

The logo for Reason Group, featuring the word "REASON" in a bold, sans-serif font. The letter "O" is stylized with a vertical line through it. The text is white and set against a teal rectangular background.

GROUP

original thinking | lasting impact

Digital Economy

CONSULTATION SUBMISSION

In this paper, we present our view on where Government should be focusing in developing a digital economy strategy. We illustrate this through two industry sector examples where digitalisation can yield high impact.

DEPARTMENT OF INDUSTRY, INNOVATION AND SCIENCE

NOVEMBER 2017

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OUR VISION – SMARTER AUSTRALIA

Reason Group shares much of the ambition and spirit expressed in the Digital Economy consultation paper. Rather than answering the questions individually, this paper captures some of our perspectives on the challenges at hand, our ambitions relevant to the Government's agenda, and where our business and others can work with Government towards a smarter, digital economy for Australia in the future.

How do we stay lucky?

Our vision for a Smarter Australia™ is one where Australia continues to punch above our weight, leading the rest of the world in the digital economy in key areas such as agriculture, education, health care, and tourism.

Australia has many areas of competitive strength, such as energy resources and medical and mining related technologies. We also have significant opportunities in emerging sectors like FinTech and precision agriculture. However, to remain a lucky-country, we must manage smarter. We must create more locally grown businesses capturing the value of the significant export opportunities that exist right on our own door-step.

A Smarter Australia™ makes the digital economy relevant to all Australians by growing new kinds of businesses and jobs outside capital cities, replacing businesses that have traditionally supported regional communities.

As noted in the consultation paper, if we manage to move quickly to get in front of our competitors, build on our strengths and become a world leader in digital innovation, we could boost the Australian economy by \$140 billion to \$250 billion over the next eight years.

We will only be able to do all this by having a world-class public sector enabling and stimulating private sector innovation. Government - at all levels - needs to be integrated and embedded in the digital service infrastructure, achieving most goals through partnerships, smart regulation and practical standards. This will position government service delivery to leverage evolving business, consumer and technology relationships within the natural systems of the economy.

Good governance
embedded in digital
service delivery
infrastructure

Therefore, in a digital economy, Reason Group sees the roles and responsibility of our federal system of government as essentially two-fold, namely to:

1. Provide Government services to clients/stakeholders as effectively as possible; and
2. Create the right environment for private enterprise to flourish in a digital economy.

These responsibilities align with Reason Group's goals, ambitions and offering. Our track record of success is built on business transformation and project leadership, delivering business and IT solutions for Government. Reason Group has helped overhaul the way government plans and executes digital work. In much of our work (various examples are show-cased on our website www.reason.com.au), we have salvaged critical multi-million dollar projects, breaking out of 'death-march' cycles, and guiding projects back to viability. We are practiced at engaging collaboratively with internal and external stakeholders, and working through considerable uncertainty, to achieve clear direction and strong results.

In recent times, Reason Group has evolved further to offer services to support social innovation and thought leadership, including research commercialisation and community capability building. We are well-placed to contribute to the Government's commitment to the business transformation journey to the digital economy (including infrastructure and digital readiness) and the necessary social transformation to build on Australia's areas of competitive strength and empower all communities through digital skills and inclusion.

DIGITAL ECONOMY ENABLES SMARTER AUSTRALIA

Reason's Group's vision for a Smarter Australia is to leverage digital technologies and Industry 4.0 to create Australian businesses that generate intergenerational economic and social prosperity. Digital technologies provide Australia with the means to realise vast trade opportunities as we sit on the door steps of the world's fastest growing middle-class populations. Digital transformation and Industry 4.0 which merge the digital and physical world, can overcome obstacles Australia has faced, such as our isolation, vast untapped lands, extreme weather, high labour costs, ageing population, low productivity, and unreliable and expensive utilities.

Some of this is already underway and Reason Group welcomes this Digital Economy Consultation as a mechanism to guide the strategic direction of this potentially profound change for industry and government.

We must develop world-leading digital businesses across all regions of Australia

Low international digital readiness rankings in Australian industry are a real concern for the future. Just as mechanisation and automation revolutionised primary and secondary industries, digitalisation will particularly disrupt today's tertiary industry which contributes to 73% of Australia's GDP. More people are working with their heads, rather than their hands and that means greater possibilities for more people. However, every service has the potential for digitalisation, knowledge is increasingly codified, expertise can be structured. There are new industry sectors emerging where

whole sections of economic activity are predominantly performed by digital actors and Reason Group sees this trend accelerating. The risks to Australian employment are real. Ignoring them would be to our nation's detriment. Smart public policy in the digital economy focuses on maximising the environment for job generation.

Your department¹ tells us that the proportion of actively trading businesses by employment size in Australia remained broadly stable over the past decade, with non-employing businesses accounting for around 60 per cent of total business counts. Although rarely receiving the proportional political or policy attention, medium and large businesses play an important role in the economy given their competitive advantages through economies of scale. Medium sized businesses are also more likely to create and support regional jobs. Medium (20 to 199 employees) and large businesses (200+ employees) together employ 56% of Australia's working population but account for a mere 5 per cent of the total number of businesses.

To address this, while keeping protectionism at bay and maintaining an open trade and investment stance, the Government needs to optimise conditions for small business to grow into medium enterprises. In short, the **M** in SME is really the key to job growth in the digital economy, and to greater innovation.

Medium size businesses are more likely to innovate and create new jobs

Rather than global companies arriving on our shores with whole ready-made solutions, Reason Group looks forward to a digital economy in Australia that extracts greater value-add here and promotes partnerships. It is critical to have a focus on systems to develop and nurture digital knowledge expertise in Australia and by Australian companies. Our own experience here may be instructive. Reason Group stands ready to engage with this process proactively, particularly in specific activities in our areas of interest, such as agribusiness and Council of Australian Governments (COAG) planning.

¹ Department of Industry, Innovation and Science (DIIS) data from the Chief Economist 2017 "The proportion of actively trading businesses by employment size in Australia remained broadly stable over the past decade, with non-employing businesses accounting for around 60 per cent of total business counts, followed by micro enterprises (1 to 4 employees) representing around 25 per cent of total business and businesses with 5 to 19 employees representing around 10 per cent of total business".

SMARTER GOVERNMENT

Digital economy outcomes for our nation can and will be significantly influenced by the approach all three levels of Australian government take

Every day nearly 3 billion consumers, businesses, government agencies and institutions of every nature interact using computers, laptops, tablets, smartphones and a growing range of mobile devices. Digital technology has altered the way we use the inputs of production (land, labour, capital) and is transforming the entire economic system. Industry will continue to lead, build, navigate and exploit the digital economy regardless of governments and the markets will reward or punish them accordingly.

The National Innovation and Science Agenda sought to increase national economic growth by investing \$1.1 billion in education, science, research, and infrastructure; incentivising business investment; and removing regulatory obstacles. The nature of our federal system of government however makes it very challenging to co-ordinate all the actions and investment required to steer the digital economy. The complexities of government also make it very challenging for businesses to understand, collaborate and partner to achieve and measure outcomes. In this section, we offer a summary of our perspectives on what can be done at all levels of government to address the questions posed within the themes of the consultation paper.

Enabling the digital economy – infrastructure, standards, regulation and trust

LIFTING THE BAR BY STANDARDISING DATA – Reason welcomes initiatives such as open banking, as much for the consumer benefits (e.g. competition and trust) as for the fact that it drives information standards into industries and produces systems that can inter-operate. Reason believes more of this kind of regulation is required over digital infrastructure that has become just as important as power and water to the functioning of our modern society. Unifying standards for individual and business identity to generate more trust in digital business interactions and better governance of small and medium businesses is another key example requiring progress.

WHOLE-OF-GOVERNMENT FOCUS ON GOVERNMENT SERVICES THAT ARE MISSION CRITICAL TO THE ECONOMY – outside of defence security, there are a handful of service systems controlled by individual departments that are mission critical to government delivery compact with the community. The systems that underpin the receipt of taxes and the payment of benefits are huge, complex and ageing, yet these core systems are government hubs for our economy. Effective partnering strategies to de-risk these systems, and provide stable platforms for industry to integrate with, will avoid investing in solutions that are out-of-date as soon as they are deployed.

DELIVERING FEDERAL SERVICES THROUGH OTHER LEVELS OF GOVERNMENT – Many great industry and business relationships exist at the state and local government level. State and territory governments are already leading the delivery of many services, unifying online offerings and consolidating their physical presence. Further gains could be made by extending this to the local government level with advantages of streamlining interactions, reducing pressure on existing federal service delivery capability and reinvigorating regional growth.

FOCUSING ON CONTEMPORARY POLICY AND REGULATORY SERVICES – a shift from day-to-day service delivery and ‘doing things’ will allow the federal government to focus resources on policy advice and regulatory oversight – essentially supporting a focus on the outcome economy. Industry is often better at the doing of things with existing trusted customer relationships in place. Industry is better when governments set the right environment and then get out of the way. Contemporary policy and regulatory services will be driven by real-time data collection and AI powered analytics supported by a more agile, responsive and mobile public service.

Building on our areas of competitive strength and business capability

COORDINATING REGIONAL INVESTMENT SETTINGS – In the digital economy, implementation planning and coordination at a regional level will be even more important. Targeted regional strategies that promote the establishment of production facilities, supply chains and associated services spanning from rural centres to urban areas can be facilitated through the Council of Australian Governments, in consultation with the private sector. This new approach will allow the federal government to shift the focus from the one size fits all instruments of grants, loans and taxation to tied investment for businesses to build the components of end-to-end value chains. These value chains create the economic and social ecosystems that attracts start-ups and supports business. Democratised access to information and knowledge through the National Broadband Network will empower people to discover new ideas and research the opportunities.

CONVERTING GOVERNMENT RESEARCH INTO MEDIUM SIZED BUSINESSES – While there are excellent examples of technology innovation in the public sector – for example, an Australian Government entity (CSIRO) developed the Wi-Fi, it is rare for government to be at the forefront of technology-enabled strategy and service. What has been generally missing from the track-record of government is turning these great Australian ideas into commercial success stories. More can be done to match government research investment with smaller businesses able to take these products to market and grow into a medium-sized digital business. Don't focus on small commodity businesses, develop 'factories' that become value-adding exporters. As mentioned in our case studies, we consider agriculture and healthcare as two prime candidates for this sort of commercialisation

PARTNERING WITH THOSE WHO HAVE TRUSTED CUSTOMER RELATIONSHIPS – What could our major Australian retailers, banks or even social media companies do to improve the government service experience as part of their services? Government has traditionally tried to build or buy its way through the ICT world. Relationships, partnerships and licence agreements are formed with organisations providing only pieces of the puzzle. This has created many growing capability gaps. These gaps can be leap-frogged by partnering with players who have solved the problems that government is still discovering and have solved the issues of scale.

Empowering all Australians through digital skills and inclusion

ENGAGING PEOPLE IN THE REGIONS – The regions are wondering how the digital economy applies to them. The city-based innovation hubs and talk of hot areas such as FinTech often don't translate into things that most people can put into practice. We suggest that the focus on regions mentioned above will result in being able to communicate the digital economy more effectively and encourage people to try to lift their digital readiness.

LIFTING MANAGEMENT EXPERTISE IN SMALL AND MEDIUM BUSINESSES – many small businesses do not have access to the management expertise and skills required to leverage digitalisation and/or scale their businesses into medium-sized enterprises. More programs targeted specifically at this outcome and integrated with regional planning will build smarter business management capability.

FOSTERING A BUSINESS AND TECH SAVVY PUBLIC SERVICE – Capability uplift in the public service can all too easily become focused on how to build better widgets. The capability building for the public service needs to be more focused on developing digital business skills. This will convert the public service from a builder to a smarter user, manager, buyer and facilitator of technology. It will also lead to informing better policy decisions and opening up data and the government service platform.

NEXT STEPS: HOW TO ACHIEVE THE AMBITION

At this point, a key role for Government is to prepare the community to take advantage of the opportunities mentioned above and elsewhere. Our population - both in the private and public sectors - need to be better at managing and using technology. In a post-NISA world, many parts of Australia - especially in the regions - are wondering how innovation applies to them (beyond the NBN roll-out and that set of challenges) and in

We offer these views from our own experience and we also back them up with our own plans for growing our role in the digital economy

fact, see innovation as a threat. This sentiment will take time to address and turn around. For the Commonwealth, finding ways to co-ordinate delivery across three levels of government is a key management challenge and risk.

We see that a focus on enabling the home-growth of small businesses into savvy medium size businesses is a key pathway to growing the digital economy. Government can enable these businesses with appropriate policy setting that create more pathways to building management capability and accessing Australian research.

In the APS, the capability uplift needs focus on becoming more agile, better managers/users/facilitators of technology - rather than builders. The Digital Economy process will be a success if it can open up data, set the right standards, and make the right regulations to enable the private sector the freedom and space to act on opportunities across the economy.

From our work, Reason Group sees two growth sectors within Australia that stand out with their potential to increase economic returns and improve social outcomes: premium export food production and health and aged care services to support our aging population. A sense of the opportunities for both in a future digital economy are set out briefly in the examples below. These examples reflect our own actions in growing into a medium-sized digital economy business.

The Reason Group looks forward to partnering with Government in support of growing the digital economy.

Premium food production for export

It is conventional wisdom that Australia is well positioned to supply Asia's growing middle class with quality food products. Australian agribusiness and food production has the potential to employ more Australians in the end-to-end supply chain. CSIRO, Food Innovation Australia, state and government entities – amongst others - have written brilliant strategies on the benefits of premium export food production and the role of digital technology. But what is needed to make it actually happen, including on a grand scale?

- **Free trade agreements** to continue to open doors with Asia and counter balance the Silk Road Economic Belt.
- **Industry 4.0 advanced factories and supply chains** investment to ensure reliable export volumes of consistent quality standards.
- **Access to capital** in Australian agriculture is the most serious limitation; capital requirements estimated at \$850 billion more than domestically available funding by 2050, just for Australia to maintain market share and remain competitive.²
- **Partnerships to build end-to-end digital supply chains** with Australian and international investors and building stronger export market facilitation.
- **Premium food marketing and digital engagement** around new brands reinforced through tourism. An entire export segment is created by engaging tourists in brand stories during their travels in Australia and building brand equity in the export markets when they return. Our iconic brands embody our commitment to premium quality, freshness, safety and excellent service.
- **Understand what the world wants** - digital technologies can create and analyse customers experiences, how they like their products sold, packaged and delivered with real-time digital feedback that improves our value proposition messaging.
- **Reward successful R&D in agricultural digital technologies**, robotics, food innovation, premium food products and delivery services.
- **Repurpose existing skills, underutilised land and factories** through assistance packages to build new capacity and minimise capital investment.

Over the next decade, Australia develops further as an epicurean destination and exporter of choice, using best-in-class technologies. Production is maximised across all regions to increase scale, maximise variety and develop trends:

- Cargo airships, robotics and battery storage provide reach to access remote areas to create opportunities for increasing numbers of Australians. Supplying food in smaller, customised quantities become economically viable.
- Affordable scenic, eco-, agri- and culinary tourism booms in Australia.
- Augmented AI leverages the knowledge of traditional indigenous land owners to enable sustainable land practices and appropriate use of water and soil assets.
- Australia is integrated into Asia; our population is further internationalised and is creating new premium food products and experiences influenced by the countries of origin with a uniquely Australian quality.

² Rabobank research 2016

Supporting a healthy (and ageing) population, here and overseas

By 2021 there will be 9 million Australians over the age of 50. This will place unprecedented demand on health services, families, carers, local services and infrastructure. After 2030, the Asian middle class will begin to age in large numbers. According to the World Economic Forum, by 2050 nearly two-thirds of the world's older people – close to 1.3 billion – will be living in the Asia-Pacific, and one in four people will be aged over 60.

Superior management of our own health care expenditure - while also developing products and services suited for export - is both a burgeoning opportunity and an imperative of rising aged care costs and reduced taxation income through tax base erosion. Improving health outcomes, reducing or delaying demand for intensive health and aged care services help older Australians actively participate in society for longer.

Digital technologies already deliver improved health outcomes, through testing, screening and monitoring.

Within the next five years:

- **NBN, adoption of digital authentication/identity and digital health record** provides government and industry with data to deliver customised solutions.
- **Wearable technologies** will protect and share information with medical practitioners and databases. Government departments provide better oversight and targeted policy. Wearables provide assurance for the elderly living at home. Wearables communicate health policies and reinforce positive healthy behaviours such as exercise, mobility, diet, sleep, warning of substance abuse, sugars, sun exposure, detecting dozing whilst driving.
- **Smart-home technology** makes homes safer and monitors the environment for specific indicators particularly within transitional aged care facilities.

Within the next decade, Reason Group sees and is working towards:

- A significant switch to pre-emptive, preventative, proactive 'health first' approaches leveraging real-time, historical and comparative data from sensors, wearables and large medical and DNA databases to transform individual and community health.
- Digital health products and services for the aged being exported to Asia offering remote medical procedures and support, more alternatives to hospital treatment and better health services for Australians in regional areas and when outside Australia.
- Haptic technology and robotic surgery for standard procedures from existing or pop-up clinics within Australia, Asia and aid regions - particularly key-hole procedures under the remote operation of surgeon located in Australia.
- Robots and robotic pets in aged care facilities, infirmaries and in home provide 24x7 surveillance, medication reminders and preparation, social interaction, discussing news like a Siri or a 'Watson', playing games, providing positive thoughts and acknowledgement.
- Virtual nurses supporting the aged and those recovering from medical procedures.
- Smart implants providing greater levels of observation and monitoring allowing home based care to become a mainstream alternative.

ORIGINAL THINKING | LASTING IMPACT

Reason Group is a Canberra-based business performance consulting firm with capabilities in transformation, public-private sector innovation and project leadership. Reason is known for discovering what others don't. We unearth insights and clear a space for action. To see what you do in new ways that lead to new results. Working with us rebuilds confidence, restores trust and creates momentum for a bigger agenda.

We want Australia to remain a 'lucky country'. A place where coming generations will want to stay, live and work. That's why we are working to build a Smarter Australia. A country with a world-class public service sparking world-class private sector innovation.

Our service line expertise is in:

- Working with Government – shaping effective delivery of the government agenda
- Digital transformation – re-engineering work beyond the next technology platform
- Innovation and commercialisation – developing opportunities and partnerships
- Agriculture and food production – growing exports and streamlining supply.

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