

September 2004

Vol. 2

Narelle's Notes



Welcome to the second edition of the new IN THE LOOP, the newsletter of the Australian Business Foundation (ABF).

It seems the term "innovation" is rendered less useful the more it is used. Distilling the body of our research spanning fourteen studies over seven years, one critical message on the subject is don't just equate innovation with science, R&D and new technologies. The reality of business innovation is operating all aspects of the enterprise more intelligently and adapting business offerings in response to market changes and consumer preferences.

Innovation does not just come from the university or research lab, but comes more often from ordinary firms competing on the basis of their distinctive knowledge. Their know-how and their now-who are what give them an edge in solving customer problems and meeting market needs more imaginatively, quickly or reliably than their competitors.

ABF intelligence since 1997's The High Road or the Low Road has consistently shown that there is more prosperity to be had by competing through knowledge and learning than on cost efficiencies alone. Yet much of the public attention goes to increasing the supply of science and research, not developing business capabilities and opportunities for innovation.

In other words, the focus is on science-push, not customer or market-pull models of innovation. We

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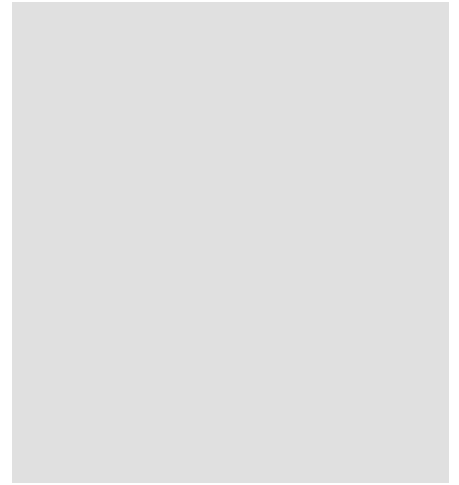
need to redress this with more explicit attention to fostering business innovation at the company level, particularly helping firms to absorb new knowledge and convert it into viable products and services that customers worldwide want to buy.

Read on and stay connected for more from Australia's premier business think-tank.

Regards,

Narelle Kennedy

Chief Executive, Australian Business Foundation



WE HAVE LIFT OFF - COMMERCIALISING AUSTRALIAN BIOTECHNOLOGY

On 4 August 2004, the Australian Business Foundation was delighted to launch its latest research study, co-hosted with the NSW Department of State and Regional Development and the Australian Graduate School of Management.



Authored by Professor Michael Vitale of AGSM, ***Commercialising Australian Biotechnology*** asks the critical questions:

- Are the odds stacked against Australian biotech innovators?
- Can we have a visible, viable and globally competitive biotech sector in this country?

Professor Vitale's remarks at the launch painted a realistic picture of Australia's biotech sector, highlighting the obstacles to sector growth and the Australian realities of small markets, insufficient venture capital, lack of experienced management staff and inconsistent public policies.

However, Professor Vitale believes we can have a viable and competitive biotechnology sector in Australia, but our biotech firms must recognise the geographic and economic realities of Australia's lack of scale in both markets and money. Australian biotechs must develop products, business models and spending plans in a way which recognises and reflects those realities. For Australia's biotech sector to succeed, or indeed even to survive, Australia must:

- encourage its firms to be born global in the sense that their products and strategies must be oriented to overseas marketplaces from day one;
- not try to play the same game as the USA - it must focus its efforts and scarce funds on areas of particular competitive advantage for maximum returns (i.e. do what it is good at); and
- capitalise on its ability to serve niche markets; and target critical segments of international production chains to capture most value.

Dr Marilyn Sleight, CEO EvoGenix Pty Ltd and a current Director of ABF, congratulated Professor Vitale on his research and identified with many of the obstacles to growth raised by the report. Dr Sleight focused particularly on the problems posed by the dearth of skilled managers in Australia with expertise in commercialisation, deal structuring and business development. Dr Sleight also highlighted the difficulties and frustrations of the skilled migration program when expertise is located overseas.

Following the launch, Perce Butterworth (Executive Director, Policy and Resources at NSW Department of State and Regional Development) referred the skilled migration problem to the DSRD's business migration experts to investigate options for speeding up the process. Thanks for taking this initiative.

The Australian Business Foundation would like to thank the Department of State and Regional Development which provided the venue for the launch event. The launch received an excellent response from Australia's biotech sector, with close to 100 people attending, including biotech business people, scientists, investment analysts, academics, venture capitalists, journalists, intellectual property experts and of course Australian Business Foundation members. Lots of networking and ideas exchanged over a drink, following the formalities.

Click here to download Commercialising Australian Biotechnology, or contact us to purchase a hard copy.

AUSTRALIAN FELLOWSHIP WINNER INVESTIGATES AMERICAN SUCCESS

While there have been significant innovations in wood products over the last two decades that have transformed materials and processes in the timber and building industries, Australia has had limited success in moving from the research laboratory to the consumer marketplace with viable commercial products. Not so in the USA. How does the USA commercialise its forestry-based innovations? Are the innovations commercialised more successfully if they are developed through a "technology push" model, or is the American success rate due to demanding customers "pulling through" smarter and better products and services? An Australian PhD student from Melbourne just may have some answers.



Lyndall Bull is a PhD candidate at the University of Melbourne and the Wood Innovations Cooperative Research Centre (CRC). Lyndall was one of three winners of the Roger Pysden Memorial Fellowship for 2003/04, an award initiated and funded by Australian Business Limited (ABL) and managed by the Foundation. Lyndall has recently completed an investigative study tour in the US and Canada, during which she assessed the role of innovation in the North American forest products industry.

In particular, Lyndall examined the process of commercialising wood innovations with particular attention to the market-pull and technology-push innovation debate. She undertook first-hand investigations to better understand how Australia's forestry products industry can more effectively harness innovative thinking to create better products that consumers want to buy.

Over her three month North American study tour, Lyndall visited specialist universities, including Oregon State University, the University of Washington and the University of Idaho, together with research labs, industry bodies such as the World Forestry Centre in Portland, and leading wood products companies.

Among Lyndall's key insights were:

- market-pull innovations have typically found greater success in the marketplace than technology-push innovations;
- investment in new innovation is a long term process, and is often in conflict with the demands of investors and the stock market;
- employing more "outsiders" (i.e. people from other industries such as oil, plastics etc.) can boost development of new ideas in both product and process innovation;
- large companies in North America are of such a size that they can afford new innovation, an inherent advantage over foreign companies;
- the promotion of innovative products and designs in "showcase" environments is effective over the long term and outweighs short term costs

Lyndall's findings will be immediately used to help bring two new Australian timber technologies to market, adding new capabilities and value to Australia's forest and wood products industries. Lyndall's full report will be published shortly by the Australian Business Foundation.

The annual Roger Pysden Memorial Fellowships provide rising stars in the manufacturing industry with \$6000 to undertake an investigative project or study opportunity overseas to benefit the future competitiveness of Australian manufacturing. Click here for more information.

The Fellowship is named after Roger Pysden who served as President of Australian Business Limited from 1992 to 1994 and who was a founding Director of the Australian Business Foundation.

Applications for the 2004/05 Fellowship have now closed. The selection process will be completed by the end of September, with the winners to be presented their awards at the ABL Annual Gala Dinner on 22 October 2004.

ABF HOSTS PROFESSOR GÖRAN ROOS AT PRIVATE ROUNDTABLE

On Tuesday 17th August 2004, the Australian Business Foundation hosted a private roundtable with Professor Göran Roos for its sponsors and key stakeholders.

Professor Roos is completing a report for ABF which analyses the national innovation systems of two leading Nordic countries, Sweden and Finland, and compares them to Australia with a view to identifying more robust approaches for improving Australia's innovation capacity.

The starting point of Professor Roos' research for ABF is the critical importance of innovation as a driver of economic growth in developed economies. He contends that world economic growth is being increasingly dominated by knowledge-intensive goods and services, and a key element for competing in knowledge-based economies is the interconnectedness or linkages between individual firms, research, education and financial institutions and government that serve to diffuse and capitalise on this distinctive knowledge.



Professor Roos is writing for the Foundation both in his role as a leading international scholar and consultant to national governments and global corporations. Göran is a wellpublished author and editor of numerous books and articles on intellectual capital, innovation and management of intangibles and is founder of Intellectual Capital Services Limited, a leading London-based think tank. The Foundation has engaged Professor Roos, together with other leading international scholars, to continue probing the emerging issues most likely to impact on business competitiveness in a knowledge-based economy. This omnibus project, labelled Industry Policy and Global Capabilities, will be rolled out over the next three months.

WESTPAC TOPS INAUGURAL CORPORATE RESPONSIBILITY INDEX



We congratulate Westpac, corporate sponsor of the Australian Business Foundation since 2001, for achieving first place in the Corporate Responsibility Index, published this month. St James Ethics Centre's executive director Simon Longstaff applauded the bank on its performance, saying "Westpac achieved the highest ranking because its corporate values and commitments are reflected in all of its mainstream business practices."



The Corporate Responsibility Index measures responses to questions on strategy, integration, management practice, performance and impact and assurance. Westpac topped the list of 26 companies in the self-assessment survey.

Based on a similar survey in the UK, the inaugural Australian Index suggests that Australian companies are performing well when compared to their international counterparts.

Westpac has developed an enviable reputation as a world leader in corporate sustainability practices and leads the global banking sector in the Dow Jones Sustainability Index for the second year running. Westpac published its third annual Social Impact Report in August, which it says illustrates the embeddedness of responsibility and sustainability in its business practices.

[Click here for more information on the Corporate Responsibility Index.](#)



Westpac is also assisting in the Foundation's Corporate Sustainable Development study which is nearing completion. A University of Melbourne team led by Professor Danny amson is questioning and critically analysing how far, and in what ways, sustainable development and social responsibility practices can contribute to the business productivity, performance and success of Australian companies.

This investigation aims to provide rigorous frameworks for executives and policymakers to better understand when there is, and when there is not, a sound case for the adoption of sustainable development and related practices by Australian businesses. [Click here for more information on the study.](#)

WESTERN SYDNEY INFRASTRUCTURE EXPERTS GATHER

The Australian Business Foundation was invited to participate on an expert roundtable on infrastructure issues in Western Sydney hosted by the Global Foundation.

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Held at the University of Western Sydney, the roundtable included academics, government figures and representatives from Australia's largest corporations. Oliver Freeman, the Foundation's Deputy Chair and co-author of the 1999 ABF study *Alternative Futures: Scenarios for Business in Australia to the Year 2015* participated in the roundtable representing the Foundation.

Oliver pointed to critical learnings from the Foundation's 2003 study, *Regional Infrastructure - New Economic Development Opportunities for the Hunter, Illawarra and Western Sydney Regions*, the key message being that a "wide angle" needs to be taken on infrastructure to recognise that economic prosperity is increasingly dependent on innovation and knowledge.

In other words, a definition of infrastructure needs to be broad enough to cover the facilities and resources underlying the movement of ideas, data and information, as well as traditional physical infrastructure. The ABF study suggested

four key areas of action for securing better economic benefits from infrastructure:

- creating regions as hubs of knowledge-intensive industries;
- connecting regions, including transport and communications;
- better harmonisation between State and regional planning responsibilities; and
- more effective partnerships between the public and private sectors for managing and financing infrastructure.

The Australian Business Foundation advocates a different mindset when thinking about how infrastructure could be used to foster economic development in Australia's regions.

[Click here](#) for more information on ABF's Regional Infrastructure study, or contact us to purchase a hard copy.

INNOVATION - THE CURRENCY FOR THE FUTURE

The Australian Business Foundation has been invited to present at a seminar entitled *Innovation - the Currency for the Future* in September.

Narelle Kennedy, Chief Executive of the Foundation will unpack a key message from ABF research that says that innovation is more than formal R&D, and that boosting business innovation is mission critical in building new capabilities for Australia.

This seminar also features:

- a look at global trends and future scenarios, featuring AEEMA and Microsoft;
- Australian Technology Showcase (ATS) presentations on new product development and building a patent portfolio;
- case studies of successful and innovative Australian firms, e.g. CAP-XX;
- the potential of emerging technologies including nanotechnology and autonomous systems.

WHERE NSW DSRD Trade and Investment Centre

Level 2, 470 Church Street

North Parramatta

WHEN Thursday, 30th September 2004

TIME 9:00am - 1:00pm

REGISTRATION [Click here](#) to download invitation



Small Business Month aims to encourage business owners to attend business development activities that are outside their normal routine, with the aim of

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enhancing business skills and knowledge, generating ideas and increasing networks of business contacts.

For more information on all the events during Small Business Month, [click here](#).

AUSTRALIAN BUSINESS FOUNDATION IN THE MEDIA

Welcome to the new ABF in the Media section. This regular section will highlight coverage of the Australian Business Foundation and its researchers in the mainstream media.

The Foundation is also linked to Australian Policy Online, a web-based database of the best Australian social, economic, political and cultural research available online. To visit APO, [click here](#).

Biotech opportunity lost without policy overhaul

Australian Financial Review, First, p 31 02-08-2004

By Peter Roberts

Australia will miss the window of opportunity offered by biotechnology unless it radically overhauls national policy and the financial community that supports the sector, according to a report to be launched this week.

The Australian Graduate School of Management's Michael Vitale said in a report, Commercialising Australian Biotechnology, that the sector was hampered by inconsistent and incomplete government policies, persistent difficulties in raising capital and a shortage of experienced managers.

Australia will miss the window of opportunity offered by biotechnology unless it radically overhauls national policy and the financial community that supports the sector, according to a report to be launched this week.

"The biotechnology window is still open, but it will not remain open forever," he said. "Unless attitudes and policies change, the sector is unlikely to achieve anything close to its potential."

Professor Vitale's report, prepared for the Australian Business Foundation think tank, is particularly critical of policies that encourage the formation of biotechnology companies at an early stage, with most unable to raise sufficient funds to bring their ideas to commercial fruition.

Of 317 venture capital investments studied by Professor Vitale, the average venture-capital investment was only \$1.2 million.

"The one undeniable fact is that Australian biotechs must find a way to succeed with much less funding than is available to their overseas peers and competitors. In this environment, the wisdom of encouraging early company formation may be questioned."

The research also points to the fact that as the small biotechs that have received small levels of funding mature, they will have to return to the markets. This suggests that by 2005, more capital will be required annually than the \$130 million invested in the sector since 1996.

Professor Vitale suggested that more emphasis be placed on developing ideas further in the research sector before going public, and on strategies for selling ideas and intellectual property rather than developing finished products.

"Australia currently lacks some of the business systems required to bring pharmaceutical products to their final stage," he said. "There need be no embarrassment about recognising geographical and economic realities and acting in a way that maximises benefits under the prevailing circumstances."

Professor Vitale also suggested that universities, in return for government research cash, be expected to devote enough resources to commercialisation.

"Only about 300 people are employed in commercialisation and commercialisation support activities across all of Australia's major research institutions and CSIRO. Eighteen universities reported employing only one full-time equivalent staff or less for commercialisation."

Biotech still waiting for sunrise

Policy failures are threatening to consign our biotechnology sector to the role of bit player

Australian Financial Review, First, p 32 02-08-2004

By Peter Roberts

Michael Vitale has blown the whistle on the wishful thinking surrounding Australia's biotechnology sector.

Rather than making stellar progress towards a bright future in biotechnology, governments and research institutions are dabbling in an area that requires far more policy attention and private-sector cash than it has ever received.

Under the former federal Labor government, biotechnology as one of the so-called sunrise industries rated as a footnote to an industry development policy that focused on reforming moribund traditional industries such as the automotive sector. The Howard government's industry, as distinct from science-related, policies towards biotechnology have been even more disappointing. While the Coalition has embraced an agenda of boosting scientific research, it has done little to develop the business systems and environment needed to nurture innovation and commercialisation.

The hard facts are that despite the billions spent on research and development, the fine work at a plethora of bodies such as the Walter and Eliza Hall Institute and the Garvan Institute, the winning of Nobel prizes, and the hard work of numerous individuals in research and management, only one Australian drug has reached world markets in recent times. And even that Biota's Relenza anti-flu drug was only a minor commercial success.

True, Australia has an apparently healthy 40 listed biotechnology companies, but together they have only eight biotechnology products undergoing phase-1 trials (which are the first part of the process to prove their safety and efficacy) and only 16 undertaking phase-2 trials. All will need perhaps \$200 million to \$300 million to go the full distance to phase-3 clinical trials on large groups of human subjects before they have any chance of commercial success.

And to top it off, the oft-heard promise of agricultural and industrial biotechnology has not revolutionised existing industry sectors. It is all pretty dismal, and Vitale should be congratulated for pointing the finger firmly at underperformance by government in the all-important creation of policy and a national environment supporting the business end of innovation and commercialisation. It is never too late to take action, of course. But every year we continue to muddle on, we shut ourselves out of more and more areas of business and sell the hard work of so many in research tragically short.

Vitale concludes by comparing the future of the biotechnology sector with the information technology and communications industries, where policy failures have left Australia as a customer and only occasional producer of technology, intellectual property and national wealth.

It would be great to see the next election fought on such a fundamental issue: Will Australia participate as more than a bit player in the most important new field of technology and business of our times? Vitale asks where the cash will come from for biotechnology's successful commercialisation and, more importantly, where the national leadership will come from.

Baby biotechs weaned too early

The Australian, Early, p 30 05-08-2004

By Andrew Trounson

AUSTRALIAN biotech companies fly the university nest too early, according to a report from the Australian Graduate School of Management in Sydney.

The surprise finding contradicts the prevailing wisdom -- that biotechs should enter the commercially savvy corporate sector as soon as possible. AGSM's report found that such companies can find it difficult to raise venture capital for early-stage projects, and management risks being distracted by corporate demands and funding pressures.

The report by Professor Michael Vitale, Commercialising Australian Biotechnology, identified a "Catch 22" situation, where projects were prematurely corporatised in a bid for scarce funding. The trend was encouraged by government grants, which were restricted to corporates.

"(Companies) may get a grant which allows continuation of the research, but the researchers find that they also have to run a company," Mr Vitale said. "Once the grant money runs out they seek venture capital funding, often far too early in the project or product life cycle."

While conceding that corporatisation provides the expertise, focus and drive to commercialise projects, Mr Vitale believes the answer lies in encouraging universities to attract more funding by being more commercial. He said research funding to universities should be linked to outcomes and be based on the quality of an institution's commercial processes. He noted that Murdoch University in Western Australia had secured an innovative, \$10 million funding deal with the state's largest private-sector superannuation fund, Westscheme.

But Bioshares analyst David Blake said that going corporate as early as possible remained the best strategy.

"In some ways you can't get research out of universities too soon, because researchers aren't motivated to commercialise products or discoveries," Mr Blake said. He said biotechs also tended to bypass the limited venture capital available in favour of stock-market listings. There were 25 biotech floats last fiscal year.

Peter Marks, of boutique investment bank Peregrine Corporate, agreed.

As soon as "basic proof of principle and a commercial utility" had been established, the project should be taken out of the university. "Usually the earlier the better," he said.

Australian R&D lags the world

Australian Financial Review, Late, p 16 01-05-2004

By Peter Roberts

Australia's recent strong economic growth has masked its declining position in the global knowledge economy, according to a report launched on Thursday by Education Minister Brendan Nelson.

The report, by Don Scott-Kemmis of the Australian National University, detailed significant structural issues and a disconnect between academic and business research that calls into question the effectiveness of the national innovation system.

"Overall, the picture that emerges is one of a conservative innovation system that is only slowly perhaps too slowly generating sustainable new paths of technological accumulation," said Mr Scott-Kemmis, director of the innovation management and policy program of the National Graduate School of Management. Mr Scott-Kemmis wrote in the report, one of six produced for the Committee for Economic Development of Australia, that Australia had a relatively low level of specialisation for a small economy and was not specialising in high growth areas at the rate of other countries. "Whereas most countries have become more specialised over the past 20 years, Australia's level of specialisation has remained more or less constant . . . agriculture, primary metals, mining, and oil and gas," he said. "Australian inventions are focused on areas where technological change is relatively slow."

Mr Scott-Kemmis said that while Australia had recently increased its activity in biotechnology and pharmaceuticals, it had not specialised in the way of Finland and Sweden in telecommunications research; Korea and Taiwan in semiconductors; and Germany in motor vehicles. One exception was the wine industry, where a shift in its knowledge base together with changes in education and training helped transform local industry. His report on innovation systems in Australia found that public-sector research organisations remained focused on traditional fields of science, while the business sector was increasingly focusing on engineering and computer software.

This suggested limited effective interaction between the public and private sector. Industry participation in scientific papers was a low 2 per cent in Australia, for example, compared to 9 per cent in the US.

"R&D in software and engineering account for the majority of R&D in industry but a minor share of R&D in the public sector. The possibility of a mismatch in research allocation and in human resource development needs to be assessed."

Mr Scott-Kemmis said Australian companies were largely adaptors of technologies and innovated through systems integration. As such, their core competencies tended to be project management; risk and financial assessment; logistics and problem -solving; and adaption of available technology to their needs.

"There is no evidence of systemic weakness in the capacities of Australian industrial or research organisations to acquire, apply and modify . . . knowledge from local and international sources. The available evidence suggests many Australian firms actively search the global stock of knowledge/technology, and that Australians are among the world's most intensive and rapid users of new information and communications technologies."

The paper suggested international technology transfer accounted for half of the productivity growth in the market sector in the '90s. Most Australian innovation was the incremental improvement of product and process, based on knowledge sourced outside Australia. Mr Scott-Kemmis said Australia's innovation systems were highly dispersed geographically, sectorally, technologically and by organisation. This limited the scope for economies of scale in innovation.

"The significance of barriers to focus, critical mass and effective interaction is generally underestimated," he said. His report is one of several that points to a need accepted by the federal government for a greater emphasis on commercialisation, and linking the public and private sector in government policy. The government has indicated that the successor to its Backing Australia's Ability statement due in the budget would focus on commercialisation.

In a second paper, Harvard University associate professor of innovation, Australian-born Jonathan West, said Australia's market-oriented economic policies were failing to generate innovation in new areas of business.

Professor West said Australia's traditional economic policy settings had failed to build a national position in the most recent technological revolutions in computer software and electronics.

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The Foundation is also delighted to have major sponsorship from:

- PricewaterhouseCoopers
- UBS and
- Westpac Business Bank.



These prestigious firms are 'thought leaders', and we are pleased to work with them to advance knowledge and debate about the future prosperity and growth of Australian business.

THE LAST WORD

So ends the second edition of the revamped In The Loop. Thanks for the positive feedback on the new design - a more frequent update on the world of innovation and emerging business issues was a common theme in the recent ABF member survey - the members have spoken!

Remember that this newsletter is not only the primary communication between ABF and its valued membership, but is also an instrument for members to interact with each other. The Foundation encourages its members to use this forum to contribute to the knowledge network that is the ABF membership community.

If you or your organisation is working on a product, service, research project or event that furthers new thinking on Australia's business competitiveness, innovative capacity and opportunities from a knowledge-based economy, please contact us and we will spread the word!

See you next month! Comments, questions, suggestions, please contact:

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