On Academic Entrepreneurship: The Transformation of New Zealand's Universities

Cris Shore, University of Auckland

UNIKE Workshop Ljubljana 10 July 2014



Celebrating expertise in commercialisation

UniServices CEO Dr Andy Shenk and GM Technology Development Will Charles accept the James and Wells "Best Commercialisation of Intellectual Property for International Business" award at the 2013 New Zealand International Business Awards

Celebrating Research at Auckland University: May 2014







Above: The Minister Stephen Joyce and Chancellor mingle with guests. Right: Stuart McCutcheon awarding prizes; Below:

Excellence in Commercialisation Awards 2014



Left: Minister Stephen Joyce announcing UniServices Commercialisation award

Below: the UniServices Medal for Research Commercialisation

Uniservices a Search Commercialisation - Research - Education - About - Working for us - Contact - Staff Latest News Awarding Research Excellence The Vice-Chancellor's Sponsored Research and Commercialisation Medal 2014 were presented by Science and Innovation Minister Hon, Steven Joyce, who opened his speech by saying "UniServices is the most successful university commercialisation company of its kind". Self-help E-therapy for young people with mild to moderate depression Professor McCutcheon and Dr Shenk say SPARX highlights world-leading innovative capability within the University of Auckland, "Our researchers can develop innovations to respond Congratulations to the Vice-Chancellor's Commercialisation Medal recipients 2014







KiwiNet Research Commercialisation Awards – June 2014



Home » Activities » KiwiNet Research Commercialisation Awards



CELEBRATING NEW ZEALAND'S INNOVATION GAME CHANGERS

About the Awards	Awards Categories	Winners	Finalists	Videos	Photos	Sponsors	Judges
------------------	-------------------	---------	-----------	--------	--------	----------	--------

The KiwiNet Research Commercialisation Awards is New Zealand's premier event celebrating the achievements of individuals, teams and organisations actively commercialising publicly funded research.

Where: Auckland, Viaduct Events Centre When: Wednesday 11th June, 2014

Research Commercialisation is about turning scientific discoveries made at New Zealand's universities and Crown Entities into innovative products and services that will grow our economy. The KiwiNet awards celebrate the entrepreneurial spirit of those who strive to bridge the gap between research excellence and outstanding business leadership.

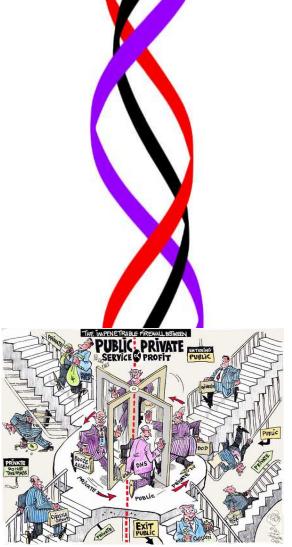
TV3 Coverage of the event





Mapping the 'Third Mission' in New Zealand Universities

- Third Mission Defined 'activities concerned with the generation, use, application and exploitation of knowledge and other university capabilities outside academic environments' (2002 SPRU)
- business-university linkages not new (e.g. Stanford's links date back to 1930s), what *is* new is the degree to which these relationships are becoming *institutionalized - & dominant*
- In NZ: 'Third Mission' not commonly used, but concern with externalization focuses mostly on 'knowledge transfer' ('KT'), forging links with industry and commercialising university IP.
- Focus on entrepreneurship reflects shits in political economy of HE but also wider ideological shift



Framing Questions

- 1. What is academic entrepreneurship?
- 2. Who are the new academic entrepreneurs (and how should we theorize them)?
- 3. How is the emphasis on entrepreneurialism chancing social practices and relations within the university?
- 4. What new kinds of academic subjects & subjectivities are these processes creating, and what model of citizenship are they promoting?
- 5. What are the wider implications of this drive towards entrepreneurialism? Is commercialization changing the meaning and mission of the university?

Starting assumptions / hypotheses to explore

Increased emphasis on commercialisng university knowledge is changing the meaning, mission and character of the university (especially its policy institutional self-definition and organisational culture). More specifically it is:

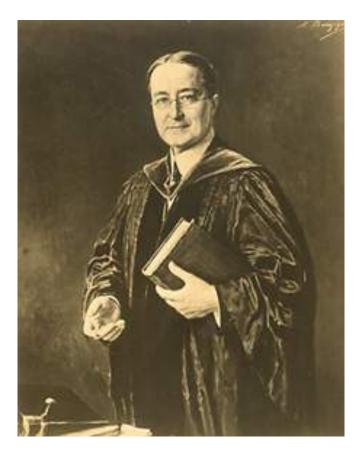
- 1. Shifting power relations toward those who control resources (budgets & staffing)
- 2. Transforming social relations within universities; new divisions, hierarchies and tensions
- 3. Refiguring the boundaries of the university
- □ Process driven largely by government and by the new discourse of 'relevance'
- □ Is this "colonisation by business' ... or self-imposed?

Theoretical Context: Beyond the 'University in Ruins' the Rise of Academic Entrepreneurs

'We have entered a posthistorical phase. The mission of liberal education is lost. There is no longer a subject that can incarnate this principle. ... The adventure of a liberal education no longer has a hero. Neither a student to embark upon it, nor a professor hero as its end'.

Bill Readings 1996, *The University in Ruins::*1

Who is the new 'hero' of the university story?



Who are the new heroes of the university story? The rise of the "administocracy" .. And beyond?





New Heroes of the Entrepreneurial University? Rise of the 'Project Barons'







Generating external income











The Academic Entrepreneur – A Contradiction in Terms?

entrepreneur An individual who undertakes (from the French *entreprendre* to undertake) to supply a good or service to the market for profit

Dictionary of Finance and Banking. Eds J. Law & J. Smullen

Entrepreneur A person with overall responsibility for decision-taking in a business, who receives any profits, and bears any losses. Entrepreneurs need not necessarily contribute either labour, which can be hired, or financial capital, which can be borrowed; but they must contribute either one of these or a credible guarantee, if their responsibility for possible losses is to be genuine.

Dictionary of Economics. Eds. J. Black, N. Hashimzade, & G Myles).

NB. So who bears the 'risk in academia'?

Schumpeterian Hero or intrapreneur?

- More expansive, social science definition: 'a person willing to convert a new idea into an innovation; who embodies qualities of selfreliance & strives for distinction through excellence' 'the gale of creative destruction' (1942: 82-83)
- Is *intrapreneur* a better term?



The Entrepreneur Classic Texts by Joseph A. Schumpeter

- Meaning of a word lies in it's uses rather than a priori definitions (Wittgenstein).
- Importance of understanding *entrepreneur as an* 'emic' category



Edited by Harbar C. Backey, Thorbjern Routhers, and Richard Swedher-

Entrepreneur or intrapreneur

- In the context of the university, entrepreneur and entrepreneurial are used more as portmanteau terms for 'go-getting', 'self-starting'; 'earning your own salary'; 'seizing opportunities'; 'closing the deal' etc.
- i.e. It does not have to be about calculated financial risktaking: it is more about a particular disposition (*dispositive*): the rewards and motivations are more about cultural and political capital: status and prestige, command over resources, one's own sphere of influence etc.

Rise of Technology Transfer Offices





- Commercialisation companies: eg. NZ3 (Canterbury) UniServices (Auckland), Viclink (Victoria), Waikatolink, Otago Innovations (Otago)...
- Common narrative of 'promisory science'

Profile of the Academic Entrepreneur – the 'folk model'

- University 'super-stars': Big grants: knowledge brokers and mediators
- Founders/directors of successful businesses: Command over resources: Have raised external income for the University: 'passionate and energetic', 'desire to create relevant research and to interact with the public':
- Seen as a highly moral figure, desiring to 'give back' to the tax payer & society

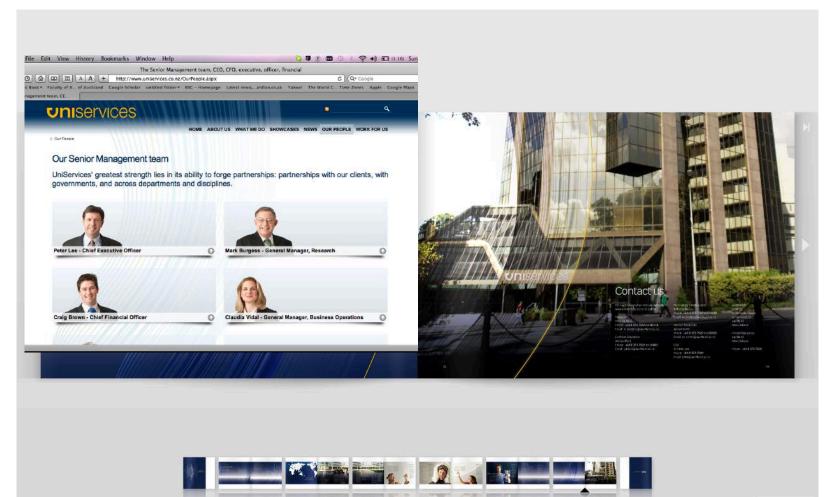


Vvvroom for a New Fuel

March 2013

exceptional learning and industry engagement. These are the only three universities in the world using this model and for New Zealand it means delivering on a government vision for fuelling national economic growth through a vibrant, innovative biotechnology industry.

Creating the Entrepreneurial University: Case Study 1: UniServices plc



UniServices - \$125 m surplus (2010)

 Commercial revenue through UniServices and public good contracts administered through the Research Office each account for roughly half the 2009 total - \$93.6m and \$98.7m respectively. UniServices revenue, however, is growing at a faster rate than public good research revenue, reflecting both the smallness and relatively static nature of public research funding pools in New Zealand as well as UniServices' outstanding success in leveraging commercial revenue from the University's academics and the intellectual

<complex-block>



property they generate. (Budget Report 2009:3).



UniServices extolled

Externally funded research grew strongly, reaching • \$206 million in 2009, 56 percent up on the \$131 million in 2004. This reflects the confidence granting agencies and businesses have in our research staff. The most obvious example of the quality of our researchers, and of the connection of fundamental research to real outcomes, is the work of Distinguished Professor Peter Hunter, 2009 winner of the Rutherford Medal, New Zealand's top science honour. Much of his work, and that of many other leading researchers at the University, finds application through the activities of our research commercialisation company, Auckland UniServices Ltd. UniServices' revenue has grown by 15 percent in the last year, a spectacular result given the recession.

NEW ZEALAND

Whare Wananga o Tamaki Makaurau



(UoA Annual Report 2009:7)

From 'the Native's Point of View': 4 points of interest

1. Benefits of creating a commercial annex separate from the university)

'universities can't own shares because then you would be seen to be investing public money into risky investments. There's a finance act which precludes that. All of the things the University has trouble doing, we can do. We provide a business friendly face to business. So we can make quick decisions, we can write quick contracts, we can buy and sell companies. We can do those things the University can't do well, or couldn't do at all' (UniServices Director, interview, 2011) The university equivalent of the casino or offshore tax haven?

- Agamben States of Exception
- The 'Guantanamo principle'?



2. Business-Academica Match-maker service (or Escort Agency)?

UniServices as portal through which companies can interact with academic researchers and 'see what kinds of research are going on inside the university that might have commercial potential'. 'The message to companies is that 'they might find unexpected big new things', the UniServices by-line being 'UniServices: The Start of Something Big'..

Welcome to UniServices, a gateway to brilliance which can H change our planet for the better. "v We are located in one of the world's most 'business friendly' countries and we are at home in the heart of the world's most entrepreneurial city. We're consulted and partnered by companies and corporations across the world. H Let's talk. Response Company Profile Response

Hon Dr Wayne Mapp

"UniServices, the commercialisation arm of University of Auckland, is a good example of how putting commercially focused resources alongside researchers to open the dialogue and showcase the potential can increase the flow of ideas."



Research, Science and Technology Priorities speech, 24th August 2009

3. Fulfilling the national government's policy agenda

All research funding is (should be?) now seen as an investment:

'The University has many objectives. Firstly, it has a very strong mission to be relevant to business and society. How does it do that? In a range of ways including having relevant and useful degree courses. But a direct and tangible way is by actually working directly with business or government to help achieve their policy objectives. That's a way in which academic research can be applied in a completely direct way .(...). Grant money from the government to universities under a contestable system is increasingly being construed as an investment, not a grant. That 's the main change. It's an investment in the future of New Zealand, and in particular, New Zealand's economic growth and social development. That's a key driver now. And if you can't demonstrate that in your grant application, you won't get grants.' (Interviews, Mark Burgess, UniServices, 2011)

• A new vision of what the university is for?

4. The Myth of IP

- 'Although they are successful, and are touted as a great commercialisation engine, their emphasis on securing IP doesn't actually don't do themselves any favours. They would be much better off to concentrate on building good relationships with business (Interview, Chris Boalch, 2011)
- "UniServices restrictions around IP has made life really difficult" ... in order to secure my current contract with Fisher and Paykel Healthcare I pretty much had to give away my IP". i.e. IP should be treated as a 'loss leader' or pragmatic sacrifice (Interview, Merryn Tawhai, 2011).
- So why is so much effort placed on generating patents? [possible answer = VC KPIs?]



"Before you leave, we have to do a brain scan to see if you're taking any intellectual property with you."

Case Study 2: Institute for Innovation in Biotechnology



Biotech building opened

Prime Minister the Rt. Hon, John Key last month opened state-of-the art facilities housing the Institute for Innovation in Biotechnology. Hosted by the School of Biological Sciences, the institute brings academics and industry together to share infrastructure, facilities, and expertise. "[It] is at the cutting edge of an international trend toward academia and industry working more closely together, to increase apportunities far innovation and accelerate scientific discovery to market,* says Director Professor Joerg Kistler.

Photo: John Key, Joerg Kistler and Vice Chancellor Professor Stuart McCutcheon



New spaces of entrepreneurialism

Commercialisation - Research - Education - About - Working for us - Contact - Staff YouTube Channel
About > Evolve July 2013 > Evolving Ecosystems
EV/OLV/INIC ECOSYSTEM DELUV/EDB ON COV/EDMINENT

EVOLVING ECOSYSTEM DELIVERS ON GOVERNMENT BIOTECH VISION



How do you define a modern university in 2013?

The world's best are moving rapidly away from the 'ivory tower' notions of yesteryear, where elevated learning was a pure pursuit that stood apart from the commercial business imperatives of the 'real' world.

Today, leading universities such as Cambridge, The University of

California in San Francisco and The University of Auckland are embracing a very different model – a fusion of exceptional learning and industry engagement. These are the only three universities in the world using this model and for New Zealand it means delivering on a government vision for fuelling national economic growth through a vibrant, innovative biotechnology industry.

Previous issues of Evolve

SUBMIT

July 2013

Name

Email

- Evolving Ecosystems
- · Comvita and IIB
- One on one
- Awakening the Taniwha
- Vvvroom for a New Fuel

March 2013

Case Study 3: UoA Business School

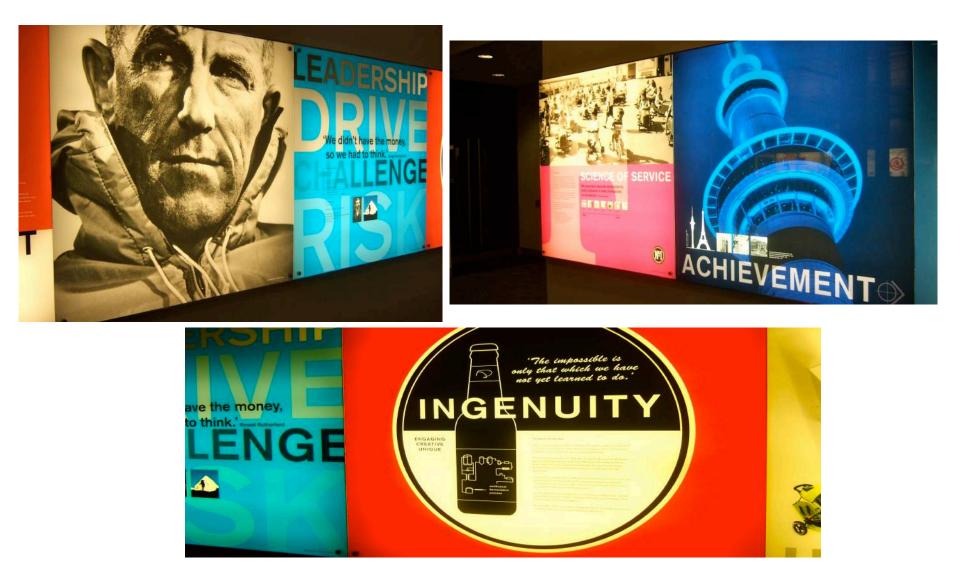


The new University of Auckland Business School is the result of the vision in 2001 by the then Vice Chancellor John Hood, now Vice Chancellor of Oxford University. He wanted to create, through an architectural design competition, an iconic building, a centre of teaching and research excellence that would help transform New Zealand into a more innovative, entrepreneurial economy.

Contractor::Fletcher Construction Company

Costt: £81.5 million

Business School 'hall of fame' corridor – celebrating NZ entrepreneurial sucess stories



Case Study 4: Producing Entrepreneurial Students

Masters in Commercialisation an Entrepreneurship

- 120 Points
- Part time study 18 Months
- Taught by: Centre for Innovation and Entrepreneurship

Programme highlights

- Provides students with the core knowledge and skills needed to commercialise and take to market new products, services and processes based on research discoveries, inventions, innovations and new ideas.
- You will learn how to test and validate customer needs and market demand, protect intellectual property, obtain funding sell research-related innovations into national and global markets, and develop a successful entrepreneurial venture.



Postgraduate Certificate and Masters in Commercialisation and Entrepreneurship

Goals of the programme

The Postgraduate Certificate and the Masters of Commercialisation and Entrepreneurship will provide you with the core knowledge and skills needed to commercialize and take to market, new products, services and processes based on research discoveries, inventions, innovations and new ideas.

You will also become "business informed" by developing an understanding of business concepts and how business actions are made. This will include learning how to work with business people to test and validate customer need and markst demand, protect intellectual property, obtain funding, sell research related innovations into national and global markets, and develop a successful entrepreneurito wenture.

An important part of the masters programme will be a project that investigates the



Entrepreneurial Pedagogy (cont.) Centre for Innovation and Entrepreneurship

"The purpose of the Centre for Innovation and Entrepreneurship (CIE) is to nurture business-savvy scientists, engineers, technologists and creative professionals by developing an entrepreneurial and innovation curriculum.

Key initiatives include:

- Inspiring and motivating students with presentations by outstanding business leaders.
- Providing network opportunities for staff and students through workshops, seminars and open forums with industry.
- Operating the University of Auckland Entrepreneurship Challenge the studentled SPARK initiative.
- Evolving the Entrepreneurial Ecosystem within and beyond the University of Auckland Business School.



E.g. 2-Day PhD Research Innovation and Commercialisation Course

Programme

The following programme outlines the two-day PhD Research Innovation and Commercialisation Course to be held on Monday 12 and Tuesday 13 May 2014.

Day 1

Session

The (economic) role of science in society and its impact on career paths

Brief overview of trends and tensions on how different groups (eg, science policy makers, universities, industry; and science, society and technology researchers) in society perceive the role of science and the impact this has on research processes and careers.

Stories from the frontline post PhD

Two guest speakers will share their experiences as academic entrepreneurs and their careers in industrial R&D.

From science to \$\$\$

Key concepts associated with capturing value from science, such as uncertainty, innovation, intellectual property, entrepreneurship and markets. The session will also provide an overview of strategies for creating and capturing value from science. The presentation will be followed by case discussion.

Identifying ideas and opportunities for creating value from science

Workshop on identifying potential commercial applications for the students' research.

Dinner with presentation of team ideas

Figuring the entrepreneurial student



Massey University launches the latest in it's 'Engine of New Zealand' brand campaign

To what extent is this a New Zealand Story?

New Zealand highlights four elements that reflect more global trends in the reform of public universities globally.

- 1 marked shift from the university's traditional academic and 'social good' missions towards increasingly pervasive emphasis on income-generation and commercialisation;
- 2 creation of new kinds of self-managed, enterprising subjects,
- 3 new hierarchies, divisions and tensions within and between universities,
- 4 new kudos and moral value attached to revenue creation and entrepreneurialism

Conclusions: How is entrepreneurial model changing the meaning and mission of the University?

1. New discourse for framing higher education based around keywords of commerce & industry:

'outputs', 'impact', 'relevance'; 'IP'; 'knowledge transfer'; 'business incubators'; 'investment opportunities'; 'capacity building'; 'innovation ecosystems' etc.

2. Changing what 'counts' as valid knowledge & research

diverting funds to promote research university managers deem 'important' or 'strategic'. Also allows greater govt. interference in setting research agendas)

3. Creates new opportunities for some, but also fuels new social divisions

- between academics and management, also *between* academics (e.g. 'star player' syndrome; Increased competition for resources between faculties (e.g. privileging of STEM subjects at expense of arts).
- **4.** Intensifies neoliberalising trends especially NPM, internationalisation, competition etc ... which lead to:
 - Strengthens idea of higher education as private investment rather than public good. (UoA Strategic Plan explicitly refers to 'private good research').
 - **Given States and Stat**
 - transformation in the 'temporarality of pedagogy & knowledge production' (i.e. what is valued and how value is measured
 - displacement of trust (NZ universities now 'low-trust organisations')

5. Financialisation of university activities – and the rise of "KPI Culture"

- teaching and research increasingly evaluated in terms of the financial indicators and the rationality of commerce.
- Alongside research output 'impact factor' weightings, the number of PhD completions and amount of external income generated have now become key performance indicators ('KPIs') for pay and promotion in the university.

6: Emergence of new kinds of university subjects and spaces

'New constellations of roles are created as people operate at the intersections of the triple helix, leading "double" and even "triple lives" in university, industry and government, simultaneously and successively. (Etzkowitz and Viale 2010: 595)

- Rise of new kinds of entrepreneurial academics/students subjects who will contribute to national wealth creation by being more attuned to economic imperatives, and more enterprising in their use of knowledge (the imperatives of 'translational research').
- Rise of 'metaexperts' (Brenneis 2012: 295) consultants increasingly shaping the new languages and practices of university governance
- Proliferation of [highly paid] cadre of administrators, accountants and managers (at expense of academics) - with executive salaries
- New spaces/practices of learning: e.g. BAs in 'Leadership' and 'Entrepreneurship' and MA in Bio-Science Enterprise
- Creating new 'spaces of exception'; university equivalent of the 'tax-haven', merchant bank & holding company

The new moral economy of the university – and its dilemmas

Discourse of 'Relevance' Combined with Entrepreneurship and Commerce is promoting idea that revenue-generation is a form of virtue

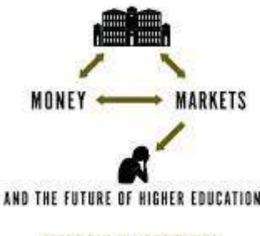
- protagonists of entrepreneurial model don't see these changes as posing any challenge or contradiction to the traditional 'public good' role of university education and knowledge: private investment and personal enrichment are the new public good.
- But commercialisation is creating new ethical conundrums (e.g. Commercial sensitivity – knowledge tied up for years in confidentiality clauses)







THE GREAT UNIVERSITY GAMBLE



ANDREW MCGETTIGAN

