUTION

UOW STUDENTS
3,167
HAVE STUDIED OVERSEAS

FROM OTHER UNI'S
9,466
STUDIED AT UOW

47
55
1,616

32
9
1,419

6
5
5,658

87
44
10,020

1
1
127

22
56
5,959

70,254

10
4
170

UOW Campus/Programs

Study Abroad/Exchange
(Number of Institutional collaborations)

Academic/Research Collaboration
(Number of Institutions)

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+
Network Analysis
Portal Redesign
Learning Analytics
Marketing Analytics

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

Four Cadets leave team!

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Business Intelligence Strategy

Increase the dissemination and volume of Information Assets

Project Productivity Strategy	User Growth Strategy

Introduce new Revenue Sources	Create more project capacity	Incorporate relevant features to improve user experience	Enhance Customer Value	Utilise Staff in the most effective manner

Customer Value Proposition

Core capabilities
- Relevant
- Accurate
- Timely
- Access

Productivity Attributes	Relationship	Image

Assets	Information Management

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
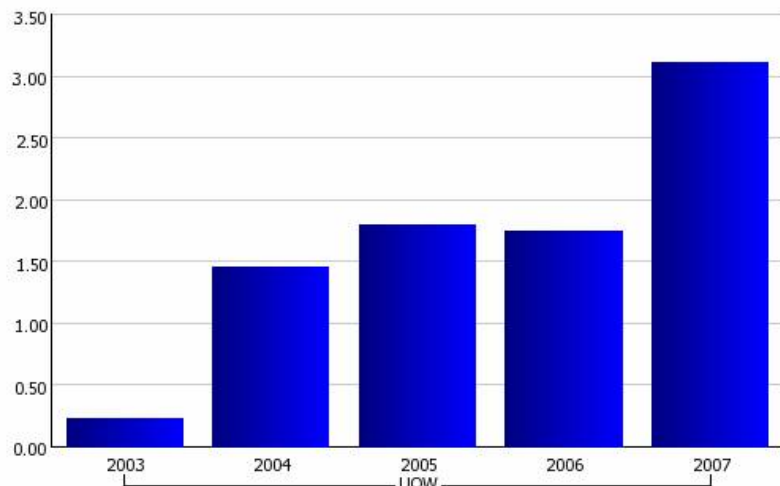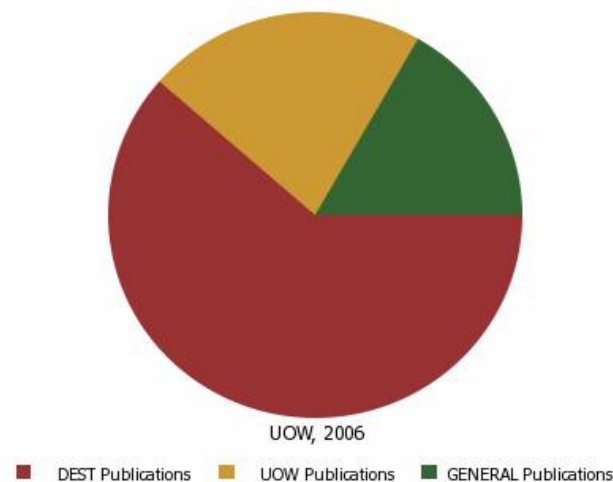
Dashboard Visualisation

Higher Degree Research Students

Select Institutions   Click to save
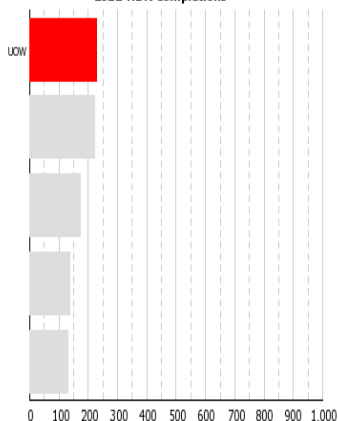
2011 HDR Completions

0 100 200 300 400 500 600 700 800 900 1,000

2011 HDR Enrolments

0 1,000 2,000 3,000 4,000 5,000

International Completions as a % of All Completions

45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
2005 2006 2007 2008 2009 2010 2011
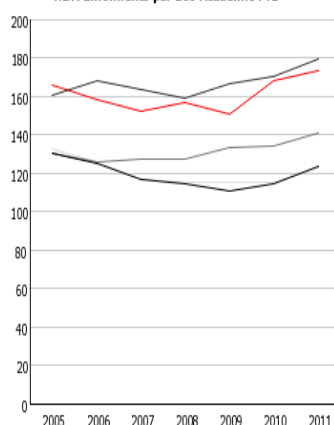
HDR Completions per 100 Academic FTE

28
24
20
16
12
8
4
0
2005 2006 2007 2008 2009 2010 2011

HDR Enrolments per 100 Academic FTE

200
180
160
140
120
100
80
60
40
20
0
2005 2006 2007 2008 2009 2010 2011

International Enrolments as a % of All Enrolments

50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
2005 2006 2007 2008 2009 2010 2011

Dashboards

Name
1. Research Benchmarking
2. Benchmarking HDR
3. Benchmarking Publications
4. Benchmarking ARC Funding
5. Benchmarking Research Income

HDR Analysis Views

Name
Completions by Student Type
Completions per 100 Academic FTE
Enrolments by Student Type
Enrolments per 100 Academic FTE

Publication Analysis Views

Name
Journal Articles per 100 FTE
Publication Weighted Points per 100 FTE
Publications by Category
UOW Scopus Publications

ARC Analysis Views

Name
ARC funding and Success Rates
ARC Funding per 100 Academic FTE
Average ARC Funding
Proportion of ARC Income

Income Analysis Views

Name
Proportion of Research Income
Research Income per 100 FTE
Research Income Rankings

Management Reports

Name
Benchmarking Management Report - ARC Grants
Benchmarking Management Report - HDR

ARC Funding Outcomes
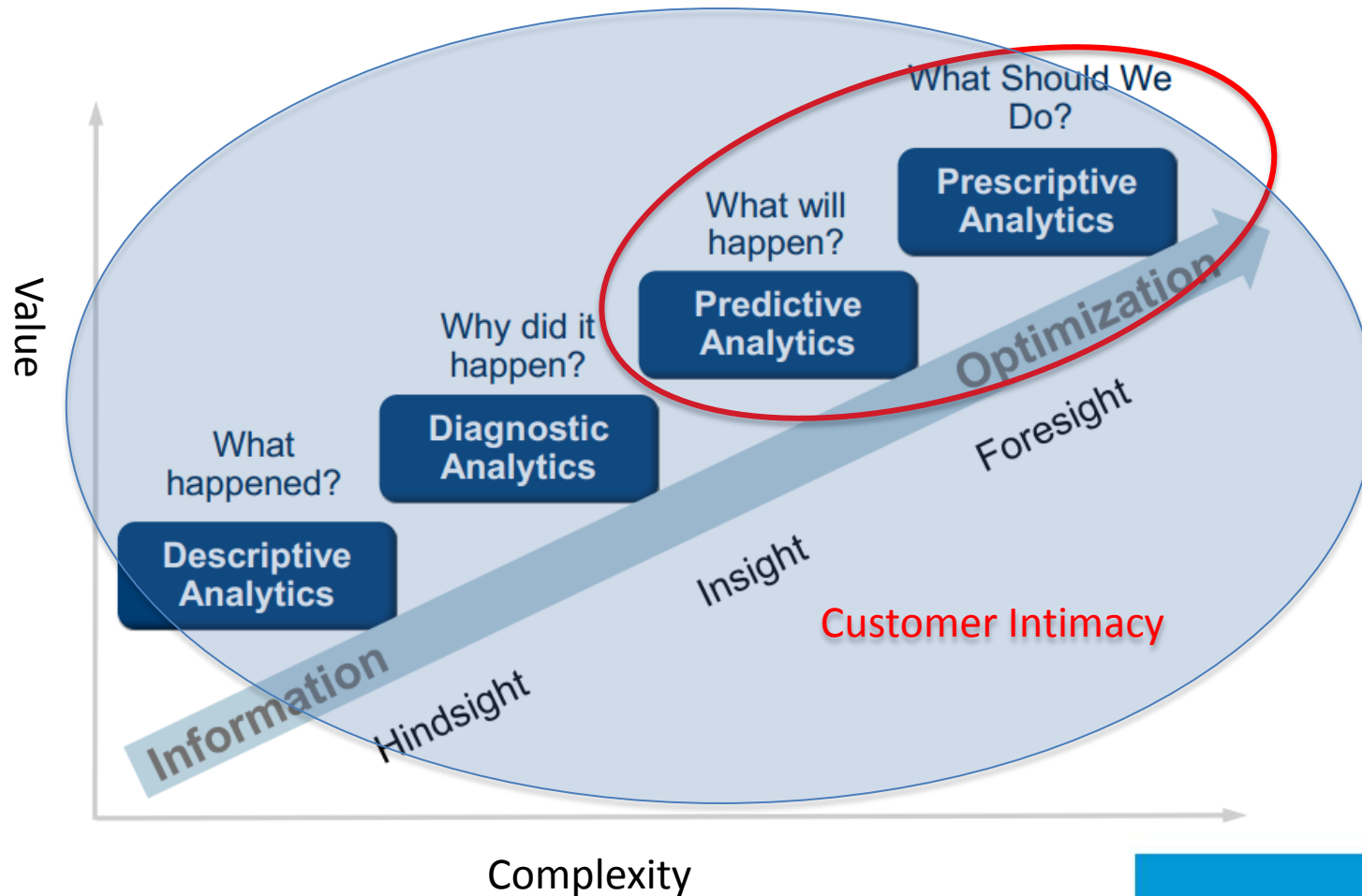DIISRTE (Commencing, All, Overseas Students Tables 1.5, 1.6, 2.5, 2.6)
HERDC Publications
Full-time Equivalence Table 1.8
Performance Indicators Unit Help

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Descriptive to Prescriptive

Source: 2012, Gartner BI Maturity Model

A Network Analysis visualisation

- Network Relationship Analysis
- Person centric paradigm
- Research Linkages
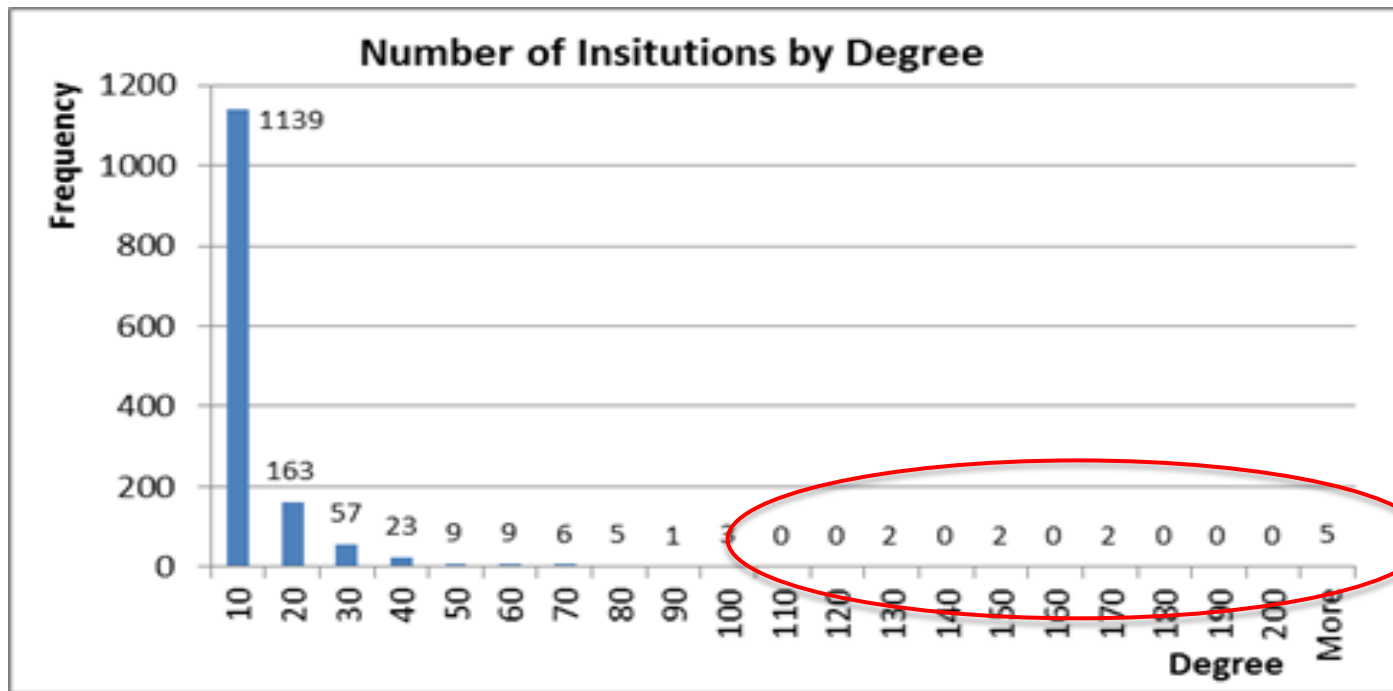- Degrees of connectedness

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 out highly collaborative academics
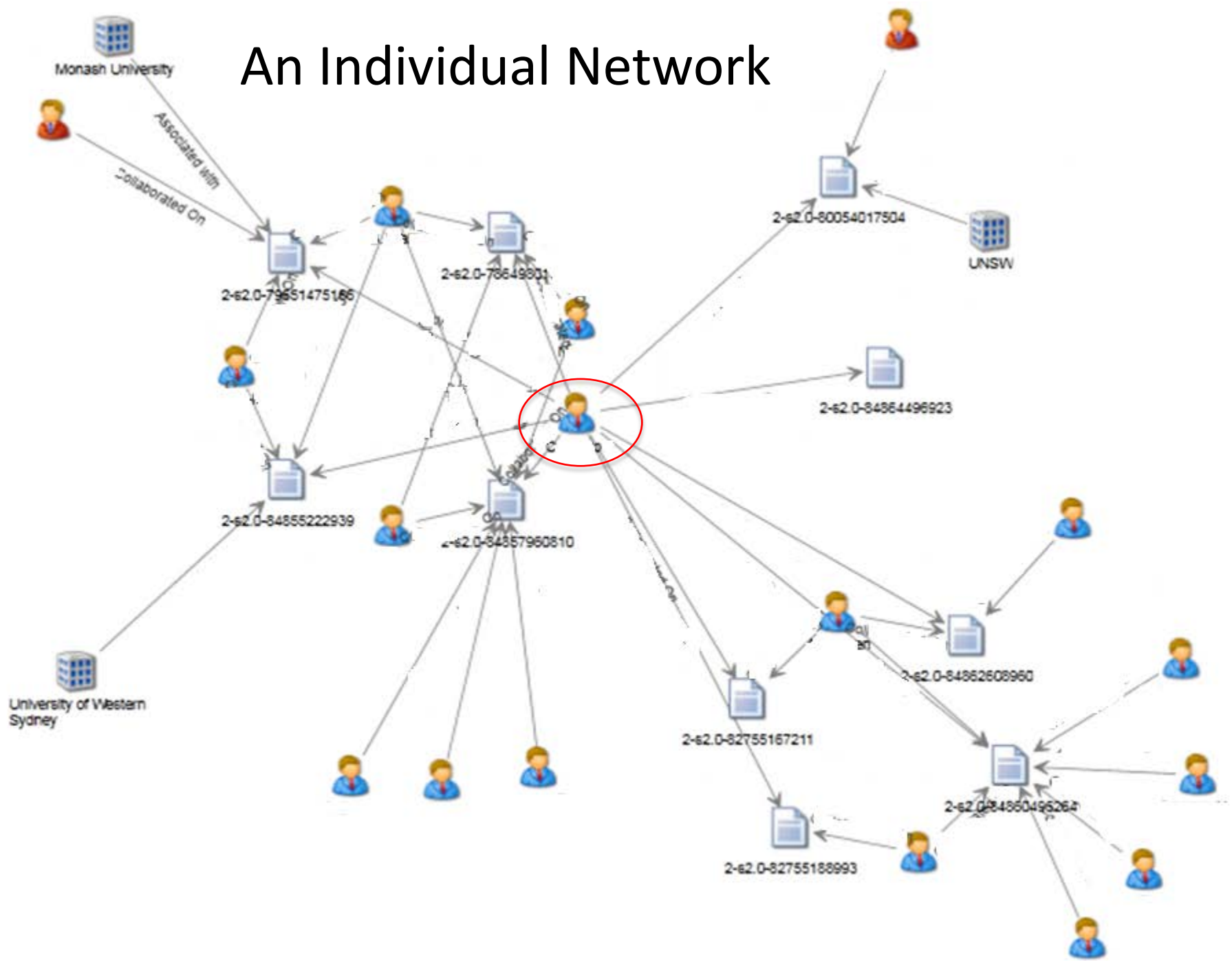
- Changes underpinning a Network

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What is the extent of our Collaborations?

Degrees represent the number of links between institutions

[Interactive Map of Collaborations](#)

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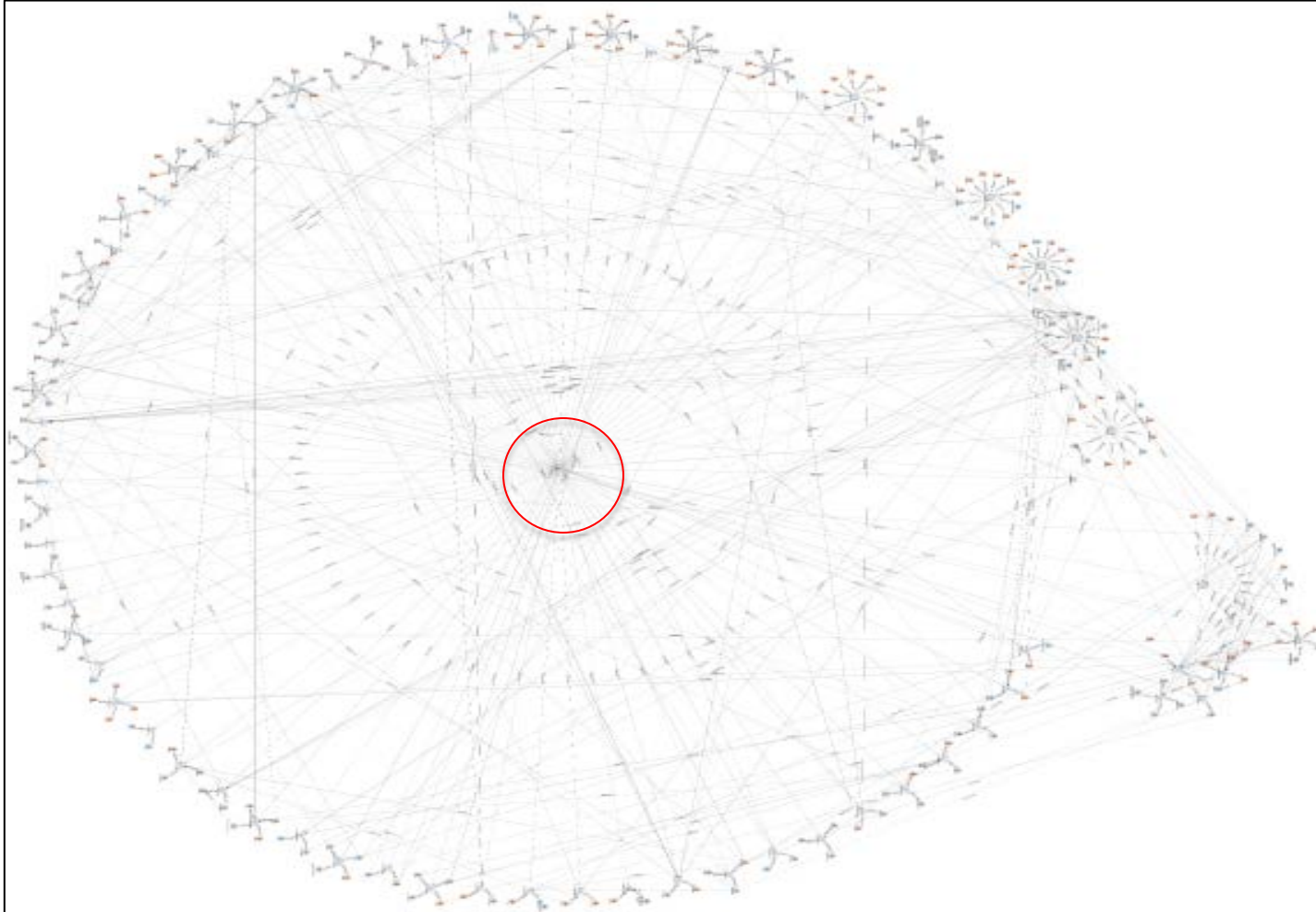WOLLONGONG

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

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
- Information as an Asset

Thank you

For further Information

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