

Systematising innovation

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Productivity is key to Australia's future economic growth, and technology innovation is fundamental to enhancing productivity. Investment in technology can have a multiplier effect on productivity — so what's holding us back? Ian Hancock, Head of Management Consulting at KPMG, discusses how technology innovation needs to be systematised for Australian businesses to realise its full potential.

To create and maintain productivity growth, new technology needs to be explored, developed and implemented. That is generally regarded as a given. What is different today from perhaps a generation ago — and creates its own raft of challenges — is the sheer speed at which technology is changing. For businesses and organisations to stay competitive, they need to adopt, adapt and evolve technology; ignoring the rapid shifts in technology is simply not an option.

Ian Hancock, Head of Management Consulting at KPMG says: *"You can't ignore technology. You can't say 'I don't think there's a return on investment on this so I'm going to ignore it'. You have to analyse it, you have to be engaged with it and you have to figure out how best to use it"*

The speed at which technology is changing and adopting different forms is an ongoing challenge for businesses. This means technology innovation must be systematised into the businesses' innovation process. *"You have to constantly examine your technology investments – there are many new technologies that enhance real value, cost-effectiveness, reach new customers in a changing environment; and leveraging those is important,"* says Hancock.

There's more to it than just information technology

But what exactly do we mean when we talk about 'technology'. There is a tendency to assume that any significant technology breakthroughs that will have the potential to change the way organisations do business and boost productivity will be information technology, but this view is limited — and limiting. In fact, many of the nascent technologies that are likely to revolutionise industries, such as sensor technology, robotics and 3D printing are not just about information technology, says Hancock. *"They're about harnessing the whole breadth of technology, creating new areas rather than just your traditional IT systems and processes"*

Silicon Valley, Australia?

The key challenge for Australia in terms of technology-driven productivity gains is that it doesn't have an ecosystem that supports innovation across the whole technology spectrum. This is recognised in the recent *National Science and Innovation Agenda* (Innovation Statement), which outlines a range of new initiatives and collaboration investments.

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That's not to say that there aren't good developments underway. Last year saw the launch of Stone & Chalk: 'a physical centre of gravity for Fintech in Australia'. As an independent not-for-profit, its stated objective is 'to help foster and accelerate the development of world-leading Fintech start-ups'. It's too early to evaluate its success, but hubs such as Stone & Chalk have the potential to start creating the environment an innovation culture needs.

Australia doesn't yet have a Silicon Valley model — the reason, unsurprisingly, is multifaceted and there's a strong cultural element. In the US, the larger population sustains a correspondingly larger number of angel investors and capital investing capabilities, and there are also many federal and state-based incentives. Perhaps even more significant is the 'safe to fail' culture of the US, in which it is acceptable, even desirable, to be involved in start-ups and new ideas that may not necessarily succeed. That culture encourages innovation and risk, both of which are essential to the creation of the new and disruptive technologies that can create fundamental change and productivity growth.

In Australia, as Hancock explains, *"we're still working through elements of the incentive programs, elements of the ecosystem, the size of our market and our culture. The Innovation Statement now puts this squarely on the agenda"*.

Interestingly, five years ago KPMG launched an innovation advisory capability but found it difficult to get organisations to buy into it in a systematic way. They were prepared to use it for analysis of a specific issue — a problem or the impact of a disruptive technology — but were not ready to embed the processes and systems into the culture of their organisations.

Gaining traction

Today, the idea of embedding innovation within business processes is finally beginning to gain real traction.

"Many organisations are now looking at innovative cultural programs ... appointing someone to lead innovation specifically. You're seeing corporate Australia make shifts to really understand how best to leverage the power organisation wide and how to do this effectively. That shift is actually a really

important one because without it, you don't get the cultural move, people taking measured risks and so on, so we're actually at an interesting turning point where Australian businesses are focusing more on innovation, technology innovation specifically and how to link that to productivity and leveraging their workforce to do that better".

Measuring returns and accessing capital

Assuming that organisations begin to implement programs of technology innovation, the next challenge from a business perspective is measuring return on investment (RoI). Even here the parameters are shifting. Whereas once the focus might have been on innovating in the expectation of some 'big bang' RoI, today more corporations are looking at small incremental innovation work that will generate ideas that can be leveraged to existing business processes. The investments are smaller; the expectations different:

"It's fail fast, move on and it's not about finding a silver bullet, it's about finding a whole raft of lessons that can be applied to business as usual to enhance it," comments Hancock.

Even more interesting is the move into a 'portfolio' approach, where an organisation might link into a range of different programs where they can invest in individuals or groups that might (or might not) generate significant RoI.

But what about smaller players and start-ups? For them the issues are access to capital and funding to continue and test.

"One of the things that technology start-up complain about is that they are building things in isolation. Teaming with large corporates to test the quality of the outcome and obtain access to funding as part of that process is really important. Partnering with existing corporates is a weak link at the moment," says Hancock.

One example of an effort to strengthen that link is the focus of Startup Week Australia, a not-for-profit that aims 'to facilitate the introductions and conversations that may lead to greater investment and commercial engagement between Australian Tech startups and large organisations'.

Positive policy movements

With the emergence of organisations such as Stone & Chalk and Startup Week, plus a Federal Government that is fervently in favour of innovation, the signs are positive.

However, Australian business is yet to collaborate successfully within the technology start-up eco-system. Without collaboration between research organisations, start-ups and technology providers, enhanced productivity will be limited.

Perhaps this is a reflection of the outdated view that 'technology' is only relevant for certain industries or perhaps it's a 'wait-and-see' approach. Either way, whether or not the Government expands its investments and incentives, it certainly needs to expand the conversation. To date, it seems determined to do so.

It's important to note that the Government's role is not limited to promoting innovation, providing R&D funding and incentives for innovation, or increasing immigration flexibility. Its response to the changes that result from the implementation of new and disruptive technologies is just as vital.

The adoption of new technologies incorporating new ways to do business is essential to achieving multifactor productivity growth. Yet disruptive technologies and new business models (e.g. Uber and airbnb), typically reduce the value of existing investments utilising conventional technologies. Comments Hancock: *"This value destruction can lead to demands on governments for protection against the use of disruptive technologies."*

Government also needs to lead by example, implementing and driving technology innovation within its own processes.

At the National Reform Summit last year, Craig Emerson sounded a clear call to action on the relationship between technology, innovation and productivity: *"If Australia is to improve its multifactor productivity growth performance, government policy will need to accommodate disruptive technologies and refrain from protecting businesses against their adoption"*.

In short, no pain, no gain.

Cloud computing: what's it worth?

In 2012, KPMG was engaged by the Australian Information Industry Association (AIIA) to analyse the potential impact on the Australian economy of the uptake of the then emerging cloud computing phenomena.

In summary, the report found that, based on Australia GDP at the time of the analysis, adoption of cloud services across 75 percent of ICT spending would achieving operating expense savings of 25 percent and capital expense savings of 50 percent. After 10 years (adjustment period) the project result would be an increase in long-run GDP of A\$3.32 billion per annum. Even at adoption levels of just 50 percent, GDP would be A\$2.16 billion per annum.

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