

Australian
Payments Network

Connect Inspire Thrive

Australian Payments Network

*Submission to the Department of Industry, Innovation and Science Inquiry,
The Digital Economy: Opening up the Conversation*

November 2017

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Executive Summary

- Australia's world-class payments system underpins our digital economy. In recent years, the payments industry has heavily invested to create new infrastructure, including the New Payments Platform (**NPP**), to ensure that it continues to support the digital economy into the future.
- An effective payments system exhibits four desirable characteristics: resilience, efficiency, accessibility and adaptability. The digitalisation of the global economy raises new challenges to these characteristics, but also presents new opportunities to enhance them. The self-regulatory approach, which has helped to deliver our world-class payment system, continues to be the most appropriate way to navigate the changes raised by the digital economy.
- As more digital payment transactions become seamlessly embedded in economic activity, greater volumes of consumer transaction data is created. It is therefore important that governance frameworks, standards, consumer protections, and security are established or enhanced to ensure continued public trust and confidence. The payments industry is collaborating with a wide range of participants on these issues, including in the areas of cybersecurity and digital identity.
- A self-regulatory and collaborative approach provides a sound and sustainable way of developing the frameworks needed for payments in the digital economy. With the emergence of new business models, government also has an important role to play in ensuring the safe and efficient adoption of new technology, through the creation of principles and guidelines. In addition, government should ensure that existing and future legislation does not present barriers to innovation, and is neutral as to the form of payment method.
- To make sure that the digital economy and payments can continue to thrive, public investment in digital infrastructure, including broadband, needs to continue. Australians rate broadband as a higher priority for investment than any other type of infrastructure.¹ To foster high levels of digital inclusion, urban and rural communities need appropriate infrastructure that will deliver the benefits of emerging technologies and digital payments systems.
- As well as infrastructure, Australians need appropriate skills, support and confidence to use digital payments. The payments industry has undertaken research to understand the payment preferences of Australians, which will inform a strategy for managing declining payment methods such as cheques. Through digital education and support programs, government can also assist in ensuring that all Australians are able to access emerging payment methods.

¹ Sydney Morning Herald, *Ipsos Global Advisor survey finds Australia ranks lowest for broadband satisfaction*, <http://www.smh.com.au/national/ipsos-global-advisor-survey-finds-australia-ranks-lowest-for-broadband-satisfaction-20171024-gz7ibi.html>

The Digital Economy

How are advances in digital technology changing the way you work, your industry and your community?

The payments industry is experiencing unprecedented disruption as three drivers of change unfold:

Technology is creating a digital-first mindset in which online service delivery is the primary focus for many industries. In many cases, the ability to make and receive payments is an important part of service delivery and as a result, the payment process is front and centre of efforts to develop a seamless customer journey. The effect of this is that we are seeing the removal of the payment process as a discreet transaction altogether.

Customer expectation remains consistently ahead of what technology delivers, creating pull for new applications and services, with social media platforms playing a significant role in shaping the “always on” and empowered mindset of today’s customer. Moreover, driven by the need to keep customers on their platform, social media platforms are introducing new technology and new experiences. These effectively link online applications and straddle the offline and online worlds. More widely, this imperative to meet customer expectations creates demand for technologies that can anticipate need and deliver secure and convenient access, such as artificial intelligence and biometrics, respectively.

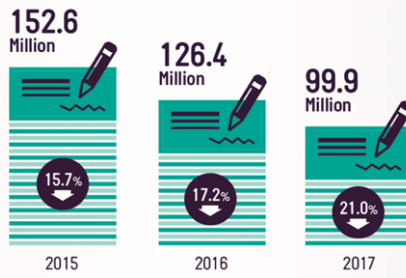
Regulation is evolving to create an environment where new entrants, both large and small, can flourish. Where technology has started to level the playing field, regulation is a close follower and we are seeing the emergence of new regulation to support wider competition, as well as regulatory sandboxes to foster early-phase innovation. The current Open Banking Review² in Australia is an illustration of the process of changing regulation, designed to support new business models and increased competition.

Combined, these drivers have created a payment system that is world class in many respects. For example, Australians lead the world in adoption of contactless payments technology, which has been enabled by significant investment by financial institutions. The Digital Economy report³ that we produce twice a year provides a snapshot of the changing payment habits of Australians.

² Commonwealth Treasury, *Review into Open Banking in Australia*, <https://treasury.gov.au/review/review-into-open-banking-in-australia/>

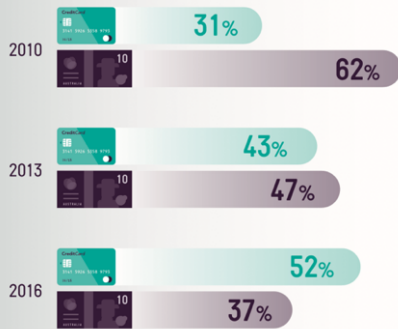
³ Australian Payments Network, *The Digital Economy*, [http://www.apca.com.au/docs/default-source/decline-of-cheques---milestones/the-digital-economy-milestones-report-\(november-2017\).pdf](http://www.apca.com.au/docs/default-source/decline-of-cheques---milestones/the-digital-economy-milestones-report-(november-2017).pdf)

INDIVIDUALS AND BUSINESSES ARE ABANDONING CHEQUES AT A RECORD RATE.



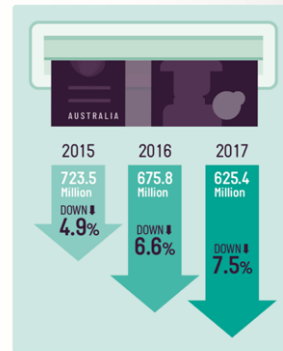
Source: Reserve Bank of Australia

CARDS DOMINATE RETAIL PAYMENTS AND ARE NOW MORE POPULAR THAN CASH.



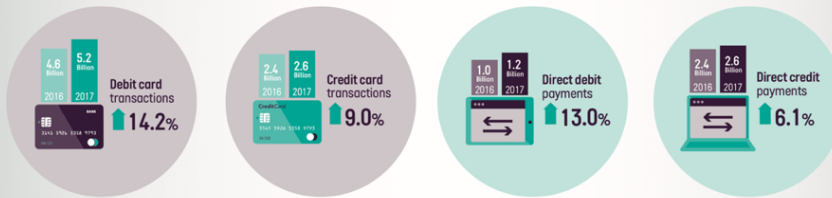
Source: Reserve Bank of Australia, How Australians Pay: Evidence from the 2016 Consumer Payments Survey

THE STRONG PREFERENCE FOR CARDS IS REFLECTED IN AN ACCELERATED DECLINE IN ATM WITHDRAWALS.



Source: Reserve Bank of Australia

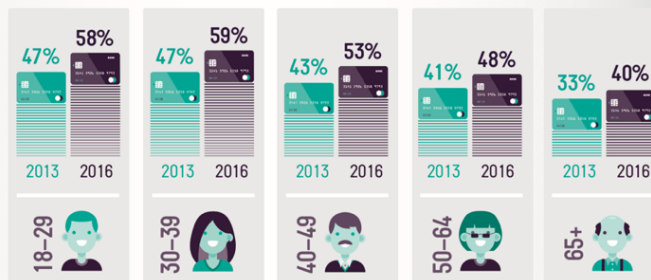
DIGITAL PAYMENTS CONTINUE THEIR DOUBLE-DIGIT GROWTH - UP BY 11.5% ON THE PREVIOUS YEAR OVERALL.



Source: Reserve Bank of Australia

AS CARDS BECOME MAINSTREAM, OLDER AUSTRALIANS ARE EMBRACING THEM TOO.

Percentage of card payments by age groups



Source: Reserve Bank of Australia, How Australians Pay: Evidence from the 2016 Consumer Payments Survey

AUSTRALIA MAINTAINS ITS LEAD IN POS TERMINAL PENETRATION.



Number of devices per million inhabitants

Source: Bank for International Settlements

What is your vision for an Australia that thrives in a digital economy? Where would you like to see Australia in five, 10 and 20 years' time?

The payment industry's vision of the future is captured in the Australian Payments Plan:⁴

“The next ten years will see profound changes to all aspects of the economy, as three interdependent trends mature – the extent to which everyone is connected, the opening up of networks and the layering of rich services on these open and connected networks”

The impact on payments is that they will become more closely integrated in the customer experience. We are already seeing examples of this with Uber, where payments happen in the background, and we anticipate that this type of experience will dominate. This shift to more seamless payments will be led by a consumer preference for mobile phones, combined with biometric technology capable of supporting secure and convenient authentication. We anticipate that we will also see tighter integration of payments within social media platforms. China provides a clear illustration of what the future might look like, with payments embedded in social activity.

The payments industry is working towards this vision by working collaboratively on three key areas:

- **Security and Trust** – with a particular focus on cyber security and digital identity
- **Managing the Payments Mix** – to ensure that all Australians have access to appropriate payment choices
- **Enabling the future** – to support the introduction of new technology and new business models

Australia is already well positioned in a global digital economy. The payments industry's vision is for this to be underpinned by a world-class payment system that is resilient, efficient, adaptable and accessible. Payment industry initiatives and improvements that are already underway will help ensure that Australia remains well-placed to take advantage of future developments.

What is the role of government in achieving that vision?

The achievement of the payment industry's vision of the future digital economy requires the right balance to be struck between bold innovation and risk. In helping to strike this balance, government may play a role in funding early stage innovation and research, as well as cultivating an economic and business climate that rewards innovation.

Cultivating this climate may entail the removal of existing barriers, where outmoded legislation may exist. On the part of government (at both a state and federal level), this may involve amending legislation to provide for technological neutrality in payments. With a focus on improving the efficiency of the payments system, AusPayNet has identified legislation that specifies the use of a cheque for the payment of rental bonds, where the parties making and receiving the payment would both prefer to use a more convenient digital payment option. The removal of this requirement, and

⁴ Australian Payments Council, *The Australian Payments Plan*, <http://australianpaymentscouncil.com.au/wp-content/uploads/2015/12/Australian-Payments-Plan-December-2015.pdf>

others like it, would allow the market to evolve more efficiently, and provide support for the consumer led transition away from paper-based methods.

Alongside this, government has an important role to play in safeguarding society against systemic risk, and as the different sectors of the economy become more closely integrated, this is likely to require cross sector collaboration on significant issues such as cyber security and digital identity.

Government is well placed to bring together industry verticals to agree and implement strategies that will deliver net benefits to the whole of the economy.

What key disruptive technologies or business models do you see? What do you predict is on the horizon in five, 10, 20 years' time?

We see two emerging technologies that have future implications for the payment system, and the economy as a whole. These are artificial intelligence (**AI**) and blockchain technology.

New technologies almost invariably require new thinking and many require new principles, a governance framework and in some cases, new legislation to support their safe adoption. Consequently, they also present new opportunities for Government to work with the payments industry and to position Australia as a thought leader on regulation surrounding these emerging issues. The creation of a supportive and agile regulatory environment will encourage growth and development of these and other technologies.

Artificial Intelligence

AI includes not only automating routine tasks, but also building systems that replicate and improve on the complex decision-making processes of humans. Rather than programming a system to undertake a task, modern AI systems are programmed to *teach themselves* how to perform the task.

The digitisation of the payments industry has generated data which can be used to improve customer outcomes.

Example applications of AI include:

- **Natural Language Processing (NLP).** The use of chatbots to initiate payments, via natural language inputs. Payments could be initiated in a number of ways: through in-app chatbots, free-form text messages, or through Siri-type assistants. The most prominent example of NLP in payments technology is seen in home assistant systems such as Amazon Alexa and Google Home.
- **Fraud Control.** AI-based fraud control systems allow for the development of sophisticated risk-based authentication tools. These tools are capable of real-time monitoring and detection of anomalies. Adopting AI-based fraud control systems allows for better targeting of responses to attempted fraud.

The safe and practical application of AI may require the private sector, including the payments industry, to lead the development of an appropriate self-regulatory regime, such as the development of principles and a code of ethics to govern use and protect against unintended consequences. Where

necessary, there may be a role for government to support the development of these self-regulatory principles.

Blockchain

While the specific merits and impact of blockchain technology are widely debated by different sectors, based on their view of the world and the applications under consideration, there is some consensus around its ability to support new models of trust.

To date, the principal application of blockchain technology has been in *crypto-currencies* – the most prominent of which is Bitcoin, and building on this point about trust, the Bank of England has observed that the emergence of private digital currencies, such as Bitcoin, has shown that it is possible to transfer value securely without a trusted third party.

Experiments in other jurisdictions include a year-long experiment by the Bank of Canada (**BOC**), Project Jasper. Project Jasper included the country's largest banks, Payments Canada and the R3 consortium to experiment with a digital fiat currency dubbed Cad-Coin. The BOC found that blockchain was not ready to act as the backbone of a wholesale interbank payment system citing concerns with respect to principles for financial market infrastructures (PFMI) for settlement finality, operational risk, access and participation requirements.

At the Australian Payments Summit on December 13, RBA Governor Philip Lowe reiterated that the RBA has no plans to issue a digital Australian dollar (**eAUD**). The Governor noted that these currencies are not currently used for everyday payments, citing issues such as price volatility, the number of payments the system can handle, governance issues, high transaction costs and high electricity costs of mining.⁵

While further experimentation and exploration may be required to support commercial payment applications at scale, a number of industries are developing practical use cases for blockchain that bring transparency and efficiency benefits to supply chain models, for example. As with AI, the rapidly developing and innovative nature of these technologies means that a flexible, industry-led, self-regulatory approach is appropriate to manage emerging challenges. Where necessary, there may be a role for government to support private industry in developing these principles.

⁵ Philip Lowe, Governor, RBA, *Speech: An eAUD?*, <https://www.rba.gov.au/speeches/2017/pdf/sp-gov-2017-12-13.pdf>

Digital Infrastructure

What communication services and underlying data, platforms and protocols does Australia need to maximise the opportunities of the digital economy?

Open banking, under consideration in Australia and overseas, is one of the core platforms that has the potential to foster the growth of the digital economy. The stated rationale of open banking is to allow greater choice to consumers, by giving them easier access to information about their finances and transactions.⁶ The payments industry is supporting the development of appropriate platforms, and is working with government to explore how they can be implemented.

In AusPayNet's submission to the Productivity Commission (PC) *Inquiry into Data Availability and Use*, we noted the high value of data generated by participants in Australia's payments system, citing the following examples:⁷

- The financial services industry shares fraud and financial crime data to ensure maximum resilience
- Financial institutions share payments data with a range of private sector organisations to create new products and services
- Governments use payments data to help improve public services and regulate Australia's financial system

Payment data is defined as data collected and stored electronically when a payment occurs. This includes credit/debit card transactions, mobile wallet transactions, ATM withdrawals, EFT transactions, cash withdrawals and cheques. AusPayNet supported the PC's recommendation of a Comprehensive Right, and that the private sector is likely to be best placed to determine sector-specific standards for data-sharing.

In the 2017-18 Budget the Government announced it will introduce an open banking regime in Australia to allow greater choice for customers, in this case by giving them easier access to, and more control over, data relating to their finances and transactions held by their banks.⁸

In submissions to the Treasury *Open Banking Review*, we emphasised that an Open Banking regime should be underpinned by a robust governance framework. This will help ensure that all parties (including consumers, data providers and third parties) have confidence in the system. The governance model should be adaptable to advances in technology, and support new entrants. At a minimum, an effective model must:

- Be transparent

⁶ Treasury, *Review into Open Banking in Australia – Issues Paper*, <https://treasury.gov.au/review/review-into-open-banking-in-australia/>

⁷ Australian Payments Clearing Association Submission, *Trusted Data Sharing: Now and in the Future*, http://www.pc.gov.au/data/assets/pdf_file/0015/203109/sub044-data-access.pdf

⁸ Treasury, *Review into Open Banking in Australia – Issues Paper*, <https://treasury.gov.au/review/review-into-open-banking-in-australia/>

- Be open to all participants, provided they are appropriately accredited and licensed
- Facilitate and adapt to new technologies and customer needs
- Champion customers interests

What opportunities do we have to accelerate the development of technologies that will underpin Australia's digital economy?

The introduction of the New Payments Platform (**NPP**) will foster the development of new applications and services that will underpin Australia's digital economy. A range of new organisations will be able to develop applications that support the closer integration of payments with other business functions such as invoicing, inventory management, fulfilment and other front and back office functions.

The move to open loop public transport, whereby standard credit and debit cards are used for payment methods, is also likely to underpin a move towards mobile payment for transit, which in turn could lead to tighter integration with other travel applications.

Standards and Regulation

What opportunities do we have in standards development and regulation to: enable digital entrepreneurship, innovation and trade? Mitigate the risks associated with digital disruption?

Payment systems exhibit strong network effects: a payment system become more valuable as more people use it. A payment system that is used by only a small number of businesses and consumers is less valuable than one broadly accepted across the economy. To drive wide acceptance, a system needs to operate to a common set of agreed standards. Given the international nature of the payments system, global standards recognise that end-to-end security for customer data is critical.

While the precise implementation of global standards is a matter for national jurisdictions (eg. self-regulation, or legislation), the weakest point in the security chain will compromise the entire system.

Multi-jurisdictional and industry-wide business operations benefit from standardisation, allowing more automated services, quicker operations and dispute resolution. Additionally, recognising that disruption often comes from identifying inefficiencies within a progress, standardisation programs should include the 'disruptors' (where possible) to ensure their needs are being incorporated.

Standards setting for the payments industry is done internationally, principally through the Payment Cards International Security Standards Council (**PCISSC**) and International Standards Organisation (**ISO**). The PCISSC was established by international card schemes to manage payment card security and technical standards.

To ensure that an Australian voice is heard in international standards setting, AusPayNet is an affiliate member of PCI and participants in ISO working groups. Through PCI, we are working to ensure that standards covering ATM, point-of-sale (**POS**) and other card-accepting devices remain relevant.

With respect to ISO, AusPayNet primarily engages through Technical Group 68 (**TG68**), *Financial Services Security*. Within that framework, we participate in working groups (**WG**), technical committees (**TC**) and an advisory group, as outlined in the following table:

Group	Description
WG 11	Encryption Algorithms in Banking Applications
WG13	Security in Retail Banking
TC 307	Blockchain and Digital Ledger Technology Standardisation
FinTech Advisory Group	Examines standards developed within TG68 to determine their applicability to FinTech. This includes analysing if there are any gaps to accommodate the needs of FinTechs.

Involvement in international standard setting will play an increasingly important role as our economy becomes more global. We encourage government to continue to dedicate resource to these initiatives.

Trust, confidence and security

What opportunities do we have to build trust and community confidence through resilience to cyber threats, online safety and privacy?

AusPayNet brings together a wide range of participants to build trust and confidence in the payment system. We do this through working groups, task forces and forums and in many case we already work with government bodies. Some of our work in this area is described below and we welcome the opportunity to strengthen ties with the government on this topic.

Cyber Security

As people and systems become interconnected, the quantity and value of information held online has increased, which in turn has led to increased efforts to exploit that information. Eight in ten Australians access the Internet daily and Australia stands to prosper significantly with reliable cyber security. In 2014 alone, the Internet based economy contributed \$79bn to the Australian economy (or 5.1% of GDP).⁹ This could grow to \$139bn annually (7.3% of GDP) by 2020 as more devices, services and people are connected online. Against this backdrop however, cybercrime is also growing and is estimated to cost Australians over \$1 billion each year.¹⁰

In 2016, the payments industry undertook an independent study of cyber security initiatives and industry needs. One of the outcomes of this study was the development of the Cyber Security Taskforce. This Taskforce is working with the Government's Cyber Resilience Taskforce to agree terms of collaboration. It is anticipated that the payments industry will provide government with the opportunity to develop a blueprint for working with other critical infrastructure, such as energy and telecommunications. This collaboration could enable the payments industry to meet the identified needs and foster closer cooperation with other industries.

Fraud in Banking Forum

We facilitate the Fraud in Banking Forum, a joint initiative of the payments industry and Australian law enforcement. The forum meets quarterly, with the aim of developing trusted relationships between law enforcement and the financial sector, sharing data, and identifying opportunities to work on common initiatives. Represented law enforcement agencies include the Australian Federal Police, and all state police agencies. Other agencies with law enforcement powers (such as ACORN) attend the forum on an as-needed basis.

⁹ Department of Prime Minister and Cabinet, *Australia's Cyber Security Strategy, Enabling Innovation, Growth and Prosperity*, <https://cybersecuritystrategy.pmc.gov.au/assets/img/PMC-Cyber-Strategy.pdf>

¹⁰ Department of Prime Minister and Cabinet, *Australia's Cyber Security Strategy, Enabling Innovation, Growth and Prosperity*, <https://cybersecuritystrategy.pmc.gov.au/assets/img/PMC-Cyber-Strategy.pdf>

This collaborative approach has allowed real-time detection and interdiction of fraud, including arrest of suspected persons. Sharing of insights has also allowed police to identify emerging fraudulent payment trends.

As Australia's fraud landscape continues to evolve with the increased adoption of digital and real-time payments, the financial services industry and Government have an opportunity to continue working together to address new forms of fraud, in order to protect Australians. This could include supporting the Forum, as it explores a nationally consistent approach to electronically sharing information between financial institutions and law enforcement.

Digital Identity

As more of our economic activity becomes digital, individuals and organisations need better ways of identifying themselves online. The lack of a national digital identity framework was identified in the Murray Report¹¹ and continues to be a key focus for the payments industry.

Through the Australian Payments Council (**APC**), the payments industry is coordinating efforts to collaborate on solving this problem, including working with the Government's Digital Transformation Agency. Our research and investigation into overseas jurisdictions indicates that cross industry collaboration is required to deliver effective governance and to create the technical standards that drive interoperability and deliver scale. Countries such as Norway with mature digital identity infrastructure enjoy significant efficiency benefits from private and public sector online service delivery.

The establishment of a digital identity framework will create new opportunities for digital service delivery, as well as helping to mitigate identity theft and online payment fraud. Importantly, it also has the potential to reduce the quantity of personally identifiable information (PII) that is shared online.

Card Not Present Fraud

Reducing the level of card-not-present (**CNP**) fraud in the Australia is a major priority for AusPayNet. We are working with all participants to achieve a co-ordinated approach that will reduce fraud, while having the flexibility to encourage innovation and competition.

Since the introduction of chip-and-PIN transactions in Australia, card-skimming fraud has declined. Partly as a result of this, fraudsters have shifted their attention to different areas, such as CNP fraud. CNP fraud occurs when valid credit (or debit) card details are stolen and then used to make payments by a remote channel, mainly online or by phone.

The overall level of fraud on Australian cards has risen from \$461 million to \$534 million, from 2015 to 2016. While the dollar value is significant, it is important to note that the overall percentage of fraudulent transactions remains small. Fraudulent transactions represent 0.03% of the total of all

¹¹ Financial System Inquiry, *Final Report*, <http://fsi.gov.au/publications/final-report/>

payment transactions in Australia. However, CNP fraud accounts for 78% of all fraud on Australian cards and is clearly the area that requires the greatest amount of attention moving forward.

AusPayNet will hold an Accelerator Event in February 2018 to gather participants in the e-commerce sector and payments industry input to develop a framework that provides a high level of CNP fraud prevention. The Accelerator Event will include representatives from the merchant community, gateways, financial institutions, payment schemes, service providers, payment industry and regulatory bodies. Following the Event, AusPayNet will document the fraud prevention framework and work with the payments industry to implement solutions that align to the framework, which aims to reduce CNP fraud.

What roles should government, business and individuals play in protecting the community in a digital economy?

The government has a role to play in safeguarding the community by developing a common understanding and approach among business and individuals through the development of rules, regulations, guidelines and procedures. In particular, it is important for government to ensure that consumer protections extend to new services and service providers.

Alongside this the government can play an important role in supporting awareness generation. AusPayNet works with participants in the payments industry to develop campaigns to support the role out of new technology and to educate the market on appropriately secure behaviour. The “Protect Your Pin” campaign is a strong example of this type of activity. As the economy becomes more digital and the inherent risks of doing business online manifest themselves, we anticipate a greater need for collaboration across industry to maintain an awareness of risks and communicate and promote appropriate behaviour.

What integrity and privacy measures do we need to ensure consumers can protect their data?

In an environment where consumers have greater access to their data, a number of measures are needed to ensure that consumer data is appropriately handled by third parties. In particular, some methods (such as screen scraping) do not provide appropriate security controls or customer oversight.

Firstly, our experience in operating payment systems highlights the need for agreed governance structures and operating rules. This includes transparent and secure standards for data-sharing with third parties, which will foster consumer confidence in any future open banking regime.

Secondly, informed consumer consent (along with the ability to subsequently withdraw such consent if necessary) is a crucial component of data-sharing. It is important that consumers understand which entity they are sharing data with, and the terms of that agreement to share. Current mechanisms that obtain consent may appear confusing to some consumers and the mechanisms for the removal of consent are also not well developed. Financial service providers currently manage consent through bilateral partnerships. As open banking may entail the provision of data on a multilateral basis. There

needs to be mechanisms for customers to give, monitor and revoke consent to their data. The APC, through its work on data-sharing, has begun to examine appropriate forms for consent mechanisms. The Australian Bankers' Association (**ABA**) in its submission¹² to Treasury's Open Banking Review, has also developed a potential model for giving and revoking consent.

A trusted digital identity frameworks developed and supported by both government and the private sector (including the payments industry) will play a critical role in future in the protection of consumer data.

Particular attention must be given to protecting vulnerable individuals; this is especially important where financial data is concerned.

¹² Australian Bankers Association, *Review into Open Banking: ABA Submission*, https://static.treasury.gov.au/uploads/sites/1/2017/09/c2017-t224510_ABA.pdf

Building on our areas of competitive strength

What efforts are you or your organisation making to respond to digital transformation?

As the peak body and self-regulator for payments, AusPayNet helps the payments industry respond to digital transformation by focusing on three core objectives: effective self-regulation, promotion of innovation, and leadership in collaboration. Focusing on these objectives has enabled the delivery of the following recent initiatives.

New Payments Platform

The New Payments Platform (**NPP**) is new national infrastructure designed to meet the evolving needs of the digital economy. It is a world-class platform for delivering fast, versatile, data-rich low-value payments. The NPP is a collaborative payments industry initiative. AusPayNet established NPP Australia Ltd in late 2014 to oversee the build and operation of the platform. When it begins public operation in early 2018, consumers will have convenient payment services, which include the ability to send a payment to a mobile phone number or email address, rather than a BSB/account number.

Open Loop Transit

The removal of paper based ticketing on many public transport routes across the country has delivered efficiencies to transit operators and convenience to passengers. As a next step, many transit operators are looking to deliver further efficiencies and convenience by enabling passengers to use existing payment cards for travel, removing the need for separate travel passes. Throughout the year, we worked closely with the payments industry to support Australia's first Contactless Transport Payments trial launched by Transport for NSW on 6 July 2017. In partnership with Transport for NSW, issuers, acquirers, and card schemes we developed the new framework for the trial. Commuters on Sydney's Manly ferry can now use their own debit or credit card (or smart phone or wearable), instead of an Opal card. We are now engaging with transport authorities across Australia to develop a national 'open-loop' framework for transit. With many transport authorities worldwide looking to replace their proprietary ticketing cards, our work is gaining attention overseas.

Open Data

Having established principles for data sharing last year, we ran an industry-wide hackathon to "Improve the Lives of Australians" with transactional data. The hackathon drew participation from across Australia and led to the creation of applications that clearly illustrated the value of transactional data. Participants came up with a range of ideas for new apps, from personal finance management tools, to crowd sourcing funds in the wake of a natural disaster.

The event also helped to build collaboration between more established financial institutions and the fintech community.

Empowering all Australians through digital skills and inclusion

What opportunities do we have to equip Australians with the skills they need for the digital economy, today's jobs, and jobs of the future?

We have highlighted the importance of addressing cyber threat at an economy wide level and part of this must include the education of all Australians. Economy wide campaigns that have effectively educated the nation about the importance of sunscreen could be taken as a model for educating individuals and business to be alert to cyber risk and aware of measures to take to protect themselves.

What opportunities do we have to bridge the 'digital divide' and make the most of the benefits that digital technologies present for social inclusion?

As more payment transactions move to online platforms, it is imperative that all Australians have the skills and confidence to use digital payment methods. While most Australians are taking up digital payment methods, some Australians have not. These include older Australians, Australians living in rural areas and Australians with disabilities.

The payments industry is aware of our responsibility to these groups, and is taking action to ensure that all Australians continue to have accessible payment methods. Our industry has identified managing the changing payments mix as a key strategic goal and has undertaken research into the payment habits of Australians, which will inform a strategy for managing declining payment methods. We would welcome further collaboration with the Government to ensure that all Australians are comfortable with using digital payments, and that they are able to do so. This includes areas such as:

- **Education and Accessibility.** Older Australians who are confident in using the internet are more likely to use digital payments. AusPayNet notes the Australian government's *Be Connected* program,¹³ and suggests that online payment safety may be an appropriate inclusion in future iterations.
- **Closing the Digital Divide.** The Australian *Digital Inclusion Index* measures Australia's digital divide. The Index paints an overall reasonably positive view of digital inclusion in Australia, but notes that more could be done. In particular, older Australians, Australians in rural and regional areas, and Australians on lower incomes have lower levels of digital inclusion.
- **Ensuring Payment Neutrality in Legislation.** As mentioned above, Australian governments at all levels have a role to play in ensuring that consumers are able to pay with their choice of payment method. To this end, Australian governments should identify and remove any legislative requirements for payment by cheque.

Australians rate broadband as a higher priority for investment than any other type of infrastructure. The Ipsos Global Adviser survey found 46 per cent said broadband should be Australia's top

¹³ Department of Social Services, *Be Connected – Improving Digital Literacy for Older Australians*, <https://www.dss.gov.au/seniors/be-connected-improving-digital-literacy-for-older-australians>

infrastructure priority followed by energy generation (44 per cent) and major roads (43 per cent).¹⁴ Urban and rural communities need connectivity speeds that meet the needs of emerging technologies and digital payments systems.

¹⁴ Sydney Morning Herald, *Ipsos Global Advisor survey finds Australia ranks lowest for broadband satisfaction*, <http://www.smh.com.au/national/ipsos-global-advisor-survey-finds-australia-ranks-lowest-for-broadband-satisfaction-20171024-gz7ibi.html>

Appendix A: Payments in the Australian Economy

Co-Regulation of the Australian Payments System

AusPayNet is the industry association and self-regulator for the Australian payments industry, representing over 120 organisations. AusPayNet was established in 1992 to manage and develop regulations, procedures, policies and standards governing payments clearing and settlement within Australia.

The payments system is co-regulated by the RBA and the payments industry. The Payment Systems Board (**PSB**) of the RBA has a mandate to promote safety, efficiency, and competition in the Australian payment system. Through AusPayNet, the payments industry promotes competition and innovation, delivers efficiency, and controls systemic risk. This includes overseeing clearing systems and frameworks covering cheques, direct debits and direct credits, aspects of card transactions, high value payments and bulk cash exchanges between financial institutions.

AusPayNet also works closely with the payments industry, government, regulators and other stakeholders to enhance the Australian payments system by promoting competition and innovation, delivering efficiency, participation in the development of standards to control systemic risk.

The Australian Payments Council

AusPayNet provides secretariat support to the APC, which is the strategic coordination body for the payments industry and engages directly with the PSB.

The APC is responsible for delivering on the Australian Payments Plan. Released in December 2015, the Australian Payments Plan identifies three initiatives that serve to enhance the standing of the Australian's payment system in accordance with the desirable characteristics, which are most efficiently addressed through collaboration: *Security and Trust*, *Managing Australia's Payments Mix*, and *Enabling the Future*. The APC continues to progress work under each of these initiatives.

Industry's Role in Driving the Digital Economy

AusPayNet works to improve the Australian payments system by promoting competition and innovation, delivering efficiency, and controlling systemic risk. As highlighted by Wayne Byrnes, Chair of the Australian Prudential Regulation Authority (**APRA**) in a recent speech, as technology opens up the potential for new competitors to enter the financial system, it must do so without unduly jeopardising overall entry standards.¹⁵

As guardians of the payments systems AusPayNet believes participation and access to the payment system, via new entrants or new technologies, should not undermine public confidence in the payments system, not impair overall efficiency or introduce material risk to the system or customers.

¹⁵Individual Challenges and Mutual Opportunities, Wayne Burns, Chairman, APRA, Keynote Address at COBA, 23 October 2017