

Deloitte.



The reality of innovation *unzipped*

An investigation in middle market Australia



November 2006

‘Innovation is the clever
use of novel ideas and
new ways of doing things
in order to add business
value’

Source: Australian Business Foundation/Deloitte
innovation study – Sydney, Melbourne, Brisbane 2006

Contents

1.	Introduction Innovation and Australia's middle market	4
2.	Key insights	5
3.	Growth: case study Energising business growth and creating value	6
4.	Business models: case study Imaginative business models	9
5.	Partnering: case study Partnering, collaborating and alliances	12
6.	Results-oriented: case study Doing the hard yards	15
7.	People: case study Innovation motivates people	17
8.	Market driven: case study One size does not fit all	20
9.	Performance: case studies Innovation is multi-faceted and complex needing replicable processes	22
10.	Where to next? The challenges for the future	24
11.	An executive's diagnostic	26
12.	Appendix	28
13.	Contacts	30

Innovation and Australia's middle market

In the world of business there is a special kind of alchemy that differentiates innovative companies from those where it is 'business as usual'. While powerful voices in government and commerce are pushing the message of innovation to make economies more globally competitive, results can be elusive.

To better understand the triggers for innovation and the value for investment, the Australian Business Foundation¹, an independent business research think tank, together with professional services firm Deloitte, undertook qualitative studies spanning middle market businesses in Australia in 2006.

These included more than 50 businesses across three groups in Sydney, Melbourne and Brisbane comprising well established middle market innovative companies, academics, innovation researchers as well as emerging innovators. The subjects of the case studies were recommended by the Australian Business Foundation on the basis of previous research and include case studies of Deloitte and two of its clients.

The purpose was to capture the experiences and opinions of representative middle market companies around the opportunities and the challenges for innovation-led growth in Australian business, and ascertain how these companies are achieving competitive results from investment in innovation.

A word of clarification: the middle market is perhaps the most diverse of all sectors. Attempts to group middle market companies by annual revenues, number of employees, or market position varies significantly across geographies and industries. The sector can include professional partnerships, publicly-listed corporations, private companies, and new, high-growth, or family-run businesses.

However one characteristic all businesses in this eclectic sector share is that they are a fast growth group looking for ways to accelerate and then sustain that growth.

The companies in the Australian Business Foundation/Deloitte study clearly believed that innovation will energise business growth. And when implemented well, they believe that innovation will be a driving force to achieve profit and sustain value.

The Australian Business Foundation/Deloitte study captured the obstacles as well as the opportunities from innovation. It also identified successful implementation as a major challenge.

Two of the biggest issues for successful implementation are how to:

- acquire the right skills to convert innovative ideas into business and
- speed up the return on investment.

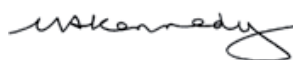
This study addresses those questions and shares case studies and research on the ways some companies are managing the challenges.

It also explores the views of some leading thinkers and some of the key triggers middle market management in Australia believes will accelerate innovation and determine the pathways to success.

We hope you find the following insights and ideas of value.



Gerhard Vorster
Head of Innovation
Deloitte Australia



Narelle Kennedy
Chief Executive Officer
Australian Business Foundation

Key Insights

The investigation identified seven major insights into innovation in the middle market that come from shared learning and collaboration. We look at how these insights can address some of the challenges associated with converting innovative ideas into business, growth and return on investment (ROI).



1. Innovation energises business growth and creates value

Innovation in the middle market results from market pressures and customer demands, not just from novel technologies and product developments. It is driven by practical business realism and is about creating and energising business growth and creating value.



2. Innovation fosters imaginative business models

For middle market companies to be successful in innovation they need to build more imaginative business models and creative ways of organising. They need to create a culture that enables experimentation, learning and managed risk.



3. Innovation needs partners

Innovation is not a solitary pursuit – it needs partners, collaborators and alliances. Innovative ideas, by definition, rarely confine themselves to a single group. They require support. They need to be built on and will flourish with input from different groups, from different locations adding different skills, disciplines and experiences.



4. Disciplined innovation contributes to competitive outcomes

Innovation is about doing the hard yards. It is worthwhile only if executed as a disciplined, structured and sustainable process in enterprises. In this way it will result in a demonstrable contribution to competitive outcomes.



5. Innovation motivates people

Innovation makes people feel positive. It is one of the rare change processes which excites, motivates and engages.



6. One size does not fit all

Innovation is highly context-specific in business. The path to innovation for any particular enterprise depends on a thorough understanding of its business strategy and capabilities, its position in its industry sector domestically and globally, and the external market conditions and trends it faces.



7. Innovation is multi-faceted, complex and must be repeatable

Enterprises must simultaneously foster wide-ranging creative thinking and experimentation and yet be disciplined. They must risk failure and monetary loss yet deliver ROI. They must overcome complacency and commitment to traditional and successful approaches, and be able to repeat processes that manage and implement innovations over time. And above all they must have the courage and vision to stay the course and deliver.

Growth:

Innovation energises business growth and creates value

One of the consistent themes emerging from this study is that innovation is the clever use of new ideas and ways of doing things in order to add business value and deliver hard targets and specific outcomes.

There was a clear recognition by the participants that innovation is not just creativity, individual inspiration and bright ideas. It goes way beyond that. It even goes beyond the commercialisation of novel ideas, technologies or products.

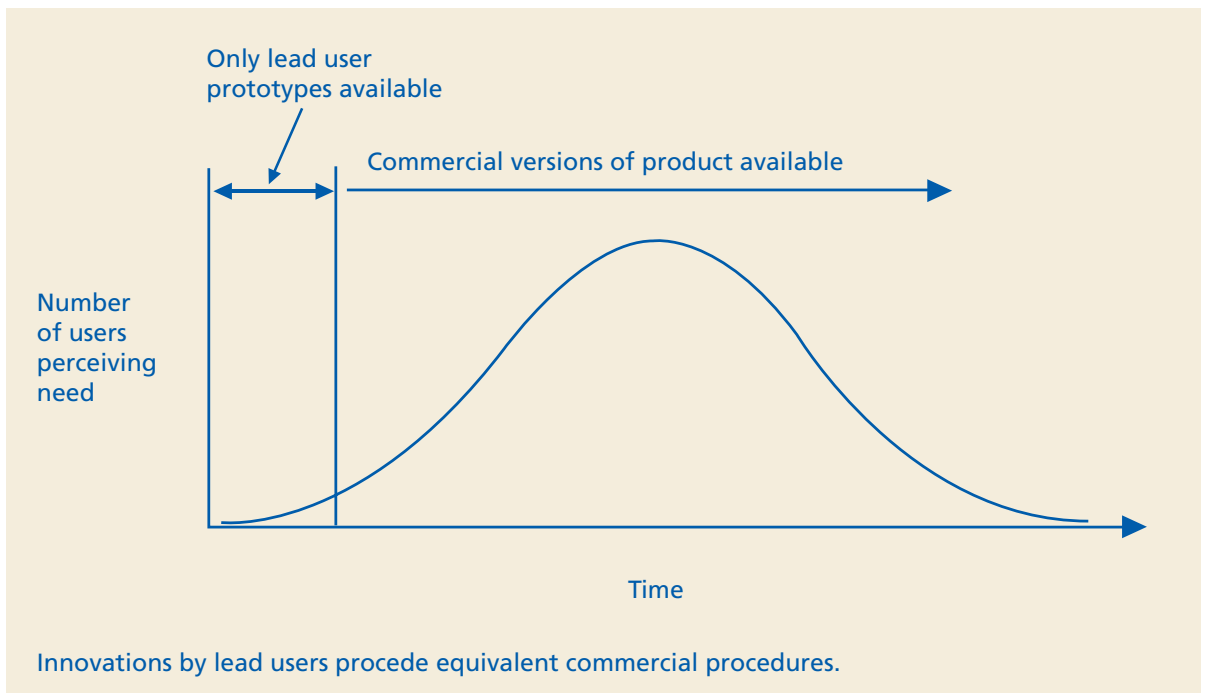
Innovation in the middle market results from market pressures and customer demands. The consensus is that in the middle market innovation is about smarter and faster ways of solving problems for customers and meeting market needs in more imaginative ways.

Innovation by customer problem solving

Previous research shows that sectors such as food processing, metal production, chemicals, timber products, printing and publishing, transport, mechanical engineering, mining, the hospitality industry, financial services and health become innovative through the knowledge they gain from problem solving for customers and collaborating with others.²

The results of our investigations are reinforced by other research by the Australian Business Foundation as well as internationally by those writing about open source innovation and user-centred innovation like MIT Professor Eric Von Hippel, who shows that 80% of innovations occur before they are put into a production cycle. Innovations are triggered by the ideas and prototypes created and adapted, often in freewheeling online communities of practice by lead users seeking to meet their own urgent needs.





Eric Von Hippel – Democratizing Innovation <http://web.mit.edu/evhippel/www/books.htm>

How can you meet growth challenge by innovating?

Companies alert to these 'user innovations' can respond to this market pull by putting together all the elements needed to make this innovation a reality and to build a sustainable and responsive business.

To be able to do this and continue to attract investment, middle market companies will have to pay significant attention to their investment and risk management capabilities and to their management proficiencies and governance capacity. They will be more likely to benefit if they innovate in how they:

- define their business offerings
- organise people and production
- work with customers and suppliers
- anticipate and understand their markets
- reinvent themselves to solve problems
- respond to opportunities as market needs change and evolve.

To benefit from more investment in innovation it is advisable to foster problem-solving and technology integration capabilities in firms, and create organisational systems to acquire, adapt, respond to and continuously learn from market knowledge.

In this way, companies in the middle market sector will develop value-added products and services that solve problems and offer new opportunities to customers.

Case study



Brevini Australia is a Western Sydney-based modern, high performing company that decided it was time to 'innovate or evaporate'.

The Brevini story is one of a business that needed to take a hard look at how it could ensure its survival and growth in a climate of intense competition. Typically customers had little loyalty, they bought on price and the company's profitability was becoming marginal.

Brevini sells and services planetary gear boxes to customers mostly in the mining, agriculture and construction industries in Australia and offshore. It transformed itself from a manufacturer of a single product to a unique and customised total package service provider by understanding the need to get closer to their customers.

The Brevini team:

- listened and talked with their customers to understand the end uses of the gearbox
- added value to their gearboxes with new features and capabilities
- became involved in problem-solving and design
- added services to their offerings to include maintenance and upgrades.

Brevini's journey was successful, but not easy. It required a cultural shift in management, sales team changes, and major efforts to win customer confidence.

It needed a commitment to forming alliances and reorganising the capabilities of their business to consistently offer a high quality package of solutions to customers.

Businesses like Brevini clearly believe they have to differentiate and create new value, to come up with new ways of doing things, to 'innovate or evaporate'. And they have done so successfully.

In middle market companies in Australia, innovations come about by learning and problem solving not primarily by scientific discovery. By collaborating, users and manufacturers can accelerate their ROI.

Business models:

Innovation fosters imaginative business models

For innovation to be successful in middle market companies, it needs to build more imaginative business models, creative ways of organising and a culture that sanctions experimentation, learning and managed risk.

The Australian Business Foundation/Deloitte study discovered that the business triggers for innovations that achieve growth and create value were expressed in terms like: survival, crisis and future growth. Companies innovate to meet a burning market need or respond to competitive pressures or external threats like emerging middle market businesses in China or talent poaching.

All businesses seek differentiation, cost reductions and/or new value creation depending on where they are in their cycle of growth.

The opportunities to energise and create new business growth and value are ripe for the taking with today's trends to outsourcing and specialisation. As business offerings merge product and services, new models need to be developed. And as single buyer-seller relationships become complex webs of buyers, partners, alliances and stakeholders, the demands for more customer driven decisions and entrepreneurial employees outstrip current models.

The common denominator for the future is to be smarter and develop faster ways of solving problems for customers and meeting their needs in more informed and imaginative ways.

The Australian Business Foundation/Deloitte study determined that companies can look to innovation to help them build such imaginative business models.



Case study



One World for Children innovatively grew its business by adding new services to meet unarticulated customer needs.

One World for Children, a child care facility in North Geelong, Victoria, is a good example of a company that changed its business model in response to competitive pressures. In a highly scrutinised industry, it innovatively grew its business by adding new attributes to its services that satisfied unmet and unarticulated customer needs.

One World for Children⁵ introduced longer daily operating hours and opened on Saturdays as a play centre and meeting place for parents and children with specialist programs like music and baby massage.

It revolutionised the grouping of children into family groups in rooms of 20 children, not following the norm of segmenting by age group with designated carer ratios.

It added kindergarten sessions for three year olds and four year olds which can be used independently of the child care. It now offers a highly interactive website for online enrolments and data update, chat room for parents and e-training for TAFE students as well as providing consultancy services to other child care centres on its family group model.

These innovations have deepened the company's skill set and capabilities, added to their financial viability by working their resources and facilities harder. It helped One World for Children differentiate its services from its competitors, resulting in new markets and revenue generators.

It is acknowledged that innovation is complex to energise and manage. When starting the innovation journey companies should not underestimate the power of 'resistance to change', and the attraction of the 'tried and true'.

Innovation helps
businesses keep up with a
moving target . . .

investment in innovation
breeds further innovation.

Partnering:

Successful innovation needs partners

Innovation is not a solitary pursuit – it needs partners, collaborators and alliances. Innovative ideas, by definition, rarely confine themselves to a single group. They require support. They need to be built on and will flourish with input from different groups, from different locations adding different skills, disciplines and experiences.



In response to the question 'What type of help is most useful to innovation in your business?' participants in this study identified a 'network of like minded innovation practitioners' as most important along with, 'the experience and guidance of others in the same and different industries' and 'market analysis – getting an understanding of stakeholders who buy into the vision of the company'.

Sharing relevant case studies of success and best practice and developing tailored and informed solutions were deemed the most useful help. And developing complementary skills and practical mentoring, as well as sharing insights from demanding customers, were important. As were sharing practical experiences, contacts and the 'how to' of innovation in particular around culture change.

These collaborative, partnering activities were identified as invaluable in getting innovation programs up and going in the middle market along with clear 'interaction from customers and peers'.

General responses around access to 'competent support systems including good quality government support,' which covers leveraging available government incentives as well as 'good collaborators in particular industry partners,' continue to point to the importance of access to partners, collaborators and alliances in building value from innovation in business.

The following case study from CEA Technologies, Fyshwick ACT exemplifies this 'most useful external help'. This case study was reported in the Final Report of the Prime Minister's Science, Engineering and Innovation Council, Working Group on Growing Technology-Based SMEs, March 2005

Case study



CEA Technologies (Fyshwick, ACT).

CEA Technologies distinguished itself by intelligent partnering with local firms and major international contractors.

CEA Technologies designs, develops and exports systems at the forefront of radar and communications technology, with 30% to 40% of its revenue coming from exports and more than 90% of that from defence-related products.

The Australian and US Departments of Defense are CEA's most important customers. CEA Technologies invests heavily in in-house research and development which it describes as a combination of product development and breakthrough technology.

But while CEA's technology is leading edge, it capitalises on this by continuously upgrading its capability to supply world class products and services and solve problems for highly sophisticated and demanding customers globally. It distinguishes itself by intelligent partnering with local firms and major international contractors, which are also CEA's competitors.

This proficiency at partnering extends to venture capitalists and to Australian Government agencies which have supported CEA's technology development and overseas market access.

By embracing difference and input even from competitors, CEA Technologies continues to operate well on the world stage.

The least useful external help is generic, formula 'cookie cutter' prescriptions. Organisations or people who 'do innovation' for you and don't teach you are least useful, as are 'specialists' with trite or wrong answers. Lack of practical implementation capability, or 'help' without specific industry or enterprise understanding was seen as worthless.

The value of innovation is
outcomes-focused
for the business enterprise

. . . and innovation is
often championed by
individuals predisposed
to taking a leap of faith to
move beyond 'successful
mediocrity'.

Results-oriented:

Innovation must be disciplined to contribute to competitive outcomes



Innovation is about doing the hard yards. It is worthwhile only if executed as a disciplined, structured and sustainable process in enterprises. In this way it will result in a demonstrable contribution to competitive outcomes.

A critical issue is to be clear about the choices that are made. Innovation programs typically surface a plethora of ideas and opportunities. A key to delivering outcomes is to be focused on which ones to pursue. Many innovators have failed by trying to do too much with too little resource and project management.

The difference in business experience in 2006 to that in previous years is its 'outcomes based' approach. Business today recognises the need for a disciplined process where what is learned can be replicated and embedded systematically in the organisation.

Persistence, systems, leadership, structure, the right people, the application of resources and skilled execution were all seen as ensuring that innovation achieves business outcomes.

Coupling ideas and outcomes, and harnessing creative thinking in a disciplined way to solve a real problem, is new. The challenge is to ensure that the disciplined process does not destroy creativity and innovation, which depends on unfettered and divergent thinking.

There is also a prevalent view that innovation is inherently uncertain and risky. Because it seeks alternatives it disrupts the status quo. Therefore, managing calculated risk goes hand in hand with innovation. New ideas and creative thinking are not enough. Structure and discipline are also needed.



Case study



Jones Lang LaSalle has found new ways to seek new solutions by managing its idea generation process. It now incubates its ideas and fast tracks them through to commercialisation.

One company that has done the hard yards and developed the structure and discipline to build on its own activities and intellectual property is real estate conglomerate Jones Lang LaSalle. Its trigger for innovation was the desire for growth and to leverage its own innovative potential.

Working with innovation partners, Deloitte, the firm recently introduced a systematic innovation program through a disciplined structured approach in two main phases of work:

- the first was development of the strategy for innovation; identifying the vision, the goals and targets
- the second was the design, development and implementation of the innovation program.

Some of the actions in this second phase included an innovation engagement survey, a communications and implementation plan and end to end process documentation. Jones Lang LaSalle also held idea generation workshops and put idea development tools in place including the ideas capture and collaboration tool, Innovate™ with idea filtering using developed criteria and stage gates.

The program took about two and a half months to implement and involved combining different and unique external skill sets to work with an internal JLL team to help build the company's own innovation capability.

The future for Jones Lang LaSalle will be to monitor the Australian program and continue to develop and commercialise some of its new winning ideas, in advance of a potential roll out across the rest of Asia-Pacific.

Coupling ideas and outcomes, determining choices and priorities, and harnessing creative thinking in a disciplined way to solve a real problem, is new.

People:

Innovation motivates people

People and business are two clear triggers for innovation in the middle market. These triggers reflect the key facts that innovation is a 'people' driven pursuit energised by individual aspirations and embraced because of market need.

Innovation programs provide opportunities to find new strategic capabilities and leverage existing resources; these are highly valued. And in these days of skill shortage, the value of innovation programs to attract and retain clever staff is an important consideration.

Innovation motivates people. All companies that participated in the study agreed that innovation makes people feel positive. It is one of the rare corporate change processes which excites, motivates and engages.

Individual aspirations around innovation were typically expressed in terms like: learning, challenge, excitement; personal stimulation; curiosity; dissatisfaction with the status quo; the fun of the chase; disproving that 'it can't be done'; seeking better work/life balance; and future personal financial security.



Case study

Deloitte.



Leadership is also an important part of the 'people' trigger. Recently voted as the most innovative professional services firm in Australia by clients, Deloitte's Australian leadership were responsible for formalising innovation, developing it from an 'inside to outside' process. CEO Giam Swiegers and Managing Partner Consulting and Innovation champion Asia Pacific and Australia, Gerhard Vorster considered innovation would be a pathway to bringing greater ingenuity and integration to Deloitte's market performance with clients.

To this end Deloitte started a program to encourage people to explore innovative ways of thinking and apply different perspectives to solving business issues. Deloitte addresses its challenges of growth with a daring program that is transforming the work environment at the deepest level. The premise is that everyone is an innovator. At Deloitte they like to say that the firm gives its employees permission to play in the innovation space.

Career enhancer

Submitting creative ideas that can lead to service improvements or breakthrough new products is such a high priority that it is a career performance indicator for all employees and is recognised favourably at review time. More than a thousand employees have attended workshops to develop innovation skills and a system of rewards and recognition celebrates their achievements.

There is a hotly contested 'Innovator of the Year' award at Deloitte. It is competitive and the winners are awarded their \$5000 prize at the annual Partners' Conference. Indeed the interest in the value of innovation is such that both 2005 winners became new partners in 2006.

The opportunity to become more attractive than its competitors, to grow and gain market share and outstrip the competition were seen as good reasons at Deloitte to spend more on innovation.

As contemporary wisdom has it: Innovation assets are like most other kinds of asset: they cost money to acquire and depend on regular leveraging to deliver an appropriate return on investment. With two major awards under its belt due in large part to innovation, Deloitte is comfortable that its ROI in innovation is well and truly paying its own way.

Innovation is a people process. It happens when people work together on a challenge that energises them in an open environment of trust and respect in which mistakes are considered learning events and everyone understands what value is being created and for whom.

How to teach old dogs new tricks and share practical experiences, contacts and the 'how to' of innovation around culture change is invaluable in getting innovation programs going in the middle market.

Market driven:

One size does not fit all

Innovation is highly context-specific in business. The path to innovation for any particular enterprise depends on a thorough understanding of its business strategy and capabilities, its position in its industry sector domestically and globally, and the external market conditions and trends it faces.

Risk and the length of time required to achieve ROI in innovation were identified in the Australian Business Foundation/Deloitte Innovation study as key obstacles to innovation. Because innovation is highly context specific, the need to have a thorough understanding of business strategy and one's own capability were extremely important.

The issues of lack of confidence in the company systems, and the lack of skilled people to execute innovation productively and sustain it were identified as significant hurdles to be overcome. The obstacles of 'short term' focus and the constant pressure to deal with the 'immediate and urgent' as opposed to the future were identified as frequent alibis that can easily stop progress.



Case study



GPC Electronics in Penrith has grown spectacularly over recent years by distinguishing its products and services.

GPC Electronics in Penrith has grown spectacularly over recent years by distinguishing its products and services. Its journey to innovation was highly context specific, demonstrating that one size does not fit all. GPC featured as one of the case studies in research done for the Australian Business Foundation by Dr Richard Hall of the University of Sydney on 'Knowledge Management in the New Business Environment'.

This manufacturing firm in Western Sydney now successfully competes with global competitors through the smart application of distinctive knowledge in project management and customer relationship management.

GPC Electronics designs, manufactures and markets interconnected products and related services for the electrical power, automotive, consumer, communication and contract electronic manufacturing industries. It now has an impressive client list that includes Nortel, Toshiba, Ericsson, Siemens and Alcatel.

GPC's spectacular growth in recent years has rested on revenues growing at a compound rate of 40% p.a. for seven years. It currently employs 450 staff.

Like many Australian enterprises, GPC realised it could never compete in a globalised, fast-paced world economy as a high-volume, low cost producer. To distinguish its products and services GPC needed to carve out a specific niche. It needed to harness market intelligence, process and supply chain knowledge.

To do this GPC's managers began to treat their customers as partners and using this closer relationship developed a deep and detailed understanding of the customer's business priorities, strategic imperatives and competitive environment.

This close-contact, collaborative approach enabled GPC to gain a key strategic advantage over its often larger global competitors. It learnt how to understand and respond and even anticipate its customers' needs more effectively.

Now GPC competes on the world stage by its superior use of knowledge, particularly about industry and market trends, and customer needs. Its innovation comes primarily from GPC's mid-tier professional ranks, with excellent project management being the main focus.

The firm acquires most of its new knowledge through professional and industry bodies and associations which provide the electronics industry with an opportunity to develop a critical mass and an effective networking and knowledge sharing community.

Utilising the 'know-who' is an integral part of effective knowledge management for GPC.

Through this innovative approach to its strategy, GPC Electronics is now able to respond effectively to the challenges of rapidly changing markets and advances in technology and stay ahead of the pack.

All the participants in the study agreed that they can no longer 'get by' by competing on cost or price. The advantage was to compete by innovation.

Performance:

Innovation is multi-faceted and complex

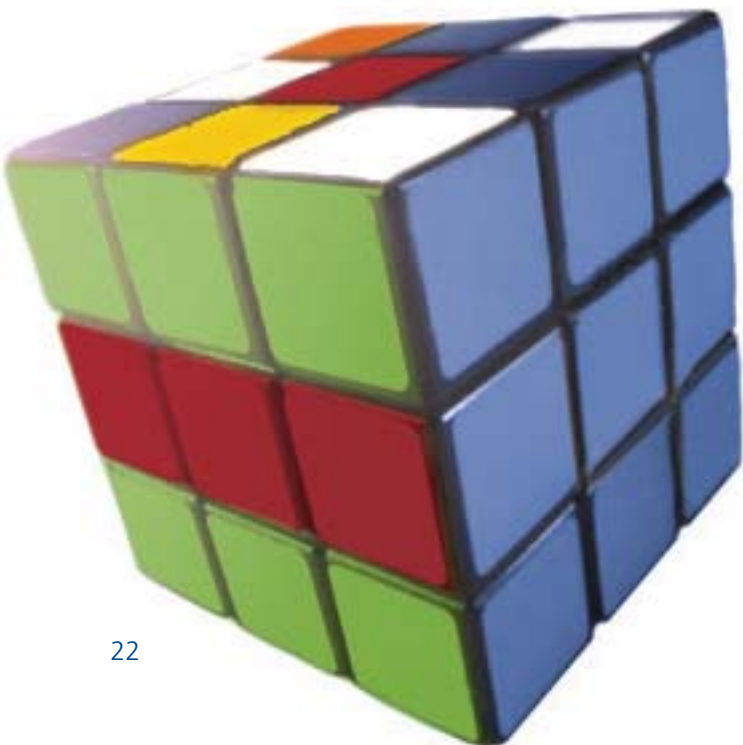
The task for industry building is to ensure that the broader business community, particularly the middle market companies in mature and traditional industries, understand that competing on the basis of knowledge rather than cost is a decisive factor in rising to the more intense global competitiveness challenges.

The key considerations for innovative competitive advantage, as this study's insights show, cover the ability to:

- meet customer needs
- improve performance
- understand markets
- improve knowledge management
- adapt to changing technology
- motivate and skill people and
- deliver results.

Some of the competencies needed to do this were identified as:

- project management skills
- integration of heterogeneous sub-systems
- risk management and financial management
- supply chain logistics
- problem solving and adaptation to particular applications or customised conditions.



Case study



Victorian Metropolitan Ambulance Service, provides road and state-wide air ambulance services to more than 300,000 emergency cases each year.

Victorian Metropolitan Ambulance Service, which provides road and state-wide air ambulance services to more than 300,000 emergency cases each year is a good example of a service that needed to embrace innovation and understood the key considerations for innovative competitive advantage as described above. And in a multi-faceted and complex piece of work, also developed the five competencies outlined above to implement an interconnected mobile recording system for paramedics in the field.

Until recently the majority of Metropolitan Ambulance Service (MAS) paramedic teams recorded patient, operational and clinical management data on hand written A3, triplicate copy, standard forms.

Part of the 'innovation' challenge for MAS was to find a way to formalise this clinical data-taking and share it with others in dramatic situations where time is critical in order to save a patient's life or limb.

The Eclipse Group, a leading innovative web and wireless technology developer, worked with MAS to connect paramedics' information in the field through a wireless tablet PC to a custom built application and database.

The partnership resulted in the Victorian Ambulance Clinical Information System (VACIS), which is now one of the most sophisticated, integrated ambulance information systems in the world. VACIS is the only computer system that matches the logical processes followed by MAS paramedics and is now being used in other Australian states.

Enterprises need to integrate several potentially contradictory prescriptions to boost their capacity to innovate. They must simultaneously foster wide-ranging unfettered creative thinking, exploration and experimentation. They must overcome commitment to traditional approaches and institute sound replicable processes to manage and implement innovations over time.

Where to next:

The challenges for the future

The study found that middle market companies are not only using innovation, they are democratising innovation. Any firm can be innovative, yet it is clear that innovation is not just something you do if you are an enlightened firm. It is something you do because you have to ... to survive.

The study identified a few obstacles to innovation, with complacency on the internal front often the most prevalent. Firms in the study reported situations where they had to overcome current success, which more often than not masked the need to change.

Many were concerned about their size and the associated lack of people, time, money and knowledge. They also identified the problem of too many ideas and a lack of focus around how to deal with them. As well as the fact that innovation takes time. The perception that 99% of ideas fail was enough for many businesses to place innovation in the 'too hard' basket.

That said, all the participants in the study agreed that they could no longer 'get by' by competing on cost or price. To get an advantage they had to compete by innovation.

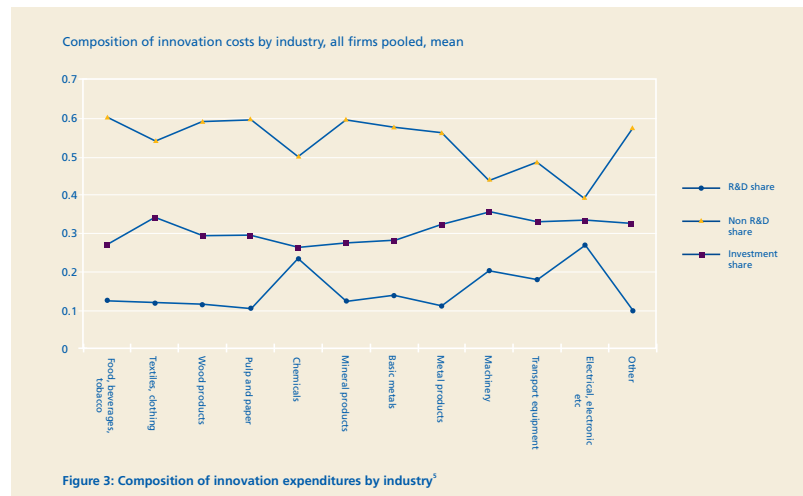
Technology only part of the story . . .

The Australian Business Foundation/Deloitte study points out that it is important not to equate innovation just with technology. Technological innovation is important, but it is only part of the story.

This means that the current measures of investment in innovation by level of expenditure on R&D are too narrow. Investment in innovation is not restricted to research and development, but extends to training and skill development, market research, design, use of advanced machinery and equipment, engineering development, and knowledge drawn from licences and patents.³

In fact, of the total expenditure on innovation in Australia in recent years, only one-third consisted of direct spending on research and development. Innovation is not just new products and technologies, nor is it only creativity and entrepreneurship.

Australia is not typically a technology maker, nor a technology taker. Rather, it is a nation of technology integrators



Previous research by Professor Keith Smith⁴ and the Australian Business Foundation, coupled with this investigation, shows that innovation is based on the painstaking development of new product concepts that either solve consumer problems or meet market demands.

Using existing technology, innovation rests on learning and problem solving by firms in the middle market, not primarily on scientific discovery.

As the Australian Business Foundation/Deloitte study shows, innovation is multi-faceted and complex. It encompasses business models, growth, results, markets, people and performance. Middle market companies in Australia use innovation to create new value by market-driven business transformation, building on their own knowledge base and intellectual property (IP). They share and partner as well as leverage their own activities.

Where the Government comes in ...

To take Australia's innovative journey forward, middle market businesses see a crucial role for Government. They perceive compliance and regulation as obstacles and some identified bureaucratic procedures in government and the 'lack of leadership' in business as problematic.

The challenges the participants in the study identified for the future for business and government to better partner included:

- creating an environment that supports business leaders to innovate
- fostering existing knowledge bases at company level
- placing more emphasis on identifying, capturing, sharing and applying knowledge
- investing in skilling and engaging people.

The call to action to the Government, was to foster a business environment that could mitigate risk and manage uncertainties.

How ready is your organisation for innovation? Take this quick quiz and see how you score:

An executive's diagnostic

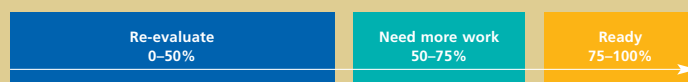
Creating the required foundation, enhancing operations to foster innovation, and managing change are important steps in transforming your company into an engine of innovation. The following 20 questions will assist your organisation better understand where you are on this culture change journey.

Create the required foundation	Yes		Somewhat		No
1. Does innovation continually contribute to revenue generation and cost savings within your company?					
2. Is innovation pervasive across the company, or is it isolated to specific groups?					
3. Do your employees understand how innovation relates to the corporate vision and goals?					
4. Have you created a set of core values, beliefs, and norms in order to guide the development of your corporate culture?					
5. Have you redefined the roles of your company leaders to encourage and champion creative activities?					
Enhance operations to foster innovation	Yes		Somewhat		No
6. Does your workforce consist of people who have the ability to approach problems in an unconventional manner?					
7. When hiring new employees, do you look for people who are willing to challenge the status quo and pursue new trends and directions?					
8. Do you involve employees in the hiring process?					
9. Do you have programs and activities that allow for meaningful interaction between new and existing employees?					
10. Do you encourage your employees to be divergent thinkers and ensure that they have the right information and resources to follow through on their ideas?					
11. Have you assessed your company's organisational structure to identify and remove decision-making bottlenecks?					
12. Is there a high degree of trust and open communication between various groups in your company?					

13. Do you balance empowerment with accountability by creating a set of metrics for your employees to work toward?		
14. Do your employees feel secure enough to believe that should their ideas fail to realize the desired result it will not affect their position within the company?		
15. Does your company have a reward system that fosters behaviour that contributes to innovation?		
Manage the ongoing change	Yes	Somewhat No
16. Do you have a team of dedicated individuals, composed of representative employees, that lead and champion the changes required to sustain innovation?		
17. Does this team monitor the activities of the company and ensure that there are no inconsistencies in the practices expected and performed?		
18. Does this team use dialogue and consensus-building to garner support for the changes at the departmental level?		
19. Do you manage the expectations and anxieties of your employees by communicating why change is important, involving employees in the implementation process, and providing the time and opportunity to disengage from the status quo?		
20. Do you articulate clear short-term goals and objectives, measure progress, and communicate evidence of success to maintain the momentum and enthusiasm of your employees as changes are implemented?		

Scoring key:

If more than 75 percent of your answers (16 of 20) are "Yes," then your company is addressing the challenge of fostering an innovative culture. If 50 to 75 percent of your answers (10 to 15) are "Yes" or "Somewhat," there is more work to be done in order to foster an innovative culture. If less than 50 percent of your answers are either "Yes" or "Somewhat," your company needs to re-evaluate its approach towards fostering an innovative culture.



Appendix

¹ The core business of the Australian Business Foundation is research - studies that advance knowledge and detail new thinking on what will make Australia more competitive and prosperous. Its research covers a variety of themes including boosting the innovation capabilities of Australian firms, the rise of the knowledge economy and the importance of intangible assets, and challenges for policy makers to ensure Australia is world class in the high growth, high return emerging industries. See more at www.abfoundation.com.au.

² Australian Business Foundation, Innovation and the Knowledge Economy in Australia an Overview – May 2006 – Research by Professor Keith Smith (Smith 2005, 18; 2004, 9f; ABS & DITR 2006, 36).

Professor Smith also points out that in Australia, as in most advanced economies, high technology or science-based industries and the technologies underlying them are very important, but they are also very small. He notes that high technology industries account for only around 3% of Gross National Product (GNP) in most OECD economies (Smith 2004, 6).

Furthermore, Professor Smith affirms that innovation is pervasive across all Australian industries. Traditional, low-to-medium tech industries, like food processing, metal products, chemicals, transport, mining and hospitality are no less knowledge-intensive than high-tech ones (Smith 2004, 9-18). Professor Smith drew extensively on data subsequently presented in the 2006 ABS-DITR report: Patterns of Innovation in Australian Business 2003.

Innovation Data Facts (ABS & DITR 2006, 9-15)

- 35% of Australian businesses undertook at least one form of product, process or organisational innovation during 2001-03
- 'innovation is occurring across the economy'
- there is no great variation by industry around the mean
- 50% of businesses innovating in utilities
- 27% of businesses innovating in accommodation, cafes and restaurants.

New or changed goods or services

- 17% of Australian businesses introduced new or changed goods or services in 2001-03
- communication services, manufacturing and wholesale trade recorded the highest forms of innovation 25% x 30%
- accommodation, cafes and restaurants, mining, retail trade, and construction recorded the lowest form of innovation at 11%.

Operational Process Innovation

- 23% of Australian businesses undertook operational process innovation in 2001-03
- standout industries were communication services, utilities and manufacturing with 29%
- mining, construction, and accommodation, cafes and restaurants were 20%.

Organisational or Managerial Innovation

- 21% of Australian businesses undertook organizational or managerial innovation
- utilities, finance and insurance, and communication services achieved > 30%
- mining, retail trade and accommodation, cafes and restaurants were < 20%.

The empirics contained in the 2006 ABS-DITR report are consistent with the findings of No

Simple Solutions, a 2005 ANU study into Australia's sectoral innovation systems led by Professor Don Scott-Kemmis (with the Australian Business Foundation as a partner).

This report revealed that innovation centres in the needs of customers and an ability to find distinctive solutions to problems. It points to examples of innovation achieved in response to solving sequences of customer or market problems or opportunities – in mining and exploration software, defence electronics, scientific and medical instruments and value-added agricultural products like wine (Scott-Kemmis et al. 2005, 4, 10f, 22f).

³ Smith, Keith. 2004. 'The Knowledge Economy in the Australian Context'. Published in Innovation & the Knowledge Economy in Australia, 2006. Sydney: Australian Business Foundation. <<http://www.abfoundation.com.au/ext/Frame.nsf/pages/Research>>

Smith, Keith. 2005. 'Promoting Innovation in Australia: Business and Policy Issues'. Published in Innovation & the Knowledge Economy in Australia, 2006. Sydney: Australian Business Foundation. <<http://www.abfoundation.com.au/ext/Frame.nsf/pages/Research>>

⁴ Professor Keith Smith is the co-founder of the new Australian Innovation Research Centre at the University of Tasmania in Hobart. He was previously with the European Commission Joint Research Centre in Seville, Spain for some years, prior to which he was at the Institute for New Technologies, United National University, and Professor at the Norwegian University of Science and Technology (NTNU).

Originally trained at the Universities of Cambridge and Sussex, Professor Smith's academic background is economics and development studies. Following nine years as Lecturer in Economics at the University of Keele, he was appointed as Economic Adviser to the Science Policy Council of Norway in 1988. From 1990 to 2000, he was Research Director of the STEP Group in Oslo, carrying out a wide range of research on innovation issues for Ministries, Research Councils and the European Commission.

Professor Smith's main fields of research are innovation and economic growth, the development of innovation statistics, the use of science in industry, innovation in 'low technology' industries, and knowledge studies. He has worked extensively as a consultant to policy agencies on innovation policy, both at a national and international level – he has been a member of the expert panel 'Innovation Policies in the Knowledge-Based Society' for the European Commission and deputy chairman of the Norwegian Government Commission on Tax Incentives for Business-Financed Research & Development.

⁵ Thorburn, Lyndal & John Langdale. 2003. Embracing Change: Case Studies on How Australian Firms Use Incremental Innovation to Support Growth. Canberra: Federal Department of Education, Science and Training (DEST). <<http://www.dest.gov.au/NR/rdonlyres/A364E094-D061-431C-AFF4-88723DE0532F/1365/embracing-change.pdf#search=%22dest%20embracing%20change%22>>

Scott-Kemmis, Don; Magnus Holmen; Antonio Blaguer; Robert Dalitz; Kevin Bryant; Alan J. Jones and Judy Matthews. 2005. No Simple Solutions: How Sectoral Innovation Systems Can Be Transformed. Canberra: Australian National University. <http://ngsm.anu.edu.au/Research/_documents/NoSimpleSolutions.pdf>

ABS & DITR (Federal Department of Industry, Tourism and Resources). 2006. Patterns of Innovation in Australian Businesses 2003. Canberra: ABS & DITR. <[http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/9B7B5E6344A53669CA2570F80013FC91/\\$File/81630_2003.pdf](http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/9B7B5E6344A53669CA2570F80013FC91/$File/81630_2003.pdf)>

Contacts

Deloitte

Gerhard Vorster

Managing Partner, Consulting Asia Pacific
Tel: +61 (0) 2 9322 7604
e-mail: gevorster@deloitte.com.au

Peter Williams

CEO Eclipse Group
Tel: +61 (0) 3 9208 7629
e-mail: p.williams@eclipsegroup.com.au

Jenny Wilson

Partner, Consulting
Tel: +61 (0) 2 9322 7475
e-mail: jewilson@deloitte.com.au

Alan Scott

Partner, Growth Solutions
Tel: +61 (0) 7 3308 7286
e-mail: alscott@deloitte.com.au

Julia Bickerstaff

Partner, Growth Solutions
Tel: +61 (0) 2 9322 7134
e-mail: jbickerstaff@deloitte.com.au

John Downes

Director, Growth Solutions
Tel: +61 (0) 3 9208 6413
e-mail: jdownes@deloitte.com.au

Anthony Francis

Director, Technology Commercialisation Group
Tel: +61 (0) 8 8407 7066
e-mail: antfrancis@deloitte.com.au

Louise Denver

Director, Communication Innovation
Tel: +61 (0) 2 9322 7615
Mob: + 61 (0) 414 889 857
e-mail: ldenver@deloitte.com.au

Australian Business Foundation

Narelle Kennedy

Chief Executive Officer
Australian Business Foundation
Tel: +61 (0) 2 9458 7438
e: narelle.kennedy@australianbusiness.com.au

Dr Matthew Steen

Research Analyst
Australian Business Foundation
Tel: +61 (0) 2 9458 7342
e-mail: matthew.steen@australianbusiness.com.au

General information

This publication is provided as general information only and does not consider your specific objectives, situation or needs. You should not rely on the information in this publication or disclose it or refer to it in any document. We accept no duty of care or liability to you or anyone else regarding this publication and we are not responsible to you or anyone else for any loss suffered in connection with the use of publication or any of its content.

About Deloitte

Deloitte is a member of Deloitte Touche Tohmatsu (a Swiss Verein). As a Swiss Verein (association), neither Deloitte Touche Tohmatsu nor any of its member firms has any liability for each other's acts or omissions. Each of the member firms is a separate and independent legal entity operating under the names "Deloitte," "Deloitte & Touche," "Deloitte Touche Tohmatsu," or other related names. Services are provided by the member firms or their subsidiaries and affiliates and not by the Deloitte Touche Tohmatsu Verein.

About Deloitte – Australia

'Deloitte' refers to the Australian partnership of Deloitte Touche Tohmatsu and its subsidiaries. Deloitte, one of Australia's leading professional services firms, provides audit, tax, consulting, and financial advisory services through around 3000 people across the country. Focused on the creation of value and growth, and known as an employer of choice for innovative human resources programs, we are dedicated to helping our clients and our people excel. For more information, please visit Deloitte's web site at www.deloitte.com.au.

About the Australian Business Foundation

The Australian Business Foundation is an independent research think tank founded in 1997 by the eminent industry organisation, Australian Business Limited to produce fresh insights and practical intelligence to enhance Australia's capabilities and global competitiveness. The body of research and scholarship generated by the Foundation has probed beyond the obvious to advance knowledge about what makes Australia competitive and what will support Australia's enduring economic prosperity, levels of employment and enhanced living standards.

The Australian Business Foundation's research focuses on business innovation, new models of competitiveness and opportunities arising from a knowledge-based economy.

More information about the Australian Business Foundation and access to its research can be found at <http://www.abfoundation.com.au>

Liability limited by a scheme approved under Professional Standards Legislation.

© Deloitte Touche Tohmatsu, November 2006. All rights reserved.

AM_SYD_11.06_019636



Contact us

Deloitte
225 George Street
Sydney, New South Wales
Australia

Tel: +61 (0) 2 9322 7000
Fax: +61 (0) 2 9322 7001
www.deloitte.com.au

Australian Business Foundation
140 Arthur Street
North Sydney, New South Wales
Australia

Tel: +61 (0) 2 9458 7553
Fax: +61 (0) 2 9929 0193
www.abfoundation.com.au