# REFLECTIONS OF CHANGING A HEI

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Comprehensive
Academic
Research
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#### **University change**

- Site of learning for learning's sake
- 1950's (big business) - > 20-50 years to see the change
- 1999: In the last ten years, Australian universities have begun the challenging and necessary task of recreating themselves given significant political, economic, industrial and technological discursive shifts, especially those towards corporate managerialism, economic rationalism, entrepreneurialism and globalisation (Currie and Newson 1998; Dudley 1998; Treleave, 1999).
- Rise of post-secondary institutions
  - -- university needed to redefine itself; identify its scope
  - -- competition through international criteria
- Increased centralization, branding, market-driven decision- making
  - -- where can they find new revenues

### What's your profession?

- Professor
- Researcher
- Scientist
- Sessional instructor

#### Which faculty are you in

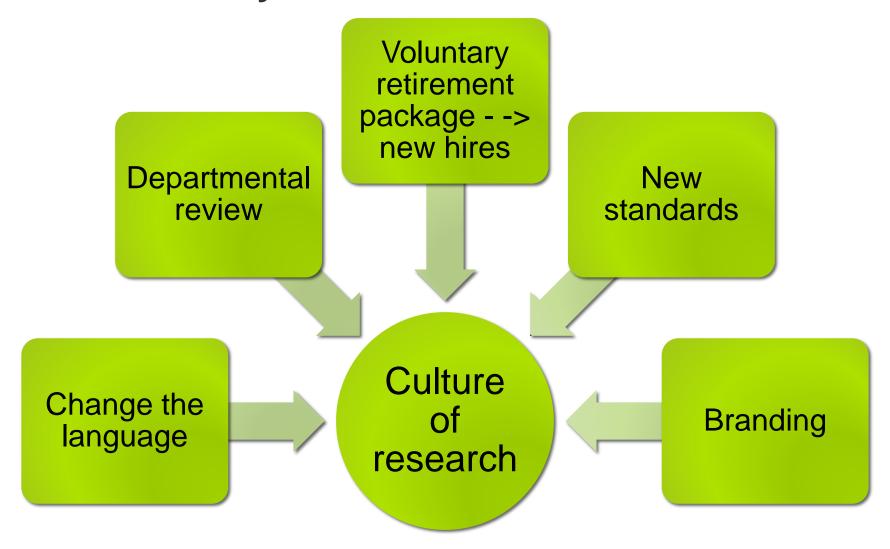
STEM – culture of research



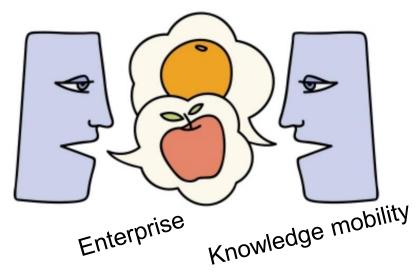
#### **Futurist Alvin Toffler**

Standardization

### Four of many processes that took place simultaneously



### #1 Change the language - Create a common language across campus -



Culture of research

Capacity building



Knowledge transfer

Sustainability

Indicators

## #2 Departmental review – multi-step process

# Self reflection

- Consultation with wide range of stakeholders
  - Faculty
  - Support staff
  - Students
  - Graduate students
    - Current
    - Completed
- Professional associations
- 12-15 page report with appendices
  - Answer given questions

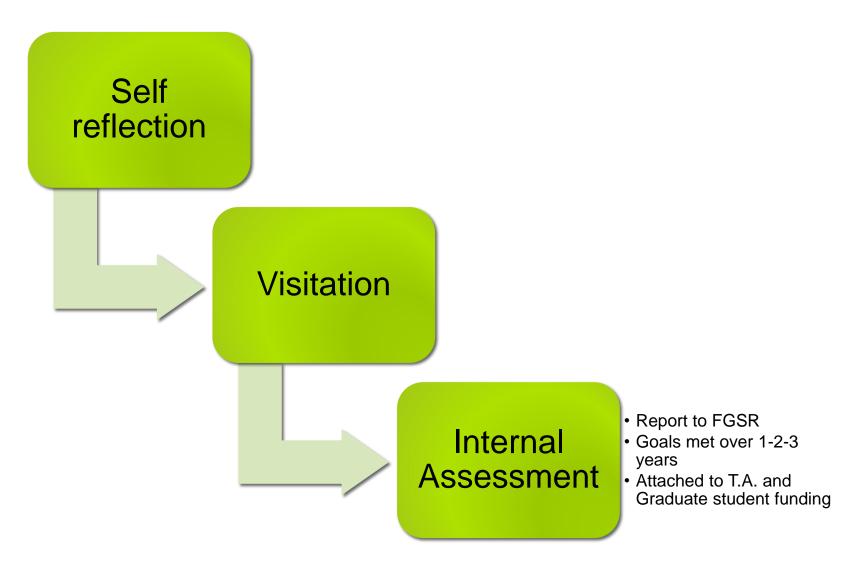
#### Departmental review



Visitation

- Committee
  - Internationally recognized
  - Nationally recognized
  - Insider from another Faculty
- Read report and formulated questions
- Meetings over 2 days
  - With FGSR
  - with stakeholders
- Write a report
  - Recommendations
  - Ranking

#### Departmental review



#### #3 Voluntary retirement package

- One month salary for every year worked
- Ideal for those who were ready to retire
- Reduce university budget (\$100,000->\$300,000)
- Respectfully minimize the number of resisters
- Make room for new hires -> build critical mass
  - From universities with a culture of research
  - Shaping their thinking Learning the ropes of a new institution is normal
    - mentors
  - Afraid to speak out (no tenure)

# #4 Faculty member Annual review CRITERIA



**Teaching** 

Research

Committees

Collaboration

- Undergraduate courses
  - Number of students
- IDQs <u>Instructor Designed Questionnaire</u>
  - Subject specialist for others
- Graduate
  - Number of Master's
    - Project
    - Thesis
  - Number of Doctoral students
    - ED D
    - Ph D
- Presentations for other courses

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  - Graduate student performance/awards
- Presentations for other courses
- Other
  - Use of technology
  - Awards

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  - Use of technology
  - Awards
  - New course development (online):
  - Community service learning
  - Reflection

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  - New course development (online)
  - Community service learning
  - Reflection
  - Undergraduate research

#### Research

- Publications
  - Articles
    - Peer reviewed
    - Non peer reviewed
  - Chapters
  - Books
  - Reports
  - Websites
- Presentations
  - Local, regional, national, international
  - Keynotes
  - Number of listeners

- Editorial
  - For which journals
  - For which granting groups
- Grants
  - Applied
  - Successful
- Leadership
  - Subject committees
    - Provincial
    - National
    - International
- Awards

#### Research (increase value (e.g.33->40%))

- Publications (for which publishers)
  - Articles
    - Peer reviewed
    - Non peer reviewed
  - Chapters
  - Books
  - Reports
  - Websites
- Presentations
  - Local, regional, national, international
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  - Number of listeners

- Editorial
  - For which journals
  - For which granting groups
- Grants (which ones?)
  - Applied
  - Successful
- Leadership
  - Subject committees
    - Provincial
    - National
    - International
- Awards

#### Service (decrease value (e.g.33->20%))

- Department
  - Committees (Graduate program, undergraduate program, Recruitment, Social...)
- Faculty
  - Committees (Deans advisory, executive...)
  - Representative (to other faculties, provincial bodies (e.g. ATA, ERLC, Assessment...)
- University
  - GFC, Library, Teaching and Learning, scholarship adjudication...
- Community
  - Boards

#### Collaboration

- Across disciplines
  - New criteria for grants
  - New kinds of grants
    - E.g. KIAS
- Between universities
  - New criteria for grants
  - Undergraduate research initiatives (URI)
    - Local
    - International (building partnerships and reputation)
- Developing areas of "excellence"
  - Centres
  - Signature areas

#### #5 Branding

- Common templates for:
  - Departments
  - Faculty
  - Programs
- Use of logos
  - Hierarchical
- Centralization of new initiatives
  - URI
  - Internationalization

#### The role of the academy

- Knowledge creation
  - Grants
  - Collaboration
- Knowledge mobility or transfer
  - Translation, synthesis and networking
  - Publications
    - Journals (status, ranking)
    - Books (status of publishers)
    - Public
  - Presentations
    - Conferences (status)
    - With graduate students
    - Collaboration
  - Public
    - Newspapers
    - Editorials
    - Knowledge transfer



# What drives the change in the academic enterprise?

Rankings

#### Rankings

- The Times Higher Education Rankings out of the United Kingdom
- The Academic Ranking of World Universities (ARWA) out of Shanghai <a href="http://www.shanghairanking.com/ARWU-Methodology-2012.html">http://www.shanghairanking.com/ARWU-Methodology-2012.html</a>



#### The Times - UK

- Teaching: the learning environment (worth 30 per cent of the overall ranking score)
- Research: volume, income and reputation (worth 30 per cent)
- Citations: research influence (worth 30 per cent)
- Industry income: innovation (worth 2.5 per cent)
- International outlook: staff, students and research (worth 7.5 per cent).

## Times - "International outlook: People, research (7.5%)

#### **People**

- diversity on campus (international students)
- ratio of international to domestic students and is worth 2.5 per cent of the overall score
- to what degree academics collaborate with international colleagues on research projects both signs of how global an institution is in its outlook.
- compete for the best faculty from around the globe 2.5 per cent weighting for the ratio of international to domestic staff.

#### Research

- calculate the proportion of a university's total research journal publications that have at least one international co-author and reward higher volumes.
- worth 2.5 per cent
- normalised to account for a university's subject mix and uses the same five-year window as the "Citations: research influence" category."
   (http://www.timeshighereducation.co.uk/world-university-rankings/2013-14/world-ranking/methodology

### Rankings - Shanghai

Indicators and Weights for ARWU

Criteria	Indicator	Code	Weight
Quality of Education	Alumni of an institution winning Nobel Prizes and Fields Medals	Alumni	10%
Quality of Faculty	Staff of an institution winning Nobel Prizes and Fields Medals	Award	20%
	Highly cited researchers in 21 broad subject categories	HiCi	20%
Research Output	Papers published in Nature and Science*	N&S	20%
	Papers indexed in Science Citation Index-expanded and Social Science Citation Index	PUB	20%
Per Capita Performance	Per capita academic performance of an institution	PCP	10%
Total			100%

<sup>\*</sup> For institutions specialized in humanities and social sciences such as London School of Economics, N&S is not considered, and the weight of N&S is relocated to other indicators.

#### How this phenomenon has come about

#### Diffusion

#### A culture of academic enterprise

To stay ahead, research varsities need to groom young harvested by many stakeholders linked in an talent to become scientists and technopreneurs.



BY PROF TAN SRI DR SHARIFAH HAPSAH SYED HASAN SHAHABUDIN

ESEARCH universities are expected to RESEARCH universities are expected help fuel the nation's innovation-led economy through knowledge and technology through the specific property of the control of the contr nology transfer that can transform existing products and services.

products and services.
Such varsitites can also spin off new technology-based enterprises which promote business growth and in the process create high-paying jobs and a better quality of life. In realising these goals, research universi-ties must get their act together in four areas. effective innovation system. Through effective engagement and collaboration, we learn how to identify the strengths of others and leverage on those resources that enhance innova-

tion-based economic opportunities.

As for the fourth aspect, the supporting ingredients include good governance, an effective leadership and adequate infrastructure. These together with managing our talents in a fair and transparent manner, are factors that play a key role.

All these expectations of launching start-ups and producing a new breed of graduates require a mindset change towards acceptance of innovation and entrepreneurship (I&E) as core academic values, or as a culture in the university.

It means integrating I&E in university R&D, and the curriculum at both undergraduate and postgraduate levels.

In an I&E culture, academic staff members already think of possible market applica-tions of the ensuing technology at the start of

#### Innovation

 Technology has created new ""terms of reference" that shape our debates about the future organization of the world" (Sadlak, 2008, p. 244).

#### Drivers of this change

#### A culture of academic enterprise

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#### Building the system to support this

- Infrastructure
- Enterprise

Research Enterprise: Major National funding bodies



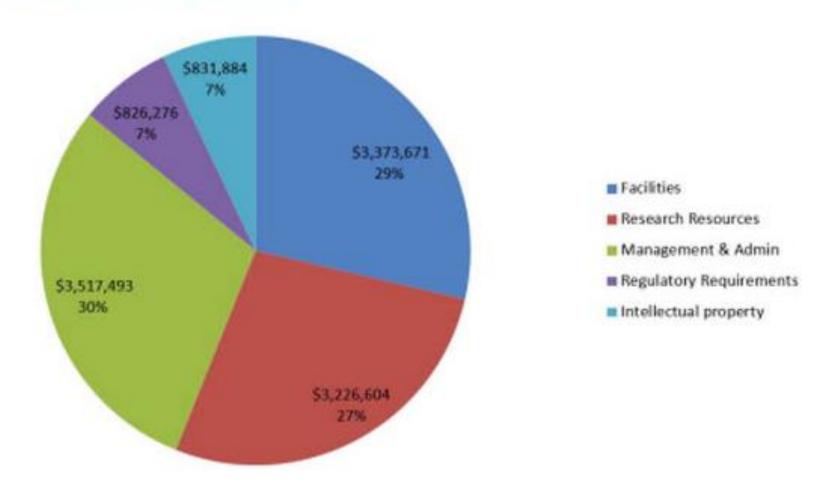




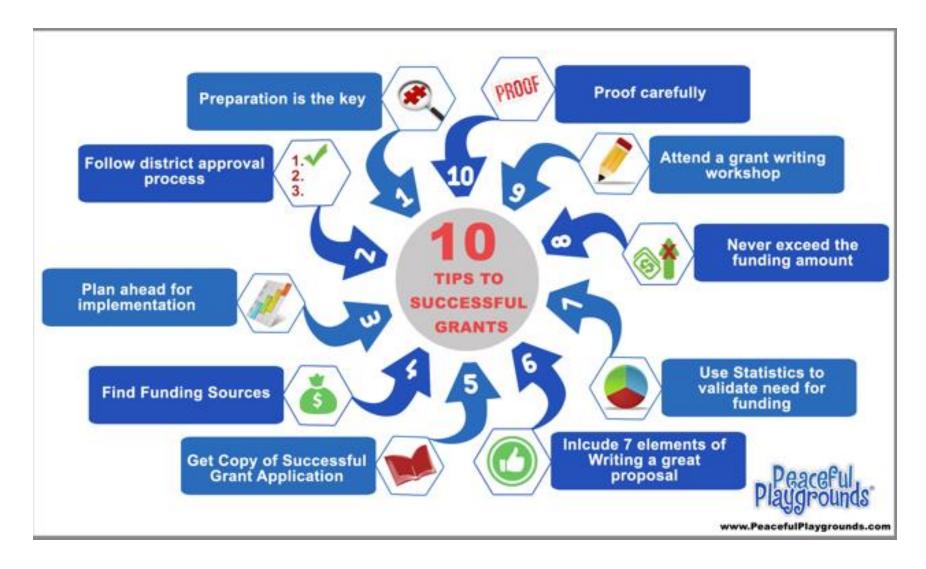


# A Canadian university reports how federal grants are used

2013/14 Federal Indirect Cost Distribution



#### The "enterprise"



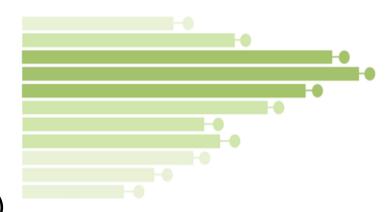
# What is happening through the growth of these enterprises?

- Building capacity
  - Masters
  - Doctoral
  - Post-doctoral
  - Young scholars (early career)
  - mid-career
- Sustainability of change
  - Centres of excellence
  - Only one in Canada
  - Funded researcher (no teaching)
  - Collaboration

Systemic reproduction

#### Sustainability Leaders

A GlobeScan/SustainAbility Survey









### Teaching enterprise

**DECEMBER 5** 







#### Teaching enterprise

National Local

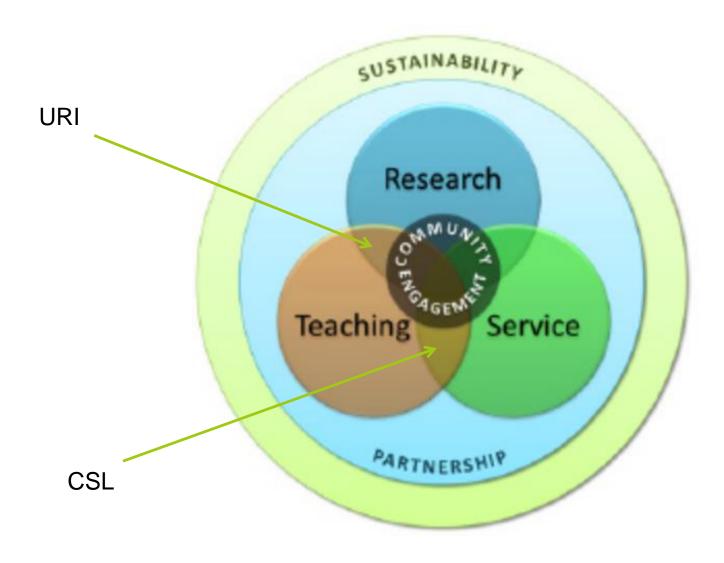




International



### Teaching-Research



### Community-University Engagement

- Helping the public see/learn how the university expertise can assist them in solving their problems
- Integrating "evidencebased decision making" into pubic discourse
- Appealing to employers
- Providing students with work experience opportunities



### Community-University Engagement

Finding additional funds for universities

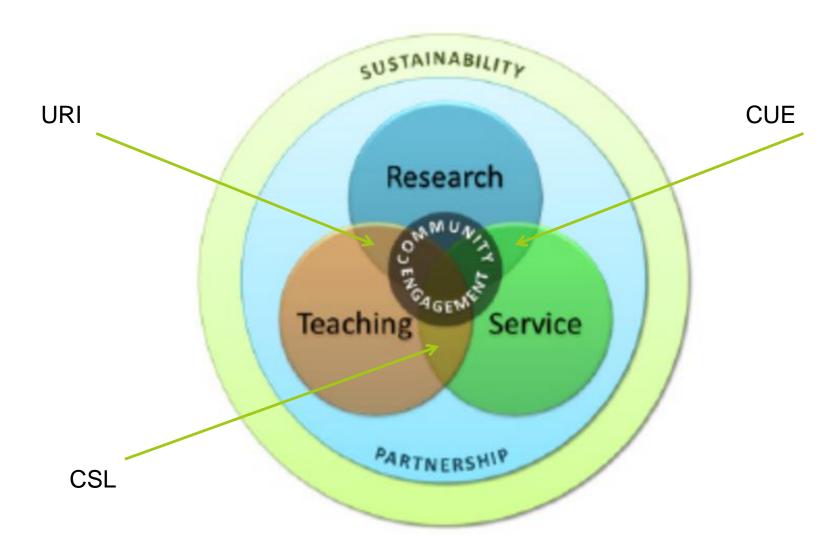
### Community-University Engagement

Finding additional funds for universities

Another new enterprise

- organizations'
- conferences
- best practices
- ethical guidelines

#### Teaching-Research



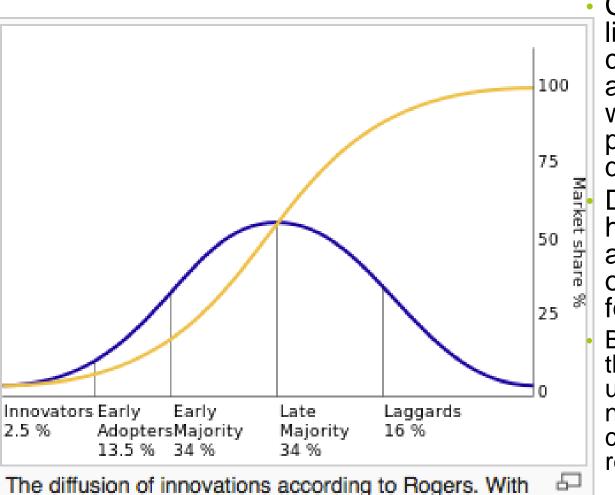
### Closing

- Implications
  - Invest in incentives at the beginning of an initiative and then integrate into expectations
    - CAQC "audit" uses initiatives from 15-20 years ago (eg 6 year review)
- Caution
  - Faculty overload

### Closing

- Implications
  - Invest in incentives at the beginning of an initiative and then integrate into expectations
  - Rate of Diffusion and constant change
    - Can we keep up?

#### Diffusion



(1005.2002)

 Centralized diffusion is a linear one-way interaction controlled by an authority and a top-down process, which is asymmetrical in the power relationship between diffuser and adaptor.

Decentralized systems are horizontal networks of peers and allow for greater local ownership and adaptation in fostering institutionalization.

Beerkens (2008) argues that the global diffusion of particular university models does not necessarily lead to convergence in practices and results (p. 33).

### Closing

- Implications
  - Rate of Diffusion and constant change
  - Ukraine friendly processes?
  - Need for document on best practices?

#### Discussion-Questions

