



2004 Innovation 'Thought Leadership' Roadshow

*Sydney, 23 November 2004
New South Wales*

*Canberra, 24 November 2004
Australian Capital Territory*

*Melbourne, 25 November 2004
Victoria*



Hank Chesbrough, Executive Director, Centre for
Open Innovation, Haas School of Business,
University of Berkeley



John Wolpert, Executive, BRIDGE Services,
InnovationXchange

Overview

The IBM Innovation 'Thought Leadership' Roadshow was hosted by IBM from 22 -25 November 2004 in Sydney, Canberra and Melbourne.

The Roadshow comprised a series of formal dinners, luncheons, roundtables, media briefings in three capital cities, as well as a live televised presentation at the National Press Club in Canberra, Australia's national capital.

The two keynote speakers on the Roadshow were Professor Hank Chesbrough, Executive Director of the Open Innovation Centre at the University of California, Berkeley and Adjunct Professor John Wolpert, from the InnovationXchange BRIDGE Program.

Professor Chesbrough is an international expert on innovation, author of the prize-winning book "Open Innovation" and was named one of the top 50 technology and business leaders in 2003. He is also an accomplished and highly regarded speaker who addressed audiences on the role and importance of innovation for Australia and Australian businesses as well as Government.

Professor John Wolpert is the InnovationXchange's BRIDGE Services Executive and former Lab Director of Extreme Blue, IBM's incubator for talent, technology and business concept innovation. Professor Wolpert is an entrepreneur and innovator with a passion about how companies innovate and a long-term vision for 'open innovation'. John Wolpert is also an Adjunct Professor with the Faculty of Commerce and Economics at the University of New South Wales and his work on the subject of innovation has been published in the Harvard Business Review and Harvard Business School Press.

The roadshow program highlights included:

- Launch of the Roadshow in Sydney by the NSW Treasurer, The Honourable Michael Egan
- Dinner presentation to approximately 300 government, business and research thought leaders in Sydney, Canberra and Melbourne.
- Live broadcast of Professor Chesbrough's address to the National Press Club, Canberra
- Luncheon presentation to the Victorian State Government Innovation Council Advisory Board
- Luncheon presentation to the A/g Deputy Vice Chancellor (Research) of the University of New South Wales and senior staff of the Faculty of Commerce and Economics
- Television interview with Sky News and face to face interviews with five leading journalists
- Presentation of an International Fellowship Award to Professor Chesbrough by the InnovationXchange

The Purpose and Message

Whilst Australia has had 13 years of strong economic growth, low interest rates, increasing employment and real wages growth, the key drivers of this performance, namely strong population growth, high workforce participation rates, and improved productivity as a result of microeconomic reforms and investments, such as ICT, are all now starting to decline in impact. As a result, the Australian Government's Department of Treasury and Finance predicts that over the next 40 years, Australia's average annual GDP growth of 4 per cent is going fall to 2 per cent a year. In order for Australia to sustain growth in such an environment, competitive advantage must come from innovation, at the individual, organisational and national level.

The purpose of the Roadshow which was part of an IBM Australia Government Program Innovation Policy Driven Growth initiative, was to establish an innovation thought leadership position for IBM in Australia and establish an environment and the government support necessary to create for IBM the opportunity first in Australia and then worldwide; through BCS, hosting and access to new clients, for new market opportunities for IBM. To achieve this goal Government Programs implemented a number of initiatives in 2004 of which the Innovation Roadshow was the final event.

One of the key messages on innovation can be illustrated by the following excerpt from Professor Chesbrough:

“Companies that don't innovate die. This is one certainty your company faces in a complex world. But how should your company innovate? While the key to successful innovation once lay in the controlled environment of the corporate laboratory, today the widespread distribution of useful knowledge makes such control unfeasible. Competitive advantage now often comes from leveraging the discoveries of others”.

Professor Henry Chesbrough

During the course of the roadshow this message was applied to a broader context by stressing that Australia's long term success depends on the creation of innovation friendly government policies, educational systems and an innovative culture across the nation. Around the world, governments are looking for new ways to devise economic development and competitive advantage for their nations; businesses are seeking top-line growth after an extended period of cost-cutting; and universities are reconsidering the relevant skills and disciplines that will shape 21st century business. Both Australian SMEs and multinational corporations such as IBM have an important role to play to ensure that Australia takes the initiative and becomes a leading innovative country in the region and the world.

NSW University Adjunct Professor John Wolpert spoke about the InnovationXchange BRIDGE project, of which IBM is a founding member, and which has been designed to put open innovation to work. The IXC's Trusted Intermediaries work between companies under a strict Code of Ethics and non-disclosure agreements to forge new business opportunities that do not risk Intellectual Property.

Feedback from the Roadshow has been excellent about the key innovation messages, the leadership of IBM in bringing the roadshow together and the role of IBM Australia in making Australia an innovative nation into the future.

Target Audience

The target audience for the Innovation Roadshow was Australian thought leaders from Government, including Ministers, Shadow Ministers and their staff and selected Members of Parliament, leaders of the Australian business community as well as the research and university sector.

An extremely large number of senior thought leaders accepted IBM's invitation to attend the events which were full to capacity in all three cities.

A total of some 400 people attended one or more of the Roadshow events including

- Seven Government Ministers, Shadow Ministers and Ministerial Chiefs of staff
- 17 CEO's and business leaders, including the CEO of Telstra, Australia's largest corporation.
- Seven University Chancellors, Vice Chancellors and Pro-Vice Chancellors

The Program

Highlights of the three day event are as follows.

Sydney – 23 November 2004

- Luncheon presentation to the A/g Deputy Vice Chancellor (Research) Ian Petersen of the University of New South Wales and 12 senior staff of the Faculty of Commerce and Economics



Members of the University of New South Wales

- Meeting with Ted Pretty, Group Managing Director of Consumer and Marketing, Telstra



The Hon Michael Egan, NSW Treasurer

- Launch of the Roadshow in Sydney by the NSW Treasurer, the Honourable Michael Egan. The Sydney Dinner was held at the NSW State Government Reception Room, at the invitation of the Treasurer, Level 41, Governor Macquarie Tower, Sydney



Fiona Balfour, CIO, Qantas Airways and Philip Bullock, CEO, IBM Australia Limited

Hank Chesbrough, delivering Presentation on Open Innovation



Keynote Speaker, Hank Chesbrough presented with the Visitor International Fellowship Award by Grant Kearney, Chief Executive, InnovationXchange

- Lunchtime presentation to a capacity audience of 200 business, government and academic leaders at the National Press Club, Canberra. Professor Chesbrough's presentation was broadcast live on national television to a viewing audience of approximately 300,000.



- Briefing with the Deputy Secretary and the Head of the Innovation Division, of the Department of Industry, Tourism and Resources, and the Deputy Secretary of the Department of Education Science and Training.
- Briefing with the Honourable Gary Nairn MP, Prime Minister's Parliamentary Secretary on Innovation and Chairman of the House of Reps Science and Technology Standing Committee.
- The Canberra Dinner was held at the historic Old Parliament House, Canberra.



Heather Ridout and Hank Chesbrough.

- At the dinner Heather Ridout, the CEO of the Australian Industry Group made a presentation to Professor Chesbrough



Hank Chesbrough, Heather Ridout, and Philip Bullock



John Wolpert, Executive, BRIDGE Services, Australian Industry InnovationXchange



View of Parliament House from Members Dining Room

- Luncheon presentation to the Victorian State Government Innovation Council, a committee established by the Victorian State Government Minister for Innovation to guide government policy in this area.



David Hanna, Chief Executive, Innovation Council and Hank Chesbrough



Members of the Victorian State Government Innovation Council

- The Melbourne Dinner event was held at the Sofitel Hotel. Attendees included Dr Ziggy Switkowski, CEO of Telstra, Australia's largest corporation, former Minister for Communications, Information Technology and the Arts The Hon Richard Alston, and a cross section of Victoria business, government and academic leaders.



Dr Ziggy Switowski, CEO Telstra, Philip Bullock and Guests



John Guest, Business Unit Executive, State Government & Education, IBM Australia and John Wolpert & Hank Chesbrough, Key Note Speakers



John Wolpert, Executive, BRIDGE Services Australian Industry InnovationXchange

Key Note Speaker Biography



Henry Chesbrough is Executive Director of the Center for Open Innovation at the Haas School of Business. He teaches in the Management of Technology Program at Haas, which is a joint program with Berkeley's graduate College of Engineering. Previously, he was an assistant professor of business administration, and the Class of 1961 Fellow at the Harvard Business School. He holds a Ph.D. in Business Administration from the University of California-Berkeley, an MBA from Stanford University, and a BA from Yale University, summa cum laude.

His research focuses on managing technology and innovation. His new book, *Open Innovation* (Harvard Business School Press, 2003), articulates a new paradigm for organizing and managing R&D. In this new approach, companies must access external and well as internal technologies, and take them to market through internal and external paths. This book was named a "Best Business Book of 2003" by *Strategy & Business* magazine, and the best book on innovation in 2003 on NPR's All Things Considered. *Scientific American* magazine named him one of the top 50 technology and business leaders for 2003 in recognition of his research on industrial innovation

His academic work has been published in *Harvard Business Review*, *California Management Review*, *Sloan Management Review*, *Research Policy*, *Industrial and Corporate Change*, *Research-Technology Management*, *Business History Review*, and *the Journal of Evolutionary Economics*. He is the author of more than 20 case studies on companies in the IT and life sciences sectors, available through Harvard Business School Publishing.

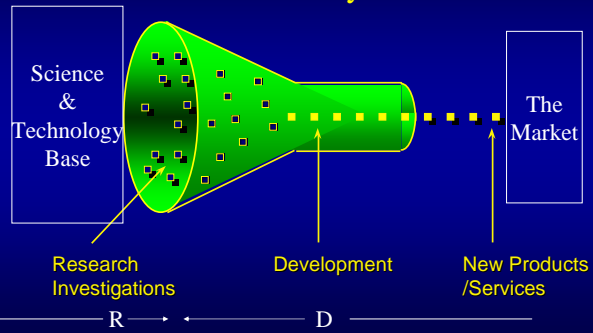
Prior to embarking on an academic career, he spent ten years in various product planning and strategic marketing positions in Silicon Valley companies. He worked for seven of those years at Quantum Corporation, a leading hard disk drive manufacturer and a Fortune 500 company. Previously, he worked at Bain and Company. He can be reached at henry@chesbrough.com.

Open Innovation: A New Paradigm for Industrial Research & Development

November, 2004

Henry Chesbrough
Center for Open Innovation
Haas School of Business, UC Berkeley

The Current Paradigm: A Closed Innovation System



Hidden Assumptions in the Internally-focused Innovation System

- If I discover it, I will find a market for it
- If I discover it first, I will own it
- The important technologies I will need can be anticipated in advance
- The best people in this field work for us

What changed? Five Erosion Factors

- Increasingly mobile trained workers
- More capable Universities
- Diminished US hegemony
- Erosion of oligopoly market positions
- Enormous increase in Venture Capital

Diminishing Economies of Scale: US Industrial R&D by Size of Enterprise

Company Size	1981	1989	1999
< 1000 employees	4.4 %	9.2%	22.5%
1,000 – 4,999	6.1 %	7.6 %	13.6%
5,000 – 9,999	5.8 %	5.5%	9.0%
10,000 – 24,999	13.1%	10.0%	13.6%
25,000 +	70.7%	67.7%	41.3%

Sources: National Science Foundation, Science Resource Studies, Survey of Industrial Research Development, 1991 and 1999.

The Challenge of Short Product Lifecycles

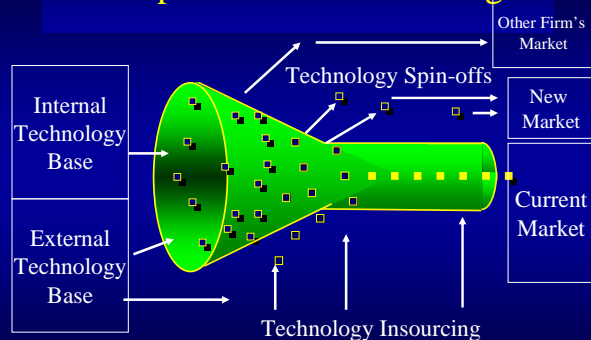


NEW RESEARCH MISSION:

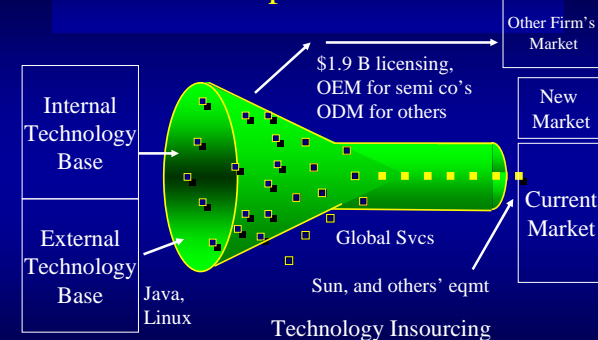
- R&D must get faster to market
- External sources matter more
- More collaboration needed

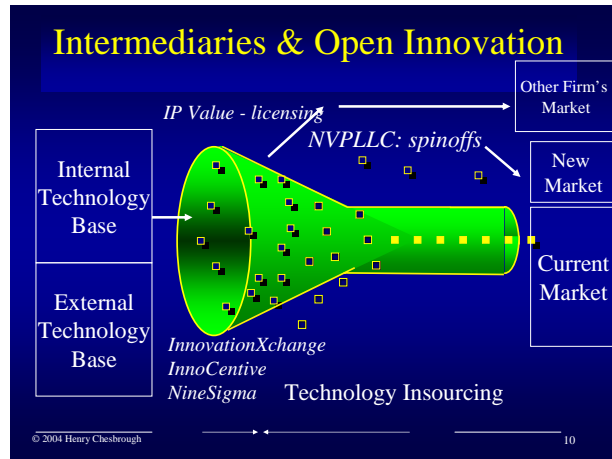
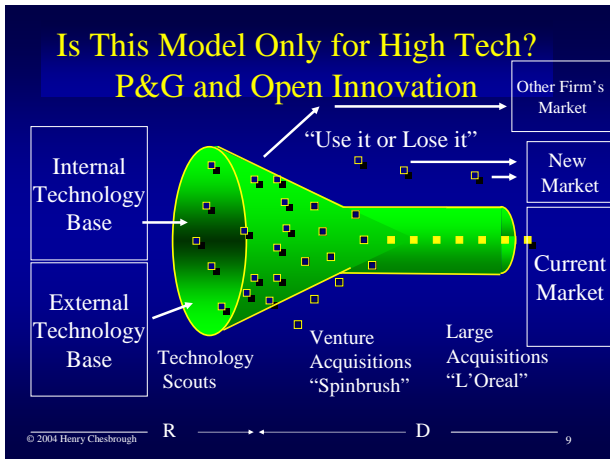
NEED NEW INNOVATION MODEL

The Open Innovation Paradigm



IBM & Open Innovation

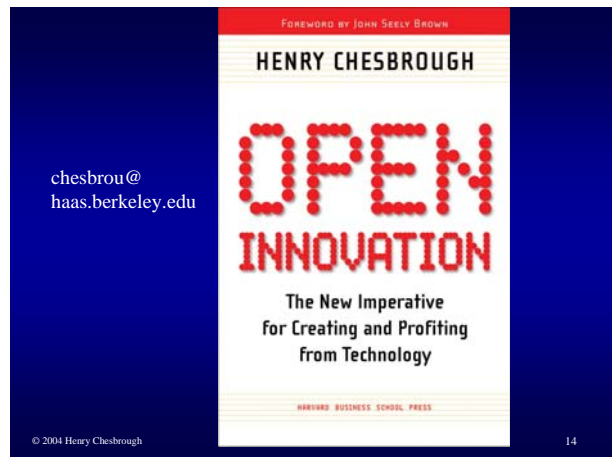




- ### The Logic of "Open Innovation"
- Good ideas are widely distributed today. No one has a monopoly on useful knowledge anymore.
 - We must manage IP in order to manage research:
 - need to access external IP to fuel our business model
 - need to profit from our own IP in others' business model
 - Not all of the smart people in the world work for us.
- © 2004 Henry Chesbrough 11

- ### Open Innovation Implications for Australian Businesses
- Innovate locally...
 - Encourage your smart people to identify the other smart people. Then collaborate with them.
 - Develop an innovation sourcing strategy
 - Develop mechanisms that reward collaboration
 - ... But Think Globally
 - Be the architect, and not just the plumber
 - Become a linchpin for global access to Indian and Chinese economies
- © 2004 Henry Chesbrough 12

- ### Open Innovation Implications for the Australian Government
- Don't pick winners; foster an environment of innovation
 - Beware of "strategic industries", and special pleas
 - Focus on the *process* of innovation, not just the inputs
 - Build critical mass and expertise in research
 - Establish translational research grants: from Lab to Market
 - Break down barriers that discourage collaboration
 - Adopt tax policies that promote rapid commercialization of R&D
 - Big companies matter as much as SMEs in a healthy innovation system
 - Celebrate achievements – An Australian Innovation Prize?
- © 2004 Henry Chesbrough 13



Key Note Speaker Biography



John Wolpert, the InnovationXchange's BRIDGE Services Executive and former Lab Director of Extreme Blue, IBM's incubator for talent, technology and business concept innovation, is an entrepreneur and innovator with a passion about how companies innovate and a long-term vision for 'open innovation'.

John Wolpert's talents span an unusual range from the theatre to Java and relational database development, from project management to the Spanish language, and from dynamic systems modelling and forecasting to financial analysis.

Best known for his work with IBM, from 1997 John was Product Marketing Specialist for the Java Team which created a worldwide Java product marketing program before going on to manage the alpha Works emerging technology and business development team, which finds strategic IBM research technologies, assesses business opportunities and speeds them to market.

From 2001, John Wolpert was Lab Director for Extreme Blue, IBM's incubator for talent, technology and business concept innovation which built small teams of high-potential business and technical talent to conceive, develop and prove new directions for the firm, in the USA and internationally. This program is now a core component of how IBM makes investment decisions in emerging business opportunities.

From his work in the field of corporate innovation since the late 1980s, including with several Fortune 100 firms, John saw that despite best efforts at 'open innovation', finding and exploiting connections between legally separate entities was inefficient, risky and slow.

John developed a new business methodology, using trusted intermediaries to bridge the gap between the old, closed regime and a totally open regime, now being trialled in the InnovationXchange's BRIDGE Services pilot.

John Wolpert is also an Adjunct Professor with the Faculty of Commerce and Economics at the University of New South Wales and his work on the subject of innovation has been published in the Harvard Business Review and Harvard Business School Press.

Innovation Xchange Network



Australian Leadership in Open Innovation

Connecting resources and capabilities for innovation and growth

Innovation Xchange Network

Open Innovation

- The act of connecting
 - Insights
 - Resources
 - Capabilities
- Across borders
 - Social
 - Institutional

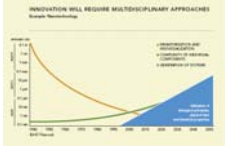


Connecting resources and capabilities for innovation and growth

Innovation Xchange Network

The Trend to Openness

- External sourcing of initiatives
 - 45% of new initiatives globally
 - Proctor and Gamble - 50%
 - Java, Linux, Open Source
- National Innovation Initiative
 - "Extend integration of insights beyond company borders"
 - Australia pioneers InnovationXchange



Connecting resources and capabilities for innovation and growth

Innovation Xchange Network

Australian Leadership

- Leading the US
 - US Congress
 - Nil
 - Grant Kearney
- Leading the World
 - Australian firms born global
 - Multiple countries



Connecting resources and capabilities for innovation and growth

Innovation Xchange Network

The Challenge

- Common Themes
 - Standards
 - Open collaboration - even competitors
 - Cultural shift from bottom to top
- Lingerin g problems
 - Boundary spanning
 - Orphans
 - "Open Kimono"




Connecting resources and capabilities for innovation and growth

Innovation Xchange Network

The Problem of Institutional and Domain Boundaries

- Breakthroughs
 - 550k cases of heart disease
 - Damaged tissue, no regrowth
 - Crazy idea - grow synthetic
- Convergence
 - Cell biologists
 - Material engineers
 - Lucky and problematic




Connecting resources and capabilities for innovation and growth

Innovation Xchange Network

The Orphan Problem

- We don't know what we don't know
 - Wrong company
 - Unaware of breakthrough potential elsewhere
 - HR nightmare
- InnovationXchange
 - Unexpected connection
 - Orphans become heroes



Connecting resources and capabilities for innovation and growth

Innovation Xchange Network

The Open Kimono Problem

- Small business meets big business
 - Mutual fear of exposure
 - Contamination
 - Appropriation
- Late and wrong
 - 3-18 month negotiation
 - Nothing under the kimono
 - Increased skepticism next time



Connecting resources and capabilities for innovation and growth

Between Closed and Open

- **Connecting between legally separate organizations**
 - Inefficient
 - Risky
 - Haphazard
- **Sharing models**
 - **Open:** alphaWorks & Innocentive
 - **Intermediated:** InnovationXchange



Connecting resources and capabilities for innovation and growth

InnovationXchange (IXC) & Trusted Intermediaries (TI's)

- **IXC - Provider of specialized human resources - TIs**
 - Non-profit, government-backed
 - Division of the Australian Industry Group
 - Global network
- **TIs - A new profession**
 - Commercially neutral
 - Embedded virtual employees of IXC Members
 - Over \$2.5b in shared research knowledge



Connecting resources and capabilities for innovation and growth

Trusted Intermediaries Work

- **World-first process**
 - Open Sharing between intermediaries, but not to members directly
 - Secure Knowledgebase
 - Step-wise opportunity briefs
- **Unique value**
 - Large and small firms
 - Consortia management
 - Lower cost, wider net, better results



Connecting resources and capabilities for innovation and growth

Results

- **Engaged opportunities - Beyond Expectations**
 - Acrux - New invention
 - UNSW & IBM - \$1.5b Market opportunity collaboration
 - Joint research funding opportunity
 - Breakthrough joint business opportunity
 - P&G connected to Australian startup
- **Other results**
 - Successful stealth investigations of potential partners
 - Double-digit web channel growth



Connecting resources and capabilities for innovation and growth

Media Coverage

A comprehensive media strategy was developed and implemented for the Innovation Roadshow. The Roadshow attracted excellent coverage in the print and broadcast media. Highlights of the media strategy included

- A successful television interview with the prestigious Sky Business Report program
- A morning tea roundtable for 16 of Australia's leading journalists, including writers from the Australian Financial Review, The Australian Newspaper, the Sydney Morning Herald and the Australian Broadcasting Corporation. At the media roundtable IBM also issued a joint media release with the Australian Centre for Quantum Computer Technology, highlighting our local collaboration in the spirit of 'Open Innovation'.
- One to One Media Interviews with the Business Review Weekly, the Age Newspaper and freelance journalists
- Hosting of a 'media table' for leading journalists at each of the Sydney, Canberra and Melbourne Dinners

Some examples of the media coverage:

- **Sky TV Business Report Interview:**
Kate Powditch, reporter, interviewed Professor Henry W. Chesbrough. Coverage received 26/11/04.
Tape available
- **National Press Club Address**, televised live on the ABC, 24/11/04
- **Australian Financial Review**. 06/12/04, "Ideas exchange pays its way"
Author: Peter Roberts
- **Computerworld**, 01/12/2004 "UNSW inks quantum computing pact"
Rodney Gedda
- **Computer Daily News**, 26/11/04, IBM links with unis for R&D
- **Australian Biotechnology News**, 02/12/2004 "Getting the most out of ideas"
Melissa Trudinge
- **The 'News & Media' section of the IBM A/NZ w3 Intranet**
IBM Signs Joint Study Agreement with Australian Centre for Quantum Computing Major Australian effort to collaborate with IBM's Thomas J Watson Research Centre in New York for future Innovation.
<http://w3-7.ibm.com/ap/anz/w3anz.nsf/MainHeadlines/FE53F1A5A44DF059CA256F56000B63A6?OpenDocument>
- **The IBM A/NZ "Newslinks" Bulletin**
IBM Signs Joint Study Agreement with Australian Centre for Quantum Computing
w3-7.ibm.com/ap/anz/w3anz.nsf/MainHeadlines/FE53F1A5A44DF059CA256F56000B63A6?OpenDocument)
- **The Media Centre section of the IBM A/NZ Internet.**
<http://www.ibm.com/news/au/2004/11/2004112501.html>

The Innovation Roadshow Team



From left: John Harvey, Corporate Affairs Executive, IBM Australia, John Wolpert, Executive, BRIDGE Services, Australian Industry InnovationXchange, Hank Chesbrough, Executive Director, Centre for Open Innovation, University of California Pilar Martin, PR Manager Public Sector, IBM Australia, Grant Kearney, Chief Executive, InnovationXchange, Kaaren Koomen, Government Affairs Executive, IBM Australia