

June 30, 2016

Productivity Commission - Inquiry

Data Availability and Use

Tyro Payments is pleased to submit to the Productivity Commission inquiry into the benefits and costs of increasing the availability and improving the use of public and private sector data by individuals and organisations. Our contribution is from the perspective of a new entrant and innovator in the banking space.

Governments and regulators across the globe are competing to redesign their policies and regulations as a reaction to market crises and digital disruption. The UK and EU are well advanced with their Open Data and Open API movement.

We are convinced that smart public policy and smart regulation is the source of sustainable competitive advantage for Australia in its ambition to become a leading financial services hub in Asia. It does require to turn upside down some of the solidified and persistent paradigms of past thinking.

New entrants, models and methods reduce risks for the system New entrants and innovators do not inject on balance risk but rather de-risk the systems and markets by delivering transparency and efficiency through automation, data and algorithm.

Engaged smart regulation is required, not de-regulation or self-regulation

A highly concentrated market with oligopolistic and duopolistic industry structures requires engaged smart regulators delivering strong policies, principles, mandates and rules that actually enable and ensure open markets and the ensuing innovation and competition. Industry self-regulation which puts incumbents in charge has stifled innovation and competition.

Smart procurement is required from government

The government is the biggest consumer of products and services in the country. That enables the public sector to drive innovation and instil competition through digital transformation in-house and smart procurement of new products and services through open panels and open APIs.

For the consumer and the public good, data has to be shared That requires the right for Australian consumers and businesses to share their data held on their behalf by banks with third parties in order to benefit from more product choice and competitive terms (Open Data and Open API).

Tyro Payments Limited abn 49 103 575 042 afsl 471951



That right to see, use and share their data must be mandated in a sufficiently practical manner that ensures that the sharing can occur (noting that some rights already exist under the Privacy Act of 1988, but that they are effectively neutered in practice as noted in the Murray Inquiry Report).

Once allowed to analyse, manipulate, integrate and share data as customers see fit, they benefit from vastly broader product choice and competitive terms, for instance using alternative lenders or comparison, advisory, financial management and payment services that improve their lives.

Banks that open access to data and create external APIs could benefit because it would enable them to become more of a "platform" for other services.

Banks have to recognise that they have to serve the public interest by opening the infrastructure so that data can be accessed (read) and transactions can be effected (write) under the consumer's authority. It is the banks' responsibility to invest in the required technologies and offer the adequate solutions that address legitimate concerns with regards to safety and privacy.

Banks have to honour their special role in today's modern economy and society. Otherwise, why would they benefit from the Australian taxpayer as supporter of last resort and guarantor of the deposits held by banks at no charge?

The encouraging success of Tyro Payments

Tyro is a great example of what the leadership and foresight of the policymakers and the regulators can enable. Tyro holds an authority under the Banking Act to carry on a banking business as an Australian Deposit-taking Institution (ADI) and operates under the supervision of the Australian Prudential Regulation Authority (APRA).

Tyro provides credit, debit, eftpos card acquiring, Medicare and private health fund claiming and rebating services as well as a transaction and deposit account integrated with Xero cloud accounting. Tyro takes money on deposit and is about to launch its first lending product.

Tyro is building a next generation bank. That means banking solutions that are fully contained in the cloud, totally integrated, frictionless and mobile, ie: efficient banking.

This is important because efficient banking and access to cash flowbased lending are the two ingredients which are critical to small-tomedium business (SME) growth. Those SMEs will create the jobs, products and services that will underpin prosperity in the digital century.



RBA and APRA enabled and supported a start-up bank

On February 3, 2003, Tyro Payment Limited (then MoneySwitch Limited) was founded. During the years of reform of the payment space from 2003 to 2005, the Reserve Bank of Australia (RBA) created a specialised bank licence (SCCI) to attract non-banks into the payment space recognising that more competition was needed in the Australian banking system.

On April 26, 2005, the Prudential Regulator (APRA) granted Tyro the authority to carry on banking business in Australia. Then the term 'fintech' had not been coined yet and Tyro was a start-up backed by three Australian founders and a German entrepreneur.

On November 11, 2006, Tyro processed, cleared and settled the first credit and debit card transactions through the global and domestic schemes and the domestic clearing and settlement systems (BECS/CECS). This was after multiple interventions by the RBA to encourage recalcitrant membership organisations and banks to grant access and to trade with the first and only new entrant in Tyro.

By 2015 Tyro was serving 15,000 SMEs with credit and debit card payment services, when APRA granted the company that had operated for 10 years successfully as a regulated entity a full banking licence to accept money on deposit and to offer loans. This was an Australian first. Never before in this country had a banking licence been granted to a technology company.

Department of Human Services and Medicare Australia contract the delivery of rebates with a start-up bank

On December 22, 2006, Tyro was contracted by Medicare to provide the delivery of rebates in real-time through the domestic debit card system. The service was tendered as a panel inviting all banks to participate as long as they satisfied the same accreditation criteria, an InfoSec Registered Assessors Program (IRAP) certification and connected versus the same open Application Programming Interface (API).

On the same day the Commonwealth Bank of Australia (CBA) signed the contract. Others followed in later years. Today, Tyro is the market leader. Medicare rebates are claimed on the spot and funds are deposited into the patient's account in 11 seconds. Tyro's innovative integration approach that embeds the claiming process into the Practice Management Software (PMS) to make the process easy and seamless for frontline staff was the key to the success of this so-called Medicare Easyclaim service.

Over the years Tyro integrated with more than 160 Point of Sale (POS) software and PMS solutions to remove all friction from accepting and reconciling card payments. Tyro offers to the software



industry an open API to make the initial integration and the subsequent maintenance highly efficient.

Tyro technology de-risks the payment system

Tyro automated from the start the overnight clearing and settlement process with the Reserve Bank of Australia. Operators, faxes and manual errors were eliminated.

Tyro brought EFTPOS into the internet age and architected a fully-redundant acquiring platform that ensures highly reliable non-stop processing. If there is a component failure, the Tyro EFTPOS terminal fleet falls over automatically between four switches and two live data centres. While the major bank disrupt commerce in Australia through frequent retail payment outages, Tyro's live-live core system has not failed for a second.

Tyro also eliminated the exposure of face-to-face credit and debit card transactions to data compromise that occurs mostly where the EFTPOS terminal integrates with the merchant's POS system. Since Tyro has architected its solution in the cloud, before that term was coined, it processes the card payment transactions without exposing card holder and financial transaction data. There has not been one known data compromise.

Tyro architected its new in-house developed core banking platform again fully in the cloud. That again raises the security bar by strictly separating concerns between the accounting and the mobile banking world. The current practice of sharing for convenience security credentials for online banking between the business owner and bookkeeper is eliminated.

The discouraging barriers to innovation and competition

On November 15, 2014, Tyro dedicated a whole floor for Australia's first Fintech Hub supporting fintech start-ups and high-growth companies with co-working space, mentoring, banking access, and a program to co-develop open APIs. The Tyro Fintech Hub is also host to accelerators, conferences, hackathons, meet-ups and programs to build Australia's burgeoning fintech ecosystem.

The new bank and fintech products imagined, tested and launched by this new generation of entrepreneurs range from targeting consumers to businesses, from helping them to visualise and manage their financial affairs, to obtaining better deals, to fund personal lifestyle or business growth or to manage or transact on a customers' behalf.

The development of these solutions has huge potential to improve customers' financial outcomes and to bring transparency, integrity and efficiency to the banking space, but the success of these new



products and services is stifled by the barriers to access the core banking system to use customer data and to process transactions efficiently.

The ability for consumers and businesses to access their own data and to efficiently share it with third party providers is the prerequisite for them to offer Australian consumers and businesses more product choice and more competitive terms.

The fintech enterprises' ability to access consumers' and businesses' data through Open Data and Open APIs is critical for these innovations to happen.

The legislator and/or regulator has to mandate access and force the elimination of impediments that illegitimately restrict the availability and linking of data.

Comprehensive Credit Reporting (CCR)

The experience of the Comprehensive Credit Reporting (CCR) changes, introduced in March 2014 bringing Australia in line with the majority of the developed world, is a most telling one. It highlights that in highly concentrated oligopolistic and duopolistic markets voluntary arrangements fail to deliver the sought-after public interest outcomes.

Allowing lenders to share more data of consenting customers more often providing a more complete picture of credit commitments and history allows for a better assessment of credit. That in turn improves access to credit, lowers switching barriers and improves capital allocation. It increases the productivity and efficiency of the Australian economy and the product choice for Australian consumers and businesses.

More than two years after the introduction of CCR, the participation level remains low. The majority of banks still refrain from joining, frustrating the delivery of the obvious benefits to society. The scope of the data that is exchanged among participants has been minimised. All would win, but banks seem to think that locking in the customer rather than competing is in their interest.

Thus the voluntary approach of industry self-regulation has again wasted time and has failed. That is not new. Only legislation and mandates have brought the payments system reform underway. Only a mandate with firm milestones and deadlines has finally forced the banks into a collaborative effort and investment to deliver an overdue new interbank infrastructure for Australia's low-value payments (New Payments Platform).



Open Data and Open API

It is in the public interest to mandate that banks give their customers the right and ability to share data held on their behalf with third parties that are under an adequate licensing regime, such as APRA, AFSL or ACL.

Australia is one of the most consolidated markets in the developed world. With Open Data and Open API standards that market could be kept open for innovation and competition to happen. Without it market exclusion and failures will thrive.

Market positions will become even further entrenched as it is in the interest of market dominant players in one space to further solidify their position by integrating their solutions which other market dominant players in another space thus further raising access barriers.

A dominant bank would integrate with a dominant accounting software provider using proprietary contracting, integration technology and data sharing to mutual advantage, excluding or discriminating as a consequence access for secondary banks or secondary accounting software providers.

A totally different dynamic develops when dominant players offer open standard contracts with fair and level playing field terms granting access to data and open standard APIs with an efficient transactional interface. Such an interface would support reading of data and writing of data.

A fintech innovator could provide customers with a unified view and analysis tools across all bank accounts held across multiple institutions.

Another fintech innovator could use customer data across multiple banks to extend a loan and transact the loan efficiently across a customer's chosen bank account.

Today the Australian consumer and business is deprived of such product offers, because the bank does not grant open access to data and does not allow transactions at all or at prohibitive costs.

By refusing their customers to make their data and accounts available to third parties, banks control the pace of innovation and competitive tension in Australia to the detriment of the public interest.

Well-architected open APIs have become so much easier to integrate with. Banks could consider to use suitable open standards making data available in industry formats instead of many different ones. That needs to be weighed against possible complexities and gaming caused and enabled by the required collaboration and coordination that would result in delays against the mandated delivery deadlines.



Open Know Your Customer (KYC)

New entrants and innovators have to build their business by focusing on specific products and services that they can excel in, instead of competing on the broad scope of banking and financial products that the incumbent large retail banks offer.

Thus they have to convince customers to unbundle their bank relationship, entrust a specific value added step to a new provider and suffer through onerous KYC documentation for sign-up with the new provider.

In that regard, a fintech innovator is at a significant competitive disadvantage when compared with the major retail banks. The major retail banks do not have this problem, since their retail banking division must satisfy the KYC requirements when an Australian person or entity opens the first bank account with them. A specialised fintech company is not a full range retail bank.

In many fintech business cases, complying with the full customer identification obligations of the Anti-Money Laundering and Counter Terrorism Financing Act 2006 presents a significant obstacle with no perceived gain in the effectiveness of money laundry and terrorism financing monitoring.

The customers, who are already a part of the Australian banking system, consider the burden of the application process too onerous and then decide not to change from their bank to the alternative fintech provider to sign up with Tyro. Thus they lose all the advantages that new fintech business could provide to them.

An open KYC approach would remove these switching barriers that have so far stifled switching between bank accounts and also switching to new providers.

Instead of every institution using resources to duplicate processes in an environment of domestic electronic banking, financial service providers could put reliance on or have access to the KYC data of the other authorised banking institution.

Open government data

Once the government makes data, as a principle, more available, many uses of data that no one imagines now would come to fruition. Ideas and application would literally explode. When scientists, inventors, data analysts get a look at data a whole innovation wave will be unleashed.

Academic research data should be made available free of charge to support the basic research that is the longer term necessary precondition for innovation. Commercial use data should be charged so as to support investment and ensure efficient allocation.



For instance, consented access to a status that ascertains a good standing with the Australian Taxation Office (ATO), official documents of registration, trust deeds and other documents or current registration as medical provider with Medicare Australia would significantly reduce fraud and credit risks and increase operational efficiency.

Improving customer financial literacy

The opportunity for efficiency gains through lower frictional barriers to trade is clear. However, the wider economic performance of Australia depends on sound financial decision-making by all agents. The great promise of digital platforms for financial analytics lies in the education of customers through examples and peer comparison services that can help them make better plans, more accurate budgets based on real world data, and superior investment and financing choices. Financial literacy is acknowledged to be a major stumbling block to improved retirement outcomes and small-business performance.

In the same way that open and transparent securities markets have provided participants with a ready pricing signal, the transactional system of payments data embodies important activity signals.

Open data and non-proprietary APIs enable higher level services to be built which aggregate the financial experience of similar agents and provide essential feedback on comparative performance. New services in this area could help promote better financial literacy and decision making for enhanced productivity and social outcomes.

The fallacy of self-regulation and need for clear government and regulator mandates

The Australian Government must legislate to ensure Open Data and application programming interface APIs in banking.

The government and industry are already behind compared to the drive to deliver new Open Data and Open API standards in UK and European banking. The EU Payment Services Directive ("PSD2") 'Access to Accounts' regulation forces all EU banks to allow access to customers' payment accounts to service providers. The British Government is working with industry and regulators to ensure that by 2017 consumers have easy access to the data held by banks and can authorise third party intermediaries such as price comparison websites, market-based lenders or other new fintech innovators to access their data on their behalf using secure APIs.

The Open Data and Open APIs are required to boost competition and the legislation is required to overcome competitive resistance by incumbent banks and to ensure the priority in implementation.



Open Data requirements have to also include the Open API mandate to allow the low cost, automated and real-time interfacing between software applications of different parties. The use of standards and the implementation could possibly benefit from some degree of industry collaboration.

The challenge of an accelerating world

The rate of change in the digital century is accelerating. That is a particular challenge for policy makers and regulators. This enquiry, which we welcome, is a 12-month effort. If its conclusion results in legislative or regulatory outcomes, further consultation processes will be required.

Even in Tyro's case, that has to be applauded as an example of leadership and foresight in policy making and regulatory execution, the entry barriers and time delays were huge.

It took years to overcome the resistance of critical membership organisations in the payment space to allow Tyro, an organisation authorised by the Australian regulator to conduct banking business, to be accepted. Overcoming the resistance of the incumbent banks to connect and trade with Tyro took years, and that was with the support of the RBA. As a rule, to overcome the contractual and technical access barriers with market dominant major counterparties is typically a multi-year effort.

The reality is that in the world of digital start-ups, companies that have to deal with years of delay will not be created or will fail to scale up.

It is now broadly recognised that fintech is a huge opportunity for Australia and there is progress on multiple fronts. The regulatory sandbox scheme, which allows early-phase businesses to test their products in a controlled environment is a much-needed step in the right direction. So is the work of the government's Digital Transformation Office and research initiatives like Data61 bringing together their Digital Productivity team and National ICT Australia (NICTA).

Much more needs to be done though before the Australian banking and financial services space can become innovative and competitive. If we are late comers in delivering Open Data and Open API in Australia, the fintech revolution will take place elsewhere.

Fintech start-ups and fast-growth companies cannot thrive in an environment that requires years to deliver critical prerequisites.

The importance extends far beyond the industry itself into supporting the productivity and efficiency of the Australian economy, government and society. The prosperity of Australia in the digital century is at stake.