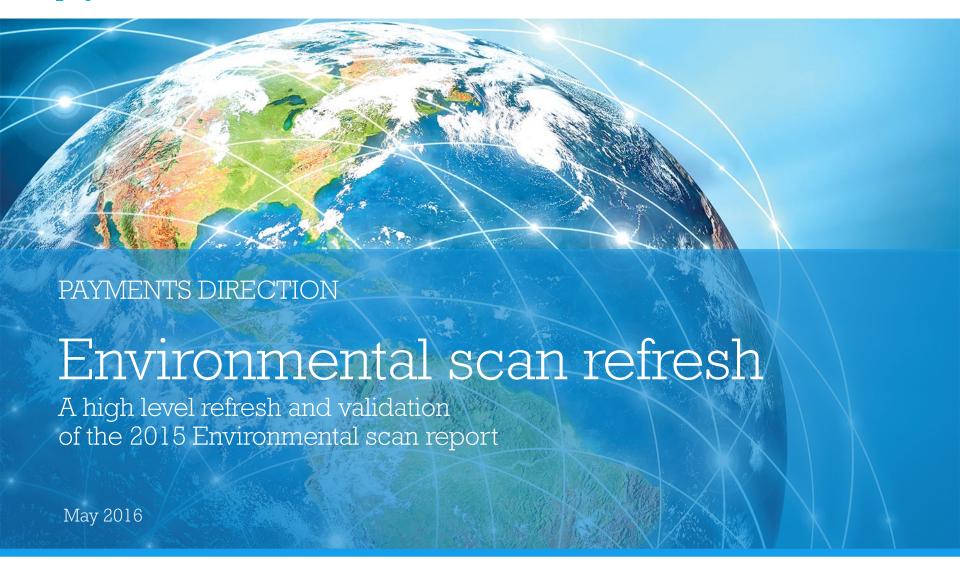
paymentsnz



Executive summary

Executive summary

- Our 2015 Environmental scan presented the global trends and influences likely to affect our payments ecosystem over the next decade. In that report we identified five themes relevant to our future ecosystem:
 - 1. Payments are increasingly continuous and international in orientation.
 - 2. Payments are increasingly faster, more mobile, more informative and linked across the value chain.
 - 3. Payments infrastructure refreshes and renewals are widespread and arise for a number of reasons.
 - 4. Financial services and payments regulation is expanding and aiming to produce more inclusive and resilient systems.
 - 5. Payments associations face rising expectations.
- Our 2016 Environmental scan refresh represents a high level point review as to whether our 2015 work remains directionally accurate and up to date. Our refresh corroborates our original findings and also points to the increasing pace of change underway across payments around the world.
- Our refresh identifies seven global influences consistent with the 2015 Environmental scan:
 - 1. Many countries are undergoing macro payment system modernisation initiatives.
 - 2. Increased levels of coordination between different regulators on the development and implementation of global payments regulations and standards.
 - 3. Adoption of ISO 20022 is becoming increasingly widespread and common.
 - 4. A surge of real time payments initiatives has occurred, particularly in South East Asia, USA, Canada and Europe.

- 5. The regulation of cross-border payments is increasingly complex and disruptive payments providers are offering mobile-based cross-border solutions, particularly for lower value payments.
- 6. Mobile technology continues to provide the basis for a significant amount of opportunity, innovation, and disruption and for changes in customer behaviour.
- 7. Expectations on payment associations continue to be very high.
- In our refresh we also identified five areas which have grown in importance and visibility since our 2015 Environmental scan was completed:
 - Distributed ledger technologies: these technologies are being evaluated for their potential to address known pain points in payments.
 - Digital security and identify management: new approaches are being developed to manage security and identity in the digital world.
 - Broadening ecosystem / broadening regulation: regulatory models for payments are beginning to change to accommodate an increasingly complex and varied ecosystem.
 - Technology access and multi-faceted interoperability: regulators, incumbents and payment associations are
 evaluating the payments systems implications of non-standard technology deployment and third party access to
 payment system information.
 - Integrated and embedded payments: payments are increasingly integrated with and embedded in a wide range of technologies used by consumers.

- Most of these five areas were implicit in our 2015 Environmental scan results. That said, the above areas are now increasingly significant in shaping the ecosystem of the future.
- Our 2016 refresh underscores the need for New Zealand's payment industry to carefully assess how best to develop our payments ecosystem so we continue to have an ecosystem that is progressive, flexible and open to change and so New Zealand remains a world leader in payments.

Introduction and approach

Introduction and approach

- Our 2015 Environmental scan was based on a wide ranging review of research material relevant to the NZ economy and its payment systems. That report did not set out to prescribe how New Zealand's ecosystem should be developed. Rather it identified five themes which capture the trends and influences relevant to our future ecosystem:
 - 1. Payments are increasingly continuous and international in orientation.
 - 2. Payments are increasingly faster, more mobile, more informative and linked across the value chain.
 - 3. Payments infrastructure refreshes and renewals are widespread and arise for a number of reasons.
 - 4. Financial services and payments regulation is expanding and aiming to produce more inclusive and resilient systems.
 - 5. Payments associations face rising expectations.
- The 2016 Environmental scan refresh involved a high-level desktop review of relevant research material to confirm our research fact base is up to date and our initial scan remains directionally correct. As the refresh was based on a high level desktop review it did not replicate the depth of research that underpinned our 2015 work.
- In the remainder of our refresh we examine:
 - 2016 global influences that are consistent with our 2015 Environmental scan.
 - Areas which have grown in significance and visibility since our 2015 Environmental scan was completed and are now increasingly significant in shaping the ecosystem of the future.
 - How the five themes from our 2015 Environmental scan have evolved since we completed our initial research and provide our assessment of the strength of the global trends we observed.

Global influences and what's new

Global influences: 2016

Our refresh reinforces and validates the importance of our original findings and identifies seven global influences which are consistent with the 2015 Environmental scan:

- 1. Many countries are undergoing macro payment system modernisation initiatives.
- 2. Increased levels of coordination between different regulators on the development and implementation of global payments regulations and standards.
- 3. Adoption of ISO 20022 is becoming increasingly widespread and common.
- 4. A surge of real time payments initiatives has occurred, particularly in South East Asia, USA, Canada and Europe.
- 5. The regulation of cross-border payments is increasingly complex and disruptive payments providers are offering mobile-based cross-border solutions, particularly for lower value payments.
- Mobile technology continues to provide the basis for a significant amount of opportunity, innovation, and disruption and for changes in customer behaviour.
- 7. Expectations on payment associations continue to be very high.

What's new since 2015?

Our refresh identified five areas which have grown in significance and visibility since our 2015 Environmental scan was completed:

- 1. Distributed ledger technologies: An increased emphasis on the use of these technologies to address some known pain points.
 - "A wide range of explorative and commercial activity is now underway to consider and develop innovative uses of blockchain technology for central bank currencies and other financial assets." ¹
 - "The distributed ledger feature of the technology continues to be the point of interest for financial services firms, as it is expected to provide solutions for several payments infrastructure-related issues." ²
 - "Blockchain promises innovation in corporate banking business models", and "blockchain promises to streamline cumbersome, costly and risky correspondent networks." ³
- 2. Digital security and identify management: A renewed focus on the need for new approaches for managing security and identity in the digital world.
 - Development and deployment of new technologies and coordinated approaches to ensure the safety of payments.
 Particularly on managing digital identity, data management, and cyber security strategies.⁴
 - Examples include the proliferation of biometric identify verification tools being used in finance and banking industries⁵, digital identities, tokenization of card payments and cyber security national strategies.⁶

- 3. Broadening ecosystem / broadening regulation: A growing awareness regulatory models for payments will need to change to accommodate an increasingly complex and varied ecosystem.
 - Globally the breadth of organisations in the business of payments is widening beyond traditional banks, including Fintech companies, telcos, handset manufacturers and technology companies.
 - Banks remain at the center of payments, but are facing disruption and competition from new quarters. In response banks are taking up collaborative, partnership and commercial opportunities.
 - Regulators are beginning to respond to the broadening of the ecosystem by increasing their reach.⁸
- 4. Technology access and multi-faceted interoperability: More emphasis on the payments systems implications of non-standard technology deployment and third party access to payment system information.
 - Historically the focus was on interoperability between players in the payment system. While this remains critical, new challenges are emerging on payment systems interoperability with other industries and third party processors. Particularly with respect to historical transaction data, account balances and payments initiation, e.g. PSD 2.9
 - Regulatory responses emerging setting open access, licensing and security requirements, e.g. PSD 2.¹⁰
 - API's emerging as an "unstoppable force" between the technology architectures and the banks. 11 Potential inefficiencies giving rise to new API standards being developed. 12
- 5. Integrated and embedded payments: Payments are increasingly being integrated with and embedded inside technologies used by consumers.
 - The smartphone enabled drive towards an integrated mobile experience has stimulated innovation in payments, offering customers more convenient and streamlined ways to pay, e.g. Uber and <u>Klarna</u>
 - Payments are likely to become increasingly embedded with other processes and "linked to other events in the network, enabled by the combination of multiple sets of data." ¹³

Theme summary: 2016/15 comparisons

2016 Theme summary

Key theme from 2015	2016 Refresh
Payments are increasingly continuous and international in orientation	Global commerce, regional harmonisation and coordination, technical innovation, greater connectedness between countries, and the expectation of greater availability continue to have a significant impact on payments.
Payments are increasingly faster, more mobile, more informative and linked across the value chain	Faster payments, more mobile and informative payments which are linked across the value chain continue to be important in shaping the payments ecosystem of the future.
Payments infrastructure refreshes and renewals are widespread and arise for a number of reasons	Global activity over the last 12 months confirm payments infrastructure refreshes and renewals continue to be widespread.
Financial services and payments regulation is expanding and aiming to produce more inclusive and resilient systems	The reach of payments regulation continues to significantly broaden with regulatory requirements becoming increasingly complex.
Payments associations face rising expectations	Regulators broaden their remits and often encourage or set payment system modernisation expectations. There is a strong trend towards national-level long-term roadmaps. Expectations on payments associations continue to increase.

2016 theme conclusion

In 2016 payments systems continued to be influenced by global commerce, regional harmonisation and coordination, technical innovation, greater connectedness between countries, and the expectation of being available beyond traditional business hours.

Cross-border payments and global remittances

2015 findings

Cross-border payments are expanding: driven by growth in trade flows.

Global remittance flows are growing: driven by rapidly falling barriers to global mobility, employment and standardisation.

Comparison 2016 vs 2015

- Global remittances to all countries contracted by 1.7% in 2015 the lowest growth since the GFC, due to weak oil prices and other economic factors.¹⁴
- Major international banks continue to close correspondent banking accounts of money transfer operators to limit exposure to money laundering and other financial crimes.¹⁵
- Low-value cross-border payments for small and medium-sized enterprises and B2P segments are experiencing high levels of innovation. ¹⁶
- High penetration of mobile banking and innovative mobile financial service offerings in Africa and Latin America have led to a surge of firms offering low-value cross-border payments by offering mobile virtual network services.¹⁷
- SWIFT's <u>Global Payments Innovation Initiative</u> aims to reduce barriers and to streamline the cross-border payments experience to deliver same day use of funds, transparency and predictability of fees, end to end payments tracking and the transfer of rich payments information.

• Mixed Global Trend: The global economy has temporarily disrupted overall remittance growth. Cross border barriers are in a state of flux, with technological advancement decreasing barriers, while higher regulatory requirements are increasing barriers.

Payment systems as a platform for change

2015 findings

• Payment systems are being used as a platform for change: there is a sustained move towards regional payments system cooperation.

Comparison 2016 vs 2015

- High levels of global collaboration to further develop and adopt the ISO 20022 payments messaging standard. For example; a 17-country collaboration to agree a specific deployment of ISO 20022 to support real-time payments¹⁸, as well as the development of an ISO 20022 standard to replace the 40 year old cards messaging standard ISO 8583.¹⁹
- ISO 20022 to support real-time payments¹⁸, as well as the development of an ISO 20022 standard to replace the 40 year old cards messaging standard ISO 8583.¹⁹
- ASEAN countries have adopted an Economic Community Blueprint 2025 to facilitate the seamless movement of goods, services, investment, and capital. This includes developing settlement infrastructures, promoting regional linkages between payment systems and harmonisation of standards, and encouraging market practices based on international best practices, such as the use of ISO 20022.²⁰
- The European Union (EU) is continuing its payments harmonisation efforts, including mandating a real-time payments platform.²¹

• While such cross-border real-time payments initiatives are likely to grow in number and size, building new payment platforms across international jurisdictions remains a challenge.²²

Conclusion

• Strong Global Trend. High levels of regional cooperation in developing and adopting common standards and best practice.

Payments contribution to GDP growth

2015 findings

• Payments are being leveraged to contribute to GDP growth: fast electronic payments are contributing to GDP growth by removing friction from the payments process and making the process more secure.

Comparison 2016 vs 2015

- Significant investment is occurring in developing new real time and mobile payments infrastructures, often as a part of a wider plan to modernise an economy. These countries have all either gone-live or announced the development of real time systems within the last 12 months; Malaysia, Sri Lanka, Thailand, Turkey, USA, Netherlands, Philippines. Other countries such as Singapore and China launched their real time systems within the last 2 years.
- Canada's ISO 20022 adoption will deliver an estimated economic benefit to Canadians of up to \$4.5 billion over 5 years.²³

Conclusion

• Strong Global Trend. Fast electronic payments regularly form a cornerstone of a country's economic modernisation strategy.

Payments enable borderless and continuous economic activity

2015 findings

• Payments are increasingly mirroring borderless and continuous economic activity: there is an increasing expectation payments system availability should facilitate the continuous economic activity of companies and consumers.

Comparison 2016 vs 2015

• Countries that have recently implemented 24/7 payment system availability include: <u>China</u> (2014), <u>Sri Lanka</u> (2015), <u>Singapore</u> (2014), <u>Australia</u> (2017) and <u>Japan</u> (in 2015 extended settlement system availability as a step towards 24/7).

Conclusion

• Strong Global Trend. Is expected to remain a strong future trend driven by customer expectations on availability, the roll out of 24/7 real time payments, and infrastructure renewal introducing new capabilities.

Theme 2: Payments are increasingly faster, more mobile, more informative and linked across the value chain

2016 theme conclusion

Faster payments, more mobile and informative payments which are linked across the value chain continue to be important in shaping the payments ecosystem of the future

Real-time payments (RTP)

2015 findings

RTP are increasingly important. RTPs are closing a clear gap between meeting customer demands for immediacy and the capability of traditional batch processed deferred payments.

Comparison 2016 vs 2015

- SWIFT's recent findings are that a payment might be completed long after an item has been ordered, purchased and delivered. SWIFT conclude it is inefficient for the financial supply chain to lag behind in today's digital economy. "If we can communicate with whoever we want, wherever and whenever we want, thanks to advances in mobile and digital technology, we expect to be able to move money on the same basis, with finality and security." 24
- The following countries have all ether gone-live or announced the development of real time systems within the last 12 months the following countries are in addition to the 18 countries examined in Payments NZ's "Payments Now" research paper; Europe (2018), Malaysia (2017), Sri Lanka (live 2016), Thailand (2017), Turkey (live 2016), USA (TBD), Netherlands (2019), Philippines (2016),
- <u>China</u> (live Q4 2014), <u>Hong Kong</u> (TBD) and <u>Canada</u> (TBD).
- "Implementation of immediate payments systems will continue to accelerate globally." 25

Strong Global Trend. Real-time payments are on a trajectory to become a global norm in the medium term.

Payments value chain extension, convergence and continuous innovation

2015 findings

- The payments value chain is being extended: pre-payment, payment processing and post-payment services are becoming better integrated, sometimes by new entrants blending payment propositions into their product or service offerings.
- Increasing payments convergence is taking place: at both a channel and product level.
- Payment systems are subject to continuous innovation: as a result of disturbances from digital technologies, regulation, intensifying competition and new market entrants.

Comparison 2016 vs 2015

- Payments is increasingly integrated into the search-evaluate-buy-bond value chain. New digital solutions combine and link offerings across different industries throughout the value chain, from search (pre-visit), evaluate (decision), buy (payment) and bond (post visit).²⁶
- Digital challengers and fintech innovators are contributing to unprecedented levels of competition for payments revenue among a widening field of players.²⁷

Conclusion

• Strong Global Trend. The rate of innovation, disruption and change in payments continues be a major global theme.

Payment instruments

2015 findings

• Payment instruments are being re-examined: to determine how those instruments sit together as a whole and whether they are properly aligned with future expectations.

Comparison 2016 vs 2015

• The Australian Payments Plan will review existing payment systems to "deliver a strategic assessment to identify any capability deficits or enhancement opportunities in existing payment systems." ²⁸

Conclusion

• Trend has not materialised as expected. There are few recent examples of a holistic review of payment instruments.

Payments internationalisation

2015 findings

• Payments are supporting internationalisation: global payments environments are evolving to support the internationalisation of commerce.

Comparison 2016 vs 2015

• A key driver behind the adoption of the richer payments message format ISO 20022 is to support cross border payments and to facilitate the transfer of richer information through international value chains. Countries that have either adopted or are in the process of adopting ISO 20022 payments messaging now encompass the majority of the world by any measure including: by population, economic size or geography.²⁹

• Strong Global Trend. A strong trend, becoming stronger over time as more jurisdictions adopt ISO 20022 across a wider range of use cases.

Payments mobility

2015 findings

• Mobility in payments is increasingly important: in both developed and developing economies across three broad fronts: card based, closed loop and account to account.

Comparison 2016 vs 2015

- Proximity mobile payments are forecast to triple in value in the USA in 2016.³⁰
- Global mobile payments are forecast to reach \$USD 2.8Tn by 2020, up from USD \$0.4Tn in 2014 (compound annual growth rate of 39.2%).³¹
- 42% of consumers with smartphones conduct research online while in a store. 32

Conclusion

• Strong Global Trend. A strong trend, becoming stronger over time as smart phone penetration and consumer dependence on smart phones increase.



Theme 3: Payments infrastructure refreshes and renewals are widespread and arise for a number of reasons

2016 theme conclusion

Global activity over the last 12 months confirm infrastructure refreshes and renewals continue to be widespread

Infrastructure in a state of flux and is enabling change

2015 findings

- Infrastructure is in a state of flux: due to widespread changes to reduce costs, comply with increasing regulation and minimise risk.
- Infrastructure is enabling change: the role of infrastructure as a catalyst for change is often documented in national payments plans.

Comparison 2016 vs 2015

- The payments industry has witnessed many front-end innovations in the recent past, but innovation in back-end payments processing and infrastructures often lag behind due to various factors, such as siloed legacy systems and continued focus on complying with increasing regulatory demands. Cappemini consider the build of next-generation infrastructure will transform payments processing.³³
- Infrastructure renewal features in many national payments plans (refer to Theme 5 for details).

Conclusion

• Strong Global Trend. Refreshing and renewing infrastructures remains a common global theme.

Infrastructure supporting RTP

2015 findings

• Infrastructure is supporting RTP: infrastructure evolutions are often focussed on enabling real-time functionality.

Comparison 2016 vs 2015

- As mentioned earlier, the many countries have gone live, or have concrete plans to introduce RTP, all of which require either new infrastructure or the evolution of existing infrastructures.
- "Increasing customer demands for anytime/anywhere, immediate payments, and omni-channel payments." 34

Conclusion

• Strong Global Trend. Real-time payments is one of the main drivers of infrastructure renewal.

Infrastructure platform consolidation

2015 findings

• Infrastructure platforms are consolidating: to the point where a single platform can handle multiple payment instruments.

Comparison 2016 vs 2015

Very few global examples exist. The best examples are Singapore's FAST real time system, which can handle direct
debits and credit transfers, and Sri Lanka's <u>Common Card & Payment Switch</u> which handles ATMs, cards at POS, mobile
payments, RTP and direct debits (although in both instances the older batch-based systems have not been retired) and
France's CORE platform.

• Trend has not progressed as quickly as expected. Infrastructure consolidation has not been a focus over the past 12 months. New payments platforms do not necessarily replace older payments platforms.

Central bank modernisation

2015 findings

• Central bank modernisation is underway: central banks are in the process of modernising their systems by way of significant upgrade or full system replacement.

Comparison 2016 vs 2015

- The Reserve Bank of NZ is <u>upgrading its settlement system</u> (2016).
- The Reserve Bank of Australia upgraded their settlement system in preparation to settle low value real time payments from the NPP (2015).³⁵
- China implemented the CNAPS II (2014) settlement system, and many other central banks have upgraded or enhanced their settlement systems.

Conclusion

• Strong Global Trend. Continuous global activity of various central banks upgrading their respective settlement systems, including NZ.

Shared infrastructure

2015 findings

• Shared infrastructure requires common solutions: there is growing recognition that the development of shared infrastructure across the payments value chain may give rise to issues of governance, standardisation, funding and investment arrangements.

Comparison 2016 vs 2015

- The only scenario where 'common solutions' issues have not applied is when a central bank has driven, implemented and then operated and governed a new infrastructure, e.g. China's implementation of the CNAPS II programme which upgraded existing retail and high value infrastructures, introduced ISO 20022, and a real time system.
- Most other scenarios that develop shared infrastructure rely on a mix of central bank and industry coordination to resolve issues of governance, standardisation, funding and investment arrangements.
- The exceptions are some Scandinavian countries such as Sweden's <u>Swish</u> (2012) and <u>Denmark's Nets real time 24/7</u> <u>system</u> (Dec 2014), which were developed collaboratively by the industry.

Conclusion

• Moderate Global Trend. Regulatory and industry arrangements are used to manage shared infrastructure.

Pace of development

2015 findings

• Differing pace of development: resulting in emerging markets that are 'leapfrogging' developed economies.

Comparison 2016 vs 2015

- Under-developed financial systems but highly developed mobile money networks see mobile payments playing an important role in the transformation of financial products and services across the developing world.³⁶
- "Developing economies are witnessing disruptive innovation in payments and are leapfrogging the developed nations."

Conclusion

• Strong Global Trend. But of limited direct relevance to NZ's payment ecosystem given the relative sophistication of that ecosystem and our high rate of financial inclusion.



Theme 4: Financial services and payments regulation is expanding, and aiming to produce more inclusive and resilient systems

2016 theme conclusion

The reach of payments regulation continued to significantly broaden with regulatory requirements becoming increasingly complex.

Regulation of financial market infrastructure, risk management, think globally act locally.

2015 findings

- Re-regulation of financial market infrastructures: regulators are moving to strengthen their powers over financial market infrastructures.
- Concerted risk management: there is greater recognition of the systemic risk associated with payment systems and management of that risk.
- Focus on managing Participant failure: there is significant regulatory focus on managing Participant failure and reducing the contagion effect.
- Think globally, act locally: there is a trend for the domestic regulatory agenda to be set by extraterritorial regulation.

Comparison 2016 vs 2015

- Wide spread central bank / regulator adoption of the Principles for Financial Market Infrastructures (PFMI). The Bank of International Settlement's reported in June 2015 that 79% of assessed countries (excludes NZ) have fully adopted the payment system related PFMI standards.³⁸
- The <u>Financial Stability Board</u> has set recommendations for global financial systems including <u>key attributes</u> to prevent systemic failure with those recommendations being adopted by central banks (including the RBNZ).
- Vastly different domestic approaches to the application of international standards.³⁹

• Strong Global Trend. Widespread central bank adoption of global standards is occurring, and these are being implemented domestically via a range of different approaches.

Security and minimisation

2015 findings

• Secure and minimise: regulators are looking to limit opportunities for lost GDP and tax revenues through illegal activity and the shadow economy.

Comparison 2016 vs 2015

- <u>OECD</u> continues to lead significant work on global tax avoidance and evasion.
- 'Panama Papers' have made the subject very topical.

Conclusion

• Strong Global Trend. But of limited direct relevance. In comparison to many jurisdictions NZ's payment ecosystem is well structured and relatively sophisticated and its tax system is well regarded Internationally.

Modernisation drivers

2015 findings

• Regulators are driving modernisation: some regulators are requiring current system infrastructure be replaced to support new products and services and to increase settlement speeds and lower settlement risk.

Comparison 2016 vs 2015

- USA's Federal Reserve led the 'payments improvement' work in the last 12 months, with a focus on RTP and payments messaging standards adoption.
- Recently Asian central banks had either mandate-setting roles or lead implementation roles for payments infrastructure modernisation. Recent examples can be found in the Philippines, Singapore, China, Sri Lanka, Thailand, Japan, etc. The most common change was upgrading settlement systems and implementing RTP.
- Payments harmonisation efforts continue to be driven by the European Commission.
- "Regional regulatory initiatives, such as implementation of immediate payment systems and ISO 20022, are increasingly cascading to global scale." ⁴⁰

Conclusion

• Strong Global Trend. New Zealand is in a small minority of countries where the regulator relies on industry solutions to drive modernisation.

Regulators expanding the pool

2015 findings

• Regulators are expanding the pool: by increasingly promulgating regulations to expand the pool of payment providers or to remove barriers restricting innovation in payments.

Comparison 2016 vs 2015

• In the U.K. the Payment Systems Regulator announced its <u>market review into the supply of indirect access to payment systems</u>.

- The EU's <u>Payments System Directive 2</u> will directly regulate non-traditional third party payment providers.
- Regulatory bodies are increasingly directly regulating or certifying third party payment providers or mobile payment operators, e.g. <u>Sri Lanka</u>, China, South Korea, <u>Europe</u>.
- Mobile payments are bringing new complexity, challenges and ambiguity to regulators, due to an expanded set of stakeholders (e.g., mobile network operators, banks and nonbanks, mobile handset manufacturers, and software application developers, merchants and consumers).
- Regulators are trying to balance the need to encourage the growth of m-payment technology with the obligation to protect consumers from new issues that may arise.⁴¹
- Primary regulatory priorities generally remain on the systemically important financial infrastructures, driven by the Bank of International Settlements.

• Moderate Global Trend. The number of stakeholders being directly affected by payments regulation continues to grow in both breadth and depth.

Protecting consumers

2015 findings

• Protecting consumers is an increasing priority for regulators: there is a specific focus on transparency, fraud prevention and fee limitation.

Comparison 2016 vs 2015

Following some high profile compromises, South Korea has introduced new resilience regulation and enforcement.

- The Reserve Bank of Australia is currently consulting on changes to <u>card payment systems</u> including certain fee levels.
- Introduction of stricter 'know your customer requirements', e.g. in China.
- The new U.K. Payment System Regulator "considers and promotes the interests of all the businesses and consumers that use them" (payment systems). 42
- The EU's Payment System Directive 2 has a major focus on fraud prevention, consumer protection in digital payments and bans cards surcharging fees. 43

• Strong Global Trend. How that trend plays out around the world depends on the applicable regulator's priorities, scope and powers.

Increasing inclusion

2015 findings

• Increasing inclusion is an important outcome: regulation is increasingly being used to promote financial inclusion.

Comparison 2016 vs 2015

 Most developing and some developed countries have strategies to use payments to improve financial inclusion, particularly in rural areas.

Conclusion

• Strong Global Trend. But limited relevance to our domestic payments ecosystem given NZ's very high financial inclusion rates.



Theme 5: Payments associations face rising expectations

2016 theme conclusion

Regulators broaden their remits and often encourage or set payment system modernisation expectations. There is a strong trend of clear and inclusive national-level long-term roadmaps. Expectations on payments associations continue to be high and are increasing.

High expectations, regulatory reform, overlap

2015 findings

- Expectations have never been higher: Expectations on payments, the payments industry, and, by extension, on payments associations have never been higher and are likely to continue increasing.
- Regulatory reform and expansion: Payments regulation is increasingly driven by global compliance requirements and expanding regulatory scope beyond inter-bank clearing to the whole end-to-end payments ecosystem.
- Payments associations and regulatory overlap: There is a significant overlap between the mandate of payments associations and regulatory public policy interests, which can lead to tensions between industry bodies and regulators.

Comparison 2016 vs 2015

- "Regulators are increasingly turning their attention to facilitate innovative schemes and also creating a level playing field for banks and non-banks alike." 44
- "Entry of non-traditional players is driving regulators to develop guidelines and frameworks so as to ensure a level playing field." ⁴⁵

• The European Commission's digital agenda, the remit of the U.K.'s Payment Systems Regulator, and the increased global focus on virtual currency regulations demonstrate a shift in regulatory emphasis towards innovation.⁴⁶ These increasingly overlap with industry initiatives and commercial interests.

Conclusion

• Strong Global Trend. Globally there are many instances of payments regulators broadening their remit to include innovation, technological advancements, and non-traditional payments providers.

Long-term national payments plans

2015 findings

• Long-term national payments plans are of growing importance to payments associations: The combination of payments system complexity, its reliance on shared infrastructure, rapidly changing technologies, the time and coordination required to deliver major change, and regulatory interest in economic efficiency mean that all payments associations (looked at during our research) have or are working on long-term plans.

Comparison 2016 vs 2015

- The <u>Australian Payments Plan</u> was launched in Dec 2015, and sets out a strategic direction for and major initiatives in payments over the next 10 years.
- Canadian Payments Association, with regulators support, made significant progress in 2015 on their <u>Modernising Canadian Payment Systems initiative</u>.
- In 2016, the Dutch Payments Association, as a part of their wider national plans, is consulting on the requirements for a <u>new instant payments</u> platform.

• There are a number of instances where the central bank sets the national payments strategy and the industry collaborates on its delivery. For example, the European Commission's instant payments (real-time) endorsement in November 2015 is being led by the European Banking Association. In the United States the Federal Reserve 'payments improvement' initiative has set a strategy for industry to deliver on through, for example, The Clearing House's partnership with VocaLink.

Conclusion

• Strong Global Trend. NZ is in a small minority of developed countries without a clear national payments plan setting a macro strategic direction.

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- In 2016, the Dutch Payments Association, as a part of their wider national plans, is consulting on the requirements for a <u>new instant payments</u> platform.
- There are a number of instances where the central bank sets the national payments strategy and the industry collaborates on its delivery. For example, the European Commission's <u>instant payments</u> (real-time) endorsement in November 2015 is being led by the <u>European Banking Association</u>. In the United States the Federal Reserve 'payments improvement'

Stakeholder engagement

2015 findings

• Widening stakeholder engagement: Technology-driven expansion of the payments ecosystem beyond banks and traditional clearing houses has expanded stakeholder outreach by both regulators and payments associations.

Comparison 2016 vs 2015

- In 2015 and 2016 the CPA engaged with over 100 organisations when developing the <u>vision for the Canadian payment</u> ecosystem.
- In Australia, APCA has significantly expanded its stakeholder membership base and reach. <u>The Australian Payments</u> <u>Council</u> is representative of the whole payments ecosystem. The <u>Australian Payments Plan</u> includes linkages with other government and industry initiatives.
- In the United States the Federal Reserve leads 331 organisations and has significantly advanced their 'payments improvement' work in the last 12 months, with a focus on RTP.

Conclusion

 Moderate Global Trend. The drive for more inclusive stakeholder engagement continues to be evident in major developed markets.

Governance structures

2015 findings

• In response to changing demands and expectations, payments associations are renewing their governance structures to increase independence and widen engagement.

Comparison 2016 vs 2015

• Payments UK was launched in June 2015 as a trade association designed to represent their members in an advocacy and lobbying role. This replaced the UK Payments Council. This change was in response to significantly increased regulation and the introduction of a new Payments Systems Regulator.

Conclusion

• Ad hoc. Following a number of payments association governance renewals, only one notable example occurred in the last 12 months.

- Our 2016 refresh confirms the global trends and influences we identified in our 2015 Environmental scan continue to be highly relevant in shaping our future payments ecosystem.
- There is an increasing pace of change underway across payments around the world with more jurisdictions deploying solutions which allow payments to be faster, more informative and increasingly mobile and seamless.
- These developments are taking place against the backdrop of an increasingly complex regulatory environment and across a more varied ecosystem which is rapidly embracing the use of new emerging technologies, such as distributed ledgers.
- Increasingly regulators are driving modernisation and removing barriers restricting innovation in payments. The expectations on payments associations around the world continue to increase.
- Our 2016 refresh underscore the need for a careful and well coordinated assessment as to how best to develop New Zealand's payments ecosystem so we continue to have a progressive, flexible and open ecosystem and so New Zealand remains a world leader in payments.

References

- 1. Payments NZ, The Rise of Blockchain
- 2. Capgemini, Top 10 Trends in Payments in 2016, Trend #5
- 3. McKinsey, 16 in 2016 Trailblazing trends in global payments, trend #12
- 4. Australian Payments Council, Australian Payment Plan, pages 8-9,
- 5. The Global Biometrics Market
- 6. "The UK Cyber Security Strategy. Protecting and promoting the UK in a digital world"
- 7. McKinsey, How the payments industry is being disrupted
- 8. Capgemini, Top 10 Trends in Payments in 2016, Trend #2
- 9. SEPA For Corporates 5 things you need to know about PSD2
- 10. Ibid
- Monetary Authority of Singapore Chief Fintech Officer Sopnendu Mohanty, <u>interview</u>
- 12. W3C web payments API standards, Also Open Bank Project
- 13. Australian Payments Council, Australian Payment Plan, pages 6-7,
- 14. World Bank's Migration and Development Brief, April 2016
- 15. Ibid
- 16. Capgemini, Top 10 Trends in Payments in 2016
- 17. Ibid
- 18. ISO 20022 Org, Real-Time Payments Group
- 19. ISO 20022 Org, Cards and Related Retail Financial Service messages
- 20. ASEAN Economic Community Blueprint 2025, A.4, Para 18 (ii)
- 21. European Banking Association, Instant Payments
- 22. BNY Mellon, <u>Innovation in Payments</u>, page 7
- 23. Canadian Payments Association, <u>The economic benefit of adopting</u> the ISO 20022 payment message standard in Canada
- 24. SWIFT making real-time payments really work
- 25. Capgemini, Top 10 Trends in Payments in 2016, Trend #4
- 26. McKinsey, 16 in 2016 Trailblazing trends in global payments, trend #15, Exhibit 3
- 27. McKinsey, 16 in 2016 Trailblazing trends in global payments, trend #14

- 28. Australian Payments Plan, page 11
- 29. ISO 20022 Organization, <u>Introduction Map</u> Payments messaging page 2
- 30. eMarketer
- 31. Future Market Insights
- 32. Think with Google
- 33. Capgemini, Top 10 Trends in Payments in 2016, Trend #3
- 34. Capgemini, Top 10 Trends in Payments in 2016, page 9
- 35. Reserve Bank of Australia, <u>Fast Settlement Service Information Paper</u> 3
- 36. Financial Consumer Agency of Canada, <u>International Review: Mobile</u>
 Payments and Consumer Protection
- 37. Capgemini, Top 10 Trends in Payments in 2016, Trend #10
- 38. Bank of International Settlements, <u>Implementation monitoring of PFMIs</u>: Second update to Level 1 assessment report, June 2015
- 39. Reserve Bank of New Zealand, <u>Consultation Document: Crisis</u>
 <u>Management Powers for Systemically Important Financial Market Infrastructures</u>, May 2016, Appendix 1 Summary of international approaches
- 40. Capgemini, Top 10 Trends in Payments in 2016, Trend #2
- 41. Financial Consumer Agency of Canada, <u>International Review: Mobile Payments and Consumer Protection</u>
- 42. Payment System Regulator Purpose
- 43. SEPA For Corporates 5 things you need to know about PSD2
- 44. Capgemini, Top 10 Trends in Payments in 2016, Trend #2
- 45. Ibid
- 46. Ibid