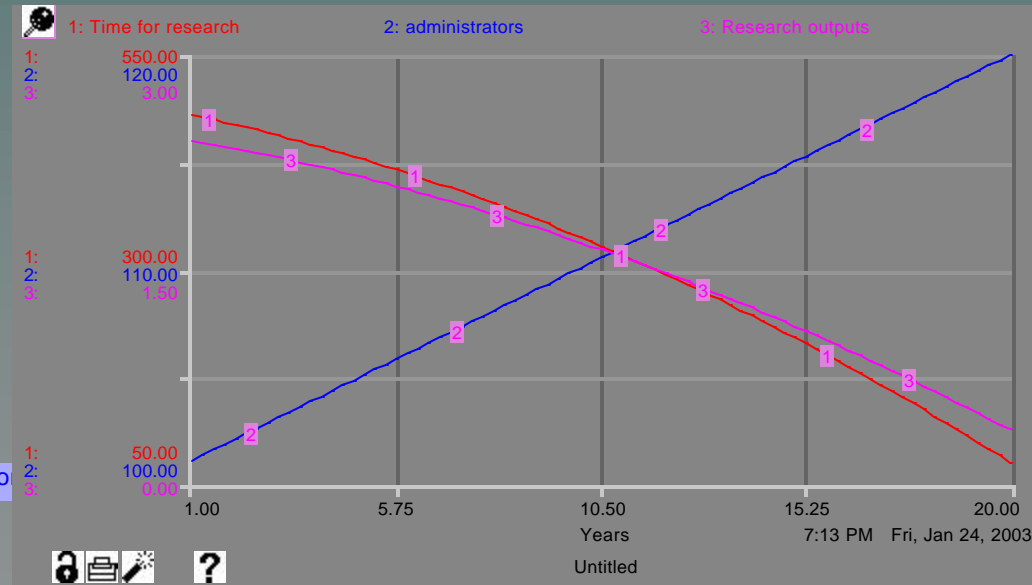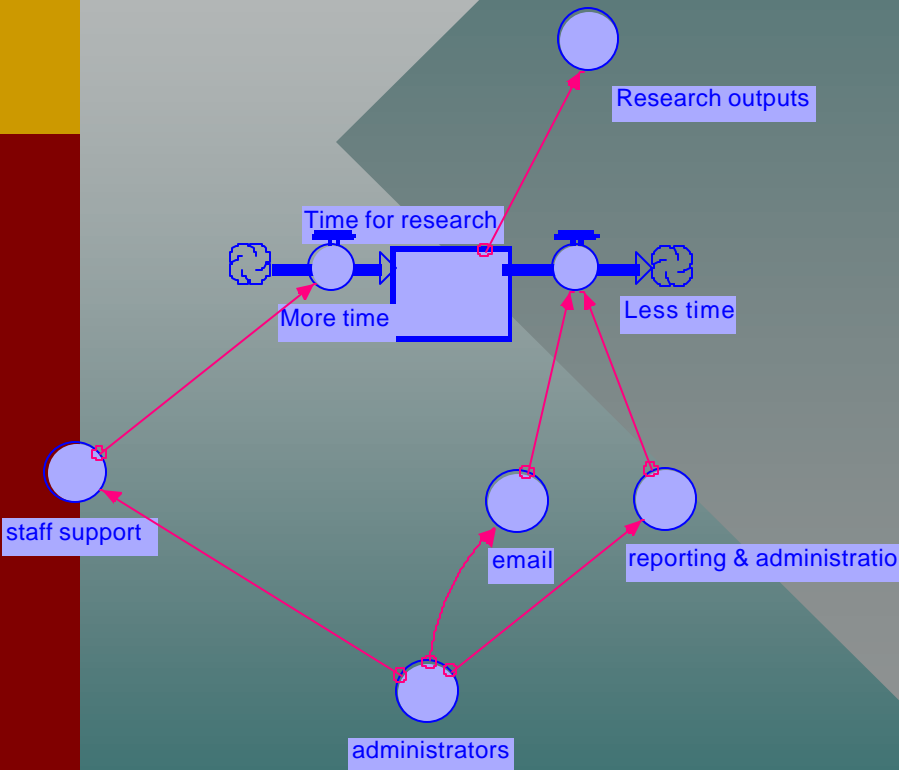# Promoting university research: Institutional Economics of Creativity

Abstract

Managers of universities seek to make researchers more accountable by planning, controlling and measuring inputs and outputs. But these efforts can easily prove counterproductive by interfering with creative processes. Simple SD model simulations of the unintended effects of managers' policies intended to increase research profiles illustrate how unintended feedback effects can occur. Literature and interviews suggest more positive and effective ways to increase the quality and quantity of university research.
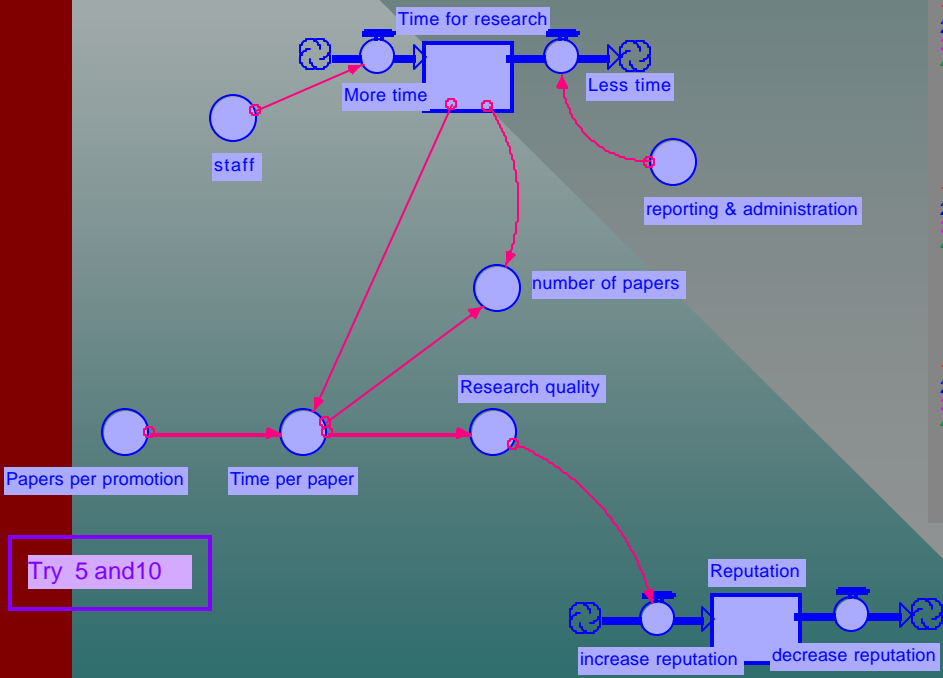
This presentation resembles work in the not entirely serious *Journal of Irreproducible Results*. However, there is a serious battle underway between an older vision of universities as places of contemplation, creative thought and social criticism versus a newer concept of universities as revenue generators for private interests managed on a corporate model.

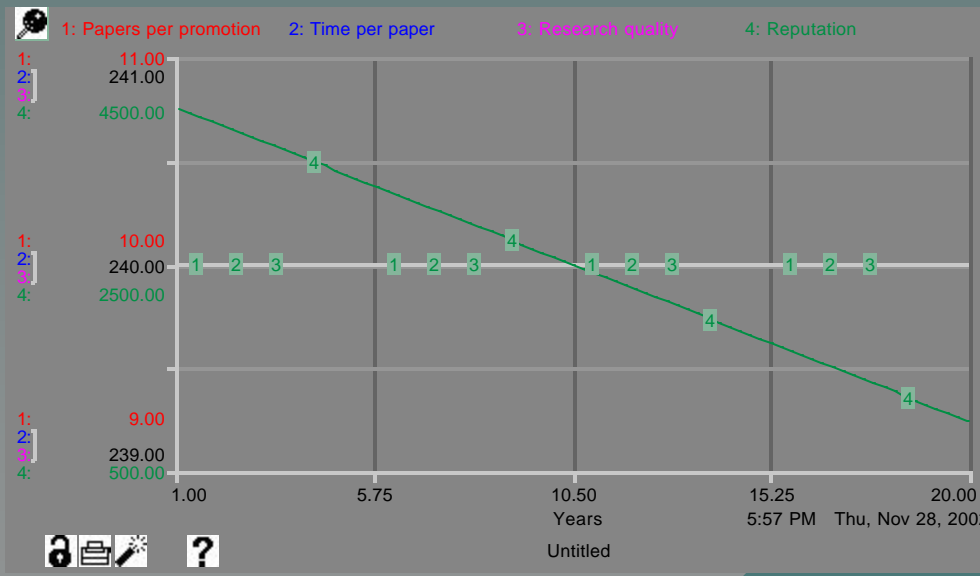# More administrators, less output

Research outputs

Time for research

More time   Less time

staff support

email   reporting & administration

administrators

Try +time and -time (linear increase
and decrease in administrators)

More papers for promotion, lower quality papers

Time for research

More time — Less time

staff

reporting & administration

number of papers

Research quality

Papers per promotion — Time per paper

Try 5 and10

Reputation

increase reputation — decrease reputation

1: Papers per promotion   2: Time per paper   3: Research quality   4: Reputation

1:	11.00
2:	241.00
3:	
4:	4500.00

1:	10.00
2:	240.00
3:	
4:	2500.00

1:	9.00
2:	239.00
3:	
4:	500.00

1.00   5.75   10.50   15.25   20.00

Years

5:57 PM   Thu, Nov 28, 2002

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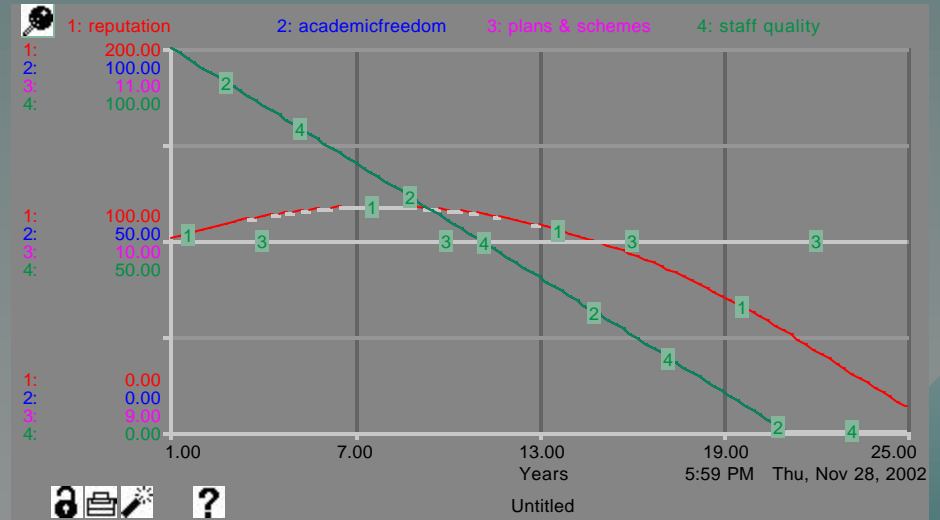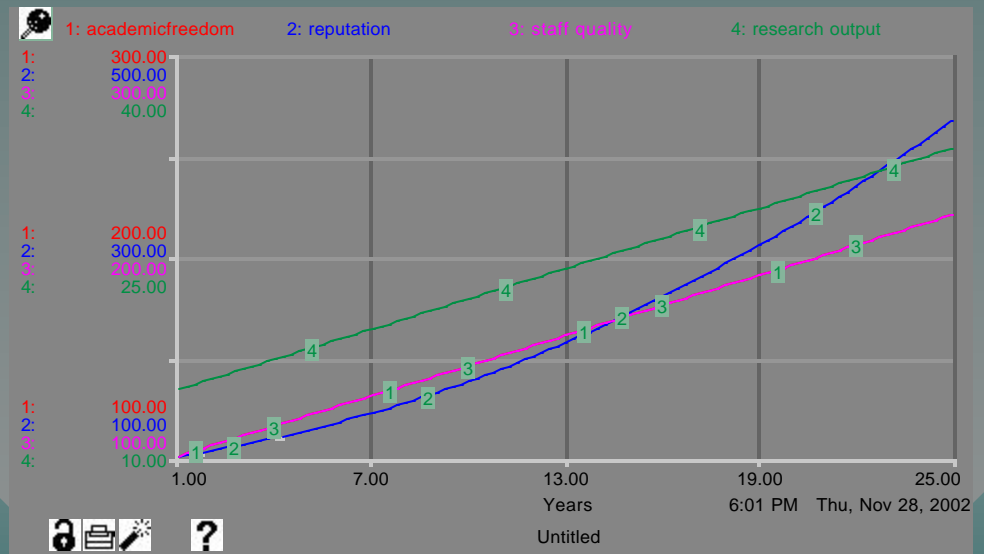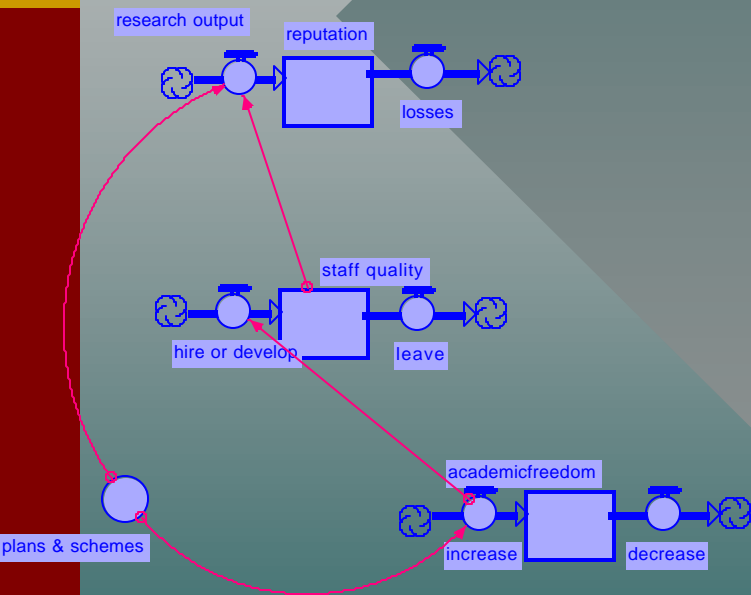
More incentives, worse faculty
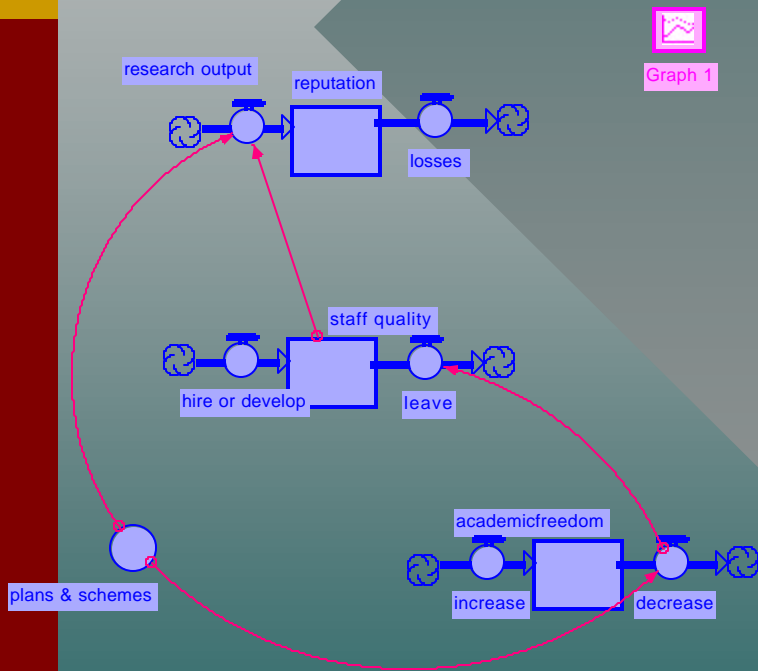
Assumptions: Try 5 and 10 for plans & schemes
Academic freedom is a key perk.
Research output is a function of staff quality and incentives.

More freedom more output

Assumptions: Try 5 and 10 for plans& schemes
Here the schemes increase freedom and attract staff

Paradigm

- Managers need to adopt the marketing concept relative to faculty who are "internal clients"

- Understand benefits from faculty point of view that will motivate increased research output

- Empower and enable staff to carry out research

- Use "inverted pyramid" concept of management as service providers to faculty

Institutional Economics

- "Rules matter" (Bromley)

- Customs, laws, ideas, contracts, culture, habits, regulations, organisations

- Collectively created structures that shape human behaviour

- Management tries to invent institutional innovations to improve efficiency and effectiveness

- AEA founder: Richard T. Ely

Main sources consulted:

- Kotter, John. *The Heart of Change, Harvard Business School Press, 2002*

- *Liston, Colleen. Managing Quality and Standards (Managing Universities and Colleges, Guides to good practice),* Open University Press, Buckingham UK, 1999

- Walton, Mary. *The Deming Management Method*, Perigee Books, New York, 1986.

- Bunge, Mario. *Social Science Under Debate.* Uni of Toronto Press, Toronto, 1999.

- Sulston, John. *The Common Thread.* Bantam Press, London, 2002.

- Kummerow, Jean, ed. *New Directions in Career Planning and the Workplace, 2nd ed.* Davies-Black Publishing, Palo Alto, 2000

- *Research and Practice in Human Resource Management* V 8 #2

- Notes from the university Research Forum & R & D committee

- Interviews with Curtin University researchers & research managers

- Adams, Scott, Dilbert website

- Personal experiences

The Heart of Change by John P. Cotter
Harvard Business School Press, Boston, 2002

- Surveyed 400 people in 130 organisations

- 8 step model of organisational change

- Uses "stories" or case studies to illustrate steps

- Chapter summaries are bullet lists of "what works" "what does not work"

John Kotter, *The Heart of Change*

- "Behavior change happens in highly successful situations mostly by speaking to people's feelings...even in organisations focused on analysis and quantitative measurement"

Emotions in relationship to change

- Undermining
  - anger, pessimism, arrogance, cynicism, panic, exhaustion, insecurity, anxiety

- Facilitating
  - faith, trust, optimism, pride, passion, excitement, hope, enthusiasm, mutual respect

- Kotter p. 180

Discussion questions

- Why do you do research?

- What could the university do to increase your research output?

Research is a creative activity requiring devolution of control

- The "product" is created by experts, managers don't understand research outside (or even in) their own field

- Managers may make research processes less efficient by imposing controls that reflect lack of understanding

- We aren't interchangeable, we all have specialised expertise

Hayek v socialists:

Decentralised market decision making works better than central planning because no one at the centre can have as much information as those directly involved.

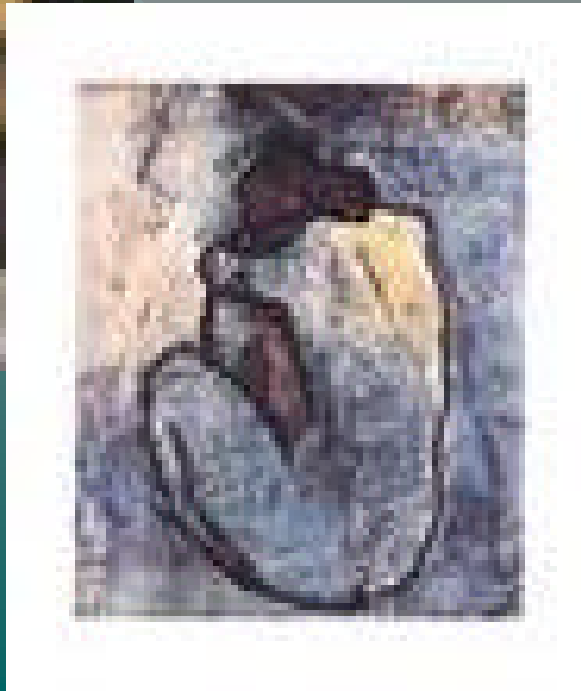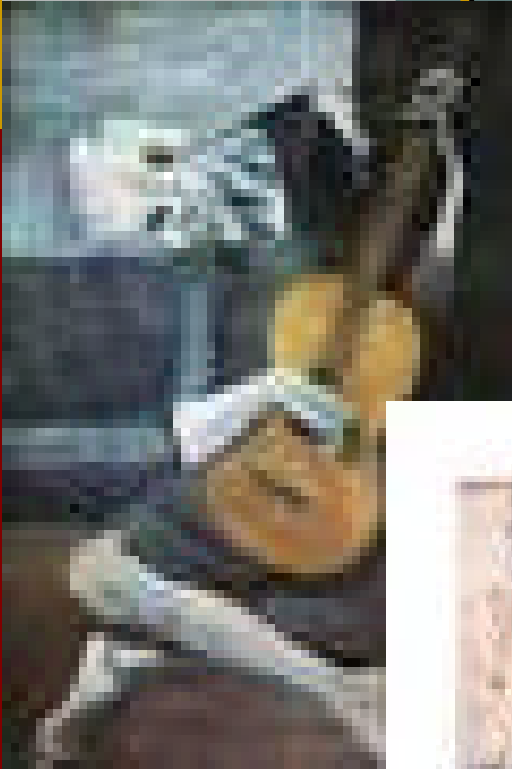# John Sulston: Nobel prize for human genome

- "Even more valuably, they were given all the time they needed, and did not need to waste any of it on administration"

    (article on Sulston describing Cambridge lab that produced 9 Nobel prizes)

- Self-effacing

- Raised money to support staff

- Fought for ethical vision

Picasso fails to follow the strategic plan

"Pablo,

Regrettably you are using too much blue, our strategic plan clearly calls for a balance of colours.

The Director

James Watson's supervisor told him to work on hemoglobin

- On Feb. 28, 1953, Francis Crick walked into the Eagle pub in Cambridge, England, and, as James Watson later recalled, announced that "we had found the secret of life."

- Actually, they had.

- "My impression was that we were just, you know, mad keen to solve the problem,"

  Francis Crick

"banish fear" (Deming's 14 points)

- Fear "can become a significant liability, not an asset" "We have yet to see great transformations launched with fear as the primary and sustaining force."

- Because "people eventually focus on self-preservation rather than organisational transformation"

- Sabotages teamwork essential for success

- Kotter p. 27-28

"Trust your staff" (Deming)

- Implicit message of heavy accounting and "command and control" procedures, oversight and approvals for minor decisions is:

- "You are not to be trusted and you will rort the system if we don't watch your every move"

- "And by the way, we want your loyalty and extra effort required to make us a world class organisation."

- Human response: "Get stuffed, I'll put in minimum effort and fool you into thinking I'm productive by playing your games."
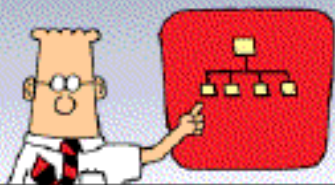
Go look at best practice

- "Change leaders are finding ways to get their subordinates, colleagues or bosses to visit other, better firms."

- Kotter p. 33

Improve communication for buy-in

- Keep it simple

- Speak to anxieties, frustrations, distrust

- Less is more: "rid communication channels of junk so important messages can go through"

- Don't "undercommunicate"

- Tell the truth

- Don't foster cynicism by saying one thing and doing another

- Kotter p. 101

Empowering action

- What works
  - feedback, reward systems that inspire and build self-confidence, re-tooling disempowering managers

- What does not work (Kotter p. 104-106)
  - Often the single biggest obstacle is a boss
  - Ignoring bosses who disempower subordinates
  - Solving the boss problem by taking away bosses' power.
  - Need to re-educate bosses perhaps by shifting them to different positions that will change their perspective.

Quality & Standards, 1999
by Colleen Liston (Curtin Uni)

- Executives should be willing to support and align the organisation's resources behind the front line staff and always be a living embodiment of the service culture they espouse. Middle managers have to shed their control and compliance garb and instead clothe themselves as facilitators and coaches. P. 127

- Albrecht and Zemke (1985) studied examples of outstanding service organisations and came up with five steps to transform a *factory style* management mentality to a *customer-driven* one. The magnitude of the task is encapsulated in Albrecht's well-known chapter "How to teach an elephant to dance." (quoted by Liston, p. 127

"Empower employees with discretion"

- Ownership of the initiative must be spread evenly throughout the organization and the pyramid of authority reversed to support the front-line staff with a facilitating leadership style. (Liston, p. 129)

- Communications, data and other systems and structures should be re-aligned to support the client interface.

- There are external clients and internal clients (staff) and management should serve both, especially internal clients.

- To get more research, ask researchers what they need—then give them what they need insofar as possible

Conversation over beer with a highly successful business middle manager:

- Me: How would you go about getting more output out of university researchers?

- Him: I would ask them. And I would give them what they need.

People are the key

- When we talk about quality research we name names:

  - Newton at Cambridge

  - Bardeen at Illinois (two Nobel Prizes, invented transistor)

  - Hendry at Oxford

  - Wheaton at MIT

- Researchers are one-offs, not commodities, they need to be collected and taken care of like something rare and valuable

- "many companies recognize that human assets provide the best form of competitive advantage. In this respect, work values, organizational commitment, compensation and employee turnover remain current and urgent issues in the workforce of the 21st century

- Chay Yue Wah, editor

- *Research and Practice in Human Resource Management* V 8 #2, July 2000

The the university Debate on R&D: Issues

Top down v bottom up research objectives

- Can (university) governments pick winners?

- Which objectives? How to choose?

Operationalising incentives for applied research

- Conventional rewards for publication ignore industry clients

The HR management dimension

- How to recruit and retain good researchers

- How to keep researchers happy & enable research

Motivation, "research culture," & collaboration

- How to foster teamwork through incentives

Current system at Curtin University: Rationing research funds by guidelines

- Can't use research program funds for x,y,z

- Application process takes time

- So fewer applications than research $$

- This system is probably inefficient

- Deadweight losses when use of funds is restricted can be considerable

- Why restrict use of funds?

"Trust your staff" (Deming)

- Suggest simplifying administrative processes

- Loosening up spending requirements to try to stimulate more proposals

- Suggest targeting funds better by trying to get a surplus of applications so we only fund the best ones based on outputs.

- Substitute quality rationing or outcomes rationing or first come first served for guidelines or spending limits rationing.

The scarcest resources:
Can we find, attract, develop or create more of these?

- Faculty time

- Faculty motivation (fire in the belly to do research)

- Original, innovative research ideas

- Research skills and expertise

- Excellent researchers

Create quick wins

- Focus on a few achievable things
  - Simplify administrative systems so they steal less time

- Remove staff frustrations
  - Plans that appear to restrict their academic freedom

- Something visible but small is a symbol of ability to do bigger things and creates credibility needed to take on harder changes where there is more opposition

Suggested research dean job description and style

- Spend most of the day hustling for money
  - Helping people write grants (implies getting to know what they are on about, brokering formation of research teams)
  - Raising money for endowed research chairs
  - Promoting collegiality by seminars, working groups, informal discussions, get people excited about doing research
  - Let people work on what they are interested in
  - Don't worry about how they spend the money. Count the outputs, give money where you think it will produce the most outputs, with the no strings attached.
  - Don't worry if a good idea doesn't conform to plans

Summary

- Increasing research output is an internal marketing job with the faculty as the customer (who is always right)

- Requires an inverted management structure with management serving researchers' needs not the other way round

- Command and control management style could lead to quality losses, solution (Kotter, 2002) is for managers to learn a new style where they give up control