

From science to dollars –  
a classic growth strategy  
but playing it to the strengths of NZ

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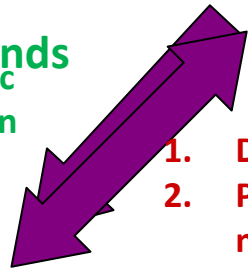
# Main points

- Why classic arguments and approaches to analyse wealth creation from research are less useful in the NZ context
- Need for rewriting the rules and using the strengths of NZ
- Building blocks for regional change
  - People
  - Networks
  - Failure
  - Getting the most from good ideas
  - Innovation village

# Evolution in the Research Triple Helix

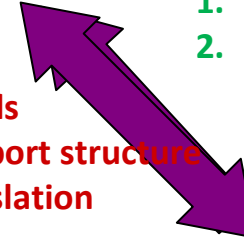


- 1. Conditioned funds
- 2. Strategic direction



- 1. Decision input
- 2. Performance measurements

- 1. Economic growth
- 2. Strategic direction



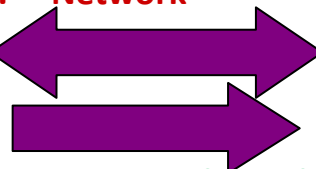
- 1. Funds
- 2. Support structure
- 3. Legislation

The second academic revolution  
The first academic revolution  
(Etzcowitz 2004):

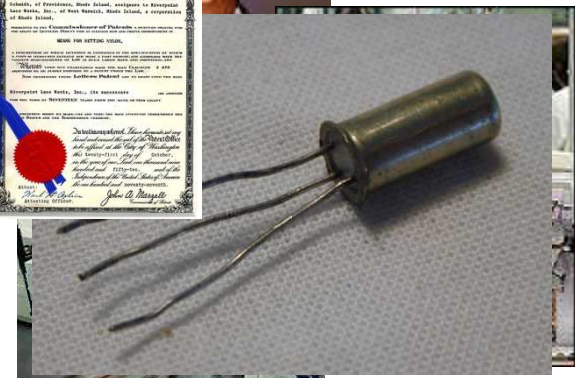
Third mission: Economic and social development; Teaching and research continued



- 1. Funds
- 2. Research results
- 3. Research agendas
- 4. Network



- 1. Research results
- 2. Patented innovation
- 3. Research results
- 4. Graduates
- 5. Access to networks



# So, what is the issue?

- Most of the models and understanding of getting from science to dollars are relevant for countries with a) large MNCs, b) easy access to large markets and c) deep pockets
- Playing by those rules is a serious disadvantage to NZ
- Use organisational learning, regional innovation and knowledge management to develop alternative strategies

# People

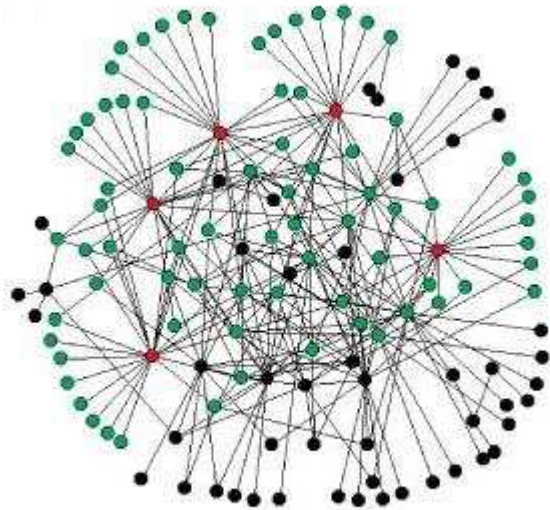
- Right competencies and values
- Reduce individual risk
  - job opportunities for failed entrepreneurs
  - culture of second or third shot



- Catalyst for action -make success of others visible
- Students are the main actor in creating dollars from science



# The dynamics of networks



Scale-free

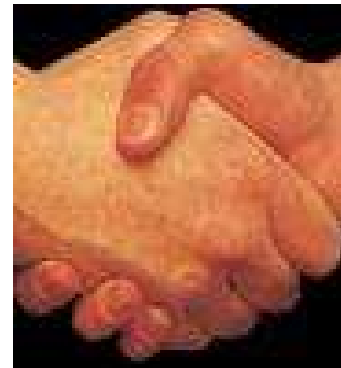
Based on social norms, access to networks, social sanctions, reputation and trust

## *Strengths:*

1. Access to knowledge
2. Low cost and flexible
3. Encourages variation and learning
4. Can handle uncertainty - supports “bumble-bee” innovation

## *Weaknesses:*

1. Path dependent
2. Difficult to enforce outside the network / social setting
3. Costly and slow to develop



# The power of failures

*“It is better to have enough ideas for some of them to be wrong, than to be always right by having no ideas at all.”* Edward de Bono

*“Only those who dare to fail greatly can ever achieve greatly.”* Robert F. Kennedy

*“I have not failed. I've just found 10,000 ways that won't work.”* Thomas Alva Edison



# Get the most out of good ideas...

- Responsive science system
- Stimulate bottom-up collaboration
- Educate the value chain in being part of innovative projects
- Secure local demand for new products
- Capture and reuse learning from failures
- SMEs can hit the ground running – if they have the time and human resources to engage

# Innovation village

- Fenced off, but still collaborating with the outside
- Collective effort in opportunity *construction* (notice: not recognition)
- Low cost collaboration – trust based transactions
- Distributed risks
- Local funding



Thank you