

NAB LABS AUSTRALIAN BUSINESS INNOVATION INDEX 2018

Business innovation behaviours in Australia

NAB Behavioural & Industry Economics

September 2018





TER	2
SAMSON	3
	4
NOVATION INDEX OVERVIEW	6
N	8
BY INDUSTRY	10
BENEFITS FOR CUSTOMERS & BUSINESSES?	12
AL INNOVATION	13
	14
ORS IN BUILDING A CULTURE An organisation	16
ENERGY EFFICIENCY MADE EASIER Ven by passion for accessibility	19
APPLYING HIGH-TECH TO GRAIN Ery of differentiated products	20
<mark>Mes:</mark> Regional Leadership Sustainable, Boutique Home Building	23
AN EFFICIENT ONLINE BOOKING Ig containers globally	24

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FOREWORD BY ALAN OSTER



ALAN OSTER **NAB Chief Economist**

For many business owners, innovation can seem an abstract concept. But we know that innovation is common across the entire business sector, regardless of size. Driven by their passion for their customers and competitive pressures, many small business owners innovate continuously.

But few call this innovation. Rather, they'll speak of improvements or simple changes they have made to their everyday processes or incremental enhancements to their products or services.

In reality, there is no simple diagnostic. But, by measuring actual innovation behaviours, as opposed to other metrics such as patents or R&D intensity for example, NAB's innovation index is unique in that it can be applied to business innovation irrespective of size and type of business.

The NAB Labs Business Innovation Index is based on the extent to which firms have adjusted, improved or changed anything in their business that allowed them in the past year to do things: differently; more quickly; and more cost efficiently.

This report is our third edition of this annual series and provides a timely update on how business innovation behaviours have been tracking in Australia over the past 12 months. Australian businesses were once again asked to assess their innovation behaviour as well as the "culture of innovation" (their perception of innovation) within their own firm, industry, and Australia as a whole.

It is heartening to report that not only do Australian business believe that the "culture of innovation" in Australia has improved significantly over the past 12 months, when measured against their actual behaviours, innovation is also significantly higher than in 2017.

The rise in innovation aligns with more robust levels of business conditions reported in NAB's Monthly Business Survey over the past year or so. That said it is noteworthy that there remains a strong emphasis on incremental innovation (such as an improvement to an existing product, service or process), rather than more radical innovations, as businesses remain focused on paying down debt, business simplification and cost reductions, rather than more significant business investment.

By industry, it is interesting to note that Manufacturing, Finance, Business & Property Services have replaced Utilities & Telecoms as the most innovative sectors in 2018.

Encouragingly, when we look at the results across the country, there has been a significant improvement in the levels of business innovation in all states, with the biggest gains in VIC, TAS and QLD. As a result, VIC and QLD have overtaken WA as the most innovative states in the country.

We hope this research will help shine a light on the ongoing innovation efforts of Australian business.

FOREWORD BY DANNY SAMSON



Professor of Management University of Melbourne

The survey data revealed some extremely interesting and generally positive findings about the culture-building factors of innovation. It's entirely consistent with international best practice that leadership, technology, execution and customer focus elements were the strongest reported factors, all of which are key to innovation success. In contrast, the reported low emphasis on innovation measurement indicates the immaturity of approach that many businesses have, in that individual innovation projects can be accomplished without organisational measures of innovation, yet to sustain high levels of 'systematic innovation capability' one must set up measures and business outcomes, which we know 3M, CSL, Apple, Google, Toyota and other innovation leaders emphasise. I expect that as Australian companies become mature in innovation capabilities, that measurement becomes more emphasised.

Other notable elements of innovation culture and behaviour that were reported as relatively low were of funding and failure, both of which are opportunities for future improvement. Funding is key, because no matter what the state of the innovation approach, output will be a direct function of input. Failure is higher than reported in innovation hotspots such as Silicon Valley while openness to sensible risk-taking and a 'fail often and fail fast' attitude aren't common across our economy.

We also saw a continued emphasis on incremental innovations over radical innovations, and on cost driving innovations relative to speed or differentiation, which reflects our economic and business structure. Innovative process improvements that reduce cost were recognised as important to business success as new marketplace offerings.

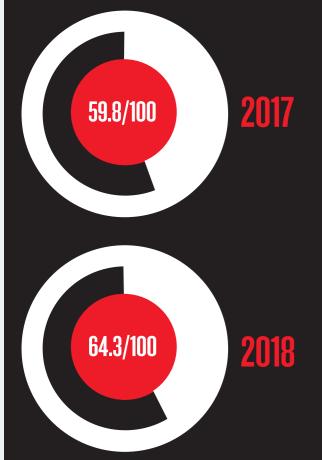
Our new questions this year on digital disruption reflect the rapidly rising threats and opportunities of new technologies that significantly impact all industries. We saw that innovations such as website and social media were

understandably more extensive in business-to-consumer sectors than in primarily business-to-business sectors such as mining, yet these activities are relatively low across most sectors.

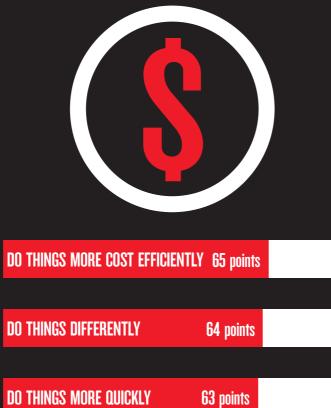
On topics such as business model innovation, workflow collaboration systems, business intelligence, analytics and automated transaction processing, lower levels of activity were reported, showing less sophisticated digitalisation activity. This presents both opportunity and threats of disruption for those who underinvest. We already see a myriad of large players (eg Amazon in retailing and wholesaling) and smaller players such as fintech and other start-ups securing digital disruption opportunities with larger incumbents strategizing on how to beat, join or innovate to combat these plays. To avoid disruption by new players, existing businesses need to become 'self-disruptors'. This connects to the survey findings on the need for sound leadership, customer focus, and change management capability, in concert with a commitment to uplifting innovation capability.

KEY FINDINGS

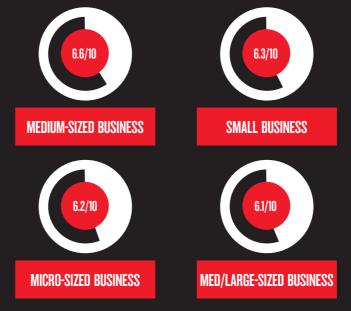
THE NAB LABS BUSINESS INNOVATION INDEX HAS INCREASED SINCE 2017 - OVERALL, BUSINESSES BELIEVE THE CULTURE OF INNOVATION IMPROVED SIGNIFICANTLY OVER THE PAST 12 MONTHS



THE INDEX IS BASED ON THE EXTENT TO WHICH FIRMS (REGARDLESS OF SIZE, TYPE, INDUSTRY OR LOCATION) HAVE ADJUSTED ANYTHING IN THEIR BUSINESS IN THE PAST YEAR ACROSS THESE THREE TYPES (WHERE 100 IS THE MOST EXTENSIVE)



BUSINESSES' RATINGS BY EMPLOYMENT SIZE OF INNOVATION CULTURE



By size, all firms rated the culture of innovation in Australia higher than in 2017 (0= not at all innovative; 10 = extremely innovative)

DIGITAL DISRUPTION - KEY FINDINGS

Businesses recognised opportunities presented by social media and digital tools, however, digital disruption – applying new technology to promote and deliver products and services to customers more efficiently also poses threats to companies that haven't prepared for disruption.

Most businesses saw opportunities arising from digital disruption, but also sad that their business was still 'moderately' vulnerable to some form of disruption. On average, businesses **5.7 out of 10** (10 being 'completely' vulnerable).

LEADERSHIP			51%	
TECHNOLOGY		40%		
EXECUTION	29%			



A NUMBER OF FACTORS CAN DRIVE THE CULTURE OF INNOVATION WITHIN A BUSINESS. ACCORDING TO THE SURVEYED BUSINESSES, THE MOST IMPORTANT OF THESE IS LEADERSHIP.



NAB LABS BUSINESS INNOVATION INDEX OVERVIEW

Are Australian businesses innovating?

The NAB Labs Business Innovation Index provides another measure of innovation that is more intuitive and easily applicable to all business, regardless of size, type, industry or location.

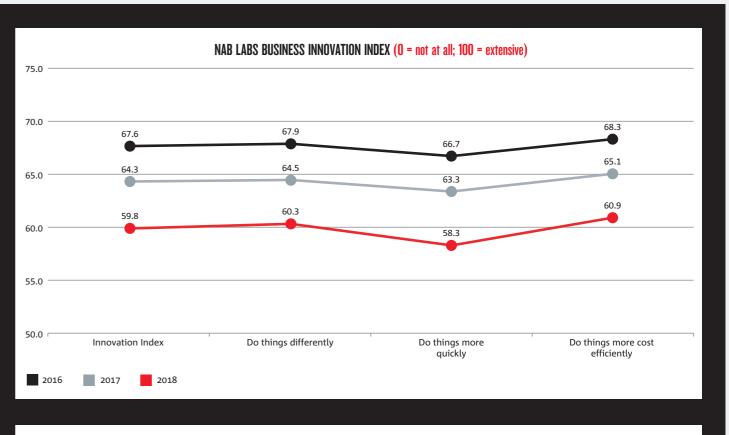
The Index is based on the extent to which firms' have 'tweaked', 'adjusted', 'improved' or 'changed' anything in their business that allowed them in the past year to do things:

- differently;
- more quickly; and
- more cost efficiently

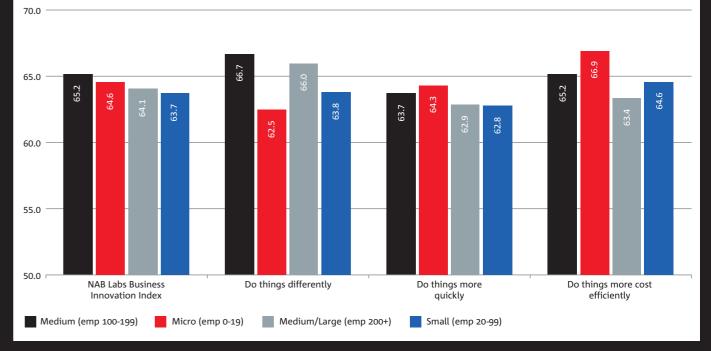
Overall, the NAB Labs Business Innovation Index rose to 64.3 points in 2018 (where 100 is 'extensive'). This was up from 59.8 in 2017 but down from 67.6 in 2016.

All three components of the Index improved over the past year. Cost efficiency (65.1) continued to be the biggest driver of innovation, ahead of doing things differently (64.5) and doing things more quickly (63.3 points).

The NAB Labs Business Innovation index does however, mask differences in the overall level of innovation and drivers of innovation by business size. Medium-sized business scored highest for overall innovation (65.2), and also well above the same time last year (59.6). They also scored highest for doing things differently (66.7), just ahead of medium/large businesses (66.0). Micro-businesses were the next most innovative (64.6) and were more innovative than at the same time last year (60.0). Innovation in this group was also the highest when it came to doing things more cost efficiently (66.9) and more quickly (64.3), but they were the least innovative when it came to doing things differently (62.5). Innovation was also more extensive in small and medium/large sized firms relative to last year.



NAB LABS BUSINESS INNOVATION INDEX: BUSINESS SIZE (0 = not at all; 100 = extensive)



Download the full NAB Labs Business Innovation Index from:

business.nab.com.au

CULTURE OF

novation in Australia as a whole, within their indus rithin their own business

In 2018, businesses rated the culture of innovation in Australia more positively sized firms (6.1) were most positive and than at any time since 2016, scoring 6.3 out of 10 (where 10 is 'extremely' innovative).

Firms were least positive when asked to evaluate the culture of innovation within their own industry - albeit they did score a little higher (5.9) than in 2017 (5.7).

When asked to assess the culture of innovation within their own firm, they were a little more positive, scoring 6.3 (6.2 in 2017) and on par with Australia.

By size, all firms rated culture of innovation in Australia higher than in 2017. But medium-sized firms (6.6) were much more positive than medium/large ones (6.1). Firms in all industries also rated culture of innovation higher, with Wholesale (6.4) and Utilities & Telecoms firms (6.4) most positive and Mining least positive (6.0).

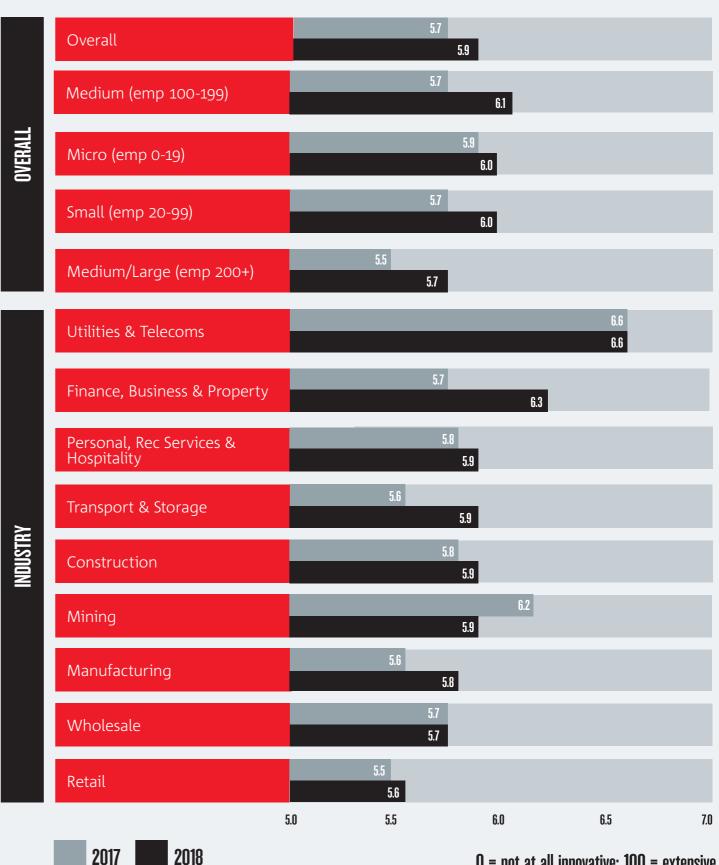
When it came to their industry, mediummedium/large firms least positive (5.7). By sector, Utilities & Telecoms (6.6) led the way, with Finance, Business & Property Services (6.3) the big improver. Mining firms (5.9) said their industry had gone backwards, and firms in Wholesale (5.7) said culture of innovation in their industry hadn't changed.

When asked to rate their own organisation, all firms by size were more positive - especially medium-sized firms (6.6). But the results by industry were mixed. While Finance, Business & Property Services (6.6) viewed it much more favourably, Mining firms (5.6) were far less positive. Utilities & Telecoms sector firms were also less positive (6.8), but still the most positive overall.



CULTURE OF INNOVATION: YOUR INDUSTRY

6.3



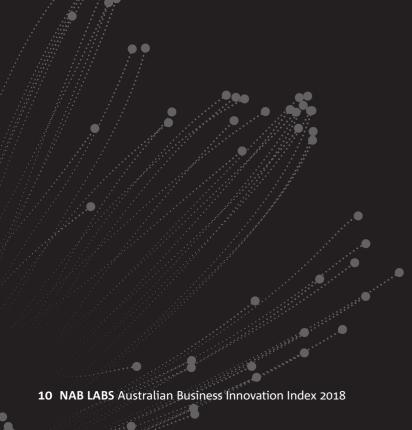
 $\mathbf{0}$ = not at all innovative; $\mathbf{100}$ = extensive

JSTRY BY INDUSTRY

In contrast, innovation in the Mining industry was much less extensive (54.8 vs. 60.7 in 2017). The sector is now rated the least innovative industry overall, after being second highest in 2017.

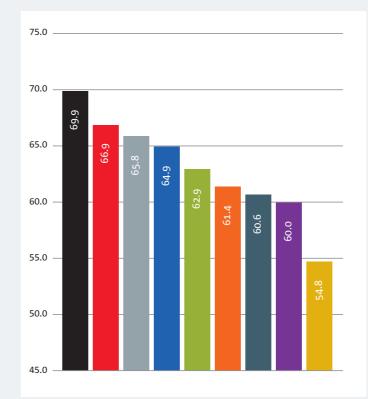
Innovation in the Mining sector was significantly lower in regards to doing things more quickly (50.0) or differently (52.9) than in any other sector.

Innovation rated higher in all other sectors relative to last year, except in Utilities & Telecoms where it was marginally lower (65.8 vs. 66.3 in 2017).

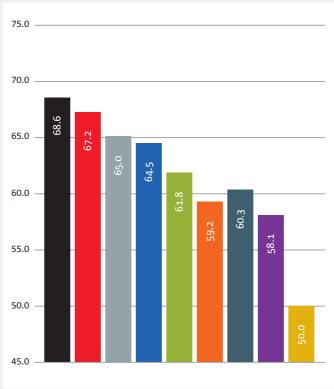




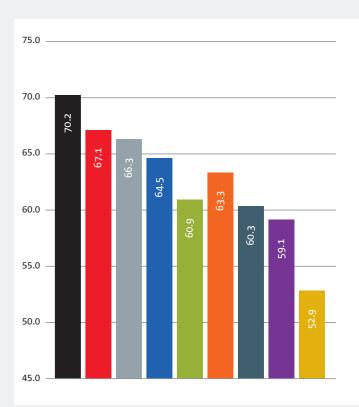
NAB LABS BUSINESS INNOVATION INDEX: INDUSTRY



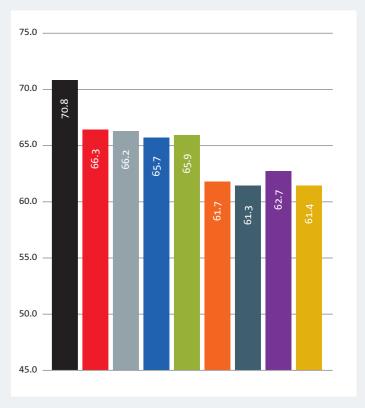
NAB LABS BUSINESS INNOVATION INDEX



DO THINGS MORE QUICKLY



DO THINGS DIFFERENTLY



DO THINGS MORE COST EFFICIENTLY

0 = not at all innovative; **100** = extensive

IS INNOVATION DRIVING BENEFITS FOR CUSTOMERS & BUSINESSES?

We also asked businesses to tell us if they thought their innovation activities had provided a clear benefit for their customers (eq cost, time, functionality, experience etc) or a clear improvement in their business (eg time, revenue/profit, employee drive, brand, reputation etc).

The overall results suggest that both their customers (62.8) and business (65.0) benefited 'moderately', but the impact was somewhat bigger for their business than for their customers.

This was true across all firms by size and industry, except Utilities & Telecoms firms, where customers were identified as the main beneficiaries.

The survey also suggests that businesses with higher levels of innovation were often more likely to see clearer benefits from their innovation activities.

This was most obvious in the Mining sector. Not only did this sector report the lowest level of innovation, but their customers and businesses also benefited the least from their innovation activities.

RADICAL & INCREMENTAL INNOVATION

Innovation can be 'radical' (eq the development of a new business, product and/or process that transforms a business) or 'incremental' (eq an improvement to an existing product, service or process. Businesses were again asked to identify the extent to which their innovation behaviours had been radical or incremental in 2018.

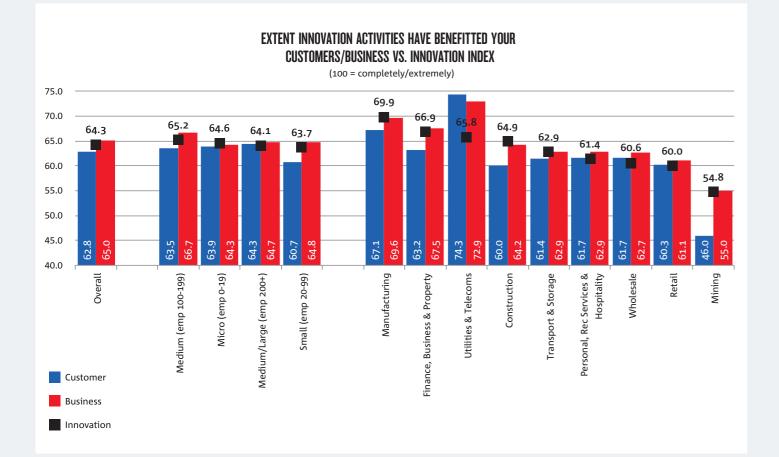
On average, they reported 'low' levels of radical innovation (3.6 out of 10) unchanged from 2017. But they reported 'moderate' levels of incremental innovation - and higher than in 2017 (6.3 vs. 5.5).

All firms by size reported relatively low levels of radical innovation in 2018 (ranging from 4.1 in medium-sized firms to 3.3 for medium/large firms) with radical innovation levels broadly unchanged across all business sizes.

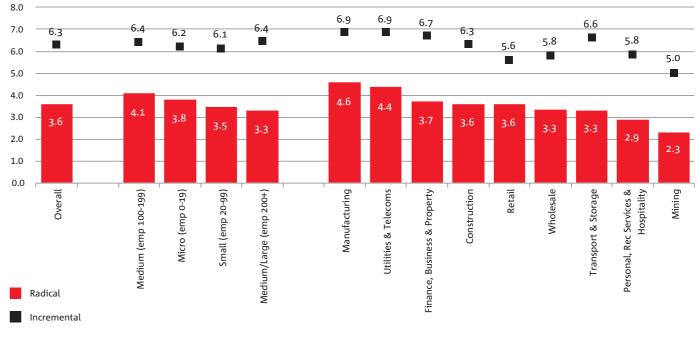
Incremental innovation was broadly similar across all business sizes. It was however, noticeably higher than in 2017 for medium-sized (6.4 vs. 5.2) and small (6.1 vs. 5.1) firms.

By industry, Manufacturing firms scored highest for radical innovation (4.6) and Mining firms the lowest (2.3).

Radical innovation was higher than in 2017 in the Manufacturing, Construction, Retail and Finance, Business & Property Services industries, but lower in all other sectors.



EXTENT ORGANISATIONAL INNOVATION IN THE PAST 12 MONTHS HAS **BEEN RADICAL OR INCREMENTAL** (10 = extensive) 6.9 6.9 6.7



Incremental innovation was also highest in Manufacturing (6.9) and Utilities & Telecoms (6.9) firms and lowest in Mining (5.0). Mining was also the only sector where incremental innovation was less extensive than in 2017, while the level of incremental innovation in the Wholesale industry was unchanged.

DIGITAL DISRUPTION

Innovation in technology and digital business models is disrupting markets and challenging the way business has traditionally operated at an unprecedented rate. In the words of the Reserve Bank's Chief Information Officer, digital disruption is "about innovating to break the ranks of status quo, it redefines the norm and changes the markets and competitors around us. This comes through a relentless focus on the customer and offering new business models and new ways of applying technology."

Some of this disruption can be very positive for business, allowing them to deliver new and better products and services more quickly and cost efficiently, but it can also pose challenges. In this part of the survey, NAB asked business to tell us about their digital innovations, whether they view digital disruption as an opportunity or a threat, how vulnerable they think they are to digital disruption and if they're adequately prepared for it.

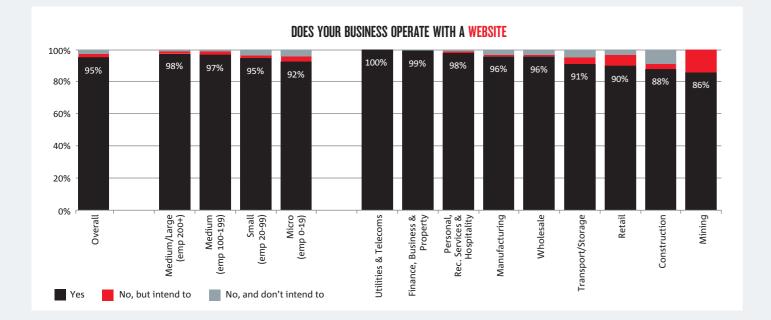
Most businesses recognise that new digital platforms are enabling them to reach customers in new ways. This has been most prevalent in relation to having a website. In fact, nearly all businesses (95%) said they operated with a website. By business size this ranged from 98% of medium/large firms to 92% of micro

firms. There was greater variation by industry, where it ranged from 100% in Utilities & Telecoms to 86% in Mining.

Many companies - nearly 3 in 4 (73%) are also utilising social media to reach customers. Adoption has been highest in medium/large sized firms (85%) and lowest in micro firms (63%). By industry, perhaps not surprisingly given the rise of the 'experience' economy, more Personal, Recreational & Hospitality Services firms (86%) had a social media presence, ahead of Retail (84%) and Finance, Business & Property Services (82%). Far fewer firms in the Mining (43%), Construction (58%), Manufacturing (59%) and Transport Storage (59%) sectors had a social media presence.

Around 3 in 4 firms (76%) also operate everyday digital tools (eg EFTPOS, product scanning etc) to support customer interaction. Not surprisingly, this was most prevalent in Retail (96%) and least prevalent in Mining firms (14%). Even more firms (84%) operate everyday digital tools to support back end operations of their business such as online bookkeeping software and online inventory management systems. Take up has been highest in Retail (90%) and lowest in Mining (57%).

Sarv Girn, Chief Information Officer, Digital Disruption - Opportunities for Innovation and Growth, Speech to the Committee for Economic Development of Australia (CEDA) Adjusting Australia Series, Sydney (11 June 2014)



100%

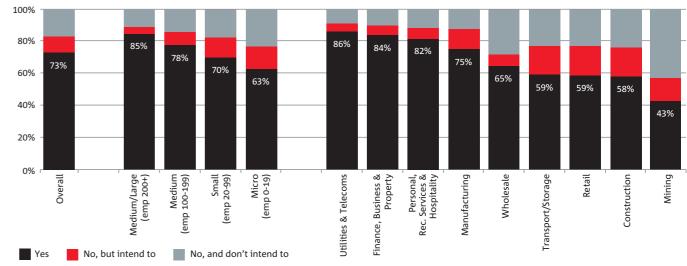
80%

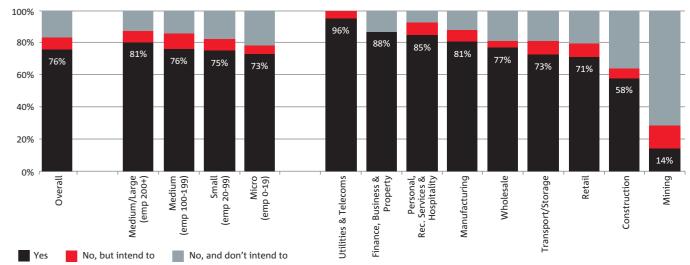
60%

40%

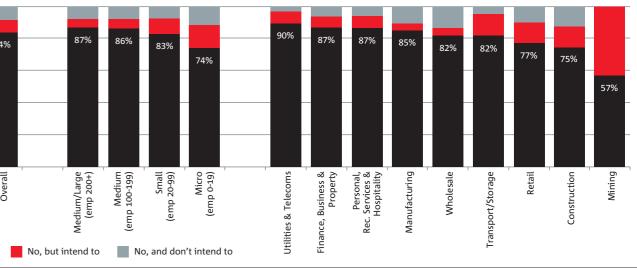
20%

Yes









DOES YOUR BUSINESS OPERATE WITH A SOCIAL MEDIA PRESENCE

DOES YOUR BUSINESS OPERATE WITH EVERYDAY DIGITAL TOOLS TO SUPPORT CUSTOMER INTERACTION



ANT FACTORS IN **OF INNOVATION**

Other key factors include **execution**, or the ability to not only generate new ideas but also implement them (29%), **customer** for Transport & Storage firms (55%), focus and a good understanding of their needs and requirements (29%) and **vision** & Telecoms firms at all. But 3 in 4 (75%) or goals that are clearly articulated and understood by all those within the business (24%).

But what's considered to be important varies considerably by business size and by industry. For example, leadership mattered to 62% of medium/large firms, but to only 43% of micro firms. The difference was even more pronounced by industry, where leadership was most important for 86% of Mining firms, but for only 37% of Wholesale businesses.

Among other noticeable differences, technology was a lot more important but it did not resonate with Utilities Utilities & Telecoms firms said execution was important - by far the highest of any industry. By size, customer focus was much more important for micro businesses (41%) and technology highest for medium-sized firms (48%).

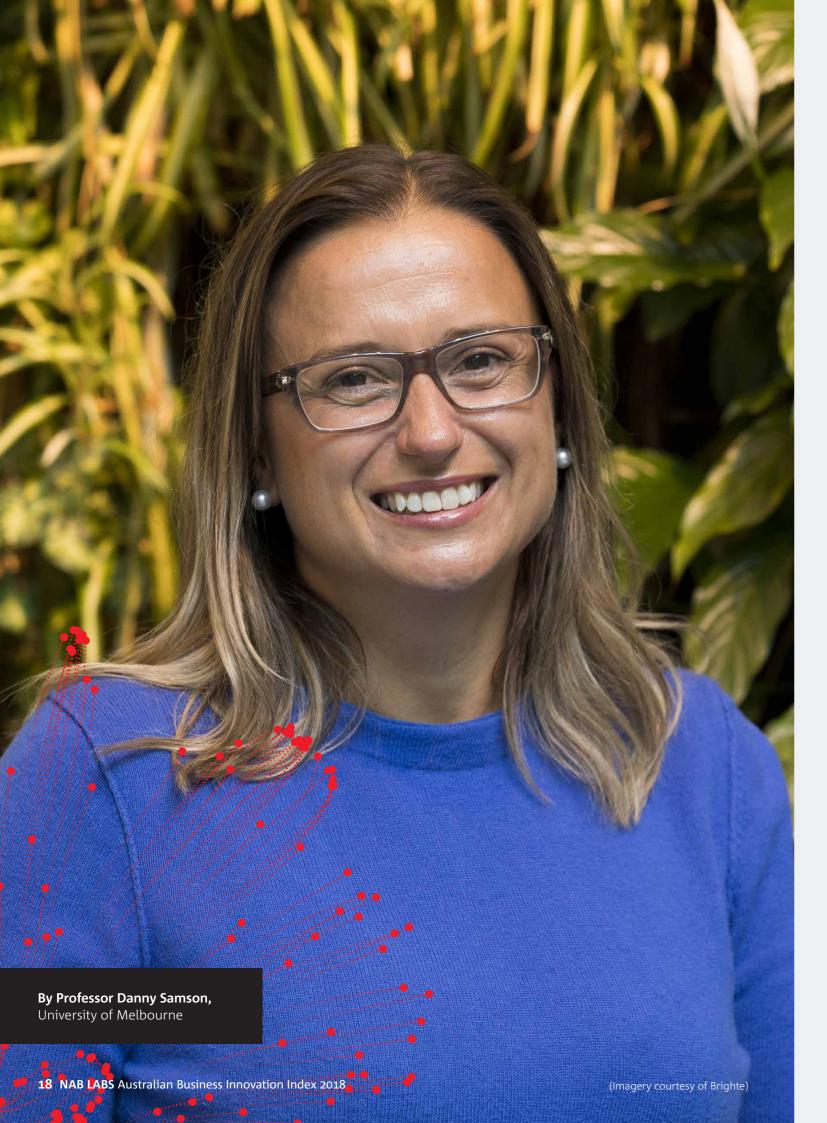
OF INNOVATION WITHIN

MOST IMPORTANT FACTOR

Leadership			
Technology			
Execution			_
Customer			
Vision			
Openness		_	
Collaboration			149
Talent			13%
Time			12%
Funding		11	%
Feedback		10%	
Challenge		9%	
Trends		9%	
Failure		9%	
Competitors	7%		
Measurement	6%		
Network	3%		
Don't know	1%		
Other	1%		
	0%		10%

*Multiple responses allowed

S IN BUILDING A CULTURE An organisation (%)*								
						5	i1%	
				40%				
		29%						
		29%						
	24%							
18%								
	20%		30%		40%		50%	60%



BRIGHTE: FINANCE FOR ENERGY EFFICIENCY MADE EASIER FOR HOMEOWNERS, DRIVEN BY PASSION FOR ACCESSIBILITY

When Katherine McConnell left her Macquarie Bank job to become the founder and CEO of start-up company Brighte in 2015, funding her business through her family's home mortgage redraw, it was literally a million-dollar risky call, but her belief and determination were intense. Within one year she launched her business' app, and in less than three years she gained several high calibre investors and advisors. She leads a business of 60 employees that's growing fast and has great further potential. It's very much an Australian 'Fintech' success story.

Katherine's vision was to provide simple finance for homeowners' renewable energy source needs and installation. She was a very early adopter of solar and home battery technologies and from positive personal experience, she saw the business opportunity to grow a financial intermediary that linked equipment suppliers with homeowners and supplied loans to enable installations.

Katherine recognised that as the cost of such home-based renewable energy sources decreased there was potential for a simple and easy solution. Homeowners can apply to Brighte for finance in a simple process that takes about two minutes including credit checking. The current approval rate is 91%. Loans via Brighte are interest-free for the homeowner, who otherwise pay their loan (of up to \$30,000) and relatively modest fees. Brighte's equipment supplier to whom Brighte is delivering customers pay a sales and marketing levy.

Katherine had never started a business before Brighte, nor been in leadership roles, so as a new CEO, she was eager to take both investments and advice from experienced Australian entrepreneurs and business leaders such as Mike Cannon-Brooks, Naomi Milgrom, and Scott Farquhar. She received successive investments of \$3.5 million, then additional funding of \$22 million, in addition to debt funding of \$20 million from NAB. By May 2018, more than \$45 million in loans had been approved to more than 5,000 Brighte customers.

Her leadership approach has been to stay personally close to all her staff, and to empower them to innovate for the business. Katherine has cultivated a culture focussing on collaboration, open communications, as well as a very clear vision and objectives. She empowers her people to "buzz" ideas and take ownership for developing them.

- Brighte was born with a detailed customer focus. Its customers are typically in their 50s, rather than Gen Y, tech-savvy people who automatically do everything on their mobile phones. Hence, Brighte's web-based interactions and user experiences are designed to be simple, clear and easy for its target demographic, with whom Brighte establishes the loan and introduces to the installer. To enhance this experience, the next generation app will be a straight-through connection to installers for householders, making the offer even faster, clearer and easier for them to take-up Brighte's services.
- Katherine has future plans to 'remove friction' from customers' processes, develop offerings for SMEs and engage with selected partners while building the customer base. Further, Katherine sees the opportunity to move from energy oriented loans to lending for general home improvements a much larger market that's supportable by a similar strategy and business model.
- When Katherine looked for a banking partner, she chose NAB because of their stated desire to back 'big ideas', and their speed and responsiveness, which has paid off in her debt financing with them. She sees NAB as a "truly collaborative partner", and long term collaborator that's been "truly impressive" as a part of her journey. According to Katherine: "I had a degree of additional confidence in NAB to 'get there' based on NAB's proven ability to fund newer types of financiers because of their in-house VC, NAB Ventures and their innovation culture, driven by NAB Labs."

Learn more about Brighte's beginning via this video.

MARA GLOBAL FOODS: APPLYING HIGH-TECH TO GRAIN PROCESSING AND DELIVERY OF DIFFERENTIATED PRODUCTS

Mara Global Foods (MGF) Managing Director and owner Ross Larsson has used his farming background to ensure that his business fits effectively and productively between his raw material grain suppliers and his end-product food producing customers. MGF operates several allergen-free and gluten-free processing facilities in the Northern Rivers of New South Wales. The business has a clear focus according to Ross: "Investment in technology is the key to developing strong and innovative manufacturing processes with quality outcomes."

Ross has recently implemented advanced technologies to ensure his products' food safety and quality are of the highest levels, supported by investment in new technology grain cleaning, optical sorting and milling processes.

The innovation focus at MGF is on advanced process technologies: Ross and his team partner with the world's leading technology providers to get the best possible product from raw materials. The aim is to process products at the highest-possible volume for a better priced, higher quality end ingredient. MGF's ideas for processing methods are often adapted from other food processing principles. An example of MGF's innovation is highly efficient, automated optical detection of aflatoxins and other bacterium, ensuring a safer product for MGF's customers.

Ross has a team-based approach to innovation, seeking business partners' (customers and employees) inputs and ideas, whilst also working closely with equipment suppliers to maximise competitive advantage. MGF is also considering new products and features, across all process stages from technologies, right through to administration and financial management. The company has applied a full digitization strategy from grain receival through to the combining process, production and financial packages on custom-made programs. This has increased the efficiency of information analysis and decision-making. It's also involved employment of external programmers to custom-design processes, driving benefit for all staff and management.

Since beginning his operations a decade ago, Ross has grown the business based on close awareness of growing trends in organic, allergen free and functional food market segment demand. MGF has responded to these growth sectors by investing in advanced technologies to provide safe and high quality differentiated food ingredients from raw materials such as soybean, maize, chickpea, field pea and others.

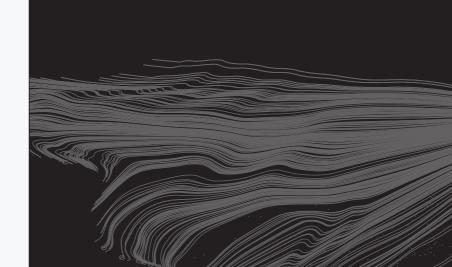


Having reached more than \$25 million in turnover and employing 48 people directly and 20 indirectly, MGF's business strategy includes ongoing growth through investment. Ross sees a period of consolidation in the short term, having just commissioned three new factories with high-tech equipment sourced from leading suppliers in Switzerland, Germany and the United States. From these suppliers, innovative technical solutions have been tailored, giving MGF a competitive edge in process innovation and final product development. This has led MGF to achieve the highest standards of food safety accreditation and also increased in yield, hence lowering its unit operating cost.

MGF's approach is also supported by consultation with up-stream suppliers and downstream with customers, to ensure overall supply chain value creation. With this set of inputs, a wider choice of quality, differentiated products can be offered.

Ross has a personal background and education in benchmarking and agribusiness, but he's blended this technical knowhow with the desire to create beneficial products beyond existing technical and market norms. He sees his purpose to be the driver of innovation within his company.

MGF's growth has been underpinned with domestic market growth and its export-based business which makes up a third



of its revenue - mostly from Asian and Pacific markets. Ross said; "I believe through conservative financial management and creative business management, MGF and its suppliers and customers have a bright future of high-quality partnerships."

Ross has taken a partnering approach with farmers, customers, technology/equipment suppliers and with his bank, NAB, about, whom he says: "They took a calculated risk on me, my company does not operate in mainstream markets, so we set targets and I hit those targets and I am highly appreciate what they have done for my company. They are a trusted business partner that has allowed me to develop the business that we have today, and the one into the future."

By Professor Danny Samson, University of Melbourne



SCOTT AND FELICITY JAMES: REGIONAL LEADERSHIP IN ENVIRONMENTALLY SUSTAINABLE, BOUTIQUE HOME BUILDING

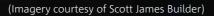
Scott and Felicity James have built a strong reputation in the Albury region for their continuous innovation in designing and building distinctive, customised homes. Their business, specialising in creating environmentally sustainable homes has been recognised by numerous Master Builders Association (MBA) and Housing Industry Association (HIA) awards. They cater for a small market segment of clients (on average four per year) with world-class energy-efficient requirements and personalised, leading-edge features.

Since starting their residential design and building business in 2001, the James' approach has been to work with clients who share their awareness and passion for environmental leadership and to continually produce distinctive results. They continue to evolve their knowledge and use of new materials and standards; one example is their use of tripleglazed windows that are well beyond mass-market standards and regulatory requirements. Their service offering comprises all aspects of home creation from design and construction through to landscaping. Alternatively, they can partner with architects as their clients require, to create luxurious and efficient homes.

Scott and Felicity continuously review the vast range of new materials and building systems that are released and take keen interest in the most advanced, innovative that will help position them at the top edge of the market. They employ a team of twelve staff and access the skills of more than 100 contractors, simply because of the wide and deep range of specialist material and systems knowledge required to provide a full offering to their clients.

Just one example of their building design is the building fabric envelope approach, which produces best-in-class insulation. They also use the thermal mass approach (utilising materials such as concrete, bricks and water) to store heat across the winter months, which means reduced energy use, environmental impacts and costs for the homeowner Other energy efficient systems used include concrete chill panels, used to control temperatures in winter and reduce home heating requirements.

By Professor Danny Samson, University of Melbourne



- Advanced systems such as thermal mass have increasingly become cost effective and environmentally advanced, and the James' approach is to lead with such advanced technical and innovative building technologies, while others in their industry have taken a limited 'wait and see' approach.
- Scott and Felicity's passion for advancing environmental and customised designs has inspired their building teams and staff. They anticipate their customers' needs, a core requirement for commercial innovation. This business has taken a radically different strategy to boutique home-building, especially in comparison to the mass market, high volume builders in the Albury region.
- In operating their specialist business, the Scotts are aware of its risk factors and the (greater) effort required to access financial support. They've formed a solid business collaboration with NAB in recent years, having moved from another financial institution in search of a more flexible approach, attesting that: "We are different and hence more risky, but NAB has taken the time to understand us and back us as a boutique business."



MATCHBOX EXCHANGE: AN EFFICIENT **ONLINE BOOKING PLATFORM FOR** SHIPPING CONTAINERS GLOBALLY

Carl Marchese fits the classic definition of an entrepreneur precisely, as someone who sees, seizes and implements solutions to challenges and opportunities that others do not see or act on. He was working in the Port of Brisbane, which processes many thousands of shipping containers each year, when he saw a significant source of inefficiency and then designed and implemented a solution, in a new start-up. The challenge for shipping companies and truck transport companies is that when containers are emptied after imports, or needed for exports, they are usually taken to or from 'empty container parks'; a slow, costly and cumbersome process.

Carl recognised that an online solution that 'triangulates' between those who have emptied containers from imports and those who need them for filling and exporting, could be built and activated. This clearly can lead to matching of importer and exporter requirements, reduce or eliminate transport steps (to and from container parks), and provide faster and lower-cost solutions for truckers and shipping companies. Timing is important for Carl's business to manage and synchronise where possible container movements, and ensure that both container quality and service are high.

Carl's company, Matchbox Exchange, was then born as an online collaborative platform, increasing the efficiency of trucking and shipping companies and container park operators. Carl started in Australia, but given that local activity represents only 1% of the global shipping container market, he spends a lot of time in cities such as Hamburg, Singapore and London, taking his innovative solution platform to the world. It's estimated that there are about 20 million containers in existence, and that at any time, around 66% of these aren't in active use shipping goods, and are being stored somewhere before their next journey. The world market is large indeed!

To bring his idea to fruition, Carl accessed an Australian Government Entrepreneurs grant, which matched his contribution on a dollar-for-dollar basis. He then engaged in rapid product development, achieving a minimum viable product (MVP) status and engaged intensively with potential customers, listening to their requirements and adapting his service design as needed. He stresses that one of the lessons learned has been the need to pivot his offering design as he's continuously engaging with shippers and trucking companies to meet their varied needs.

Matchbox Exchange is now in growth mode, servicing customers across all major Australian and New Zealand ports and has global ambitions. The business employs five full time staff and additional contractors. In just 18 months, the business has gone from ideation to having more than 200 trucking company customers. This is indeed a rapid implementation, given that Carl spent most of the first year of business, 2017, in stakeholder engagement and planning.

In reflecting on his journey to date, Carl argues for the 'keep it simple' principle, and suggests that his key leadership 'lessons learned' have been to build and communicate a vision, act with speed, listen and stay close to customers, communicate openly, and be prepared to be flexible and pivot daily. While he acquired some early funding from a government grant, he also worked closely with NAB from early days to fund his working capital and other cash flow needs, commenting that NAB understood his business and backed it with financial support. His key lesson for budding entrepreneurs is to not aim for perfection at first, but to get a prototype out there in the marketplace and be flexible. In engaging with shipping companies, he's finding that they're asking him about providing new and different services too! These are exciting times for his business.

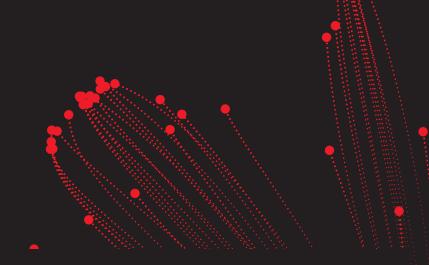




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About NAB Labs

Established in early 2015, NAB Labs is the bank's innovation hub, focused on developing new solutions for customers and driving a culture of innovation across the workforce. NAB Labs has been central to launching new customer initiatives, including unsecured business loan <u>QuickBiz</u>, integration with <u>Xero's</u> cloud accounting, enabling voice-activated virtual assistants for <u>Google Assistant</u> and <u>Amazon Alexa</u>, as well as partnering with start-up Medipass to deliver an Uber-like experience for healthcare, <u>HICAPS Go</u>.

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