

Out of sight, out of mind?

Australia's diaspora as a pathway to innovation

March 2018





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This report has been prepared jointly with Advance.

Advance is the leading network of global Australians and alumni worldwide.

The many millions of Australians who have, do, or will live outside of the country represent an incredible, unique and largely untapped national resource.

Its mission is to engage, connect and empower leading global Australians and Alumni; to reinvest new skills, talents and opportunities into Australia; to move the country forward.

diaspora di as pora

noun

A diaspora is a scattered population whose origin lies within a smaller geographic locale. Diaspora can also refer to the movement of the population from its ancestral homeland.

Defining the Australian diaspora

The Australian diaspora is made up of Australians living overseas, Australians who have returned to Australia with global experience and know how, the circulating diaspora who have returned home temporarily, and overseas-born alumni of Australian universities who have settled in Australia and those who have returned overseas.

Collaborating with our diaspora

86%

of global CEOs say that collaboration is a very important skill



23rd

Australia is ranked 23rd out of 25 countries in the Global Innovation Index for 2017, falling four places in the past year



1.35m

By 2030 we expect there to be 1.35 million Australians overseas, with a third of those in Asia



7.7%

of Australian businesses collaborate with international firms while innovating products and/or processes (putting Australia 27th in the OECD)



\$23.5bn

GDP can be expected to increase by \$23.5 billion over the next 10 years if Australian businesses collaborate on innovative activities to the level of the five best collaborating OECD nations

of Australians currently overseas see benefits associated with engaging with peers back in Australia. Of these, they identified benefits from their engagement, including:



8%

new or streamlined operational processes

innovative solutions to problems

13%

productivity benefits

6%

the creation of superior organisation or managerial processes

14%

new or improved ways of working, goods or services

of Australians who have returned from overseas continue to associate with peers overseas. These returnees identified a range of benefits from such continued engagement:



innovative solutions to problem

4%

the creation of superior organisation and managerial processes

Productivity benefits

28%

new or improved goods or services

The returned diaspora were most likely to bring back 'ways of thinking' and 'methods of working' upon their return to Australia.





Australian businesses' 'collaboration deficit'

In PwC's 20th *Global CEO Survey* nearly a quarter of the CEOs singled out innovation as their top priority for the coming year, in order to capitalise on new opportunities (see PwC 2016c). This focus on innovation far outstripped other concerns such as human capital, competitiveness, customer experience, and even technological capabilities.

At the core of innovation is collaboration.

"Innovation happens through collaboration. The best organisations are not only harnessing innovation from their employees, but also from outsiders such as suppliers or competitors."

> Forbes, Jan 13 2015 'Innovation and Collaboration' Kate Vitasek

It is difficult for a single business to be able to obtain all the knowledge, skills and resources necessary to create breakthrough innovation that will cement or progress their competitive advantage. This is where collaboration comes to the fore. In PwC's 21st CEO Survey, 88% of Australian CEOs cited collaboration as being very important to their organisation.

Collaboration can be thought of as networking for innovation projects. It is the mechanism with which a business can source a wide range of ideas and resources to improve their ability to create new and unique innovation. By increasing the scope and sharing the resources, risk and ideas with another, the business can achieve much more than working alone.

Collaboration is becoming more and more relevant in our globalised world. Australian companies are facing an increasingly competitive global trading environment, especially as technological improvements allow innovations to be diffused and implemented quicker. This means that businesses must innovate, and innovate efficiently, to survive.

Collaboration is already a priority for many CEOs, with 86 per cent saying collaboration is a very important skill. That direct link between collaboration and innovation is something also borne out in PwC's ongoing *Innovation Benchmark* study, where leaders cite innovative behaviours and culture as integral to success (PwC 2017).

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Hence, without:

- collaboration and the cross-disciplinary fertilisation that it enables, it's difficult to generate radically new ideas
- challenges from outside your domain, it's too easy to get stuck in the same boxes
- outsiders to test your preconceptions and push you to defend your more outrageous ideas, it's hard to develop inspiration into true innovation.

While it is easy to focus on how well people are collaborating within a particular organisation, we also need to look outside:

"External collaboration is equally important, because there are billions of IQ points outside your company. If you can harness them, you will establish a significant competitive advantage over those who can't."

Shelton (2016)

Not surprisingly, if businesses collaborate on innovative projects, they are more likely to develop an innovation at the frontier, or 'new-to-world' (Department of Industry, Tourism and Resources 2006, p.8). There's also evidence that collaborative Australian businesses are more productive than noncollaborative businesses (Department of Industry 2013, p.13).

The real challenge is that Australian businesses do not have a strong track record of external collaboration. For example, comparative Organisation for Economic Co-operation and Development (OECD) data shows that:

- 7.7 per cent of Australian businesses collaborate with international firms while innovating products and/or processes (putting Australia 27th in the OECD)
- 24.9 per cent of Australian firms co-operate on innovative activities (OECD average is 32.4 per cent)
- 4.1 per cent of Australian firms collaborate with higher education or government institutions when undertaking innovative projects (putting Australia 30th, or 2nd last, in the OECD)

This relative lack of collaboration has a real impact on the individual businesses who are not collaborating, and the economy as a whole.

PwC modelling¹ suggests that if we can get Australian businesses to collaborate with other organisations on innovative activities to:

- the OECD average: then we can expect an increase to Australia's gross domestic product (GDP) from the productivity improvements of \$8 billion
- the level of the top five largest collaborators in the OECD: then the increase to GDP over the next ten years would be \$23.5 billion.

These estimates focus on improving the quantum of collaboration, but additional benefits could be expected if we can improve the quality of collaboration.

This is the collaboration deficit facing Australian businesses.

- Firstly, a comparison between Australia and other OECD countries was made. The OECD reports the percentages of firms that co-operate on innovative activities. So using the latest data for each OECD country, two scenarios were created:
 - the first fixed the proportion of Australian businesses collaborating on innovative activities to the OECD average for 2017 and onwards.
 - the second fixed the proportion of Australian businesses collaborating to the average of the top five OECD countries. For note, the countries with the largest proportion of businesses collaborating on innovative activities are Belgium, Slovenia, Denmark, Spain and Austria.

The increase to businesses productivity growth for each scenario was estimated and aggregated at a whole-of-Australia level. This was then fed into PwC's Intergenerational Fiscal and Economic Model (IFEM), a model based on the most recent data on the Australian economy and is forecast using Australian Bureau of Statistics (ABS) population projections. The IFEM calculates the economic impact by calibrating fiscal, macroeconomic and demographic projections. This allows us to estimate the economywide impact of productivity improvements.



The diaspora as an accelerator for collaboration

It has long been a tradition that many Australians, some briefly (i.e. the 'gap year'), some for many years, and some ultimately permanently, will strike out from Australia to other countries.

Australia is also fortunate to attract a high number of Asian born and other foreign university students who represent an important national resource for the country.

Hence, every day, in countries around the world, Australian and Australian-educated managers, CEOs, entrepreneurs, engineers, scientists and workers from any field you would care to mention are doing great things: running businesses, developing products and services, innovating for better outcomes for our people, our communities and our businesses. This is the Australian diaspora at work.

"[Diaspora] is primarily used to refer to a group of people, bound together by a common ethno-linguistic and/ or religious identity, who no longer reside in their home country. Though once specific to groups of people who had fled their home country due to fear of persecution, the term diaspora has progressively adopted a far broader definition to reflect the contemporary trends of globalisation and transnationalism."

Joint Standing Committee on Migration (2013, pp.131-132)





The co-author of this report, Advance, was founded in 2002 to harness the skills, influence and goodwill of the Australian diaspora to move the country forward. Under the Patronage of all Prime Ministers since the Honourable John Howard OM AC, Advance has worked closely with Government highlighting the important role of the diaspora to the Australian economy and facilitating collaboration and innovation on the global stage.

Over the past decade there has been a notable increase in policies of engagement seeking to activate the 'diaspora capital'. Alongside Advance in Australia, leading examples of diaspora organisations harnessing talent for the benefit of their countries include New Zealands' KEA, Global Scot and Ireland Connect. Much has also been written on the way Israel, China and India derive value from their diasporas for their home countries.²

The Australian Government has a bilateral approach to engaging our Australian diaspora, by collaborating with a range of diaspora organisations. Prime Minister Malcolm Turnbull MP and Advance Patron highlights: "A million adventurous, enterprising, innovative, competitive Australians right around the world... The important thing is to harness this smart grid of human capital and with Advance we're doing that."

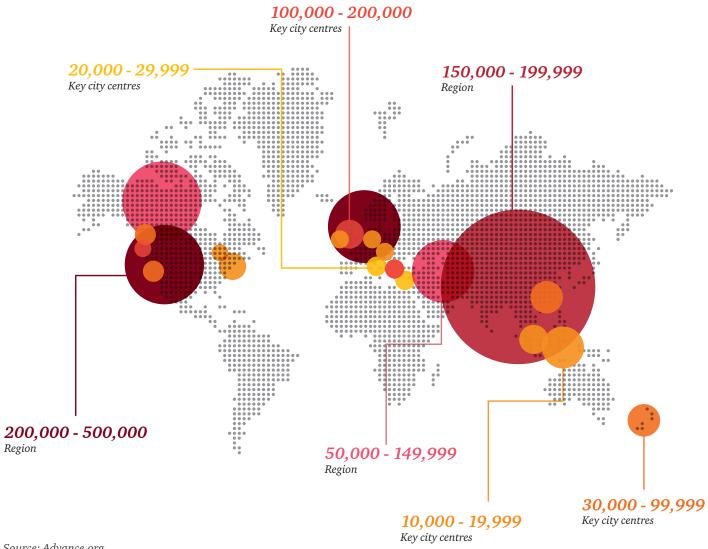


The Honourable Julia Gillard MP, Former Prime Minister of Australia and Former Patron of Advance said: "The Advance network brings together an amazing array of distinguished and rising Australians ... In our globalised world, strong and productive networks with our fellow Australians will underpin our continued growth and prosperity, leveraging our skills and knowledge to promote our nation and its achievements to the wider world."

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^{2.} Kuznetsov "Mobilising Intellectual Capital of the diasporas: from first movers to a virtuous cycle" (2008) 9 Journal of Intellectual Capital 2 pg 269.

Figure 1: Estimated distribution of Australia's diaspora by region and key city centres



Source: Advance.org

"Australians Abroad: Preliminary findings on the Australian diaspora"

While there is no official reporting of the scale of the Australian diaspora, it is generally considered to be sizeable, approximately 1 million overseas.

Additionally, it is estimated that there are 2.5 million (non-Australian born) alumni of Australian universities living overseas.

"Diasporas - communities which live outside but maintain links with their homelands - are getting larger, thicker and stronger. They are the human face of globalisation."

Michael Fullilove, World Wide Webs: Diasporas and the International System, Lowy Institute, Sydney 2008 Indeed, more recently, PwC suggests that by 2030 Australian expatriates could number 1.35 million (PwC 2016b).

Advance's estimate of key pockets of density for the Australian diaspora is shown in Figure 1.

In a time before instantaneous 'always on' global communications, with Australia somewhat disconnected from global happenings, it was reasonable to see Australia's diaspora pulled overseas by cultural as much as economic factors.

This is no longer the case:

"The 'new expats' are different from the expatriates who left Australia during the 1950s and 1960s ... Today, Australians live overseas not because they resent a provincial Australia, but because the world is now truly global and Australia produces global citizens. The motivation for today's Australians to live abroad is no longer rooted in a cultural cringe, but in the recognition that the world is a large place, worthy of exploration, and that Australians are well-placed to take advantage of what globalisation has to offer."

Leigh (2005)

A 2003 Organisation for Economic Co-operation and Development (OECD) survey of 346,000 Australianborn expatriates revealed that Australians were mostly abroad for employment reasons.3

The OECD went further, stating that over twothirds of expatriate Australians are 'professionals, para-professionals, managers or in administrative occupations'.

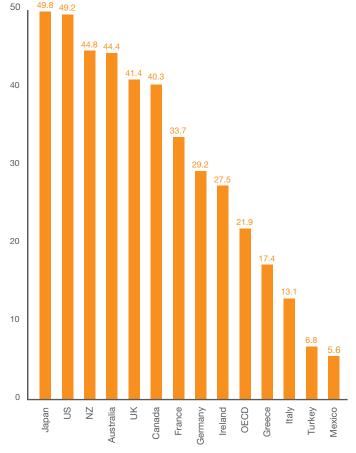
Consistent with this view, an examination of 2010/11 Passenger Cards suggests that, prior to leaving Australia, over 60 per cent of people departing permanently were employed, with:

- 42 per cent as professionals
- 21 per cent as managers
- 7.3 per cent as technicians and trades workers.

As shown in Figure 2, Australians departing Australia have relatively high standards of qualifications.

Advance includes Australia's overseas-born alumni of Australian Universities as diaspora. Given that they come to Australia for the purposes of study, a high proportion will return overseas as professionals, managers, potential innovators and investors.

Figure 2: Percentage of expatriates with a high level of education



Source: Australian Bureau of Statistics (2006)

^{3.} This observation is corroborated by the PwC/Advance survey; the relevant findings are presented in Figure 4 and Figure 11.

This pull of talent overseas is only going to accelerate, as there is increasing:

- · ease of travel
- internationalisation of labour markets
- global demand for skilled workers.

This will be further exacerbated as, in relative terms, the rest of the world, and particularly Asia, becomes more attractive due to the advancement of specific economies.

Specifically, PwC modelling suggests that Australia will slip from the 19th largest economy to be the 28th largest by 2050 (PwC 2016a) – see Figure 3. As other countries see their economies continue to grow faster than Australia's, these countries, predominantly in Asia, will become even more significant magnets for Australians, and our broader diaspora.

Figure 3: Projected GDP rankings (at PPPs)





Equally, we will see a shift in our diaspora over time as the economic centre of gravity moves even further to Asia. Hence, while we estimate that Australia's expatriate community in Asia currently makes up 20 per cent of our total expatriate community, we project the Australia's Asian diaspora to constitute a third of the total Australian diaspora by 2030 (PwC 2016b).

Hence, Australia's place in the world will create an even greater pull of Australian talent (the 'gold collar' diaspora) overseas (Fullilove 2008, p.22), and increasingly to Asia.

The obvious talent departing Australia is often portrayed as a 'brain drain', but need not be.

This is because there is evidence of strong correlations between the evidence of a diaspora residing in a country and trade ties to the country of origin for the diaspora (Plaza 2013), including studies in Canada, the United Kingdom and the United States (Head & Ries 1998; Yu 2002; Co, Euzent & Martin 2004).

Indeed, a broader perspective on the benefits of the diaspora are often enunciated.

In 2016, the Department of Foreign Affairs and Trade released Australia's Global Alumni Engagement Strategy with a mission to grow a global alumni community that actively engages and promotes Australia and advances our national interests, especially in the Indo-Pacific region.

For example, the Australian Governments' 'Australia Global Alumni Strategy' notes that "Australia's global alumni are highly talented, globally mobile and empowered by a world-class education. They are current and future leaders, influencers and change makers. Individually and collectively, Australia's global alumni are helping to shape the world around them." 4

Foreign Affairs Minister the Honourable Julie Bishop MP noted: "INSEAD recently carried out a survey of 118 nations, ranking them for talent competitiveness, and Australia came in as number six, meaning we were able to attract and retain talent, and we were a place to develop global skills. Now this is where Advance comes into the picture, and the Australian Government is happy to partner with Advance and work with Advance in supporting Australians to succeed overseas but also ensuring that they bring their skills and their perspectives and their insights back home, so that all Australians benefit from what they are achieving overseas. Advance's mission is a remarkable one: help Australians succeed overseas, help the economy and the Australian society benefit from their work.'

Australia Global Alumni Engagment Strategy 2016-2020, DFAT

Similarly, the Lowy Institute CEO Michael Fullilove noted that:

"The Australian diaspora represents a market, a constituency, a sales force and an ambassadorial corps. In recent years, Australians have become more alive to the reality of our diaspora. We should now build on these early steps and work to engage the diaspora in our national life and create a global community of Australians."

Fullilove (2008), World Wide Web: Diasporas and the International System, Lowy Institute for International Policy

In addition to the diasporas being a form of soft diplomacy and cultural marketing, they are also an innovation conduit.

We welcome Innovation and Science Australia's vision for 2030 for Australia⁵ to be counted within the top tier of innovation nations, and the opportunity it presents to strategically engage and empower our diaspora to help achieve strong economic growth, competitive industries, collaborative education, meaningful and productive jobs and a fair and inclusive society.

While possibly more pronounced for smaller countries, Newland and Plaza point to evidence of the relationship between a diaspora and the benefits of collaboration:

"For many countries, the diaspora acts as a brains trust, connecting critical components of the public and private sectors to expertise available within the country and compensating to some degree for the departure of highly skilled emigrants."

Newland & Plaza (2013, p.6)

As a specific example, it has been pointed out that international migration and the mobility of human capital may strengthen the scientific capacity of the home countries (Marmolejo-Leyva, Perez-Angon & Russell 2015; Basu 2013; Saxenian 2006).

In this way, the diaspora becomes a channel for new ideas, and also a mechanism for potential collaboration.

To better understand this channel for collaboration, PwC and Advance conducted an online survey of Australia's current and returned diaspora (see Box 1 pg.14).



Understanding the Australian Diaspora's connection to Australia

To better understand the connection between the diaspora and Australia, PwC and Advance developed a survey to elicit the views of members of Australia's current diaspora and the returned diaspora. The results of the survey are presented on the following pages.

Interviews were also held with 4 leading Australian thought leaders and innovators who have returned to Australia after living and working abroad. They shared insights about the value that the returned diaspora brings back to Australia. These interviews are presented as case studies on the following pages.

Box 1: The PwC/Advance diaspora survey



To ensure maximum comparability, standard definitions/ terms were used to describe industries (i.e. standard ABS industry classifications) and descriptions elements related to innovation and technology knowledge/transfer were drawn from ABS surveys of innovation.

The survey was distributed through Advance's and PwC's formal and informal networks (e.g. web page, Facebook, LinkedIn, direct connections, etc.).

In total, 1,039 respondents completed the survey, comprising 74 per cent current members of the Australian diaspora, and 26 per cent of people who have returned to Australia.

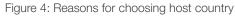


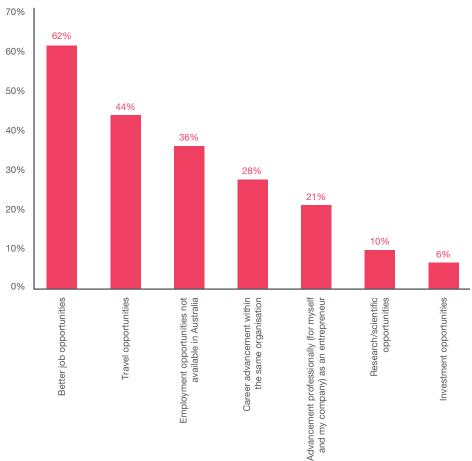
The current diaspora

The reasons that Australians head to particular countries are varied, but the PwC/Advance survey suggests that better job opportunities (whether in the same organisation or more broadly) dominate, and that the potential for travel is also a significant motivator when choosing a particular country other than Australia – see Figure 4.

"The thing with Australians is that we are not escaping Australia. The fact that we have chosen to leave a spectacular country means we have to do something spectacular with what we do."

David Droga, Founder and Creative Chairman, Droga5 (NYC) and Advance Global Australian Award Winner 2012

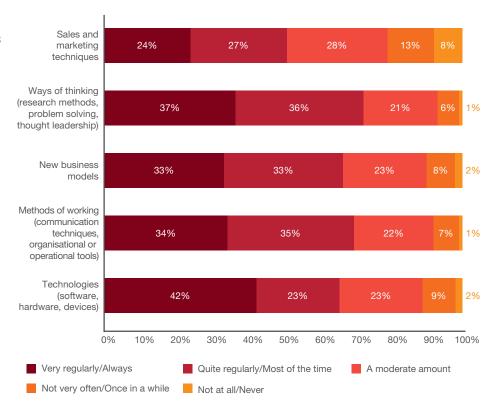




Note: Multiple responses permitted so results will not sum to 100

Australians appear to gain broad exposure to a range of 'new things' in their work environments - see Figure 5. Specifically, there appears to be relatively consistent exposure to all but sales and marketing on a very regular or quite regular basis.

Figure 5: Exposure to new tools, techniques or issues



While exposed to new 'things' overseas, almost a quarter (24 per cent) of the diaspora respondents do not engage with their peers back in Australia (see Figure 6). Conversely, at the other end of the engagement spectrum, 6 per cent of respondents note that they are in daily/constant contact with their peers back in Australia.

"Australians abroad are highly valued for their can-do attitude and big-picture capabilities. They are often bad networkers but great learners. Whilst on their grand adventures they appreciate how collaboration underpins innovation. Having spent half my working career overseas I can attest that the diaspora return with worldly innovation capabilities that are vital to Australian companies as they seek to compete in global supply chains."

Tony Frencham, WorleyParsons Group Managing Director, and Advance Global Board member

Maintenance of networks back to Australia is, not surprisingly, a combination of return visits, communications with family and friends and the use of social media - see Figure 7.

Clearly, engagement with peers is both a mix of social and professional objectives.

Figure 6: Engagement with peers back in Australia

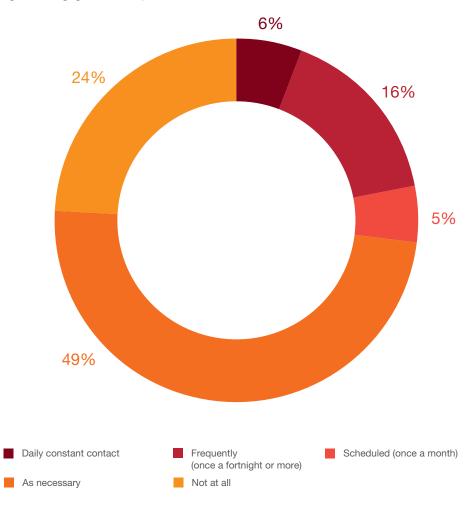
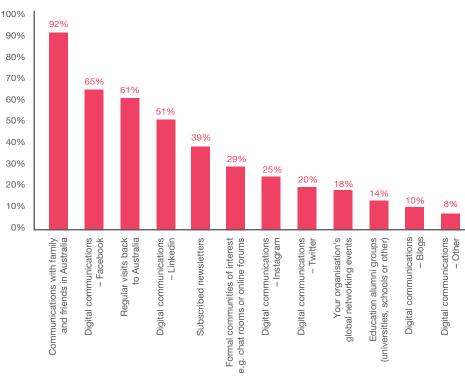


Figure 7: Ways of maintaining networks with Australia

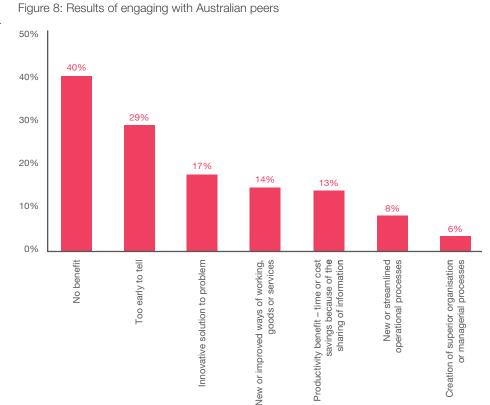


Note: Multiple responses permitted so results will not sum to 100

69% of respondents living overseas saw either no benefit from engaging with Australian peers (40 per cent) or felt it was too early to tell if there were benefits (29 per cent) – see Figure 8.

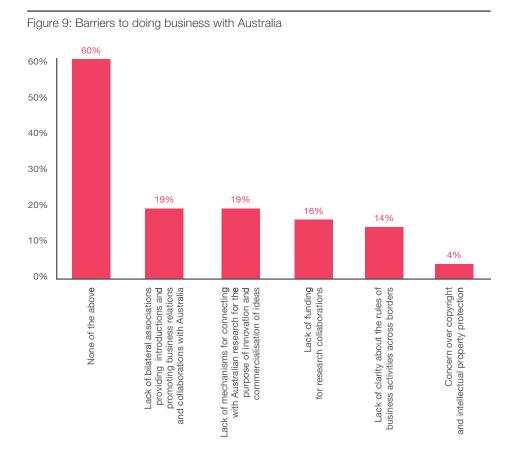
While this may seem a pessimistic outcome, in contrast, a number of respondents identified benefits from their engagement:

- new or streamlined operational processes – 8 per cent
- the creation of superior organisation or managerial processes – 6 per cent
- innovative solutions to problems - 17 per cent
- new or improved ways of working, goods or services - 14 per cent
- productivity benefits - 13 per cent.



Note: Multiple responses permitted so results will not sum to 100

identified beneficial learnings back to Australia, and overcome the barriers to collaboration see figure 9.



The challenge is to link these

The returned diaspora

While maintaining our connections with the existing diaspora is important, we also need to be cognisant of the value of ensuring that our returning diaspora continue to maintain their linkages with their overseas peers.

Almost half of the Australian diaspora return home within five years of being away – see Figure 10).

Like the current diaspora respondents, returnees to Australia chose their principal overseas country primarily for work opportunities – see Figure 11.

"The Advance Award was critical for getting recognised and I'm now hard at work using my skills and experience within the biotechnology community in Australia... Everything changed for me with the Award. The tap on the shoulder of recognition for my past achievements in the US, a world away from Australia, where I did not exist, was a turning point. At the Advance Award I met Lucy Turnbull who, as Chairperson of Prima Biomed, a public listed company in Australia, asked me to join the board. I was soon introduced to Hamish Hawthorn of a startup that needed some additional guidance. I was later invited to join as Chairman and soon invested into the company, NeuClone, to help it grow."

Dr Russell Howard, 2013 Advance Global Australian Award winner Current roles include: Executive Chairman, Neoclone Ptv Ltd Chairman, Prima Biomed Ltd Head of Commercial Strategy, Genomics

Figure 10: Time spent outside Australia

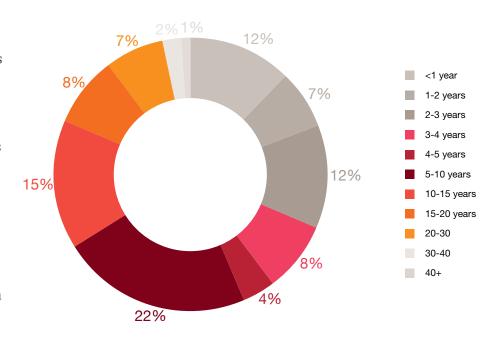
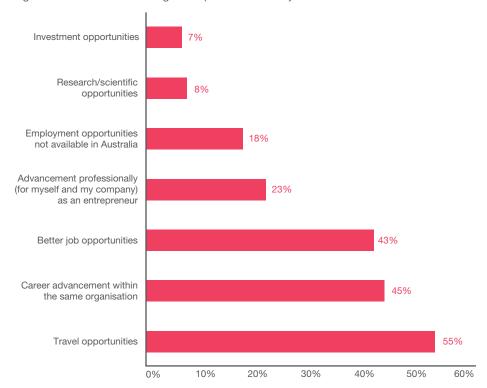


Figure 11: Reason for working in the particular country



Note: Multiple responses permitted so results will not sum to $100\,$

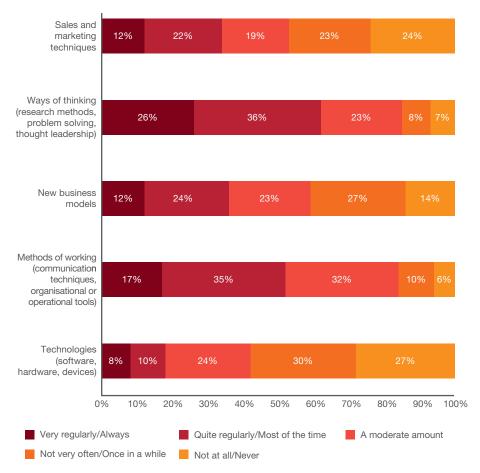
Survey respondents were most likely to bring back 'ways of thinking' and 'methods of working' upon their return to Australia – see Figure 12. Not surprisingly, new technologies were less likely to be brought back to Australia.

There is evidence that the underutilisation of expats who have returned to Australia is costing the country in terms of potential economic growth.

"As a country we need to understand much better the importance of living and working overseas, and how to leverage more effectively the fruits of the resultant expertise, insights and experience. We really need these to meet head on some of the major challenges facing Australia today. Technology shrinks distances and collapses borders, and today competition is coming from every corner of the planet. Those like myself who have spent many years offshore know only too well how this allows them to learn new things, experience different cultures, and creates a unique and immensely valuable awareness of what it takes to participate, to be competitive, and to be successful in the very global world in which we all live today. In my old firm, IBM, we had a saying: 'If you don't go, you simply don't know.' "

Michael Cannon-Brookes, Retired Vice President, Global Strategy for Growth Markets, IBM, and Advance Global Board member

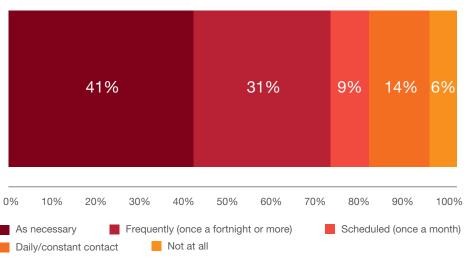
Figure 12: Degree of innovative tools/techniques/issues brought back to Australia



Note: Multiple responses permitted so results will not sum to 100

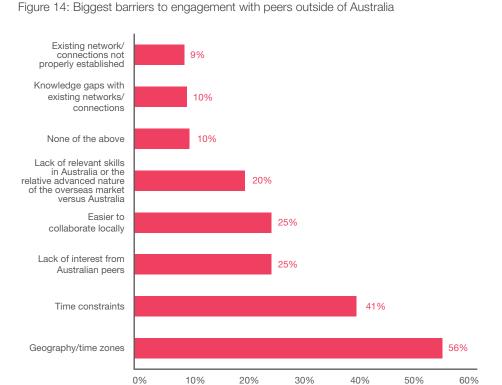
The returned diaspora were relatively likely to maintain an engagement with their networks outside Australia – see Figure 13.

Figure 13: Amount of engagement with networks outside Australia



Not surprisingly, geographic and time constraints provided the largest barriers to engaging with peers overseas - 97 per cent, see Figure 14. More concerningly, however, barriers included:

- lack of interest from Australianbased peers – 25 per cent
- the lack of relevant skills in Australia or the relative advanced nature of the overseas market versus Australia - 20 per cent
- knowledge gaps with existing networks/connections – 10 per cent
- existing network/connections not properly established – 9 per cent
- easier to collaborate locally - 25 per cent





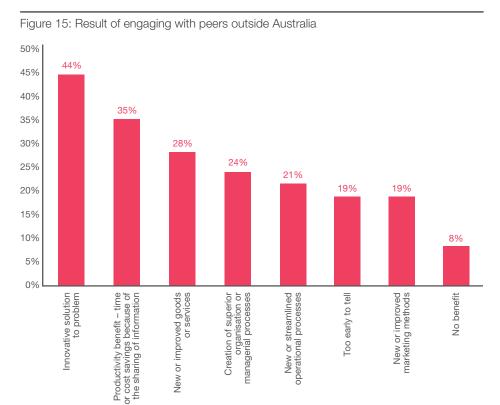
"In my two decades working offshore in a Regional or Global CEO capacity, I was amazed at the number of times winning business models presented from around the world were questioned, challenged or suggested not suitable for Australia rather than embraced. Upon probing, there was genuine concern from the Australian-based teams, retailers & agencies that Australia was different from the rest of the world, whether it be consumer needs, customers/retail environment and/or logistics/operational processes. As an Australian, I had wished we had focused more on finding the elements of the plan that could work in Australia, learn more about what made these winning programs tick and look to implement an overall stronger plan rather than rejecting the idea."

> Joanne Crewes, Advance Global Board member

Where returned respondents continue to engage with peers outside Australia, only 8 per cent identified there to be no benefit, and 19 per cent said that it was too early to tell if there were benefits see Figure 15.

Instead, as shown in Figure 15, respondents identified a range of benefits:

- innovative solutions to problems – 44 per cent
- productivity benefits -35 per cent
- new or improved goods or services – 28 per cent
- the creation of superior organisation and managerial processes – 24 per cent



Note: Multiple responses permitted so results will not sum to 100



Adrian Turner

CEO Data61, Former Advance Chairman

Adrian Turner spent 18 years competing in the 'cauldron' of Silicon Valley as a successful technology entrepreneur. His decision to return to Australia came from 'a genuine concern about the way that Australia was tracking, falling outside of the global frame of building platforms and understanding the impact of digital and data trends in transformation of economies and industries'.

In Silicon Valley (and other parts of the world), the 'pay it forward' culture of giving back 'to the system' without an expectation of anything in return underpins the success of the collective. Adrian found a way of doing this though Advance, by helping to create a platform and a trusted environment to accelerate informal networking for global Australians based on the west coast of America. Advance played a key role in Adrian's network building back into Australia and Adrian served as chair of the Advance board for 5 years.

And now he is bringing this 'pay it forward' culture back to Australia. When Adrian was approached for the CEO role at Data61, the largest data innovation group in Australia, he saw an opportunity to give back to his country. Adrian now leads 1100 people including 680 PhD students in his role at Data61.

"I really care about this country's future and I think that this group can change the trajectory of Australia from within. And that's' why I came back, to lead it".

Adrian reflects on what his return to Australia has brought back to the country:

'What I think I bring back to Australia is, more than anything else, a mindset. I have a growth mindset versus a fixed mindset, an ambition and a scale of thinking with global context, and that's what is needed for Australia to compete.'

He also taps into his overseas networks and relationships regularly, to get a pulse of what's going on in other parts of the world. His experiences whilst being part of the creation of Advance have influenced his thinking in the way he is organising Data61, which he describes as 'a network with porous boundaries, not an institution'.

The 1,100 people working at Data61 operate as one big network, which Adrian notes is a learning he is bringing from his previous experiences.

"Not only will they be more employable after working at Data61, when they leave they will be part of an alumni network and wherever they go in the world the network will help them succeed."

He cites another example of the value of a network in the '8200 Unit' in Israel. This unit is an elite cyber team 'like the navy seals for cyber security'. Many of their alumni have gone on to found leading Israeli IT companies and the majority of Israel's cyber security successes are one or two degrees removed from the 8200 Unit.

"The creation of a trusted group that can give each other a leg up to compete globally, the relationships, the trusted advice.. Its understanding the value of all of those things and bringing it back."

Data61 has teams from 70 different countries around the world, part of which is due to the PhD student body. Data61 are building a global network that Adrian explains this will give the country new pathways to build regional and global ties, underpinned by science and technology.

"Having a programmatic way to engage and capture mindshare and communicate with the diaspora is an incredible asset for the country and that's how we think about Data61.'

"I don't ever want to lose touch with these people. In fact, I suspect they will be even more valuable for us, knowing who we are, having spent the time with us, but sitting in another part of the world in another organisation and still feeling connected to us, they'll probably wind up being even more valuable to the country."



Michelle Guthrie

Managing Director, ABC, Former Advance Board Member

Working internationally has given Michelle Guthrie valuable perspective about different ways of doing things, reacting to market conditions faster and moving with audience expectations.

The Managing Director of Australia's national public broadcaster believes it's a perspective she may not have gained, had she not worked abroad and experienced the complexity and diversity of countries like Asia.

The way television programs are made is one example of where this perspective has been valuable particularly the approach to TV production in countries such as Taiwan, India and Indonesia where it is done at a lower cost.

Michelle says that the Australian media environment can seem simplistic by comparison due to its less complex market structure but the experience she's gained internationally is now relevant to her role guiding the ABC through the country's changing media landscape.

"Your ability to cope with disruption is better for having had the international experience, as you're not frightened by things being different today compared to yesterday, because that's what happens internationally. It helps to have seen the movie play out in other countries and have that perspective."

These are just some of the learnings informing Michelle's work now she's back in Australia.

Since returning, she has noticed some surprising differences in the corporate environment.

She contrasts the 'entrepreneurial culture' experienced in Asia, with how some Australian organisations tend to look to Government for more regulation to solve problems.

"You have retailers here who expect Government to regulate Netflix or Amazon, but when it comes down to it, if you are providing a better consumer experience - as Amazon will be if it can get to two-hour delivery in Australia - at a cheaper price, then that's what's going to win, not Government regulating them. I do get the sense that there is more focus on the market environment instead of on the customer, which you see around Uber, and around a whole lot of market disruption."

She also points out that very few people on executive teams or boards in Australia have international experience – something she believes is to their detriment.

"If you look at any multinationals, it's completely the other way around. Someone like **Proctor & Gamble or any** of the big miners who operate internationally, all their executives have done stints in Latin America or in Asia or in London or wherever... That's normal. But it's unusual to have that kind of experience on the boards of Australian companies."

It is imperative to Michelle that she maintains her networks abroad. She does this in various ways, by maintaining a role on international boards, through in-person visits to Asia and participating in Advance events.

"In particular, I make sure that I keep up with Australians who are doing interesting things in Asia. It is why I try to participate in Advance events, because I think that the connection internationally is very important. Post the ABC, I would hope that I could pick up a couple more NED roles internationally or potentially do something else in Asia. I don't see this as the final move. I see myself as an international person who has spent some time in roles in Australia."



Genevieve Bell

Director, 3A Institute, Australian National University, and Senior Fellow, New Technology Group, INTEL and 2016 Advance Global Australian Award Winner

Genevieve was inspired at a young age to study overseas, and made a great success of it, she did her PhD at Stanford and landed a job on the faculty of the same University, which was one of the highest ranking anthropological faculties in the US at the time.

Genevieve describes her move into Intel as 'a classic Australian pivot', which may not happen as frequently anymore as it did in the 80's and 90's when the idea that you might be following one direction, and then make an entire re-direction and go somewhere else was for Genevieve a very familiar Australian narrative.

She was educated to be an academic in cultural anthropology, in a big American university, which she describes as being the 'obvious' path for her. Taking her knowledge and know-how to a technology field in the middle of the dotcom boom was not an obvious thing to do. Genevieve explains that her 'guiding north star principle' was that your life should amount to more than your own selfgratification and that your labour should be in the spirit of service.

When Intel came calling, they were at a critical intersection as a technology company about where they wanted to go next, about what mattered to them, and they wanted to engage in wholesale reinvention.

"I thought, 'here's a company that's making the future, if they've got room for me in there, I want in'."

And so she left Stanford, joined the tech field, and spent the last 20-odd years at Intel, worked her way up from a very junior 'bunny' to the most senior ranked technical woman in the country, the first woman senior Fellow, a title she still holds, as well as being a vice-president in the company. When ANU recruited Genevieve to come home, Intel didn't want to lose her so she now maintains both jobs.

She credits her pivot into the world of technology, and her huge success in that field, to the Australian cultural values that were instilled in her which she describes as a kind of fearlessness: 'just have a go', 'what's the worst thing that can happen', 'roll up your sleeves and get it done'.

"I find it really interesting that I've had a lot of unexpected push back since I came back, in ways I don't recognise as being Australian cultural practice, but is clearly where we have moved in the time that I've been gone. Whereas I've kept a set of these little things curated in my heart very carefully as being Australian, that look weird now, here at least."

'When I came home, that tall poppy syndrome which was lurking in the back of my head the entire time I was overseas, had metastasized, and we still have that, and that's problem #1. But problem #2 is, it's become perverted into this notion about managing risk. And frankly, almost a 'you don't want to set things up to be successful, because success will expose you to tall poppy syndrome'. So now we are going to mitigate risk to zero, which of course means the possibility of doing anything interesting has gone to zero too.'

Genevieve has hit the ground running since coming back to Australia 7 months ago. She moved back to Canberra to join the ANU where, she has launched a new research institute. Its focus is the creation of a new academic discipline around the management of emerging technologies in the fields of Artificial Intelligence, machine learning, big data, algorithms, and associated ethics and morality.

"One thing you need to know about being a returning Australian, having been gone that long, is that I still sound Australian but the things I say frequently are incredibly American. So usually when I rattle off my CV to Australians they get this look on their face of total cognitive dissonance which is 'she sounds like one us, she said it was just a fang around the block and then she bragged about all she accomplished', and they don't know how to make sense of that. It's not an attitude we know how to deal with terribly well."

Genevieve notes that she never would have been able to set up the Institute at ANU if she had just been in similar roles in Australia. She believes that she wouldn't have had the intellectual capital or the personal brand assets to draw on to get it done. She ascribes this to Silicon Valley still being the beating heart of technology innovation globally and that you have to be in it to see it really unfold. She also credits the ethos of Silicon Valley, being 'just do it', 'build it and see what happens', and 'build it and break it, build it and break it, act now and break things fast' as a huge factor.

"There is a much greater orientation towards risk and a willingness to try new things."

All of that being said, Genevieve concedes that she couldn't have started a similar institute in Silicon Valley.

"The tyranny of distance cuts both ways. We may be a long way away from things, but it also means we are not in the centre of things and that can be powerful if you want to build something new without it being usurped."

During her time abroad, Genevieve maintained engagement with Australia. In the late 2000's, she helped the South Australian Government go through an early audit of what would happen when high speed internet access came to South Australia and how to think about the barriers to adoption. Genevieve also worked with NBN Co, and in the last 7 years with NAB and CBA, helping them think differently about reimagining banking and financial services and the role of technology. As a result, Genevieve returned to Australia frequently. Her overseas credentials also helped the Australian branch of Intel to open doors they couldn't open locally.

"This approach was a huge success for Intel. We landed ourselves deals and made relationships and got into conversations we wouldn't have been able to get into otherwise because, like many multinationals, our offices were mostly in those days sales and marketing. Many still are."

Being overseas has shaped Genevieve's way of thinking in so far as it has left her with a 'very American impatience' for things in Australia. She notes that, at a tactical and strategic level, there are ways that Australia moves that irritate immensely, for example the technical infrastructure being far below par for a first world country.

On tapping into the diaspora from Australia, Genevieve notes that some of the moves most recently by Government to change the visa regulations have negatively impacted what she is trying to get done.

"The way to brute force your way over that is to just go and find other Australians and bring them home too."

Genevieve has always maintained strong Australian connections while overseas. When she returned to Australia, she already knew 'what the conversations were, who was on the various cricket and football teams, what we were listening to on the radio and what the debates were, because they have played out in her twitter feed over the preceding 5 years'. Genevieve notes that technology makes it easier to maintain a connection culturally than it used to be.

"It's the day-to-day stuff, and the minutiae, and frankly it's that that keeps us connected. I look at what are the touchstones of 'Australianness' that I can consume overseas."

"It's interesting when you think of who is taking advantage of social media platforms, particularly given the time lag. I always joke about this as I would go to sleep and wake up and there will be some meme that has happened overnight in Australia while I was sleeping and I'll have no idea what the genesis is, so I can't actually work out why everyone is now doing what they are doing. Social media is so immediate we forget that there is that time lag."

Genevieve raised a missed opportunity for a cultural connection with the diaspora during the last federal election.

"I went and voted in the consulate in New York, and it was incredibly instrumentalist and pragmatic. There were voting booths and there were people and there were folders, but there was no sense of using the opportunity of Australians gathering together to extract more from it. There was no Australianness to it, nothing to hold us together. I remember thinking at that time it was a total wasted opportunity."



Professor Jane Burns

Innowell Founder and Commercial Advisor to the Board

Whilst working on the start-up of beyondblue, where she was instrumental in establishing their nationally and internationally recognized youth agenda, Jane was selected as a Commonwealth Fund Harkness Fellow in Health Care Policy (2004-2005), at the University of San Francisco. This time spent in the US, collaborating with Fellows from the other Commonwealth nations and sharing knowledge, helped Jane to forge international networks that she still leverages today.

Upon her return to Australia in 2005, Jane joined the Inspire Foundation to lead their international expansion of ReachOut.com into the US as International Director of Research. Policy and Practice.

"I possibly would have got this role but it wouldn't have been with an international lens around it if I hadn't been overseas and developed those networks in suicide prevention."

Jane took her international networks one step further, and established the Young & Well CRC in 2011, involving 75 organisations from across Australia, US and the UK, including Inspire Ireland. Part of the work done by the CRC looked at international models of how to use technologies in a global mental health system.

"CRC's include industry, academia and the not-for-profit sector, and our industry partners at that stage were Google, Telstra, eventually Facebook and Twitter, as well as a number of SME's working in the digital health space, like the Sydney company Zuni."

Jane spent time in the US in Silicon Valley with these industry partners and cultivated more relationships across the US, Canada, New Zealand and the UK amongst the people she met there.

Maintaining these relationships is hard work. Jane reflects on the 'tyranny of distance' as well as the difficulties in taking ideas and concepts from Australia across to countries like the US, Canada and the UK who all have very different healthcare systems. The population of these countries adds to the challenge as does the complexity in health policy between the states in the US.

Not dissimilar to the CRC partnership model, Jane currently advises another collaborative venture, Innowell:

"PwC and the University of Sydney are taking technology to help people manage their mental health to scale. Funding has been provided by the Federal Department of Health. It's about how you translate the research conducted and what I think are quite incredible products that have come out of the work that we have done collaboratively and collectively, and take them to scale internationally. The only way this can be done is by working with Industry. And that's the bit that I don't think Australia, in the area of mental health, has been particularly great at."

"If you look at the collaboration that's led out of the University of California in San Diego, their whole focus is on establishment of Industry & Academia partnerships, with the drivers being excellent research but also commercialisation. Similar models are used in Israel. We have not done that in Australia. We have got great foundations and a lot of interest to allow that to happen - but the real challenge is how to do this in a way that's commercially viable, sustainable and drives R&D in Australia while positioning Australia as a world thought leader in this space of mental health and digital health."

"I think the answer to those questions will be in the success of the InnoWell model, with PwC and the University of Sydney collaborating together."

Jane's time abroad exposed her to a number of key learnings that she has brought to bear. She reflects on the 'razor-sharp' focus of the US on diversity and disparities in access to care as a key learning from the international dialogue she was a part of through the international posting.

"The global experience shaped the way I have led. Prior to going I wouldn't have thought about diversity or disparity in access to care in any great depth, and this really changed my thinking. If we are really talking about innovation and how we can create accessible health services, what does it mean for someone who lives with a severe disability or in a community that is remote that is reliant on fly in fly out services? This insight has shaped the organisations that I have built since I went on that fellowship."



What now?

Collaboration is critical to Australia's innovation agenda.

Innovation is critical to the success of business as well as to a more socially and economically inclusive world. Collaboration is widely recognised as a key ingredient of innovation. In order to further our transition to a knowledge economy, collaboration across industries and with Universities must continue to be encouraged. Global collaboration, leveraging our powerful diaspora, should be planned and supported. Additionally, the success of collaborations such as Innowell should also be celebrated.

Harnessing the growing power of global Australians and alumni offshore, and those who have returned home, should be an integral part of the nation's innovation agenda.

Over the past decade, there has been a radical growth in policies and projects of engagement seeking to activate the 'diaspora capital'.5

The Migration Policy Institute (Washington) reports 450 government diaspora initiatives in 56 countries (with one third established since 2005) to leverage diaspora communities.

In addition to Israel and New Zealand, this is certainly the strategic orientation of the two most populous nations with significant diaspora:

"The Chinese and Indian governments are deeply conscious of their global diasporas and want to continue using the knowledge and skills of their emigrants who have settled elsewhere. In recent years these governments have become sharply focused on using the resources of their diasporas abroad to forge and sustain links for economic development, increased knowledge transfer and innovation collaboration."

It would be easy to note that Australia is an advanced economy and hence suggest that we do not need to view the diaspora as a strategic source of inbound learnings. Such an approach, however, overlooks the value that can be provided to a small remote country like Australia by linking Australian organisations with best practice overseas; the diaspora is one avenue to address Australia's collaboration deficit.

Opportunities for the Australian Government

There has been a largely bipartisan approach by Australian Governments to our diaspora. Successive governments have engaged elements of our diaspora, acknowledging its potential as a national asset, including:

- In 2017, the statement in the Foreign Policy Paper that, "We also have an estimated one million Australians living overseas. We will continue to leverage the knowledge, networks and expertise of our expatriates through chambers of commerce and organisations such as Advance." 6
- In 2016, the Department of Foreign Affairs and Trade released Australia's Global Alumni Engagement Strategy with a mission to grow a global alumni community that actively engages and promotes Australia and advances our national interests, especially in the Indo-Pacific region.
- Advance has been supported by the Department of Foreign Affairs and Trade and Department of Industry as the only global, cross-sector nongovernmental organization connecting, engaging and leveraging our diaspora (expatriates, returnees and global alumni) to enhance Australia's development and international status.
- Support for other Australian networks overseas and resources in posts to reach out to expatriates and alumni, by way of in-country promotional and networking events, information dissemination, and public diplomacy.

Rizvi, Louie & Evans (2016, p.36)

^{5.} Overseas resources available to a country, region, city or location... made up of people, networks, finance, knowledge, ideas, attitudes and concerns for places of origin, ancestry or affinity.' http://diasporamatters.com

^{6. 2017} Foreign Policy White Paper, Australian Government

There is a need and opportunity for Government to build on this awareness and measures, including:

- Development of a National Diaspora Policy to signal that our diaspora is a significant part of the Australian polity, worthy of serious, long-term evidence-driven policy attention. It would include a nuanced, inclusive definition of Australia's diaspora, including expatriates, returnees, and global alumni as an asset to be harnessed in Australia's interest as an innovation conduit. It could commit to thoughtful models of engagement, tools and resources around the globe to more fully capture the potential of our diaspora.
- Support for research, data collection, analysis and case studies to map the demographics, location and activities of a diaspora that may be as large as one fifth of Australia's population through posts and diaspora networks.
- Establish a diaspora coordination secretariat within Government to oversee cross-Departmental policy activities and coordinate support and engagement functions. Such a unit could better prioritise the consideration of the diaspora. It could optimise investigation of issues such as the creation of an innovation conduit to leverage beneficial research, commercial and innovation linkages within the diaspora, or establishing a high-level forum for senior, next generation and influential diasporeans, facilitated by Advance and typified by Advance's Global Leaders

Network, to connect with their onshore counterparts and input to accelerate national development, competitiveness and growth.

Opportunities for Australian Corporations and Universities

Leveraging global skill sets as part of the diversity mix

Looking beyond just the local pool for potential board members or executives, diversity is an integral element to a successful workplace and has many angles. One skill set a board and management team should embrace is world experience. In the globalising world, people who truly understand its scale and complexity, economies, cultures and the impact of technology across national borders are invaluable. This talent pool is an immensely valuable national resource which can be harnessed for the benefit of both those individuals, Australian Companies, Universities and Australia as a whole.7

The value of global experience, together with gender and cultural diversity, should be recognised in relation to Board roles, and should be a vital part of a Boards skills mix.

"Australian employers don't always value overseas experience. You can be a senior person in a world leading organisation overseas and come back to Australia and be a nobody."

Anonymous survey respondent

Promotion of a global mindset

Australian organisations should be creating and promoting a global mindset as part of their organisational system. Consider for example the advantage an organisation that scans the globe for the latest innovations and trends before embarking on a strategic initiative has in comparison with one who operates purely in an Australian environment without trying to learn global lessons. Consider also the opportunities to attract global diaspora talent and global collaborators for global collaborations with overseas organsiations, led by senior Australian or alumni leadership.

Our alumni advantage

Australian organisations have the added opportunity to foster better ties with their alumni – and the global or local organisations they lead - many of whom have returned to their homelands with a fond view of Australia and a willingness to – and understand how to do business with Australians.

Some examples of our alumni and former Advancer Award winners and nominees:



Kiran Mazumdar-Shaw - India

Kiran Mazumdar-Shaw, a pioneering biotech entrepreneur, is the Chairperson and Managing Director of Biocon, Asia's leading bio-pharmaceuticals enterprise. Under her leadership, Biocon has evolved from an industrial enzymes company to a fully integrated, innovation-led biopharmaceutical enterprise committed to reduce therapy costs of chronic conditions like diabetes, cancer and autoimmune diseases. Her philanthropic efforts have been featured in Forbes' list of 'Heroes in Philanthropy' and she has featured on Forbes' list of '100 Most Powerful Women' since 2010. Kiran studied at the Ballarat Institute of Advanced Education, a predecessor to Federation University.



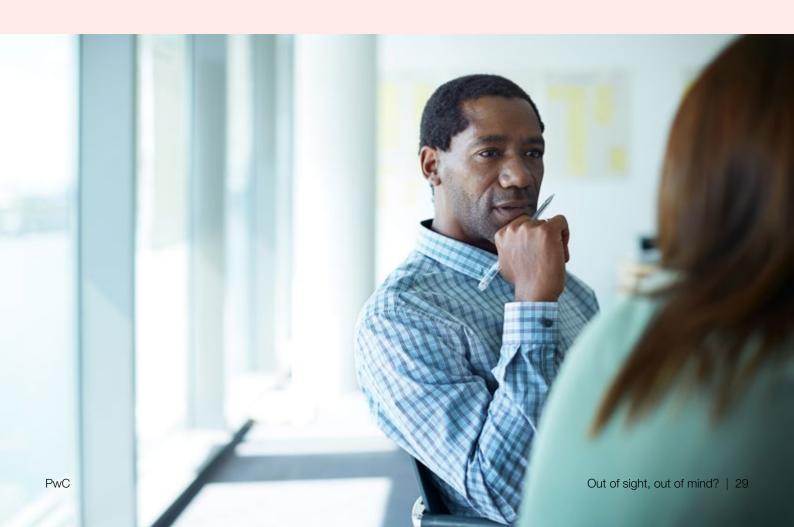
Professor Cecilia Nembou – Papua New Guinea

Professor Nembou is the President of Divine Word University. She made history by becoming the first woman to be a president and vice chancellor of a university in Papua New Guinea. Professor Nembou's impressive career has spanned 40 years and included various academic and senior management positions at the University of PNG, PNG Banking Corporation and the University of Wollongong in Dubai. Under an Australia Awards scholarship, Cecilia completed a PhD in Operations Research at the University of New South Wales.



Adeeba Kamarulzaman – Malaysia

Professor Dr Adeeba Kamarulzaman graduated in Medicine from Monash University and received her training in Infectious Diseases at the Fairfield Infectious Diseases Hospital, Victoria, Australia. She is presently Faculty of Medicine Dean at the University of Malaya, Kuala Lumpur, where she heads a tertiary referral center for Infectious Diseases and HIV/AIDS. In 2007 she established the Centre of Excellence for Research on AIDS (CERiA) at the University of Malaya where the main research focus is on the epidemiology, prevention and treatment of HIV for injecting drug users including those in incarcerated settings. As the President of the Malaysian AIDS Council (MAC) the peak NGO for HIV/AIDS from 2006 to 2010 she led the community response to HIV/AIDS including successfully advocating for the introduction of harm reduction programmes to prevent HIV transmission amongst people who use drugs.



References

Advance.org, "Australians Abroad: Preliminary findings on the Australian diaspora"

Australia Global Alumni Engagment Strategy 2016-2020, DFAT

AICD Magazine (http://aicd.companydirectors.com. au/membership/company-director-magazine)

Australian Bureau of Statistics (2006), 4102.0 – Australian Social Trends, 2006

Basu (2013), 'Some differences in research publications of Indian scientists in India and the diaspora, 1986-2010', Scientometrics 94:1007-1019

Co, Euzent & Martin (2004), 'The Export Effect of Immigration into the USA' Applied Economics 36(6) pp.573-83

Department of Industry, Tourism and Resources (2006), Collaboration and Other Factors Influencing Novelty in Australian Businesses

Department of Industry (2013), Australian **Innovation System Report**

http://diasporamatters.com

Dumont & Lemaitre (2005), Counting Immigrants and Expatriates in OECD Countries: A New Perspective, OECD

Forbes, Jan 13 (2015) 'Innovation and Collaboration' Kate Vitasek

Fullilove (2008), World Wide Webs: Diasporas and the International System, Lowy Institute for International Policy,

Head & Ries (1998), 'Immigration and trade creation: Econometric evidence from Canada' Canadian Journal of Economics 31(1) pp.47-62

Innovation and Science Australia 2017, Australia 2030: prosperity through innovation, Australian Government, Canberra.

Joint Standing Committee on Migration (2013), Inquiry into Migration and Multiculturalism in Australia, Parliament of the Commonwealth of Australia

Kuznetsov "Mobilising Intellectual Capital of the diasporas: from first movers to a virtuous cycle" (2008) 9 Journal of Intellectual Capital 2 pg 269. Leigh (2005), 'Imagining an International Australia' Griffith Review, available at https://griffithreview. com/articles/imagining-an-international-australia/

Marmolejo-Leyva, Perez-Angon & Russell (2015), 'Mobility and International Collaboration: Case of the Mexican Scientific Diaspora' PLoS One, 10(6)

Newland & Plaza (2013), 'What we Know About Diasporas and Economic Development,' Policy Brief, Migration Policy institute Policy, No.5

Plaza (2013), 'Diaspora Policies' in Constant & Zimmerman (eds), International Handbook on the **Economics of Migration**

PwC (2017), Reinventing innovation: Five findings to guide strategy through execution, available at http:// www.pwc.com/us/en/advisory-services/businessinnovation/assets/2017-innovation-benchmarkfindings.pdf

PwC (2016a), The Long View: How will the global economic order change by 2050? available at https:// www.pwc.com.au/publications/world-in-2050.html

PwC (2016b), Our Diaspora's Got Talent: Australia's Advantage in Asia

PwC (2016c), 20 years inside the mind of the CEO... What's next? available at http://www.pwc.com/gx/ en/ceo-agenda/ceosurvey/2017/au

PwC (2017), Optimistic outlooks and courageous decisions: PwC's 21st CEO Survey available at http:// www.pwc.com.au/ceo-agenda/ceo-survey/2018.html

Rizvi, Louie & Evans (2016), Australia's Diaspora Advantage: Realising the potential for building transnational business networks with Asia, Australian Council of Learned Academies

Saxenian (2006), The new argonauts: Regional advantage in a global economy, Cambridge MA: Harvard University Press

Senate Legal and Constitutional References Committee (2005), They still call Australia home: Inquiry into Australian expatriates

Shelton 2016, 'These Five Behaviours Can Create an Innovation Culture' strategy+business available at https://www.strategy-business.com/blog/These-Five-Behaviors-Can-Create-an-Innovation-Culture

Yu (2002), 'The Link Between Immigration and Trade: Evidence from the United Kingdom' Review of World Economics 138(1) pp.115-3



www.pwc.com.au