Creating an Environment of Innovation: challenges and opportunities in Australian context



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Global Forum 2015
28-29 September
Oulu City Theater, Oulu, Finland

Agenda for Today

- Innovation through Science, Technology and Knowledge
- · Catalysts for new wave of innovation
- Innovation in Australia
- Innovation and economic development
- Overcoming innovation challenges
- Concluding Remarks

Evolution of Science

"Scientific research lives and flourishes in an atmosphere of freedom-freedom to doubt, freedom to enquire and freedom to discover.

These are the conditions under which this new laboratories has been established".

Sir Ben Lockspeiser

First President of CERN Council, October 1954

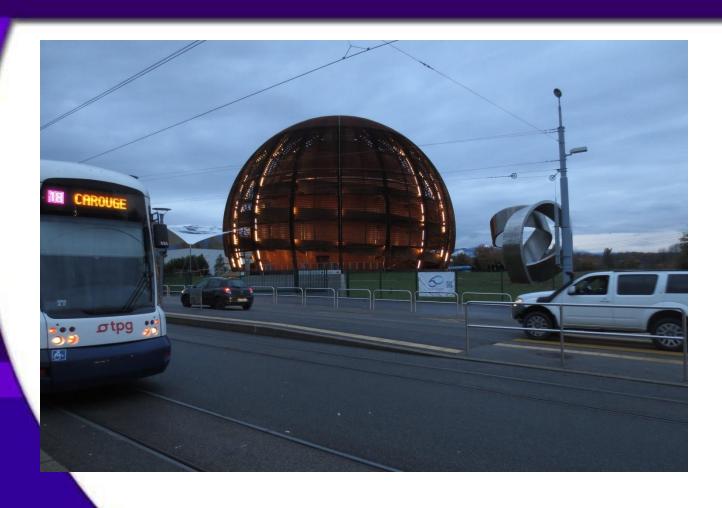
CERN



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Catalysts for Innovation

- INNOVATION=CREATIVITY + COMMERCIALISATION
- INNOVATION=PROXIMITY + CONVERGENCE

"Microsoft 's only factory asset is the human Imagination"

- Bill Gates

Knowledge

"If I had an hour to solve a problem,I'd spend 55 minutes thinking about the problem and 5 minutes thinking about the solution" ------ Albert Einstein

"The greatest enemy of knowledge is not ignorance, it is the illusion of knowledge." -Stephen Hawking

Innovation, Creativity and Entrepreneurship are about knowledge-creating new possibilities through combining different knowledge sets

A New Wave of Innovation

Internet between business opportunities and citizen expectations

- New ways of innovation
- Development of Social Networks
- Impact of the Internet of Things
- Creating Business Value through Trust

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The Internet of Things(IoT)

- 25 billion connected devices by 2020 to build the *Internet of Things*(IoT)-three for every person on the planet
- Analysts predict that IoT market will grow to \$8.9 trillion by 2020
- LoT is set to revotionise the way business is conducted

Immediate Opportunities

By 2020 Enterprises will need to manage 14 times more data, so more storages are needed

Innovation in Australia

Innovation has been defined by the Business Council of Australia as "the application of knowledge and technology to create additional value. Innovation can be incremental, or it can be transformational. At its core, demand for innovation is driven by the need to find solutions to problems.

Innovation is essential to achieve the next wave of growth and investment in the context of significant global forces of change."

Innovation in Australia

We developed the first electronic calculator for people with vision impairment wireless internet technology and the Macquarie Dictionary., at Macquarie University

Innovation in Australia

Schmidt to lead ANU from 2016

Nobel laureate professor Brian Schmidt has been announced as ANU's next vice-chancellor. Schmidt, who most recently made headlines calling for the establishment of a national agency to address Australia's poor track record in science, technology and innovation, has worked at the university for 20 years. He won the 2011 Nobel Prize for Physics and will be the university's 12th vice-chancellor

Australian key inventions that changed the world

- Black box flight recorder(1961)
- Electronic pacemaker(1926)
- Google Maps(2003-2004)
- Medical application of penicillin(1939)
- Polymer bank notes(first circulated in Australia in 1988)
- Cochlear implant(bionic ear)-(1978)
- Electric Drill(1889)
- Gardasil and Cervarix cancer vaccines(2006 by Professor Ian Frazer)

Australia's Most Recent Innovation

- Tribesta: lets you alert mates and loved ones when you're in trouble
- The Sydney-based founder of Tribesta Kathleen Kenny, has been working on the app for almost five years
- Click on the 'watch me' function to let flatmet or parner to know where you are and that you're OK
- Click on the 'alert' function where you're feeling vulnerable

Innovation and economic development

· In his best-selling book, The World is Flat: The Globalised World in the 21st Century(Penguin, 2006), Thomas Friedman argues that developments in technology and trade, in particular information and communications technologies(ICTs), are spreading the benefits of globalization to the emerging economies, promoting their development and growth.

Are you ready?

- Built on Knowledge
- Built on Reputation
- Built on disruptive Technology & Economy
- Built on Commitment
- Built on Trust

Last but not the least

> Innovation is built around managing risks

Concluding Remarks

- Innovation and creativity are vital to Economic growth
- Wealth is the byproduct of big ideas
- Balancing Mind, Body and Soul
- Technology and Knowledge: catalysts for Innovation

"When you have money in hand, only you forget who are you.

But

when you do not have any money in your hand, the whole world forget who you are"

It's Life....!

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Thomas Friedman in the New York Times

- "When we were young kids growing up in America, we were told to eat our vegetables at dinner and not leave them. Mothers said, 'Think of the starving children in India and finish your dinner.'
- And now I tell my children: 'Finish your homework. Think of the children in India, who will become CEOs and make you starve, if you don't?"



-How times change!

- "The way I measure my life is, 'Am I better than I was last year?'
- Satya Nadela
- Weekend MBA '97



What do you think?



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Have a G'Day

