About McLean Roche

McLean Roche is a specialist retail banking and payments consultancy established in 2001.

Specifically, our Group specialises in the following services:

- Strategic development and planning of retail banking and payment services
- Global research and development of payment systems
- Detailed knowledge and experience in Mobile Payments
- Advice on development of e-commerce and cyber strategies
- Identification and development of potential Strategic Partners
- Specialised assistance in the development of loyalty/reward programs
- M&A advice and detailed project work
- Product research and development
- Strategic advice, coaching and mentoring of senior executives within the financial industry

Our experience in Mobile Payments covers developed markets and emerging markets. We have also been involved with a number of the Mobile Payment vendors in North America, Europe, Asia and the Middle East/ Africa

We have assisted a number of payment and technology companies with M&A advice. This also involved in pitching to Venture Capitalists for funding as well as advising VC run companies in the US, Europe and Asia.

Grant Halverson - CEO McLean Roche Consulting with CEO experience in Financial Services and Financial Technology and has been an investor in Fintech.

PAYMENTS - A GLOBAL REVIEW OF CRITICAL INFRASTRUCTURE

The world is a very large place with 7.5 billion people and 241 countries and territories and payments are a vital tool in all of these countries/territories.

Payments are a very high volume, low margin business with even the smallest changes in revenues or margins delivering significant changes in actual dollars.

Strategic Importance of Payments

The European Union (EU) states that 'Payment Systems are the 2nd or 3rd most important infrastructure/network in any country outside national security and military issues'. Payments impact every government, business and household as well as every import and export transaction, every consumer and business payment transaction which make payments truly ubiquitous.

The retail payments world has two main divides - developed economies and emerging markets and the broad trends are fundamentally different with very little cross over.

Developed Markets are Not All the Same

In developed markets there are two major themes, a number of strong credit card markets with high cash and cheque use -- 72% of global credit card receivables are in only 5 countries - USA, Canada, Japan, Korea and UK.

Mainland Europe with 510 million consumers, the largest developed consumer market, is a debit card/EDI market with little cash or credit card use and virtually no cheques. A number of EU countries have all but eliminated cheques over the last 15 years replacing them with EDIs, well before 'digital' became fashionable.

Emerging markets are about cash and the unbanked

Emerging markets make up 78% of the world population and are heavily dominated by cash. The unbanked population is estimated at 2 billion or 45% of working adults.

Mobile payments have limited impact in most emerging markets; however a number of pioneers have developed very efficient and wildly used mobile payments - Philippines since 2000, South Africa in 2001, and Kenya in 2007 all created new payment infrastructure where none existed. Bangladesh, Brazil, China, India, Nigeria, Mexico and Pakistan are all examples of emerging markets that are developing mobile payments.

The key drivers of success are factors such as the international remittance flows in the Philippines, drive for social cohesion in South Africa and Kenya or eCommerce in China.

China is now the world's largest mobile market with AliPay and WeChat totally dominant. India launched its own debit card scheme - RuPay to reduce payment costs and avoid being dependent on Visa or MasterCard debit.

The Cost of Payment System is a Key Issue

The cost of retail payment systems is a major impost on all economies running at estimated average 1.2% of GDP. The EU estimates the range for retail payment systems in Europe is 0.6% to 1.6% of GDP. These costs blow out when emerging economies are considered - India recently changed its banknote policy to try to reduce cash use, South Korean has tenaciously developed credit cards in an attempt to eliminate the 'black' cash economy. The Irish National Payment Plan 2013 reflects the EU view -- they estimate their payment system is 1.4% of GDP and set clear goals and actions to try to reduce costs.

Are Comprehensive National Plans a Priority?

Given the strategic importance of payments the critical question is does every country have a comprehensive payments plan? If there is a plan why isn't it public?

Unfortunately, the vast majority of countries do not have comprehensive, public plans and therefore savings and efficiencies are not being pursued and maximised.

The EU has a long track record of seeking and achieving reductions in payment 'costs' especially across the credit/debit card industry. While Australia was the first to introduce laws to force changes in interchange the EU quickly followed exerting maximum pressure on Visa, Eurocard (now MasterCard) and other closed loop global payment networks e.g. American Express, Diners Club/Discover, JCB, China Union Pay to reduce interchange and merchant service fees.

Are 'Same Day' transactions delivering?

Since 2002 Payment Regulators in developed countries have targeted 'same day' transactions as the next key development - much of this has centred on ISO 20022 and has led to expensive executions using current systems and legacy providers. The cost of debit and credit card networks continues to be a major issue for regulators regardless of attempts to rein costs in. While interchange has reduced this has been more than compensated by increases in annual fees, other fees - for example all international charges now have a 3% fee plus FX rates, having been zero fee prior to 2000.

Card Networks Proliferate

The global players all have strengths and weakness - Visa and MasterCard are the largest but are far from dominant. For example Visa is weak in mainland Europe known as a debit card, both MasterCard and Visa has made no progress in China and limited progress in India. Other global payment players include American Express, Diners Club/Discover, JCB, Cetelem and China Union Pay. There is also a layer of local players who in many markets control 30-45% of a market – these include, domestic debit networks, retail store cards, conglomerate consumer cards, single purpose consumer offers e.g. car finance, airline cards, consumer finance offers,

buy now pay later, instalment loans as well as budget services, payday lenders, pawn brokers and traditional lending practises e.g. family loans which vary in many markets.

Banks Profits and Payments

Banks and independent card issuers are the prime drivers of consumer and business payments. However, major payment networks also exist within Governments and Business environments and can be used to create change. The ability of banks to service these three sectors efficiently and effectively is critical. Payments across institutional, wholesale and retail are a key part of most banks – "In 2016, the global payments industry accounted for 34 percent of overall banking revenues—up from 27 percent just five years earlier. For the next five years, annual growth will average 7 percent, making payments a $2-trillion-dollar-industry by 2020," according to McKinsey.

Technology is Critical to Payments

The payments industry has been an early adopter of technology; one key example is ISO 8583, early in 1980s the industry adopted electronic switching, which quickly developed into electronic charge submission to eliminate manual authorization phone calls and expensive paper charges. Today ISO 8583 underpins all consumer payment systems globally – a new standard ISO 20022 is progressively being adopted with 23 countries now using it.

Technology is part of the back bone of payments and is implicit in its efficiency. However, not all technology is well used and adoption rates can be low e.g. the US EMV program is a disaster, 2 years after the deadline only 60% of merchants are fully compliant and 15 years behind other developed markets due to the size of its installed base. The current market developments revolve around fast payments, wider adoption of social media payments, P-P payments, multi-currency payments with netting and better use of internet/eCommerce payments.

Technology Providers are Local and Regional

A similar situation applies to technology providers like First Data, FIS and TNS are examples of multi country providers who have built businesses in many regions. However the share of payments from multi nationals is very small and will remain so as local and regional technology providers dominate.

Mobile Payment Wallets in Developed Markets are a Dud

Mobile payments and in particular wallets have been totally unsuccessful in building critical mass quickly in developed markets. Attempts made by banks, card issuers, Google, Apple, Microsoft, Amazon, Visa, MasterCard, Amex, Telco joint ventures include WPS in Canada and ISIS (rebranded Softcard in 2014) in USA, all have been resounding failures in attracting mass consumer use. Contactless payments have quickly become the default point of sale payment in most developed markets, despite being 'legacy' technology, reaching 60-90% consumer usage in 3-5 years.

Apple Pay is a good example of the 2nd generation mobile product which is performing poorly – due to poor strategy and implementation. Apple Pay was launched 3 years ago in the USA just as the entire payments market was distracted with EMV implementation. The fact that 2/3rd of Apple phone users couldn't use Apple Pay also created dissatisfaction with many Apple consumers.

Third Generation Mobile P2P Show Potential

Zelle, Venmo, PayPal Cash, Square Cash and Dwolla are all 3rd generation US P2P transfer apps on smart phones primarily aimed at 15-35 year olds -- these apps have zero cost for consumers and are a quarter of the cost to operate vs debit/credit cards and present a major threat to the card schemes for smaller transactions and social media interaction. Zelle (re-branding of ClearXchange) owned by 30 US banks with 2017 volumes of US$54 Billion - Venmo owned by PayPal volumes of $35 Billion.

China Leads the Way with Mobile

China's mobile payment market is the world's largest reaching US$3 Trillion in 2017, from US$81 billion in 2012. AliPay has 520 million active users and TenPay is in partnership with WeChat -- WeChat has 960 million active users 40% using payments. These two platforms share 85% of the mobile market and now threaten the government owned payment card China Union Pay. Key to the rapid development and growth is Nov 11th 'Singles Day', which is a rebranding of Batchelor's Day, a 90s student tradition – sales for one day in 2017 totalled US$29.6Billion! Mobile has also expanded overseas to support the 100 million travelling Chinese tourists: AliPay is in 28 countries and WeChat in 17. Chinese mobile payments use QR codes, this is currently not standard at point of sale globally - there are some concerns about the security of QR codes

Bitcoin and Blockchain are Non-Starters for Mass Payments

Bitcoin/blockchain has been attempting for a decade to convince markets of its ability to provide timely payments. Shortly after its launch in 2007 a number of experienced payments experts reviewed the capabilities of Bitcoin/blockchain. The review concluded that Bitcoin and or blockchain had no possible role in global mass consumer or business payments. The concept of a global peer to peer network was simple not feasible given the current and future volumes. Bitcoin processes 7 transactions a second with an average transaction time of 12 mins – but with peak delay of up to 3 days. Visa and MasterCard process 16,000 transactions per second with a peak of 24,000. No amount of 'tweaking' will take bitcoin to this level. Bitcoin has also had 2 systems outages in 10 years requiring the total network to backup transactions for 2 days – if this was to occur in the global payments market the result would be catastrophic. The ability of blockchain to work in other high volume segments such as corresponding banking or foreign remittances is also unlikely given the global spread of these products and the volumes.

Fintech Has Failed to Deliver its Revolution

Fintech - the buzz word invented in 2008 was to herald the 'total destruction' of banking, payments and insurance by fledgling start-ups - however a decade on Fintech has yet to reach this goal with investment levels insufficient to build true competitors to banks. Total Fintech Investments 2008-17 are US$53.9 Billion which includes Venture Capital and other investors including private equity and crowd funding, representing only 6.7% of total start-up funding. Today Fintechs are seeking partnerships with banks in the hope of being acquired - hardly an enthralling prospect for many of these young entrepreneurs.

The Longer Term Future Is ..

The longer term future of payments revolves around the development of fully portable 'digital' consumer and business IDs which are supported in cyberspace and do not require a card or phone --- but rather a consumer 'calls up' the ID at any point of sale and confirms the sale using bio-metrics and security features which work in person or remotely for eCommerce transactions. The portability and convenience will be the key drivers while data and ID protection are critical deliverables.

THE AUSTRALIAN RETAIL PAYMENTS MARKET

The Market is Large

The Australia payments market processes $242billion payments per day or 14% of GDP – split between government, business and retail consumers. The dominant payment types are bank transfers and cash while cheques, debit/credit cards and person to person transfers play supporting roles.

The cost of payment systems is a major impost on all economies estimated at 2.15% of GDP. The European Union (EU) and World Bank along with associate agencies have undertaken comprehensive reviews of payments, considerable policy consultation and targeted research. A key conclusion of all this work is completion is a key factor in creating successful payments markets.

The key catalyst for change in the payments industry will come from competition. It must be encouraged in all aspects, for consumers, businesses and institutions. Competition is the seed to foster innovation, it drives change, lowers costs and forces decision making. It is the most important spark in creating a better deal for consumers and businesses. Yet there is less competition in the Australian payments industry than 15 years ago and this should be a major concern for a critical piece of national infrastructure.

Payments are Strategically Important

The EU states that ‘Payment Systems are the 2nd or 3rd most important infrastructure/network in any country outside national security and military issues’. Payments impact every government, business and household as well as every import and export transaction, every consumer and business payment transaction which make payments truly ubiquitous.

Current payment policy thinking in Australia can be summarised by this quote – “the retail payment system accounts for the majority of payments – about 99% of the number (not value) of payments” APCA2015b.

This thinking totally ignores all Government payments, business to business payments as well as business to consumer payments which are much more than 1% of payments. Within the retail payments sector business and government payments are largely ignored by regulators and are not separated within key market data – one example Commercial Cards with $62Billion or 19% of credit card spend. The structure, usage and liability of these products which include travel spend, purchasing business items and procurement of key inventory has nothing to do with consumer spending - other examples also exist.

Strategically the retail payment network is far more important and has a wider reach than for example mobile phones, broadband and even fixed line phones – yet receive scant coverage by comparison. An internet search of the NBN, which will reach 70% of households at best, has a massive amount of media coverage versus payments.

Australia's current retail payments products are expensive verses other payment options available including EDIs, P2P mobile payments and other cash transfer systems. Any discussions about future strategic directions must include the cost of payments. Australia current retail payment mix includes cash, cheques, debit/credit cards with very small P2P and mobile payment products. The sector is dominated by the four major banks that have done little innovation and by key acquisitions have in fact reduced competition.

This is a serious strategic and structural issue which directly impacts policy and resource issues - this needs urgent attention at the highest levels of Government.

Total Payment Costs are Significant

The EU estimates retail payment systems in Europe range from 0.6% to 1.6% of GDP. Australia is similar to the UK and Ireland with a high mix of credit cards, cash and cheques – Ireland has higher cash use and lower electronic payments than Australia. Ireland with EU assistance developed a payment plan in 2013 which detailed retail payment costs at 1.4% of GDP. If we assume Australian retail payment costs are therefore lower, at say 1.2% of GDP it is then possible to estimate the full cost of retail payments - 2017 Australian GDP is A$1.69 Trillion x 1.2% in payments costs would equal A$20.2 Billion in costs per year. If Australia could reduce retail payment cost to 0.6% as Sweden, Denmark, Norway, Belgium and others have done -- costs per year would equal A$10.14 Billion -- a significant annual saving of $10.6 Billion.

To reduce annual payment costs in Australia by 52% would have enormous economic benefit by improving speed of payments and improve cash flows for businesses and consumers. This type of objective should be the cornerstone of future Australian payment policy. Future efforts should be detailed in a strategic plan with clear goals and reviewable actions.

The Right Strategy is Critical

Key lessons can be learnt from overseas experience especially in similar markets such as United Kingdom (UK), Ireland and Canada.

The Irish Government developed a comprehensive payment plan supported by the EU in 2013 and the UK Government's "Opening Up UK Payments" issued by the UK Treasury issued in the same year. The UK Treasury report provoked considerable debate in the UK in relation to opening up access and competition in the payments industry, the response in Ireland was more muted.

The UK report was very clear in its findings that "the banks dominate the decision-making, own the payment schemes… there is considerable opportunity for these banks to manipulate their involvement in the process for their own benefit." In another section the report notes the "difficulties faced by both new entrants and existing small challengers".

Since the Irish Payments Services Directive took effect in November 2009, nine Payment Institutions have secured a licence from regulator the CBI - not one E-Money Institution or Small E-Money licence been issued. No licences have been issued since 2011. In the UK there are 1,140 Payment Institutions (Small and Regular). The contrast is significant and the Irish experience mirrors Australia's performance in granting new licenses. The lack of new competitors and the reduction of competition in Australia is alarming and reveals a significant failure in policy – a new way forward is required.

Competition – The Key to Change

The need for competition is almost completely overlooked in Australia.

One example - the major payment policy change in the last 15 years was the RBAs three pronged 'reforms' of credit card interchange. The objectives of increasing competition and enabling new entrants to enter the market have not eventuated. The desire to create open and transparent pricing has only been partial met, interchange reductions have been achieved at the wholesale level while the industry has more than recovered the 'lost' revenue at the retail level. At the same time Australian consumers have endured significant increases in fees and charges for no increase in services and faced the arrival of uncontrolled surcharging.

The other significant issue was the failure by the ACCC to supervise and require retailers to pass on the interchange savings to consumers. The net result retailers pocketed $118.8 million in year one, plus increased their revenues by starting uncontrolled surcharging – rampant by those with market power, monopolies or special services e.g. Telstra, Qantas, Utilities and specialist retailers – a more detailed review of interchange is shown later in this submission.

The Australian competitive landscape is in stark contrast to other markets - this UK quote demonstrates this "given the importance the Government attaches to improving competition… arguments now lie in favour of a full utility-style regulator". This UK thinking resulted in the appointment of a new regulator in 2014 this model should be considered in Australia.

A Lack of Competition

There have only been two major credit card launches in 15 years – Virgin Money and Aussie who 'launched' cards – the back office for both entrants was provided by Westpac and ANZ respectively with no significant product variations.

At the same time consolidation impacted the Australian debit/credit card market with Bankwest and St George both active debit/credit card issuers purchased by CBA and Westpac resulting in decreased activity across the market. GE Money a sizable competitor to the 4 banks was a casualty of the GFC in 2008 when the securitization market collapsed; the business lost market share, sold its mortgage portfolio and was in 'maintenance' mode until it was sold to private equity in 2015.

A number of small acquirers have attempted to launch these include Distra in 2001 (now owned by ACI) and Tyro 2003. Today Tyro is a niche acquiring/switch player reporting $10 billion in transactions which equates to 1.6% market share of the debit/credit card market. US acquirer/pos provider Square launched in 2016, has 60,000 merchants and $2.6billion in sales - less than 1% of debit/credit sales. Other new entrants are rumoured to be following Amazons launch in 2017.

No major overseas player has entered the Australian card market and those who did evaluations went to other international markets considered more favourable – the lack of positive credit reporting and the size of the market seen as key factors for not proceeding.

The lack of competition in payments should of great concern as it prevents innovation and cost reduction.

Collaboration is not Competition, What about the Industry Bodies?

Sometimes collaboration within an industry can be seen as a way to create benefits for customers. With four banks dominating, collaboration is not a starter

Collaboration across the wider payments industry should a broad objective detailed in the regulators operational objectives. The Australian Payments Clearing Association (APCA) and Australian Payments Council's (APC) roles and positions must be reviewed. Both organisations are controlled by the banks, effectively for the banks. APC's 15 page 'Australian Payments Plan 2015' clearly demonstrates its limited horizon and is clearly hampered by lack of resources and money. APCAs annual fraud report is one example of key data that is needed to ensure the debate in Australia is driven by facts and not opinion and nebulous research. There are numerous topics which should receive similar treatment. If real change is to be created in payments the make-up regulators, industry and consumer bodies need to be fully representative of all wider market - this was a key driver in the UK.

UKs Card Association and Payments Canada – the rebranding of The Canadian Payments Association provide important models for Australia. Both these organisations reflect the wider views of the industry and also provide detailed factual data and research which improves the level of the debate in their markets.

A good example of market collaboration was the Canadian "Task Force for The Payments System Review" in 2010 which included industry, regulators, consumer bodies and co-ordinated by Deloitte. The final report is consider by many as 'the best in class' review of a payments market and is still used today by many in the industry. This type of collaboration should be used in Australia rather than policy development with some consultation which is the model used today.

Why Ask the Regulator To Lead in Strategy Development?

As regulator, the RBA/Payments Board plays a role in working with many businesses and consumer groups that are involved in payments. Since 1998, when the Payment Systems Act took effect, regulation and review has taken place.

The RBA/Payments Board has performed the de-facto role of developing the strategy for payments in Australia. This role should be questioned - is this the right place to develop the strategy? Does the Payments board have the right structure, people and tools to undertake a comprehensive strategy development?

The Payments Board operates under the imprimatur of the RBA. The Board has five independent Non-Executive Directors with RBA and APRA representatives and is advised by RBA staff. The independent board members are all well respected business leaders; however a review of their CVs shows none of them have payments industry experience nor do they have the benefit of consulting with an Advisory Board.

This is an untenable situation for independent directors and should be reviewed – payments are a specialised industry and given the strategic importance some Board members should have industry experience and all Board members should have access to a range of views both at Board level and to consult with an Advisory Board to provide independent views to ensure good policy is created and implemented.

Cheques, Cash, Cards… What about Bank Transfers and P2P Payments?

There's no doubting the benefit of electronic payments. Payments occur at every level of Government, business and consumers. One of the clear themes in Australia is the rapid growth debit card usage while credit cards have half the growth rate. While such "modern" payment methods can help to replace cash and cheques, the idea that cards can be the sole electronic alternative to cash and cheques is not the case. For many businesses the cost and some of the scheme terms imposed are onerous. And beyond issues of costs, there are real and valid concerns about fraud and security – the rapid rise of contactless fraud is one example. Card acceptance has its place and when they work, they work extremely well and provide a superb network that enables trade. But it is important to recognise that non-card based payments can be implemented with equal success and much lower costs.

For Australian consumers and businesses, access to their core payment account, often their 'current account' has been restricted to internet banking services using BPay. More recently the banks have launched 2nd generation mobile apps for consumers but for businesses who wish to be paid or pay, their online offerings are limited. The most effective, low cost and low risk way to pay is by credit transfer. The ability to be paid or pay directly from any account has been made a reality by new technology. Such functionality can be delivered online but also via integrated interfaces (APIs).

Is the National Payments Platform the answer?

The development of the New Payments Platform (NPP) has been heralded as a breakthrough for low value electronic transfers for individuals and businesses using internet banking applications.

Based on ISO 20022 the Swift/Fiserv type development is not new having been implement in 22 other countries – Australia is lagging well behind in this area. The launch has been delayed and predicably the four major banks are delaying the roll out, while the costs of use by businesses will be a major issue -I banks have changed their terms and conditions to allow fees to be charged.

The Swift/Fiserv development will cost around $1 Billion and is consider by many to be expensive for what it delivers. The openness of the NPP to new entrants and start-ups is a major issue and it has to be proven that it will be open and inclusive – which simply restricts competition which is exactly what the four major banks want.

The NPP risks becoming the NBN of payments – openly derided and scorned as each issue is played out. Urgent action is needed to ensure the NPP is open to all players and demonstrates its ability to collaborate with the entire industry not just the banks.

Past Behaviour is a Good Predictor of Future Behaviour

The ultimate ownership of the NPP also needs to be reviewed as with no intervention it will become yet another 'zombie' payments company owned and run by the 4 banks. Currently the NPP is being developed by the banks and other deposit taking institutions. This has been the model for a series of stunningly unsuccessful payment companies e.g. Bankcard – now closed, eftpos which has lost 45 per cent market share – BPay which has never for filled its potential – these are but three examples.

The nature of these decisions needs to be understood – why did the four banks decide to 'ditch' Bankcard and become totally dependent on Visa and MasterCard. Apart from the USA no other developed market has done this. Europe and Canada stand out as markets where domestic networks still thrive. Interac Canada is probably the best example – even with all the pressure and power of US banks and US card networks can exert, they been unable to destroy Interac. In fact Interac has flourished - yet the four Australian banks closed Bankcard in 2006.

A similar situation applies to eftpos, the only Australian network, which the four banks co-own with credit unions and retailers. In a series of truly stunning decisions eftpos was deprived of investment and quality management and has been allowed to go from 86% market share in 2003 to 42% in 2017. Banks and Credit Unions who co-own eftpos have preferring to trash their investment in eftpos to issue Visa and MasterCard debit cards which charge much higher merchant fees for exactly the same service in Australia. One of many examples - the Federal Government and Indue are using the more expensive Visa debit cards instead of eftpos cards in a trial of social services payments to Aboriginals.

The routing of Visa and MasterCard transactions through eftpos must be removed by regulation, as this is another pricing 'rort' by the acquiring banks – this will cause fees to drop for merchants.

The consequence of these decisions is very significant as without any real competitors Visa and MasterCard are able to wield monopoly power in Australia.

Are Mobile Wallets a Dud?

Mobile wallets have been totally unsuccessful in building critical mass quickly in Australia. Attempts made by banks, card issuers, Google, Apple, Microsoft, Visa, MasterCard, American Express and the Telcos have been resounding failures in attracting mass consumer use.

Contactless payments have quickly become the default point of sale payment, despite being 'legacy' technology, reaching 70-80% consumer usage in 4 years. Market figures for mobile wallets and contactless payments are not published nor is the total data – industry sources say mobile is less than 1% of total debit/credit card spend.

ANZs Apple Pay is a good example of the 2nd generation mobile product which is performing poorly – due to poor strategy and implementation. Apple Pay was launched 2 years ago in the Australia and has underperformed. The fact that 75% of Apple phone users couldn't use Apple Pay also created dissatisfaction with many Apple consumers. ANZ published data on Apple Pay showing transactions for 2017 totalled 32.1 million in 2017 which is 0.038% market share for debit/credit spend - there 8.27 billion debit/credit transactions in 12 months ex RBA site. Total Apple Pay spend in December of $4.82 million vs $55.5 Billion spend on debit/credit cards highlights the issue of low adoption.

Third Generation P2P Payment Networks flourish

The next development in mobile products is third generation P2P payment apps which are rapidly expanding in North America and Europe.

Zelle, Venmo, PayPal Cash, Square Cash and Dwolla are all examples 3rd generation US P2P transfer apps primarily aimed at 15-35 year olds -- these apps have zero cost for consumers and are a quarter of the cost to operate vs debit/credit cards and present a major threat to the card schemes for smaller transactions and social media interaction. Zelle (re-branding of ClearXchange) owned by 30 US banks with 2017 volumes of US$54 Billion - Venmo owned by PayPal has $35 Billion.

This product category has been very slow to reach Australia and this should be reviewed. Fintech players in Australia are developing these products and regulators should understand the issues they face and how the market can be encouraged.

Data, Data and More Data – What is Important?

Payments are a very high volume, low margin business with even the smallest changes in revenues or margins delivering significant changes in actual dollars.

Payment regulators need to ensure they collect the right data and that it is accurate. The RBA collects and publishes data on debit cards and credit cards. There is very limited data on the other retail payment types.

Some of the data is compromised – for example Commercial Cards issued under the Visa and MasterCard brands are $62Billion or 19% of credit card spend. The structure, usage and liability of these products includes travel spend, purchasing business items and procurement of key inventory - this spend has nothing to do with consumer spending. Charge cards also have important Commercial Cards portfolios with $12Billion in spend with corporate owners responsible for liability. The notion that employees spending company money on expenses or procuring business service is somehow related to consumer spending is simply false. Therefore $74Billion or 23.4% of credit card spend is not consumer related and should not be included in RBA Consumer figures. The same issue impacts debit cards, ATM use and transfers. It simple distorts decision making and has unintended consequences when decision are made.

There are number of key data points that are not collected or made public by regulators. This includes – the number of credit and debit cards issued, average balances per card, credit losses, foreign spending by Australians and local spending

by foreigners in Australia, the number and size of contactless and mobile payments and the spending across various channel types. All of this data is available in many other markets and ensures that debates and policy discussions are based on real data. It is extremely troubling when regulators rely on market research to implement payment policy – consumers and businesses will often respond with answers about what they would like to do with payments – not what they actually do. A good example is Mobile Wallets it researches well but the actual figures are a disaster.

Unsecured Lending and Payments

Australia has a small unsecured credit market compared to mortgages – APRA reports 1.6Triilion in mortgage lending and $100 billion in unsecured lending by banks and other licensed deposit takers. The unsecured lending market includes many non-banks that lend $50billion to consumers and businesses and their activity is largely unreported.

These include retail store cards, conglomerate consumer cards, single purpose consumer credit offers for example - car finance, airline cards, consumer finance offers, buy now pay later, instalment loans, budget services, payday lenders, pawn brokers and traditional lending practises e.g. family loans. The size of the market and the segments is detailed below –

Unsecured Lending Segments	**Market Size 2017 A$ billion**	**CAGR 2010-2017 %**
Credit cards	32.0*	3.0
Retail store cards	18.5	5.0
Revolving credit	14.0	6.0
Auto lending	39.0	9.0
Student loans	3.5	6.0
Personal loans	32.0	9.0
Retail instalment loans	15.0	15.0
Total	154.0	7.0

* Credit card receivables earning interest only Source – McLean Roche

Regulation of unsecured credit falls partly under APRA, partly under ASIC while the payment policy and regulation falls under the RBA/Payments Board and the ACCC is also involved. This is extremely inefficient and cumbersome and doesn't allow the required skills and industry knowledge to be developed to ensure supervision across the entire unsecured credit market.

Consumer lending has inherent risks in the quality of lending as well as consumer rights and obligations. The number of internet offerings is staggering with little or no

documentation, even less about whom the lender is and what are their bona fides, what regulation they comply with and their dispute resolution process.

The options for regulators involve building the right level of skills and market knowledge in one organisation to ensure this group has the skills to review the total industry and not the current piece meal approach.

A case study on Fintech start-ups is detailed later in the submission.

Positive Credit Reporting – the Backbone for Effective Consumer Lending

Positive credit reporting will be an essential tool, creating a vibrant, competitive consumer/SME lending market if regulators implement the correct policy settings.

Benefits exist for consumers, SMEs and lenders by providing a much deeper picture of applicant's financial health. This enables better credit decisions to be made with higher loans to SMEs and consumers with good credit history and avoids many loans made to SMEs and consumers who would be unable to service the debt.

The major banks have always had concerns about positive credit reporting fearing it would allow competitor's access to their customer's data. The trade-off is banks stand to benefit the most from better credit decisions and gaining a 'total' view of customers who apply for credit.

The second issue is banks do not want 'risk based' pricing to start in Australia as this could increase customer churn rates. Experience in the USA and UK with positive credit reporting did allow new competitors to gain a foothold – however it also allowed existing banks to expand.

In the mid-1990s advances in technology and the internet allowed the '60 sec' loans to rapidly develop. The key requirement is each individual's credit score -- pricing of a mortgage, credit card, personal loan etc is determined by consumer's credit score, so the price is different for each consumer. In the US the credit score is called FICO (named after Fair Isaacs who invented it) which is the range of scores from bad to good.

The key policy issue is, will positive credit reporting enhance competition and will it bring new entrants into the Australian market?

The credit reporting debate continues in Australia even with another deadline - July 1st approaching. The key issue is what will the banks need to do - what level of reporting will be providing? If from July 1st banks only provide one month's consumer data this will have no impact on the quality of credit decisions. It will in effect delay the benefits of positive reporting for a further 18 months. To be effective at least 2 years history should be provided by all participants from July 1st. This will ensure a speedy ramp up of positive credit and immediately enable better decisions to be made benefiting lenders and consumers. SMEs should be included in positive credit reporting as this will ensure better credit decisions are made across this segment

Frequent Flyer Card Programs – Pure Greed or a Loyalty Tool?

Since the inception of credit card links to domestic airlines in 1991, Australian consumers embarked on an initial spending spree. Diners Club and Ansett Australia introduced the first domestic credit card program in 1991, followed by American Express in 1992 and, belatedly, the banks in 1993-1995.

From the outset, the richness of the programs attracted consumers. A Sydney-Melbourne-Sydney return flight required 17,000 points or A$11,000 of spend. The cost to credit card companies of airline points was very cheap by international standards - 30 basis points average.

Twenty seven years on the market place has changed substantially. Costs of airline points have increased five-fold as Qantas and Virgin have used their market power – reflected in their frequent flyer customer bases 10.2 million for Qantas, 4.5 million Virgin and 2 million for international programs
The Australian banks' love affair with airline rewards had been a feature of the market during the 1990's. However, the strategic risks starting to mount up - or as one industry expert said "the chickens are coming home to roost". When combined with regulation this has fundamentally changed programs.

The concept of rewarding part of your customer base in return for "loyalty" is not new. The Australian experience demonstrates the folly of rewarding non-core customers. In essence, credit cards have evolved into an unsecured loan product with customers who revolve as the prime revenue source. Airline rewards, however, appeal to high volume transactor customers - many of whom never pay interest.

With 40% of spend now made by transactors, Australian banks are in a sense rewarding the wrong customers. The major banks have limited data-mining capability needed to identify which transactors have other key relationships with their bank. This makes it difficult to target transactors and recover the ever-increasing cost of reward points.

In 2018 most frequent flyer card programs have caps on points and high annual fees – the Sydney-Melbourne return flight ranges from $50,000 spend to a massive $147,000 spend. Consumer interest has declined and research shows attitudes have also changed significantly – reward points are no longer a key driver.

CASE STUDY – INTERCHANGE REGULATION

Its 15 years since RBA/Payments Board 'reforms' of credit card interchange effective from January 2003 – Australia was the first country to legislate such a change.

The RBA 'reforms' centred on increasing competition and opening up the sector as well as reducing interchange for Visa, MasterCard and Bankcard all third party networks. Also reducing merchant commissions for charge cards American Express and Diners Club – so called 'closed loop' networks which own both the merchant and cardholder relationship

Australia had two key regulators in the payments arena area: the Reserve Bank of Australia/Payments Board and the Australian Consumer and Competition Commission (ACCC). In 2000 the RBA decided to legislate, using the powers vested in it by the 1998 Payment Systems (Regulation) Act, and announced proposed reforms aimed at opening up the credit card system and increasing competition.

The proposed reforms had three main goals:

1. To provide open access to the card associations, namely Visa, MasterCard and the local Bankcard association, enabling non-banks to join and issue cards.

2. To reduce credit card interchange fees and make clear price signals to the payments market.

3. To withdraw the no-surcharging rule imposed on retailers by the card associations, to be effective January 2003.

The RBA targeted interchange to reduce by 40 basis points effective July 2003; this was delayed until September due to the Association court case.

RBA in its press release in 2003 claimed $400 million would be reduced as a result of their actions – the court case delayed this and credit card sales on Visa/MasterCard/Bankcard in 2002 totalled $99 billion x 0.12% reduction in interchange equalled $118.8 million in savings in year one. In 2003-4 the interchange reduction went from 1.40 to 1.28% average, by 2005 the $400 million per year was achieved when rates reduced to 0.97%. The summary of key data after 15 years is detailed in the table below -

	RBA INTERCHANGE DECISION – KEY FIGURES			
Credit/Charge cards	Total Sales	Visa, MC, Bankcard interchange	Amex merchant fees	Diners merchant fees
2003	$116.6B	1.40%	2.51%	2.36%
2017	$315.5B	0.74%	1.46%	1.79%
Reduction		-0.66%	-1.05%	-0.57%
% Change	**+270.5%**	**-47%**	**-42%**	**-24%**

Interchange for Visa and MasterCard (Bankcard scheme closed in 2006) has reduced by 47% while American Express 42% and Diners Club 24% while overall sales increased by 6.8% per year.

At the same time consolidation impacted the Australian credit card market with Bankwest and St George both active debit/credit card issuers purchased by CBA and Westpac resulting in decreased activity across the market. GE Money Australia was a casualty of the GFC in 2008 when the securitization market collapsed; the business was in maintenance mode until it was sold to private equity in 2015.

Surcharging become rampant in 2004 with many retailers, utilities, Telcos and airlines quickly adopting this 'new' revenue stream – belated Government moves to attempt to curb surcharging in 2007 and 2015 proved partially successful. Estimates vary widely as to how much revenue retailers generated – MasterCard's own research said $1.6 billion per year while others put the figure at $3-3.6 billion per year of new revenue for retailers.

The success of surcharging has also allowed some high street retailers, eCommerce providers and sellers of services to introduce split fee based prices whereas pre 2002 the final price included all costs – for example airfares and eCommerce sites now add cost components such fuel or shipping on top the base price thereby increasing their margins.

The other significant issue was the failure by the ACCC to supervise and require retailers to pass on the interchange savings to consumers. The net result retailers pocketed $118.8 million in year one, plus increased their revenues by starting surcharging – rampant by those with market power, monopolies or special services e.g. Telstra, Qantas, Utilities and specialist retailers.

The ACCC, RBA and ASIC fundamentally failed in their duty to compel all retailers/sellers to pass on these savings to consumers – in addition consumers then faced credit card surcharges.

The impact on charge cards initially was reduced revenues. In 2003-4 American Express and Diners Club held their rate reduction to 0.05% or $8.79 million with market share of 14.8% – however intense market pressure in 2004-6 rates fell – Amex to 2.19%, Diners 2.17%. Amex moved further with rate reductions to its current 1.46% at the same time expanded its offering including successful bank partnerships along with companion cards - this grew market share to peak at 20% in 2011. Diners Club owned by Citibank tried to resist rate reductions, only reducing to 1.79%, which has resulted in significant lost market share – annual sales reducing from $6.5 billion pre Ansett crash to $1.8 billion in 2017.

The debit card market has also seen dramatic change in the same period. Eftpos, the Australian owned debit network had market share in 2003 of 86%, in 2017 the market share is 42%. This dramatic fall in 15 years resulted from the major banks, who partially own eftpos Australia, preferring to issue Visa and MasterCard debit cards which charges much higher merchant fees for the same service. This has seen growth of $700 million in fees over 15 years plus the growth in other fees of 44.8% without any regularity action.

The debit card market has grown much faster than credit cards – debit card sales in 2002-17 grew at 11.1% CAGR while credit/charge cards grew at 6.8% CAGR – almost half the rate.

This explains why card issuers and associations have focused on increasing debit card pricing while regulators have not being paying attention. The fact that debit card

contactless payments have also exploded and the regulator did not pay close attention resulted in the switching bonanza for the card issuers which has still to be changed.

	DEBIT CARDS 2003 – 2017 – KEY FIGURES			
Debit Cards	Total Sales	Visa, MC, eftpos	Fee Revenue	Other Fees
2003	$60.16B	0.19c	$114.3m	$12.45
2017	$290.61B	0.28c	$813.4m	$18.03
Increase	$230.45B	0.09c	$699.1m	$5.58
% Change	**+383%**	**+47%**	**+711%**	**+44.8%**

Source – RBA Statistics

The impact of the RBAs three pronged 'reforms' in Australian has been insignificant and needs to be reviewed.

There have only been 2 major launches of non-bank credit cards in 15 years – Virgin Money and Aussie who 'launched' cards – in fact the back office was provided by Westpac and ANZ respectively and no significant product variations were ever launched. A number of small acquirers have attempted to launch these include Distra in 2001 (now owned by ACI) and Tyro 2003. Today Tyro is a niche acquiring/switch player reporting $10 billion in transactions which equates to 1.6% market share of the debit/credit card market.

No major overseas player has entered the Australian card market and those who did evaluations went to other international markets considered more favourable – the lack of positive credit reporting and the size of the market seen as key factors for not proceeding, rather than interchange.

BEFORE INTERCHANGE DECISION AUSTRALIAN CREDIT CARD ISSUERS' REVENUE 2002			
Revenue Source	A$billion	5 Year CAGR %	% Revenue
Interest earned	2.98	11	47
Annual fees	0.92	3	14
Interchange	1.63	5	25
Acquiring	0.54	4	8
Other fees	0.30	4	6
Total	**6.37B**	**6.5%**	**100**

Source – McLean Roche

A comparison of credit card revenue generated in 2003 and 2017 clearly show the changes in the operational mix. In 2003 interest earned and interchange totalled 72% of revenue.

In 2017 this had reduced to 57% - however annual card fees and other fees have increased from 20% of revenue to 31%. This clearly demonstrated the industry's ability to recover lost revenues and regulators need to be more vigilant and continue to review all parts of the credit card mix. The continued fixation with one revenue line – in this case interchange and the associated frequent flyer costs has prevented a wider view of the market and required action has not taken place.

AUSTRALIAN CREDIT CARD ISSUERS' REVENUE 2017			
Revenue Source	A$billion	15 Year CAGR	% Revenue
Interest earned	5.37B	4	42
Annual fees	1.869B	4.8	14
Interchange	1.925B	1.1	15
Acquiring	1.43B	6.71	12
Other fees	2.16B	14.07	17
Total	**12.754B**	**5.78%**	**100**

Source – McLean Roche

2017 Visa and MasterCard credit card sales totalled $261.3 billion – the reduction in interchange since 2003 is 0.66%, which equals $1.72 Billion in 2017.

American Express and Diners Club have reduced merchant rates to a combined blended rate of 1.52%, with sales of $54.282 billion in 2017. The savings calculated at a rate of 0.96% equal $521 million reduction in merchant fees for 2017. This modelling demonstrates savings of $2.241 billion interchange in the 2017 year which has been passed to retailers.

How have the card issuers recovered these monies since 2003?

- Annual fees – increased from $24 average in 2002 to $89 in 2017 (that is despite 3.8 million zero fee cards in Australia)
- New 3% FX fee on all foreign charges by credit and charge cards including eCommerce – plus inflated exchange rate
- Some statement dates reduced by 2 days x reduced funding average $315billion in sales and 52 billion in receivables.
- Frequent Flyer fee increases average $35
- Other fees that did not exist pre 2003 – late fees, over limit fees, increases in cash advance fees eg lotteries, gamble fees etc
- This does not include debit card revenues increasing by $700 million.

This type of holistic over view is required by regulators if they wish to understand a market segment such as credit cards. At its heart credit cards are a very high volume, low margin business with even the smallest changes in revenues or margins measured in basis points deliver significant changes in actual dollars.

The biggest loser has been the Australian consumer – the annual impact is staggering

- Fees have gone from $24 average 2002 to $89 average in 2017.
- Interest rates have remained excessively high – 2018 still average 17.5%pa
- All fees and charges have increased by estimated $180per card

- All foreign spend is now subject to 3% fee plus an inflated FX rate
- Most cardholders have 2 days less to pay their bills or incur interest.
- Frequent Flyer benefits have been cut by 75% in 15 years
- Other new fees have been implemented – late fees, over-limit fees etc
- Surcharged by numerous main street retailers and eCommerce providers
- New split fee based prices and charges which are the new form of surcharging – estimates have this $1-2.5 billion even after action on surcharging.

This can hardly be the outcome that regulators or Government wanted or expected. The consumer has received no benefit from the RBA reforms, yet has faced significant increases in costs while the credit card industry and retailers have benefited.

Conclusion

The impact of the RBAs three pronged 'reforms' in Australian has been insignificant to banks and retailers while consumers however have endured significant increases in fees and charges.

- There has been no substantial upswing in new Visa or MasterCard issuers or acquirers.
- Allowing surcharging and the 'free for all' pricing was a disaster and has had long term consequences for the Australian retail market.
- The interchange reductions at wholesale level reduced issuer revenues - these have been recovered by banks/issuers increasing retail price levels.
- Debit card sales have grown but revenue has grown much faster.
- Merchants have enjoyed reduced merchant fees, but have seen other fees and charges increased and not all of these have been passed to consumers.

The RBA/Payments board may have been too tightly focused at the wholesale prices of interchange and frequent flyer programs and have not reviewed retail fees and charges. This is clearly seen by the results of interchange 'reform' which has result in reductions, however the industry quickly moved to recover all of the lost revenue. Other significant issues in the payments market have received no action – for example the rapid rise of contactless payments resulted in the switching bonanza which has yet to be fixed.

The policy to allow uncontrolled surcharging was an intellectual exercise in policy making which proved to be an initial disaster. The lack of understanding how the

payments market works led to unlimited surcharges being applied with no supervision from any regulator and no government action to change what was untenable for 5 years. This surcharging change has also allowed split fee pricing to become main stream which has boosted retailer margins

A review of the interchange regulation process is needed with the benefit of hindsight – how can future regulation be improved? Are the roles of the various regulators clearly defined and do they work? Is there the correct span of control over all parts of the payment system? Is the Payment Systems Board correctly resourced?

CASE STUDY – FINTECH START UPS AFTERPAY and ZIP MONEY

One Fintech start-up group that's very interesting are phone apps which target 15-35 year olds offering instalment payments. Examples are AfterPay and ZipMoney are the two largest start-ups -- with OpenPay in its infancy.

They compete in Australia with existing 'legacy' players including banks, credit unions and unsecured lenders such as Certegy Ezipay (owned by Flexigroup) and GEs old business now Latitude (owned by PE- KKR, Deutsche Bank Varde Partners) offering instalments, debit cards, credit cards and personal loans.

Three years after launching AfterPay has 1.5 million customers and 11,500 retailers - ZipMoney has 550,000 customers and 4500 retailers.

AfterPay, ZipMoney, OpenPay and others, position themselves as new technology with a new revolutionary idea that has the capacity to change the way retail and online shopping is conducted globally - a rather big claim.

Consumers can use the app in-store or online and a sales can be split up to 4 instalments to be paid over 8 weeks, with zero fees if all payments are made on time. The retailer pays 4% on all transactions - consumers who fall behind or don't pay are charged late fees and penalties.

Consumer research is very strong as it appeals to budget conscious millennials and looks to cut across credit cards personal loans and even debit cards - this group are very averse to credit cards.

Sales to date - AfterPay second full year June 2017 $574 million - last 6 months $959 million which is 320% growth - ZipMoney is similar sales for 12 months $425 million - last 6 months up 180% - while sales are off a very low base its certainly showing growth.

The current business model is very vulnerable to higher interest rates and there are issues around credit and funding running at 60% of costs, but it’s certainly has traction in both Australia and New Zealand.

The Australian debit card market totalled $288.5B in 2017 so market share is small at 1.5%. The unsecured credit market totals $152 billion with instalments totalling $15 billion, these start-ups now have 1/3 share of that segment - this should be a red light for regulators given the high growth and young consumer group involved.

The industry see these new start-ups as updating an old idea, retail instalments by adapting mobile apps and taking limited advantage of online credit reporting. Many industry players are dismissive of AfterPay and ZipMoney due to the small market share - currently less than 1% of debit/credit card spend. Very few executives I speak to have even done a competitive overview of these start-ups and those that know them point to issues around AfterPay and its merger last year as a way of dismissing them due to lack of credibility.

The industry players recognize the technology step that After Pay has made. Concerns with the current revenue model is only sustainable in a low interest environment and if consumer are charged interest or other fees the model will implode

- numbers suggest a 1% increase in funding costs would be add as much as 28% to costs

The key issues for AfterPay revolve around their credit losses which are very high for an instalment product. The accounts for June 2017 showed bad and doubtful debts at $8.1 million on sales of $570 million (no split for bad debts vs doubtful debits) - which equals 1.42% sales. This is very high for an instalment loan which offers very limited risk through 4 repayments over 8 weeks. The average transaction size for Afterpay and Zip Money is $142 which means each repayment is $35.50. If a consumer misses one payment this should raise a warning flag within the collections area. The typical risk/credit loss rate for instalment lenders internationally is between 15 - 25 basis points of sales – therefore credit losses should be around $1 -1.4 million. Some allowance should be made as these start-ups ramp up and the figures disclosed in the annual accounts do not disclose bad debt write-offs.

Similar products completing with Afterpay and Zip Money are Laybuy and charge cards like American Express, Diners Club and JCB. Laybuy risks are mitigated by the retailer retaining to goods until the full price is paid. Charge cards bad debts range between 20-35 basis points of sales – this is a higher risk category than instalments as consumers have an 'unlimited spending' capability over one month and are required to pay the full balance each month

Instalments are not credit cards and have no relationship to them - yet AfterPay compares themselves to revolving credit cards which appears to be a way of justifying high credit losses. This also should be a major red light for regulators given the number of consumers involved and the financial performance verses similar overseas products .

ZipMoney appears to pay significantly more for its funding costs which is hard to understand - their accounts have funding at $11.5 million vs AfterPay at $5.2 million - yet ZipMoney has less sales at $410 million. ZipMoney also has high credit losses but not at the level of AfterPay.

One issue contributing to high credit losses is the lack of data made available for credit checks – this is being addressed by the Federal Government and could be partially resolved by July1st 2018 but only if the banks are required to provided 2/3 years of data. To make good credit/risk decisions unsecured lenders need 3- 5 years of comprehensive data, including all payments, increases in loans or limits and a total view of all borrowings.

Similar Fintech start-ups in the USA, UK and Canada include: Klarna, Affirm, FinanceIt and Splitit, verses traditional competitors such as PayPal Credit, GE Money and Cetelem

These start-ups fall under ASICs regime and it has to be questioned whether they have the skills, market knowledge and experience to manage a group of unsecured consumer lenders who also operate in retail payments. These start-ups also fall under the RBA/Payment Systems Board as they undertake payments. APRA has the skills most closely required but only regulates deposit taking institutions.

FINTECH AFTER A DECADE

2018 will mark 10 years since “fintech”, the buzz term for financial technology start-ups, entered the lexicon, threatening to totally upend banking as we know it.

It hasn’t yet. But will it?

Total Fintech Investments 2008-17 are US$53.9 Billion which includes Venture Capital (VCs) and other investors including private equity and crowd funding, representing 6.7% of total start-up funding.

The key question is whether this level of investment is sufficient for major disruption. Uber, for example, has raised US$11.5billion in funding and debt in 18 funding rounds since March 2009 and has success in some taxi markets, a much smaller segment than Financial Services. Uber has raised the equivalent of 21% of total Fintech funding. AirBnB raised US$2.95Billion and Snap (SnapChat) raised $2.63Billion – this is more than many Fintech categories have raised

The total Fintech investments by VCs from 2008 -17 are US$41.3 B which is only 7.4% of all VC investments – not a dominant category and well behind eCommerce.

The Major Start-Up Phases

In order to establish the health and likely success of Fintech it is necessary to review the major phases of investment – which include Angel Investing, VC start-up investing, Unicorn phase and Exit through IPOs or M&A sale.

The Major Fintech Start-up Investment Categories	US$ Total Investment - %
Peer to Peer Lending - lending to consumers using online, mobile and social media that matches lenders directly with borrowers	$6.24B or 15%
SME and Business Lending – mobile, online and social media lending services targeted at small to medium business	$2.83B or 7%
Student Loans – direct lending to tertiary students using mobile, online and social media channels	$1.93B or 4.6%
Point Of Sale/ Online Payments - tech services targeting online payments, point of sale payments and related services	$2.89B or 7%

Crypto Currencies - cyber or digital asset designed to work as a currency or a value exchange.	$2.85B or 7%
Digital Banking – retail banking using social media, mobile and web based services often supported by tools and rewards e.g. budget tools.	$3.5B or 8.5%
Local and International Remittances – remittances services for local person to person payments and international transfers using social media, mobile and the web.	$1.67B or 4%
Wealth/Investment and related Tech – investment and pension products using mobile, social media and the web.	$3.4B or 8%
Insurances and Tech – insurance and tech services using web, mobile and social media.	$2.24B or 5.4%

Source – McLean Roche

The leading segment is P to P Lending with US$6.24 Billion followed by 4 segments: Digital Banking, Investment Tech, SME lending and POS/Online Payments. It is significant that these nine segments total 67% of VC Fintech investment. It is likely therefore that any major disruptor will emerge from these segments.

Unicorns are start-up companies that achieve valuations of US$1 Billion dollars or more. US research house CB Insights has 217 start-ups rated as Unicorns with valuations of $752 Billion – Uber is the top rated Unicorn valued at US$68Billion

Fintech companies in the Unicorn list are considered the most successful of the start-ups and the nearest to an exit by IPO or acquisition. There are 24 Fintech Unicorns with valuations of US$75.95 Billion, 10% of the total. Of those, 20 of the Unicorns are in the US and China with one in India, Netherlands, Sweden and United Kingdom - the top 3 are Lu Com China $18.5B value, Stripe USA $9.2B value, One97 India $5.7B value.

Fintech IPOs and Exits

Fintech IPOs formed the smallest part of the Fintech M&A sector. Research by McLean Roche Consulting reviewing M&As in 2014-17 shows 87% of transactions are M&A acquisitions of Fintechs by other, often larger players with 8% unable to IPO or find a buyer – leaving 5% which IPO. There were 77 Fintech IPOs from 2009-2017 with US$22.5 Billion raised in the IPO's. Since 2008 72% of Fintech IPOs are still trading – 28% are no longer trading.
The peak years for IPOs was 2010 with 18, 2014 with 17 and 2015 with 12 while in 2016-7 year to date there have only been 6 with a total of $1 billion raised. This raises the question was 2010-2015 the high water mark and has the peak for Fintech IPOs past?

MAJOR FINTECH IPOs SINCE 2008 WITH INVESTMENT RAISED

2009	Verisk Analytics	US$1.8B
	Emdeon	367m
	CBOE	339m
2010	LPL Financial	470m
	Fleetcard	292m
2011	Groupon	700m
	Bankrate	292m
2012	Vantiv	500m
2013	Evertec	506m
	Springleaf	358m
2014	Synchrony Financial	2.90B
	Markit	1.30B
	Lending Club	870m
	Tri Net	240m
2015	TransUnion	627m
	Inovalon	600m
	Black Knight	441m
	Square	243m
	Evolent	196m
2016	Bats	253m
	Yintech	101m

Data - FT Partners Fintech Report 2017

True Disruption or Hype?

Fintech's first decade is high on hype and spin but very low on delivering its 'vision' of a total disruption and decimation of Financial Services. There is no Fintech equivalent of Facebook, Google, Skype or Apple. That is not to say Fintech companies won't be successful and build current ideas into growth oriented start-ups which will be acquired through M&A.

The sector however faces some serious head winds which will challenge investors, start-ups and those interested in M&A.

Competition and increasing interest rates will challenge the valuations which are currently 50-60% higher than other investment categories and will require faster deliver and increased performance. This is a significant challenge for Fintechs given the barriers to building scale quickly in Financial Services.

The modest level of investment to date at US$53.9Billion is not enough to create the next Financial Service giant – Facebook founded in 2004 with an initial US$500,000 investment by Peter Thiel, had 11 founding rounds with $2.3Billion invested prior to 2012 IPO - its currently market cap is US$520 billion. The largest Fintech sector, P2P lending, has only $US6.2 Billion in total investment over 9 years, with market cap of $3.6 Billion.

The P2P example is salient. Launched when money was cheap, the sector has realised it is not quite that easy to build a billion-dollar business. The incumbent banks are protected by considerable regulation, have vast resources and will not fall over easily, this is not the taxi industry.

Performance to date is subpar – with major scandals including US$7.6Billion fraud by Ezubao in China, Lending Club and OnDecks stock being trashed due to doubtful lending practices while Prosper lent $US48,000 unsecured to the two San Bernardino terrorists months before the attach.

These incidents feed the narrative that start-up lenders do very little that is new or innovative other than offering speed while falling back on existing industry tactics once they have some scale.
The other segments include digital banks, factoring companies, point of sale payments, online services and currency exchanges are now a dime a dozen lacking scale. Most of the ideas are laser focused on a small segment and will not build scale quickly.

The enthusiastic start-ups key challenge is the realisation that the world is changing and they have to modify their dreams of world domination and accept an M&A outcome and work for a bank. This in many cases won't work as the cultures are vastly different between the young freewheeling start-ups and banks with their structure, politics, regulation and conservative approach to risk and technology.
Previous aggressive, trend oriented acquisitions by banks including monoline mortgage and credit card companies in the 90s and mobile wallet companies in early 2000s all ended with faded dreams for all parties. Fintech in its current state could well repeat this experience.

Australian Fintech – a Delayed Response

Fintech activity has been slow to emerge in Australia.

The key question is have these entrepreneurial start-ups missed the investment boom as global figures show Fintech investment peaked in 2015-16 as detailed in the KPMG Fintech investment reports.

Australia was a late starter in Fintech with initial momentum only starting in 2014 with a number of Fintech companies emerging. Venture Capitalists (VCs) in Australia have been slow to investment in this category preferring to invest in later stage companies with revenues and profits.

After a slow start there has been progress and now an infrastructure is emerging including a national representative body, 15 incubators and accelerator hubs, state government investment in both hubs and the category and a number of VCs and banks investing in Fintech companies.

In 2016 the top 10 Fintechs included in the KPMG Top 100 report were – Prospa, Tyro, Society One, Spriggy, Hashching, Brighte, Data Reublic, Afterpay and Identitii.

Regulators need to understand the Fintech space in more detail and set up working groups to gain more insights and information about the sector. Attention needs to payed to how the Open Banking standards apply to payments and how this will be delivered.