
SUBMISSION

**Business Council submission to
the National Digital Economy
Strategy consultation**

December 2017

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The Business Council of Australia draws on the expertise of Australia's leading companies to develop and promote solutions to the nation's most pressing economic and social policy challenges.

ABOUT THIS SUBMISSION

This is the Business Council's submission to the Commonwealth Government's consultation process for the national digital economy strategy.

EXECUTIVE SUMMARY

Digital innovation is having a profound impact on our society and our economy.

To realise the benefits of digital innovation, we require policy settings and business leadership that enable Australia to develop, adopt and adapt to changes in digital innovation.

This submission from the Business Council sets out a suggested policy framework for considering issues in 'the digital economy'. Although business has the primary role in driving digital innovation, government can assist by setting the right framework.

We propose the following framework for the national digital economy strategy:

1. **government as an enabler.** Government can put in place a policy environment with the incentives, capabilities and frameworks to promote digital innovation by businesses and individuals. Business Council recommendations highlight the importance of openness of markets, the competitiveness of regulatory and tax systems, a modern education and skills system, and efficient provision of digital infrastructure.
2. **government as a driver.** Government has an impact on digital innovation through its funding and purchasing decisions. Relevant policy areas include research funding and incentives, and government procurement.
3. **government as an exemplar.** Government can model the desired adoption of digital innovation through service delivery and the operation of public service organisations.

Digital innovation delivers many benefits, but there will be some trepidation in the community in the face of such fundamental change: for example, concern about the impact of technology on the labour market. Effectively addressing these risks is essential to maintain trust and support in the community for the development and adoption of digital innovation.

The multi-dimensional and complex structure of the digital world means that no single sector can address all the risks alone. The fourth area we recommend for inclusion in the national digital economy strategy is:

4. **collaboration between governments, businesses and individuals** to each play its part to manage risks. Attempting to hold back technological progress only denies consumers the benefits of digital innovation.

Public debate on emerging risks should continue, and the national digital economy strategy is a prime opportunity to facilitate further conversation.

RECOMMENDATIONS

Government as an enabler

Recommendation 1: The Government should remove unnecessary regulatory barriers to digital innovation. To help identify opportunities for reform, we recommend establishing an “Innovation Inbox” – a process where businesses can submit proposals for reform of regulations that are inhibiting digital innovation.

Recommendation 2: The Government should commission annual ‘deep dives’ that include a first principles re-examination of regulation already on the books, undertaken by an independent third party.

Recommendation 3: The Government’s response to the Productivity Commission’s data report should ensure the scope of data to be shared in each sector is ultimately designed by businesses in that sector.

Recommendation 4: As a first step towards a tax system that better promotes economic growth and jobs, legislation for a competitive company tax rate should be passed by the Parliament.

Recommendation 5: The Government should undertake initial work on how to adopt the model for governance, regulation and funding across vocational education and training and higher education, set out in the Business Council’s *Future Proof* paper. Improving market information would be a sensible first step.

Recommendation 6: The Government should work with the private sector to design a regulatory framework for digital infrastructure that enables competition and markets to deliver the next wave of infrastructure investment.

Government as a driver

Recommendation 7: The Government should improve coordination and consultation with the private sector for public procurement, including revision of the Commonwealth procurement guidelines and the establishment of portfolio-specific digital industry advisory groups.

Government as an exemplar

Recommendation 8: Government should establish a forum where government agencies can seek advice from Australian businesses in delivering customer-centric digital services.

Recommendation 9: Government should incorporate greater private sector expertise in the development of consistent identity solutions across government.

Recommendation 10: Large public and private sector organisations should do more to share lessons learnt about how to effectively structure modern organisations, and how digital tools and services can assist.

Government and business working together on shared risks

Recommendation 11: Government and business should discuss the feasibility of a possible large-scale education and awareness campaign to improve cyber practices across the community.

Recommendation 12: An annual 'state of digital innovation' report should be prepared by government to examine emerging areas of digital innovation.

INTRODUCTION

Digital technologies are having a profound impact on our economy and our society.

The potential of new technology goes beyond mere new functionality. Digital innovation facilitates shifts in communication and behaviour that amplify global forces already underway, like globalisation, the empowerment of consumers and changing workforces.

From an economic perspective, the potential benefits of digital innovation are numerous:

- productivity improvements
- greater competition and choice for consumers
- the emergence of more efficient business models
- increased global links and trade, and
- a lever for promoting economic participation.

To realise the benefits of digital innovation, we require policy settings and business leadership that enable Australia to develop, adopt and adapt to changes in digital innovation.

However, we know there may be trepidation from the community in the face of such fundamental change. Some of the potential risks are reasonably well-known and considered, like potential impacts on cyber security and privacy. In particular, some parts of the community are concerned about the impact of technology on the labour market. Other risks are only emerging, like the ethical implications of algorithm use or the safety of autonomous vehicles.

The multi-dimensional and complex structure of the digital world means that no single sector can address all the risks alone. Governments, businesses and individuals need to cooperate and play each part to manage the risks. Attempting to hold back technological progress only denies consumers the benefits of digital innovation.

Businesses are ready and willing to step up and offer solutions that address the community's concerns, while preserving the benefits of technology for consumers.

Public debate on emerging risks should continue, and the national digital economy strategy is a prime opportunity to facilitate further conversation.

FRAMEWORK FOR THE DIGITAL ECONOMY

Purpose

The Government has indicated the purpose of the national digital economy strategy is to:

- build on our competitive strengths and develop new ones
- develop world-leading digital business capability for globally engaged, innovative, high-growth businesses of all sizes
- drive a culture and mindset that supports lifelong learning, a global outlook and helps us respond positively to change
- address the 'digital divide' in skills and confidence to help all Australians succeed in a digital economy.

We recommend that the goal of the Government's national digital economy strategy should be: to work towards greater development, adoption and adaptation of digital innovation, to enhance business investment, productivity and – ultimately – improve living standards.

The strategy can do this by:

- highlighting developments in the digital economy and facilitating debate in areas that require further examination or discussion
- making recommendations relating to government policy, government service delivery, and possible areas of collaboration between governments and businesses.

Elements of the framework

The discussion paper, released in September 2017, groups the key areas according to the themes of:

- enabling and supporting the digital economy (through digital infrastructure, standards and regulation, and trust, confidence, and security)
- building on our areas of competitive strength to drive productivity and raise digital business capability
- empowering all Australians through digital skills and inclusion.

Any framework for digital innovation needs to recognise that – just like innovation more broadly – digital innovation is not the outcome of a program. It steps from a broad system (involving businesses, governments and individuals) with the settings to drive and enable innovation.

For the system to work, each part of the system – businesses, governments and individuals – needs to play its part.

We see business as holding the primary role for developing, adopting and adapting to digital innovation. Businesses are responsible for:

- investing in, and producing, new digital goods and services
- encouraging adoption of technology by consumers
- adopting technology themselves for more efficient production, and
- innovating and adapting to change.

Businesses are driven by the commercial necessity to meet the demands of their customers, which means they are best placed to assess how new technology can be used to create new, valuable products and services.

Rather than directing the adoption of innovation, governments should set the right framework for businesses and individuals to develop, adopt or adapt to digital innovation. The Business Council sees this as best described through three roles:

- 1. government as an enabler.** Government can put in place a policy environment that contains the incentives, capabilities and frameworks that promote digital innovation by businesses. This includes:
 - promoting open and competitive markets
 - providing competitive policy settings (in areas like tax and regulation) that create an environment that is conducive to business investment, digital innovation and risk-taking
 - modernising the education and skills system, to provide a workforce capable of developing and adapting to innovation.
- 2. government as a driver.** Government has an impact on digital innovation (either positively or negatively) through its purchasing decisions and direct support for innovation. This includes:
 - collaborating with academia and industry in emerging areas to convert knowledge into commercial opportunities
 - undertaking public procurement in ways that drive innovation.
- 3. government as an exemplar.** Government can model the desired adoption of digital innovation in the manner in which it delivers services and runs public service organisations.

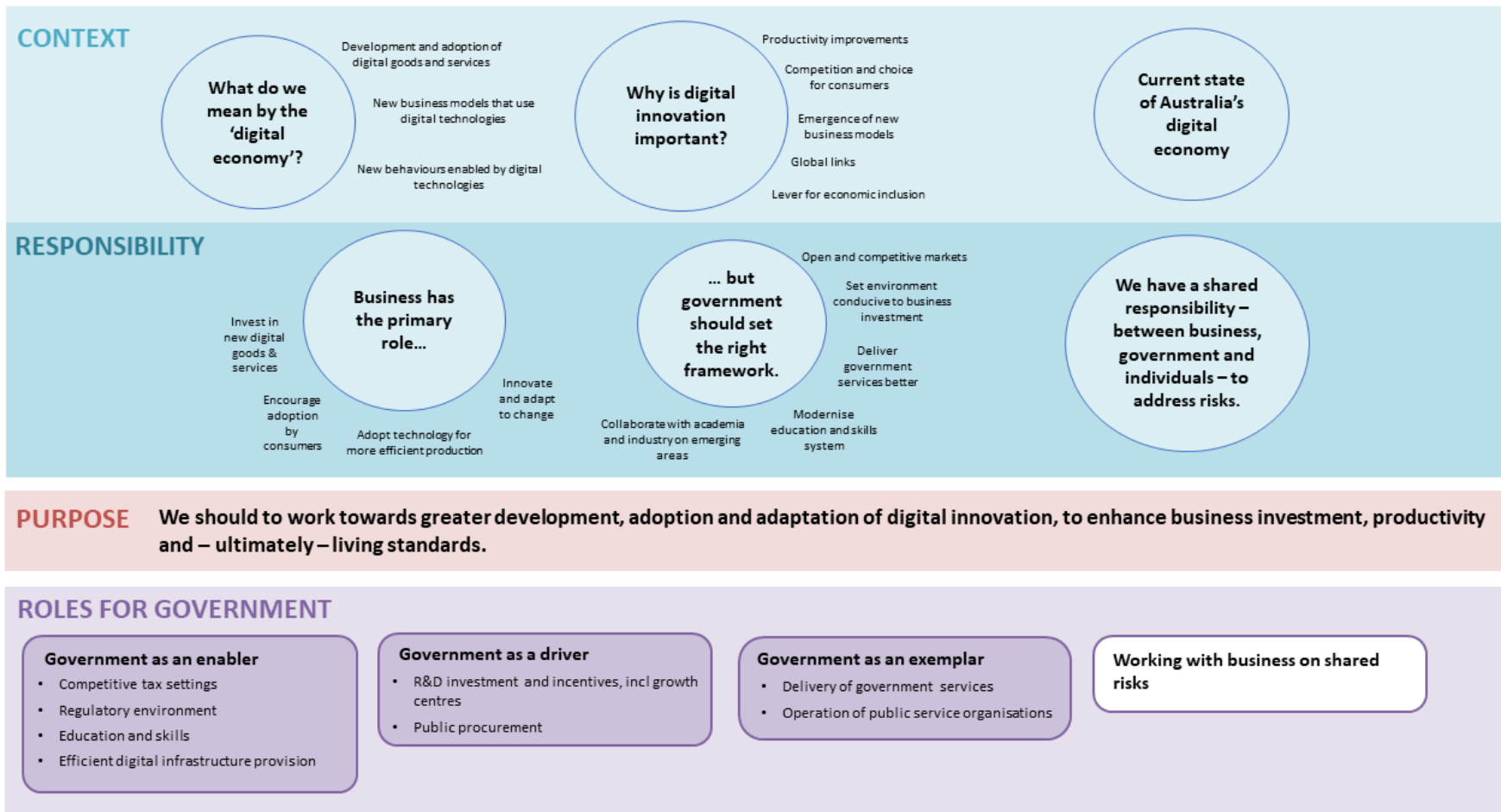
These roles notwithstanding, it is clear that the multi-dimensional and complex structure of the digital world means that no single sector can address all the risks alone. For example, cyber security risks can only be addressed if government, business, research and individuals are all playing their part to encourage better cyber practices and readiness.

For that reason, we see a fourth and final role for government:

- 4. working with business and other stakeholders to address shared risks.** Our submission identifies areas that could be candidates for greater collaboration between government and business.

Our specific recommendations are grouped around these four roles, and depicted in **Diagram 1**.

Diagram 1: Suggested framework for the national digital economy strategy



Scope and definition

The term ‘digital economy’ is broad and somewhat ambiguous.

Throughout this submission, we refer instead to ‘digital innovation’, for two reasons:

- Digital innovation occurs in every sector of the economy – not just the information and communications technology sector.
- The capability of new technology in isolation is less important than the innovation it can enable: the process improvements, new business model creation and behavioural changes effected by the technology.

Similarly, references to ‘changes in technology’ can capture broad swathes of technologies – everything from a broadband internet connection or a smartphone, to more advanced technologies like the Internet of Things, Industry 4.0, machine learning and artificial intelligence, distributed ledger technology, drones or autonomous vehicles.

Finally, digital innovation is not the sole domain of start-ups. Small businesses are important to digital innovation – and the overall economy – but digital innovation occurs across the entire business sector (see explanation in **Box 1**). Indeed, ABS data suggest that large businesses are more active innovators than small businesses.

Box 1: Supporting digital innovation in small businesses

Small businesses, including start-ups, are important for digital innovation. However, digital innovation is not the sole domain of start-ups. Large businesses play an essential role.

In particular, small and big businesses depend on each other – in all areas of the economy, but especially in digital innovation. An innovative start-up benefits from working with big businesses as customers, investors or partners. Large businesses value the dynamic culture of innovative small businesses who have the freedom from legacy assets or business units to experiment.

- The activity between big, medium and small businesses was valued at more than \$550 billion in 2015-16 in Australia.

However, small businesses are broader than just start-ups. Other, more established small businesses could do more to adopt digital tools and services. The Commonwealth Bank of Australia has released research that shows 80 per cent of small businesses delay adoption of technologies which could offer long-term benefits.¹

The Government has established a Small Business Digital Taskforce to highlight the potential benefits of adopting digital innovation to small businesses.

The best way for governments to encourage adoption of digital goods and services by small businesses – or to support start-ups – is to encourage a broader business environment that supports firms of all sizes. The burdens of unnecessary regulation and tax affects all businesses, big and small.

The adoption of recommendations in the rest of this submission would not only directly benefit small businesses, but also free up resources from big businesses that can be used to work with small business partners.

BENEFITS OF DIGITAL INNOVATION

Encouraging digital innovation is important for a number of reasons.

In an economic sense, the potential benefits of digital innovation are numerous:

1. **Improvements in productivity.** Although the magnitude of the link between digital innovation and productivity remains contested, Australia has previously enjoyed a productivity boost from digital innovation: the surge in Australia's labour productivity in

¹ Commonwealth Bank of Australia, *Majority of small businesses delay adoption of technology offering long-term benefits*, media release, 19 September 2016, <https://www.commbank.com.au/guidance/newsroom/small-businesses-research-tech-201609.html>.

the 1990s (up 1.1 percentage points, from 2.1 to 3.1 per cent a year) was linked to the rapid adoption of information and communication technologies in the 'dot com' boom.²

Productivity improvements are the primary contributor to higher living standards: they allow firms to offer higher wages and reduce the cost of goods and services to consumers.

2. **Greater competition and choice for consumers.** Technology can encourage competition and choice for consumers by: reducing the barriers to entry in a market by international or other competitors; facilitating the establishment of new businesses; reducing production costs of incumbents, allowing them to reduce prices or diversify product offerings; or increasing the transparency and comparability of product offerings.
3. **New business models.** The functionality of technology can assist to make business models viable that would not previously have been commercially possible, for example, peer-to-peer exchange or on-demand consumption.
4. **Increased global links and trade.** Digitisation amplifies the impact of globalisation in a number of ways, for example, by lowering the transaction costs for Australian businesses to import or export or by allowing Australian businesses to take advantage of opportunities relating to global data flows.³
5. **The potential to promote economic participation.** The slow adoption of digital technologies may represent an additional barrier to an individual or small business participating in a modern economy. Around 67 per cent of households without access to the internet fall in the lowest or second lowest household income quintiles.⁴

Individuals or small businesses who do not participate in the digital economy may not enjoy the full possible benefits.

Overall, it has been estimated that the adoption of selected digital innovations could add \$140 to \$250 billion to Australia's GDP (0.7 to 1.2 per cent) by 2025.⁵

There are a number of perceived and possible risks that can arise from digital innovation (for example, potential for labour market disruption, ethical use of algorithms or the safety of autonomous vehicles). Effectively identifying and addressing these risks will be essential to maintaining trust and support in the community for the development and adoption of digital innovation.

It will be imperative to develop, adopt and adapt to digital innovation, rather than trying to hold it back. As Martin Parkinson, Secretary of the Department of Prime Minister and

² Productivity Commission, *Information Technology and Australia's Productivity Surge*, 2001, <http://www.pc.gov.au/research/supporting/it-surge/itaaps.pdf>.

³ McKinsey Global Institute, *Digital globalization: the new era of global flows*, February 2016, <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/digital-globalization-the-new-era-of-global-flows>.

⁴ Australian Bureau of Statistics, *Household Use of Technology 2014-15*, 8146.0.

⁵ McKinsey & Company, *Digital Australia: seizing opportunities from the Fourth Industrial Revolution*, May 2017, <https://www.mckinsey.com/global-themes/asia-pacific/digital-australia-seizing-opportunity-from-the-fourth-industrial-revolution>.

Cabinet, has said, “we need to recognise that over the next quarter century, technology will be perhaps the most significant driver of jobs, national productivity and living standards”.⁶

DISCUSSION

A range of recommendations are provided below.

Government as an enabler

Trade and investment

Foreign direct investment, and trade, generate many benefits, including economic growth and job creation. One critical benefit is that foreign direct investment and trade are material in generating and spreading innovation, including digital innovation.⁷

Consequently, governments can continue to encourage the development and adoption of digital innovation by maintaining open and competitive markets, and establishing competitive tax and regulatory systems to attract investment.

Best practice regulation

Regulation has the potential to either support or hinder digital innovation.

Good regulation can enable innovation. For example, the patent system protects against the misappropriation of intellectual property rights and thus encourages appropriate investment.

Poor regulation on the other hand can detract from innovation in the following ways:

- Discourage market entry by businesses, which is critical to a vibrant market with competition and innovation. Previous work by the Productivity Commission has identified regulation as the key barrier for start-ups.⁸

⁶ M Parkinson, *Technological change: making the most of the technical revolution*, speech given 22 November 2017, <https://pmc.gov.au/news-centre/pmc/secretarys-address-sydney-institute-technological-change-making-most-technological-revolution>.

⁷ See, for example:

- H Lin and E Lin, 'FDI, Trade and Product Innovation: Theory and Evidence', *Southern Economic Journal*, vol 77, no 2 (October 2010), pp 434-464.
- Australian Government (The Treasury), *Foreign Investment into Australia working paper*, January 2016, https://static.treasury.gov.au/uploads/sites/1/2017/06/TWP_201601_Foreign_Investment.pdf
- Productivity Commission, *Public Support for Science and innovation*, March 2007, <https://www.pc.gov.au/inquiries/completed/science/report/science.pdf>.

⁸ Productivity Commission, *Business Set-up, Transfer and Closure*, December 2015, <https://www.pc.gov.au/inquiries/completed/business#report>.

- Direct costs of compliance, which divert resources from business innovation. The Australian Government has estimated that the cost to businesses and individuals from complying with Commonwealth regulation alone is about \$65 billion each year.⁹
- Indirect costs arise when regulation results in unintended consequences or discourages innovation and entrepreneurialism. The 2009 changes to Employee Share Schemes are one such example, which had unintended consequences for start-ups.
- Overly prescriptive regulation can limit a firm's flexibility and capacity to adopt new processes while still complying with their regulatory obligations.
- If not evaluated and updated regularly, regulation can become no longer fit for purpose in the face of changing technology.

A re-energised regulatory reform agenda would be a key enabler of digital innovation. The current model for regulatory reform (annual regulation reviews that are self-administered by portfolio agencies) should be complemented by new efforts.

One complication arises when a piece of regulation that is inhibiting digital innovation is administered by a part of government far removed from policymakers charged with innovation as their objective. The impact on digital innovation may not be apparent to those with responsibility for the regulation.

We suggest this could be addressed by the creation of a concept we are calling the "Innovation Inbox".

We envisage a process, administered by an authoritative central agency like PM&C, where businesses submit proposals for reform of regulations that are inhibiting digital innovation. This would trigger a process where:

- The central agency coordinates with their colleagues across multiple departments (and even, potentially, levels of government) to assess the proposal and whether regulations can be relaxed or amended without consumer harm.
 - Any work with states and territories may need to be underpinned by bilateral agreements.
- The central agency considers if other models of regulation are possible (for example, like a temporary regulatory holiday, as proposed by the Productivity Commission¹⁰).
- The central agency publishes their decision and a statement of reasons, outlining the examination they have taken to consider the impact on digital innovation.

Recommendation 1: The Government should remove unnecessary regulatory barriers to digital innovation. To help identify opportunities for reform, we recommend establishing an "Innovation Inbox" – a process where businesses can submit proposals for reform of regulations that are inhibiting digital innovation.

⁹ Australian Government, *Taking stock of Commonwealth regulation*, September 2013, <https://www.cuttingredtape.gov.au/annual-reports/annual-deregulation-report-2014/taking-stock-commonwealth-regulations>.

¹⁰ Productivity Commission, *op.cit.*

In some cases, the direction of digital innovation may fundamentally alter the need for regulation in the first place. Existing regulation can become out-of-date as new technologies and business models emerge.

For example, some experts have suggested that consumers are able to coordinate and share information about poor-quality or faulty products using social media, so governments should cease issuing their own product alerts and instead focus on product enforcement.¹¹

The implications for entire regulatory systems can be complex. Governments should establish a process to go back to first principles and re-think the ideal regulatory environment for current circumstances.

Recommendation 2: The Government should commission annual ‘deep dives’ that include a first principles re-examination of regulation already on the books, undertaken by an independent third party.

Use of data, and associated technologies, can generate significant economic benefits. Most of the economic benefit of data ultimately accrues to consumers, through lower prices, access to benefits often at no cost, more convenience, greater personalisation and reduced information asymmetry.

The Business Council has previously strongly supported efforts for greater availability of data held in the public sector. When done appropriately, this can promote greater transparency, increased effectiveness of government services and broader innovation.

The Government has indicated its intention to legislate for a National Consumer Right that would grant consumers data portability in relation to their banking, energy and telecommunications services.¹² A well-designed consumer right should facilitate competition, encourage innovation and foster trust from the community in data use.

The Business Council supports the principle that consumers should have greater access and control over data directly relating to them. Although a market-based approach would hold many advantages compared to additional regulation, the Business Council has put forward a range of suggestions to ensure the new system is an effective, workable regime that serves the interests of consumers and supports a productive and innovative economy.

In particular, it is essential that the scope of data to be shared in each sector is ultimately designed by businesses in that sector. The Productivity Commission recommended that data agreements should be industry-led, to avoid over-capture of commercially sensitive data.¹³ Excessive direction or intervention by government in prescribing the scope of data captured in industry agreements would risk stifling or slowing the tremendous data innovation already underway.

¹¹ For example, A Tabarrok and T Cowen, ‘The End of Asymmetric Information?’, *Cato Unbound*, April 2015, <https://www.cato-unbound.org/2015/04/06/alex-tabarrok-tyler-cowen/end-asymmetric-information>.

¹² A Taylor, *Australians to own their own banking, energy, phone and internet data*, media release dated 26 November 2017, <https://ministers.pmc.gov.au/taylor/2017/australians-own-their-own-banking-energy-phone-and-internet-data>.

¹³ Productivity Commission, *Data Availability and Access*, p 219.

Recommendation 3: The response to the Productivity Commission’s data report should ensure the scope of data to be shared in each sector is ultimately designed by businesses in that sector.

Competitive tax settings

For industries to grow, competitive tax settings are needed to encourage and empower entrepreneurs and businesses to take the risks necessary to invest and create the jobs of the future.

The Australian business tax system is out of step with the rest of the world. The statutory corporate tax rate of 30 per cent competes with an average of 22 per cent in Asia and 25 per cent across the OECD. The UK has already dropped its corporate tax rate to 20 per cent and it will fall to 18 per cent by 2020. The United States appears on the cusp of a dramatic reduction in company tax.

This disparity creates a disincentive to invest in our economy.

In addition, our tax system is struggling with rapid technological change and digitisation; forces which are fundamentally disrupting business models and corporate structures. The way we produce, sell, work and buy goods and services – and where we do so – is evolving rapidly, threatening parts of our traditional tax base. Intangible investment and assets are growing faster than physical capital. New asset classes will be created; the Internet of Things will challenge traditional business and investment models.

We need a tax system that is agile enough to accommodate and respond to the major economic impacts of technological change.

As outlined in the Henry Tax Review, one of the benefits of a lower company tax rate is that “reducing taxes on investment, particularly company income tax, would also encourage innovation and entrepreneurial activity. Such reforms would increase income for Australians by building a larger and more productive capital stock, and by generating technology and knowledge spillovers that boost the productivity of Australian businesses.”¹⁴

New investments typically embody new technology. High business taxes hurt innovative firms that drive growth at the margin the most. OECD analysis finds that reducing the corporate tax rate is especially beneficial for total factor productivity growth of the most dynamic and innovative enterprises.

Recommendation 4: As a first step towards a tax system that better promotes economic growth and jobs, legislation for a competitive company tax rate should be passed by the Parliament.

¹⁴ K Henry, *Australia’s Future Tax System Final Report*, chapter 5, https://taxreview.treasury.gov.au/content/FinalReport.aspx?doc=html/publications/papers/Final_Report_Part_1/chapter_5.htm

Human capital

Some reports over the last few years estimate that anywhere between 40 to 70 per cent of current jobs in the Australian economy will be lost as a result of technological change and artificial intelligence (AI).

While there is no doubt that AI and robotics will fundamentally change the working experience of all Australians, we believe the commentary about overwhelming job losses creates unnecessary fear, while failing to grapple with the complexity of the changes we are facing.

No one can predict labour market changes with certainty, but we are more inclined to take the same view as McKinsey¹⁵, the OECD¹⁶ and IBM¹⁷: a very small number of jobs (between 5 and 10 per cent) appear to be suitable for full automation, but the number of jobs that are impacted by changes in technology will be almost 100 per cent.

Most jobs will see a level of automation and a range of tasks simply disappearing. Jobs that are currently low-skilled will require people to have a good understanding of technology, and be able to interact with robots.

These developments make it imperative that people have the opportunity to undertake lifelong learning: upskilling and reskilling across their working lives. As AI and robotics is introduced across almost every industry and every role, it will augment the jobs in the labour market and people will need to learn to work with AI and robots. They will also need to learn new skills.

The nature and types of jobs and careers are also shifting.

- Digital peer-to-peer platforms allow people to perform a range of jobs at once, or pursue their own entrepreneurial ambitions in their spare time.
- There will also be growing value and demand placed on non-routine jobs, such as carers, that require intensive human interaction and interpersonal skills.

To meet the challenge of the new world of work, our education system requires transformational change.

In particular, the Business Council has put forward a proposal for reform of the tertiary sector.

Our paper Future Proof, released in October 2017, contains a range of recommendations for changes to governance, regulation and funding across vocational education and training that would move Australia towards a universal tertiary model.

In particular, the paper recommends putting the learner in charge by giving every Australian a capped Lifelong Skills Account that can be used to pay for courses at approved VET or HE

¹⁵ McKinsey Global Institute, *A future that works: automation, employment and productivity*, January 2017, <https://www.mckinsey.com/global-themes/digital-disruption/harnessing-automation-for-a-future-that-works>.

¹⁶ M Arntz, T Gregory & U Zierahn, *The Risk of Automation for Jobs in OECD Countries – A Comparative Analysis*, OECD Social, Employment and Migration Working Papers, May 2016.

¹⁷ M Murphy, 'Ginni Rometty on the End of Programming', *Bloomberg*, 20 September 2017, <https://www.bloomberg.com/news/features/2017-09-20/ginni-rometty-on-artificial-intelligence>.

provider over the person's lifetime. The account would consist of a subsidy and an income-contingent loan, and replace all existing loans and subsidies.

Recommendation 5: The Government should undertake initial work on how to adopt the model for governance, regulation and funding across vocational education and training and higher education, set out in the Business Council's *Future Proof* paper. Improving market information would be a sensible first step.

Digital infrastructure

A significant platform for the development and adoption of digital technology is the provision of digital infrastructure, in particular, the fixed or wireless broadband infrastructure that grants Australians connectivity.

Currently, the Australian Government maintains a high level of intervention in the markets for digital infrastructure, most notably, through the National Broadband Network (NBN) project. This is a bipartisan position. Construction of the NBN is now also well advanced.

The most important consideration now is how to encourage the next wave of investment in digital infrastructure, to allow Australians to keep pace with changes in technology and how infrastructure is used.

The Business Council strongly recommends that this next wave of investment should primarily be driven by competition and markets. Excessive government intervention in the provision of digital infrastructure will incur costs for consumers and lead to potential underuse of the digital infrastructure.

The Government should work with the private sector to design a regulatory framework for digital infrastructure that enables competition and markets to deliver the next wave of infrastructure investment. This could be done through a review by the Productivity Commission or independent third party.

Recommendation 6: The Government should work with the private sector to design a regulatory framework for digital infrastructure that enables competition and markets to deliver the next wave of infrastructure investment.

Government as a driver

Government directly funds or drives the generation and adoption of digital innovation, including through:

- direct government investment in R&D (like the Australian Research Council or Cooperative Research Centres) or incentives (like the R&D Tax Incentive)
- the six Industry Growth Centres.

Public procurement also plays a significant role in markets related to digital innovation.

Across all levels of government, Business Council members often observe instances where public procurement does not consider the commercial capability already available. Much

better value for money could be derived by seeking private sector expertise prior to going to market.

This is especially the case in relation to advances in digital technology, which can be fast-moving.

Understandably, many public servants may be uncertain how seeking advice from market participants sits with their obligations under the Commonwealth procurement guidelines to be non-discriminatory. Publishing a tender without any prior industry engagement may represent the safer option.

There are a number of steps that could be taken to address this problem and improve coordination and consultation with the private sector for public procurement:

- the inclusion of advice in the Commonwealth procurement guidelines, detailing acceptable ways for public servants to seek advice from industry participants prior to procurement
- the establishment of portfolio-specific industry advisory groups to provide advice about digital products and services already available in the market, to inform procurement. This could occur on a rolling basis, with discussion at a strategic level, to avoid any actual or perceived influence of the procurement process.

Recommendation 7: The Government should improve coordination and consultation with the private sector for public procurement, including revision of the Commonwealth procurement guidelines and the establishment of portfolio-specific digital industry advisory groups.

Government as an exemplar

Delivery of government services

Government is a significant funder and provider of services that may be highly suitable for digital innovation. This includes education, health, tax and transfer services, and other social services. Some of these sectors are least advanced in adoption of digital innovation.¹⁸

It is clear that consumers are not satisfied with the experience they are receiving from government services: in EY's 2016-17 report on the digital economy, when respondents were asked to nominate their worst digital experience, 33 per cent (the highest proportion) nominated interactions with government.¹⁹

The digital service quality of government services is improving, and the Government has established the Digital Transformation Agency to accelerate the improvement. The objective should be for government services to be seamless, intuitive and customer-centric.

Australian businesses have been much faster, and more successful, at offering digital services – even when provided by large and complex organisations. There are many lessons the private sector could share with government in delivering customer-centric digital services.

¹⁸ Deloitte, *Short fuse, big bang?*, 2012, <https://www2.deloitte.com/au/en/pages/building-lucky-country/articles/digital-disruption-harnessing-the-bang.html>.

¹⁹ EY, *Digital Australia: State of the Nation 2017*, <https://digitalaustralia.ey.com/>.

The Business Council would be happy to facilitate discussions or connections along these lines.

Recommendation 8: Government should establish a forum where government agencies can seek advice from Australian businesses in delivering customer-centric digital services.

Identity

Consumers and businesses can incur substantial duplication and regulatory costs due to the need to repeatedly verify their identity.

Efficient identity solutions can offer possible benefits including greater convenience, the ability to offer behavioural insight or the opportunity to ensure greater integrity. Identity solutions need to be carefully designed to minimise risks to privacy or security.

The first priority for more consistent use of identity must be within government.

Currently, the most innovative approaches are found in the private sector, and many of these identity solutions offer the highest levels of security.

For that reason, governments should seek to draw upon private sector expertise as much as possible and be cautious about prescribing use of government-designed identity solutions.

Recommendation 9: Government should incorporate greater private sector expertise in the development of consistent identity solutions across government.

Public service organisations

The ability for digital tools to facilitate communication and lower coordination costs is having large impacts on how organisations are structured.

Anecdotal feedback from Business Council members suggest some organisations are increasingly flatter (instead of hierarchical), task- or project-based (instead of responsibility-based) and need to offer a culture of autonomy, engagement and meaningful work. This can involve more flexible working, or other changes in the operation of organisations that are facilitated by changes in technology.

Many public service organisations are yet to experience this significant adjustment in the structure and operation of organisations. Since many Australian businesses have undertaken that transformation, there may be value in convening large private and public organisations to trade lessons around how best to structure modern organisations. Again, the Business Council would be happy to facilitate a forum (potentially with the Australian Public Service Commission).

Recommendation 10: Large public and private sector organisations should do more to share lessons learnt about how to effectively structure modern organisations, and how digital tools and services can assist.

Government and business working together on shared risks

Cyber security

Governments and businesses have been working together on a range of actions stemming from the Cyber Security Strategy, released in 2016.

No sector can address this risk alone. Improving Australia's cyber security requires a concerted and joined-up effort between government, industry, research and individuals.

The initiatives launched in the Cyber Security Strategy are getting underway, and it would be too early to make recommendations on the design or operation of these initiatives.

One area that could benefit from additional attention, and complement the initiatives underway, is a large-scale education and awareness campaign about good cyber practices, designed and delivered by a partnership of governments and businesses. While small-scale initiatives are underway (for example, Stay Smart Online), the increasing level of cyber security risk now necessitates a large-scale attempt at cultural change by all parts of the community: large businesses, small and medium businesses, other organisations, and individuals.

Recommendation 11: Government and business should discuss the feasibility of a possible large-scale education and awareness campaign to improve cyber practices across the community.

Other risks

A range of other risks exist, including cybercrime, potential discrimination or manipulation.²⁰ Many existing regulatory frameworks, notwithstanding their design in the offline or analogue world, are sufficient to address these risks.

There are however some new risks that are new. Some are complex, emerging and almost philosophical. They relate to areas such as: the norms for human communication in the digital world; how we should use robots, algorithms and other technologies ethically; and the psychological impacts of the digital world.

As a general principle, it is important that policymakers are cautious about rushing to regulate new emerging risks. Excessive regulation can stifle innovation. In many of these instances, businesses are sensitive to changing consumer preferences and are willing to develop and offer tools to address consumer concerns, without any need for new regulation.

Many of the potential risks are complex. A healthy community debate will assist in clarifying the community's expectations and settling new norms.

A document, like the national digital economy strategy, is a fine opportunity to make neutral, thoughtful contributions to the debate. A regular publication (possibly annually), released by the Government would be a good mechanism for highlighting developments in the digital economy and clarifying areas of risk or concern to the community. This could be prepared

²⁰ World Bank, *Digital Dividends*, 2016, <http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf>

through a joint effort between the Department of Industry's Office of the Chief Economist and the Department of Communications' Bureau of Communications Research.

Recommendation 12: An annual 'state of digital innovation' report should be prepared by government to examine emerging areas of digital innovation.

BUSINESS COUNCIL OF AUSTRALIA

42/120 Collins Street Melbourne 3000 T 03 8664 2664 F 03 8664 2666 www.bca.com.au

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