



PAYMENTS DIRECTION

2020 Environmental scan refresh

A high-level refresh and validation of the 2019
Environmental Scan Report

August 2020



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Executive summary

Executive summary

- Our 2019 Environmental Scan was based on a wide-ranging review of research material relevant to the New Zealand economy and its payment systems and identified six themes that are material to the future payment ecosystem. They are:
 1. Payments are increasingly continuous and international in orientation.
 2. Payments are increasingly faster, more mobile, more informative, less visible and better linked across the value chain.
 3. Payments infrastructure refreshes and renewals are widespread.
 4. Financial services and payments regulation is expanding, and aiming to produce more inclusive and resilient systems.
 5. Payments security and authentication is a key concern.
 6. Payments associations face rising expectations.
- Our 2019 scan noted the global picture contained considerable nuance. There were marked regional differences in innovation pathways, payment preferences, infrastructure deployments, regulatory settings, and in the level of trust in financial institutions. That scan identified some notable shifts in points of emphasis:
 - Meeting end user expectations for payments is now central to thinking about future payment system design.
 - Faster, more mobile and more informative are now essential characteristics of payments.
 - Real-time payment capabilities are the new norm.
 - Invisible or autonomous payments are on the rise.
 - Regulatory authorities, while still concerned about financial resilience, have a much wider set of touch points, in part because there are more regulatory and policy agencies with an interest in payments and related issues.

- Payment associations and allied bodies need to consider a widening group of issues, and an increasingly diverse group of interested end users, and regulatory and policy stakeholders, as payments become ever more integrated into everyday interactions.
 - Consumer experiences in domestic payments are increasingly setting expectations for how international payments should operate.
 - There is a renewed appreciation of the debilitating impact cyber vulnerability could have on payment systems, instruments and end users.
 - Finding the right balance between low friction user experiences and the safety and security of payments and payments data in an increasingly open ecosystem is now a more significant challenge.
- Our 2020 Environmental Scan Refresh represents a high-level review as to whether our 2019 work remains directionally accurate and up to date.
 - It corroborates our original findings but considers the stalling or deferring of some payments related policy initiatives that were previously in play, as Governments move their focus to managing COVID-19. Some of our assumptions about increasing consumer mobility may need to be rethought. Previously, consumers and their devices were on the move and enterprises stayed still. Is that about to change? Cyber resilience is now more important than ever as more of the economy is online more often.
 - The COVID-19 global health emergency is a game changing moment in history which will result in a profound and perhaps lengthy recession. As the scale of the outbreak became clearer ANZ's Chief Economist noted:
 - *"The global and domestic slowdown is going to be severe. This realisation has seen financial markets all but capitulate and has galvanised policy makers. Central banks around the world have moved to large-scale stimulus and taken measures to ensure financial systems remain stable. Governments are doing what they can to cushion the blow."*¹

¹ <https://www.anz.co.nz/content/dam/anzconz/documents/economics-and-market-research/2020/ANZ-Weekly-Focus-20200320.pdf>

- The COVID-19 crisis has the potential *“to accelerate or intensify many economic and metropolitan trends that were already underway, with huge implications of their own.”*²
- The structural changes that have accelerated include:
 - The move towards online everything. Nearly all sectors of the economy, from retail to personal services to health, are suddenly online to a greater or lesser degree. For example, health care technology now offers the ability to package audio/videoconferencing, secure messaging, electronic scheduling, analytics and reports, billing and online payment, image and file uploads, integration with EHR systems, and e-prescribing.³
 - The need for deeply engaging digital experiences. The depth of digital experience is important in a world where in-store browsing is no longer perceived as being without risk, and the widespread availability of broadband internet is commonplace.
 - The push towards automation. Automated processes facilitate quick delivery of products to consumers, especially where payments are integrated as part of the purchase process.
 - The ability to remote work. Platforms like Zoom and Microsoft Teams have established it is possible to manage a fully distributed workforce, although some business processes have yet to be fully integrated into the remote working environment.
 - An emphasis on closing the digital divide. The pandemic has sharpened the focus on access to high-speed broadband, and on the exclusion that occurs when certain sections of a community do not have access to either devices or the enabling infrastructure.

The shifts of emphasis we identified in 2019 remain on point in 2020; several of the shifts have grown more apparent since 2019, in part due to the impact of the current public health emergency.

² <https://www.brookings.edu/research/how-covid-19-will-change-the-nations-long-term-economic-trends-brookings-metro/>

³ <https://www.mobihealthnews.com/news/europe/telehealth-time-covid-19>

Shifts in points of emphasis from 2019	In 2020	Comment
Meeting end user expectations for payments is now central to thinking about future payment system design.	Stronger	The current global health crisis is causing a rapid transition towards a more extensive digital payments ecosystem, that relies less on physical payment instruments. Policy makers and payment system users are looking for solutions that both facilitate reduced physical interactions and accelerate the speed of disbursed funds.
Faster, more mobile and more informative are now essential characteristics of payments.	Stronger	There are new opportunities to embed payments experiences that automate and facilitate repetitive purchasing, and to free up consumers from physical interactions. ISO 20022 is rapidly becoming the foundational language of payments.
Real time payment capabilities are the new norm.	Stronger	The ability to support real-time capabilities is increasingly a hygiene factor in modern payment system design but there is a realisation that access to data unlocks far greater value from those capabilities.
Invisible or autonomous payments are on the rise.	Same to stronger	The ability to support 'just walk out' shopping experiences is arguably more important in a world where public health considerations are paramount, however there are unanswered questions about how well that model can be replicated beyond grocery and convenience stores.

Shifts in points of emphasis from 2019	In 2020	Comment
Regulatory authorities, while still concerned about financial resilience, have a much wider set of touch points, in part because there are more regulatory and policy agencies with an interest in payments and related issues.	Same to stronger	Regulatory authorities have been highly focused on the impact of COVID-19 as a live test of operational resilience across the payment ecosystem. Some regulatory authorities have been looking closely into central bank digital currencies as a means of developing a new mechanism for managing both liquidity and physical cash.
Payment associations and allied bodies need to consider a widening group of issues, and an increasingly diverse group of interested end user, and regulatory and policy stakeholders, as payments become ever more integrated into everyday interactions.	Stronger	Open banking continues to be a point of emphasis across payment associations, policy makers and other stakeholders. The principles of open banking are now extending to other sectors. Payment associations continue to develop roadmaps to help guide or facilitate future ecosystem development.
Consumer experiences in domestic payments are increasingly setting expectations for how international payments should operate.	Same	Consumers continue to expect there should not be significant differences between domestic and cross-border payment experiences.
There is a renewed appreciation of the debilitating impact cyber vulnerability could have on payment systems, instruments and end users.	Stronger	Preventing the disruption of operations and critical infrastructure from cyber threats is an essential priority for financial institutions, payment system users, payment associations, and regulatory and policy bodies.

Shifts in points of emphasis from 2019	In 2020	Comment
Finding the right balance between low friction user experiences and the safety and security of payments and payments data in an increasingly open ecosystem is now a more significant challenge.	Stronger	Delivering low friction, highly personalised consumer experiences often requires a wide range of commercial partnerships to be formed. That in turn increases the number and type of attack vectors that can put personal data at risk.

Introduction and approach

Introduction and approach

- Our previous Environmental Scans (2015, 2017 and 2019) have been designed to identify the key themes which capture the trends and influences relevant to our future ecosystem. The purpose of the scans is not to prescribe how the payments ecosystem in New Zealand should develop, that is an issue best addressed by a combination of industry decisions and market forces.
- This refresh involved a high-level desktop review of relevant research material to confirm our knowledge base remains up to date and that our most recent 2019 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 2019 scan. This is consistent with our approach to the refresh of earlier scans, completed in 2016 and 2018.
- In the remainder of this refresh we:
 - Revisit each of the themes from our 2019 scan.
 - Set out a key takeaway conclusion from our high-level desktop review of relevant material.
 - Cite several examples from different jurisdictions in evidence of our takeaway conclusion.
 - Present selected New Zealand developments.
- Before doing that, we comment on the COVID-19 pandemic. The pandemic has significantly changed some of the assumptions about how domestic and international economic affairs are ordered. One of the implications of COVID-19 is that our digital life will get much stronger. Even where physical interactions take place, they are likely to do so in a noticeably different way than in the pre-COVID-19 world.⁴

⁴ <https://www.forbes.com/sites/johncumbers/2020/05/07/former-google-ceo-eric-schmidt-has-five-key-insights-for-entrepreneurs-navigating-the-coronavirus-impact/#590492302b3f>

COVID-19 pandemic

Impact of COVID-19

- The World Health Organisation declared COVID-19 a pandemic in mid-March 2020.
- The pandemic expanded rapidly from a public health emergency to an extraordinary shock to the global economy, with far reaching consequences for both the real economy and financial markets.
- Governments and central banks instituted a combination of fiscal stimulus and monetary initiatives as part of a 'do whatever it takes' response, effectively keeping economies on life support.
- Governments around the world imposed significant and widespread lockdown measures, effectively closing most economies as part of their response to the public health emergency. Many economies are now emerging from the most stringent phase of those lockdowns, some more successfully than others.
- Since the 2008 Global Financial Crisis (GFC) central banks and financial regulators have focused on building resilience into their financial systems. Banks now have substantial capital and liquidity buffers, and mortgage borrowing by households has been curbed in many countries. That means banks are predominantly entering the pandemic in a much better shape than when the GFC unfolded.⁵ In the New Zealand context, the Reserve Bank of New Zealand (RBNZ) note that *"banks have strong buffers of capital and liquidity. These have increased substantially in the past ten years in response to increased regulatory requirements."*⁶

⁵ <https://www.kcl.ac.uk/news/qcgbf-role-macroprudential-policy-covid-crisis>

⁶ <https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Financial%20stability%20reports/2020/fsr-may-20.pdf?revision=5e407e63-0ed6-409d-8a84-fdf62b65526e>

Global financial sector and payments ecosystem impact

- Regulators have relaxed rules around bank capital requirements, to ensure banks have sufficient lending capacity to support the economy during the crisis.⁷
- Regulators have also called on banks to suspend dividend payments, to help preserve capital in order to support the economy as the recession takes hold.⁸
- The Chair of the Financial Stability Board's Standing Committee on Supervisory and Regulatory Cooperation noted that *"the global financial system entered the crisis with much enhanced resilience and, with central bank intervention, the liquidity stress in March was largely contained. But the world still faces an unprecedented level of uncertainties."*⁹
- The collapse of consumption caused the volume of payments in some sectors to decline steeply. At the same time, there was a significant push towards digital payment systems, and specifically contactless interfaces for several reasons:
 - Digital payment solutions have the potential to help governments deliver cash transfers efficiently and quickly to their intended beneficiaries, including those in the informal sector.¹⁰
 - Contactless digital payment solutions lower the risk of virus transfer when point of sale terminals serve multiple people.¹¹
 - Consumers avoided interacting with instruments, like cash and cheques, that may have the potential to transmit infection or because social distancing measures make it problematic for consumers to use those instruments.

⁷ <https://www.kcl.ac.uk/news/qcgbf-role-macroprudential-policy-covid-crisis>

⁸ <https://www.bankofengland.co.uk/prudential-regulation/publication/2020/prs-statement-on-deposit-takers-approach-to-dividend-payments-share-buybacks-and-cash-bonuses>

⁹ Virtual Meeting on Policy Responses to COVID-19 "Financial policymakers discuss responses to COVID-19 with the private sector", Financial Stability Board Press Release 26 May 2020

¹⁰ IMF Digital Solutions for Direct Cash Transfers in Emergencies, 2020

¹¹ <https://www.bain.com/insights/the-covid-19-tipping-point-for-digital-payments/>

- Regulators and industry are also promoting digital payments through measures such as increasing the limit on contactless transactions.¹² Bain & Company estimate that by 2025, adoption of digital payments could accelerate by 5 percentage points to 10 percentage points above what was previously anticipated.¹³
- It seems highly likely COVID-19 will accelerate several structural changes that have been underway across most economies for some time. These include:
 - The move towards online everything.
 - The need for deeply engaging digital experiences.
 - The push towards automation.
 - The ability to remote work.
 - An emphasis on closing the digital divide.

¹² <http://brc.org.uk/news/corporate-affairs/retailers-combat-covid-with-contactless/>

¹³ <https://www.bain.com/insights/contactless-payments-time-has-come-snap-chart/>

Asia Pacific ecosystem impact

- Across the Asia Pacific region, the following trends are either evident or are expected to become apparent as a result of the pandemic:
 - More online transactions and fewer instore transactions, and physical transactions become more complex.
 - A significant uplift in contactless transactions using cards, wearables or mobiles, and a reduction in the use of transactions using cash/notes.
 - More low value and fewer high value transactions.
 - Increase in contactless payments limits across Asia by 50%-100%.
 - Fewer transactions in hotels, and gyms and for leisure and travel.
 - More online entertainment and gaming transactions, as more people stay at home and remain indoors (either by compulsion or by choice).
 - A shift in card usage from credit to debit and prepaid, as consumers manage their money more cautiously in an adverse environment.
 - Fewer credit transactions amongst the employed as people reduce their appetite for risk and delay purchases.
 - More credit transactions for everyday purchases amongst those that are self-employed and unemployed, as they manage short-term cashflow constraints.¹⁴

¹⁴ <https://www.linkedin.com/pulse/impact-assessment-covid-19-payments-apac-john-ryan/>

COVID-19 New Zealand policy responses

- The Government announced an Economic Response Package to cushion New Zealanders against the impacts of the virus, to position New Zealand for recovery, and to help reset and rebuild the economy to support long term recovery.
- Significant components of the Government response include:
 - Approximately \$2.8 billion in business tax changes.
 - A \$6.25 billion Business Finance Guarantee Scheme (BFGS) to provide short term credit to financially stressed but solvent SMEs and the introduction of a Term Lending Facility to provide low cost funding to banks on terms that compliment the BFGS.
 - Temporary 'safe harbour' changes to the Companies Act to support businesses facing insolvency due to COVID-19 to remain viable.
 - An estimated \$12.2 billion wage subsidy scheme is helping to keep workers connected to their jobs.
 - A \$2.8 billion increase in benefit payments.
 - A support package for homeowners and businesses which includes a six-month interest and principal payment deferral for mortgage holders and SMEs who have lost income because of the virus.
- In May 2020 the Government released [Budget 2020: Rebuilding Together](#) which builds on the above policy response.
- In August 2020, in response to the return of COVID-19 in the community, the Government announced additional support measures to protect jobs and businesses.¹⁵

¹⁵ <https://www.beehive.govt.nz/release/govt-protect-jobs-and-businesses-extra-support>

Theme refresh - summary

Introduction

- In this section of our refresh we:
 - Return to each of the themes from our 2019 scan.
 - Present a takeaway conclusion from our high-level desktop review of relevant material completed as part of this refresh.
 - Cite several examples from different jurisdictions in support of that takeaway conclusion.
 - Present selected developments from New Zealand.
- The six themes from our 2019 scan were as follows:
 1. Payments are increasingly continuous and international in orientation.
 2. Payments are increasingly faster, more mobile, more informative, less visible and better linked across the value chain.
 3. Payments infrastructure refreshes and renewals are widespread.
 4. Financial services and payments regulation is expanding and aiming to produce more inclusive and resilient systems.
 5. Payments security and authentication is a key concern.
 6. Payments associations face rising expectations.



Theme 1: Payments are increasingly continuous and international in orientation

The expectation payments will always be on, irrespective of payment scenario, geographic location or the currency in question is central to thinking about future payment system design.

Major Takeout From 2020 Refresh

The idea consumers want payments to mirror the ease and lack of friction in the rest of their digital lives is now well entrenched. This is especially true in a world where there may be restrictions on personal mobility, the use of cash and where there is a reduced emphasis on physical interactions. *"People want payment systems that are low in friction, rich in content, and delivered in context."*¹⁶ The move to leverage common standards and solutions to ensure greater domestic and regional interoperability continues at pace.

Selected Examples

- COVID-19 has had a profound impact on consumer behaviour however, it is not yet clear to what extent those new behaviours will become entrenched. The pandemic has raised concerns about the role of cash and specifically whether physical cash could spread the coronavirus. Additionally, cash is of little use in a world where personal mobility and in-store retail opportunities are limited. According to a survey completed by EY, COVID-19 *"has contributed to a 57% fall in cash usage among respondents, alongside a rise in payments using credit cards (7% net), debit cards (10% net) and online payment tools (14% net). Where people are still purchasing from physical stores, contactless appears to be the preferred payment option (up 34% net). Furthermore, twenty percent of respondents expect to be using less cash and more contactless payments over the next couple of years."*¹⁷

¹⁶ <https://www.fisglobal.com/-/media/fisglobal/files/pdf/white-paper/modern-payments-for-modern-banking-white-paper.pdf>

¹⁷ https://www.ey.com/en_gl/banking-capital-markets/four-ways-covid-19-is-reshaping-consumer-banking-behavior

- Several central banks have actively communicated the risks associated with virus transmission via cash are low. This both bolsters trust in cash and helps universal acceptance.¹⁸
- To illustrate the scale of the shift towards digital, in Singapore more than 100,000 DBS Bank customers made their very first digital transactions in the period January to March 2020.¹⁹
- The emphasis on improving the performance of retail payment systems continues. The Bank for International Settlements notes *“retail payment systems are becoming increasingly convenient, instantaneous and available 24/7. Nevertheless, payment systems still suffer from shortcomings in two areas: access and cross-border payments.”*²⁰
- The need to rationalise and streamline global cross-border payments networks has become increasingly pressing. At its February 2020 meeting, G20 Finance Ministers and Central Bank Governors asked the Financial Stability Board (FSB) to coordinate a three-stage process to develop a roadmap to enhance cross-border payments. The FSB has flagged the following issues for further investigation:
 - What steps could the public or private sector take to increase overlaps in operating hours across payment systems in different time zones?
 - What steps could the public or private sector take to increase the use of standard message format protocols or other mechanisms to ensure interoperability?
 - What other steps could be taken to address and handle other operational aspects such as data quality, transparency of fees and status of processing?²¹

¹⁸ <https://www.bis.org/publ/bisbull03.pdf>

¹⁹ <https://www.spglobal.com/ratings/en/research/articles/200603-tech-disruption-in-retail-banking-singapore-banks-are-front-runners-in-digital-race-11402164>

²⁰ https://www.bis.org/publ/qtrpdf/r_qt2003e.pdf

²¹ <https://www.fsb.org/2020/04/fsb-reports-on-its-work-to-develop-a-roadmap-to-enhance-global-cross-border-payments/>

- The provision of cross-border payment services may be handicapped because market barriers, such as domestic processing mandates, discriminatory licensing, foreign equity caps and data localisation requirements are adversely impacting the ability of providers to achieve economies of scale.²²
- Common standards and solutions continue to be central to improving regional interoperability across multiple time zones and currencies. Ongoing collaboration in the ASEAN region has resulted in the adoption of QR code technology to help businesses make cross border payments to Singapore, Myanmar and Cambodia, with the facility expected to go online somewhere in the second or third quarter of 2020.²³
- SWIFT's gpi solution continues to make significant inroads by speeding up cross border payments, making them more transparent and more traceable. SWIFT gpi transferred \$77T in 2019, up from \$40T in 2018.²⁴
- The adoption of cloud technologies is increasingly evident across the payment ecosystem because those technologies offer the advantages of business agility, faster innovation and have the potential for greater cyber resilience. Research suggests up to a quarter of the activities of the largest global banks may already be in the public cloud or on software hosted in the cloud.²⁵
- Blockchain and distributed ledger technologies continue to advance, sometimes organised around strategic initiatives to advance digital transformation across a broad frontier. The German government has now adopted its national blockchain strategy comprising 44 measures which are intended to promote blockchain technology in Germany. As part of that strategy the government is piloting blockchain-based digital identities.²⁶

In New Zealand:

- Recognising the increased use of digital and online services over the lockdown period will hasten the decline of cheques as a payment instrument, several banks have announced plans to phase out cheques.

²² http://www3.weforum.org/docs/WEF_Connecting_Digital_Economies_2020.pdf

²³ <https://internationalfinance.com/thailand-introduce-qr-code-cross-border-payments-asean/>

²⁴ ACI Real-time Payments Modernization - Leveraging ISO 20022, Universal Confirmations and SWIFT gpi for payments innovation

²⁵ <https://www.bankofengland.co.uk/-/media/boe/files/report/2019/future-of-finance-report.pdf?la=en&hash=59CEFAEF01C71AA551E7182262E933A699E952FC>

²⁶ <https://www.linklaters.com/de-de/insights/blogs/fintechlinks/2019/september/germany-paves-the-way-for-dlt-securities>

- New Zealand moved in step with many other countries around the world, including Australia and the United Kingdom, to help restrict the spread of COVID-19 by rolling out an increased temporary PIN limit of \$200 for contactless card payments, up from the previous \$80 limit.²⁷
- The RBNZ noted *“the speed with which this change was agreed and safely implemented in far from normal circumstances is a good outcome, and represents a welcome degree of co-operation between the various entities involved.”*²⁸
- New Zealand has concluded a Digital Economy Partnership Agreement with Singapore and Chile. Among other things, that agreement commits the parties to support *“the development of efficient, safe and secure cross border electronic payments by fostering the adoption and use of internationally accepted standards, promoting interoperability and the interlinking of payment infrastructures, and encouraging useful innovation and competition in the payments ecosystem.”*²⁹

²⁷ <https://www.paymentsnz.co.nz/resources/articles/increasing-pin-limit-contactless-payments/>

²⁸ <https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Financial%20stability%20reports/2020/fsr-may-20.pdf>

²⁹ <https://www.mfat.govt.nz/assets/FTAs-agreed-not-signed/DEPA/DEPA-Chile-New-Zealand-Singapore-21-Jan-2020-for-release.pdf>



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

Faster, mobile and informative payments which are linked across the value chain are ever more regarded as essential future ecosystem characteristics. A new development in this theme for 2019 is the morphing of integrated payments into invisible or autonomous payments.

Major Takeout From 2020 Refresh

While faster payments continue to be a point of emphasis, there is a growing awareness of the role of data in unlocking the value of faster payments and in developing new digital business models based on data. Previously customers and their devices were on the move and enterprises stayed still. Is that about to change in the post COVID-19 world?

Selected Examples

- Faster payments capabilities are increasingly the cornerstone of payments modernisation initiatives. More than 50 countries have either implemented or plan to implement faster payments solutions, some of which are sponsored by regulators.³⁰
- In the United Kingdom questions have been raised about whether enough is being done to accelerate the growth of faster payments, especially in terms of making it easy for institutions to connect to the service.³¹

³⁰ <https://www2.deloitte.com/us/en/insights/industry/financial-services/financial-services-industry-outlooks/banking-industry-outlook.html>

³¹ <https://www.finextra.com/blogposting/18643/accelerating-innovation-in-financial-services-is-faster-payments-doing-enough>

- While faster payments offer the advantage of speed, there is a growing awareness of the importance of data. Data exposes a range of additional efficiencies, value propositions and insights. In many respects data is poised to be a dividend of faster payments.³² Access to data allows faster payment offerings to clearly differentiate those offerings from current payment instruments.³³
- While the move towards real-time capabilities is clear and highly evident across a range of jurisdictions, incumbent financial institutions are faced with having to clear a number of hurdles before those capabilities can be developed and deployed. Those hurdles include *"competing projects, service disruption and compliance initiatives."*³⁴
- The sentiment that payments will be about more than just transactions continues to develop. A possible future orientation will be towards *"payments+ services - a whole slew of new value-added services, such as identity protection, real-time cash management, and new purchasing insights that customers and merchants alike would value, should be the norm."*³⁵
- COVID-19 has the potential to establish long terms shifts in consumer behaviour so that online is now the default setting and in-store retail is more of an exception. EY note *"once consumer behaviour changes, it tends to stick. Getting daily basics delivered has become "the norm," and people may opt to continue with this convenience even when it's no longer required."*³⁶
- The trend towards less visible and increasingly integrated payments seems to be well accepted by industry. In Accenture's recent survey on instant, invisible and free payments, 240 payments executives from banks in 22 countries were surveyed with 73% of respondents noting that payments were already invisible or will be over the next 12 months; even more so for consumer to-consumer (84%) and consumer-to-business (83%) payments.³⁷

³² <https://www.americanbanker.com/news/not-just-speed-data-transfer-another-dividend-of-faster-payments>

³³ <https://www.aciworldwide.com/insights/expert-view/2020/january/real-time-payments-global-state-of-play-lessons-learned-and-how-to-make-money>

³⁴ ACI Keeping Pace with Innovation in Real-time Payments

³⁵ <https://www2.deloitte.com/us/en/insights/industry/financial-services/financial-services-industry-outlooks/banking-industry-outlook.html>

³⁶ https://www.ey.com/en_gl/banking-capital-markets/how-covid-19-is-reshaping-retail-payments-in-europe

³⁷ https://www.accenture.com/_acnmedia/PDF-108/Accenture-Global-Payments-Pulse-Survey-2019.pdf#zoom=50

In New Zealand:

- As part of the COVID-19 response there are moves to improve payment terms so invoices are paid sooner, especially from large corporates to SMEs.³⁸ At the same time there have been greater calls for real-time payment capabilities to compliment those moves.³⁹
- Payments NZ continues to progress its Payments Direction initiative, which considers what the payments ecosystem of the future will look like. In 2020 we have worked on developing a Payments Modernisation Plan which sets out a range of considerations for our future payments system, including a future view out to 2030, and a range of core capabilities which would deliver on that future view. We are aiming to socialise this plan with a range of stakeholders in late 2020.

³⁸ <https://www.scoop.co.nz/stories/PA2005/S00173/driving-prompt-payments-to-small-businesses.htm>

³⁹ <https://www.stuff.co.nz/business/prosper/advice/121423066/why-realtime-payments-can-boost-new-zealands-post-covid19-economy>



Theme 3: Payments infrastructure refreshes and renewals are widespread

Global activity confirms the movement towards real time infrastructures and capabilities is a new norm, as is a pattern of speeding up non real-time payments. The adoption of ISO 20022 messaging standards as part of legacy system replacements or new system developments is picking up pace.

Major Takeout From 2020 Refresh

The development of real-time payment capabilities continues to be a significant point of emphasis, as does the realisation of the potential strategic value of ISO 20022, both in its own right and to unlock the potential of real-time payments. Non-commercial entities continue to play a more visible role in the development of the future of the payment ecosystem, with that involvement ranging from support for faster payments, to the development of government-backed digital currencies, to greater roles in AML processes and digital identity.

Selected Examples

- Real-time payment capabilities continue to grow and are increasingly regarded as the new normal. This growth is driven by a blend of customer expectations, competitive pressures, the desire to phase out paper instruments, regulatory influences, and the increasing globalisation of commerce.⁴⁰

⁴⁰ https://www.ey.com/en_gl/banking-capital-markets/why-real-time-payments-are-the-new-normal-and-how-payment-providers-can-adapt

- In the euro area, the European Central Bank notes faster payments have the potential to become the new normal, acknowledging there may be differences in the faster payments journey between each of the countries in that area.⁴¹
- The Federal Reserve's announcement that it intends to enter the faster payments space as an operator of FedNow marks a long-awaited development⁴², but there are questions about how that will impact other fast payment offerings in that jurisdiction.⁴³
- ISO 20022 is quickly becoming *"the global language for financial messaging"* with banks using the shift to ISO 20022 to help drive their wider transformation and modernisation journeys.⁴⁴
- The idea that ISO 20022 is now serving as a major lynchpin in the evolution of the payments ecosystem is echoed by Deloitte who note *"we also expect public and private efforts to begin coalescing around the development of global industry standards, such as ISO 20022, to govern payments messaging, interoperability, interfaces, payment engines, and integration."*⁴⁵
- The growth of ISO 20022 is a result of:
 - SWIFT actively driving adoption and the expansion of the SWIFT gpi service.
 - Platform modernisation programmes where legacy payment systems and core infrastructure are upgraded, replaced or transitioned into a cloud deployment model.⁴⁶
- Research amongst 774 financial institutions across the United States, United Kingdom, Singapore, France, Germany, Hong Kong and the United Arab Emirates suggests 86% of global banks are looking to use APIs to enable open banking capabilities in the next 12 months. That same research revealed calls for the harmonisation of regulations between geographies, with those

⁴¹ ECB, "Are instant payments becoming the new normal? A comparative study" August 2019

⁴² <https://www.frb.services.org/financial-services/fednow/index.html>

⁴³ <https://www.brookings.edu/opinions/we-shouldnt-have-to-wait-for-fednow-to-have-faster-payments/>

⁴⁴ <https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/03/the-payments-language-of-the-future-has-arrived.pdf>

⁴⁵ <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/financial-services/us-fsi-infocus-payments-2020.pdf>

⁴⁶ <https://www.aciworldwide.com/insights/expert-view/2020/may/taking-a-holistic-view-of-iso-20022-migration-and-payments-modernization-in-the-pacific?ite=2734&ito=1731&itq=370de79a-307e-41b9-a879-36abec9c18ba&itx%5Bidio%5D=1764818>

institutions that were surveyed being almost evenly split on whether regulation stifled innovation or whether there was not enough government or industry support to foster innovation.⁴⁷

- In the United States financial institutions regard open banking as a catalyst for digital transformation. That said, there are considerable hurdles to overcome in the form of reliance on legacy mainframe systems and the complexities associated with automating, digitising and scaling. A further complication is that fintechs find it difficult to plug into those mainframe systems.⁴⁸
- COVID-19 may bring calls for central bank digital currencies into sharper focus, highlighting the value of having access to a range of payment options, and the need for any type of payment to be resilient against a broad range of threats.⁴⁹
- China's central bank has introduced a homegrown digital currency across four cities as part of a pilot programme, marking a milestone on the path toward the first electronic payment system by a major central bank. The shift to a government-run digital payment system will help combat money laundering, gambling and financing of terrorism, as well as improving the efficiency of transactions in its financial system and responding to the threat of stablecoins.⁵⁰
- In the United States there is a growing debate about whether a central bank digital currency could provide a powerful new stabilisation tool for both monetary and fiscal policies. For fiscal policy, it could facilitate new automatic stabilisers while also allowing the Fed to provide quantitative easing directly to consumers.⁵¹
- There is increasing commentary about the benefits and difficulties of establishing cross border multi-currency (CBMC) payment systems. The Bank for International Settlements notes there are a number of challenges in establishing *"CBMC systems, which calls for planning and coordination. The public and private sectors both need to step up their game if payments are to flow across borders safely, efficiently and quickly - giving us payments without borders."* The SADC-TCIB system, expected to go live in 2020, is geared towards remittance payments across a number of African countries and has its origin in regional integration.⁵²

⁴⁷ <https://www.finextra.com/newsarticle/35888/banks-worldwide-warm-to-open-banking>

⁴⁸ Developments in Open Banking and APIs: Where Does the U.S. Stand?

⁴⁹ BIS, Covid-19, cash and the future of payments

⁵⁰ <https://www.wsj.com/articles/china-rolls-out-pilot-test-of-digital-currency-11587385339>

⁵¹ <https://www.piie.com/publications/policy-briefs/securing-macroeconomic-and-monetary-stability-federal-reserve-backed>

⁵² https://www.bis.org/publ/qtrpdf/r_qt2003h.htm

In New Zealand:

- Industry is progressing its SBI-365 initiative, which is working to extend the settlement and interchange of financial transactions so electronic payments can be made between accounts across different banks every day of the year.
- The RBNZ successfully launched a new payment settlement system in February 2020, replacing New Zealand's 20-year-old interbank settlement system and central securities depository.



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

Following a period of intense focus on improving financial resilience, operational resilience is emerging as an area of focus among financial sector regulatory bodies. Additionally, the growth of the payment and fintech ecosystem, and the potential impact of global technology platforms means a wider group of regulatory and policy agencies now have an interest in payments and related issues. These issues extend beyond competition and innovation mandates to inclusion, conduct, privacy and data rights. Regulation continues to have impacts across borders and jurisdictions.

Major Takeout From 2020 Refresh

COVID-19 is providing an unexpected live test of operational resilience on a global scale. It is increasingly clear open banking continues to be a point of considerable interest to regulators and policy bodies around the globe. At the same time, it is also evident that local market dynamics are having a significant impact on how open banking outcomes are achieved and who holds the rights over data. Cyber security continues to be a major area of emphasis for regulatory and policy agencies.

Selected Examples

- The debate about how to appropriately regulate digital payments and digital currencies has played out in depth in relation to the proposed Libra initiative. Faced with concerns from central banks and governments around the world that Libra has the

potential to undermine monetary sovereignty, Libra has scaled back its initial plans to a revised concept that is more likely to fit within existing regulatory parameters.⁵³

- The uptake of open banking around the globe is likely to result in greater interoperability in the long run. That said, different jurisdictions are implementing varying open banking standards, and that is likely to present significant challenges to cross-border interoperability in the foreseeable future. The World Economic Forum note that no coordinated international effort is in place to set standards for open banking.⁵⁴
- In January 2020, the Advisory Committee on Open Banking in Canada released its report, “[Consumer-directed finance: the future of financial services](#)”. Among other things, the report identified a role for government to play in accelerating the move towards consumer-directed finance, and a role for industry to deliver leading-edge technical solutions given its expertise and innovation capacity. Additionally, consumer-directed finance (the term used to describe the pending deployment of open banking in that jurisdiction) should serve as a blueprint for the government to enable enhanced data choice and control for Canadians across all sectors of the economy.
- In Australia, the ACCC and the Office of the Australian Information Commissioner published their joint Compliance and Enforcement Policy for the Consumer Data Right (CDR). The CDR is the foundational building block of a broad data portability regime across the economy in which open banking is an initial deployment. The policy covers compliance with CDR Rules, legislation (including Privacy Safeguards) and Consumer Data Standards.⁵⁵
- The Australian Treasury is currently investigating how the CDR could be enhanced and leveraged to boost innovation and competition, and to support the development of a safe and efficient digital economy.⁵⁶
- The Bank for International Settlements is setting up its Innovation Hub in multiple locations in partnership with central banks. The first Hub centres were launched in late 2019 in Hong Kong SAR, Singapore and Switzerland. The Hubs “*will catalyse*

⁵³ <https://www.coindesk.com/libra-scales-back-global-currency-ambitions-in-concession-to-regulators>

⁵⁴ http://www3.weforum.org/docs/WEF_Connecting_Digital_Economies_2020.pdf

⁵⁵ <https://www.accc.gov.au/focus-areas/consumer-data-right-cdr-0/cdr-compliance-and-enforcement-policy>

⁵⁶ Australian Government Inquiry into Future Directions for the Consumer Data Right Issues Paper March 2020, page 4

collaborative efforts among central banks, and cooperate, when appropriate, with academia, financial service providers and the broader private sector to develop public goods for the benefit of the global financial system.”⁵⁷

- The persistent and evolving nature of cyber threats has led the Monetary Authority of Singapore to issue a set of requirements to raise the cyber security standards and to strengthen cyber resilience of the financial sector, these requirements become legally binding in August 2020.⁵⁸
- The Financial Stability Board has released a consultative document on Effective Practices for Cyber Incident Response and Recovery (the “Proposal”). The Proposal will not create new regulatory obligations for financial institutions, but if finalised, has the potential to represent an important step forward in developing a common understanding of best practices for financial institutions and national regulators to define and mitigate cybersecurity risk.⁵⁹

In New Zealand:

- A review of the Reserve Bank Act is very advanced. The changes to the legislative framework will be made through enacting two separate Acts – an ‘Institutional Act’ and a ‘Deposit Takers Act’ - to replace the Reserve Bank of New Zealand Act 1989. The Institutional Act will set out the overall governance and accountability framework, provide for the Reserve Bank’s central banking functions and incorporate the framework for monetary policy. The Deposit Takers Act will integrate the two different legislative frameworks for deposit taking institutions and establish the deposit insurance scheme.
- The Financial Market Infrastructures Bill has been considered by the Finance and Expenditure Select Committee and is before the House for its second reading. The Bill establishes a new regulatory framework for FMIs, provides certain FMIs with legal protections relating to settlement finality, netting and the enforceability of their rules.

⁵⁷ BIS Shaping the future of payments

⁵⁸ <https://www.mas.gov.sg/news/speeches/2019/building-cyber-resilience-across-the-financial-sector>

⁵⁹ <https://www.fsb.org/2020/04/effective-practices-for-cyber-incident-response-and-recovery-consultative-document/>

- The RBNZ is increasing its efforts to enhance the resilience of the financial system from cyber threats, including developing risk management guidance and promoting information sharing in collaboration with industry and other public organisations.⁶⁰ Some external facing aspects of that work have been put on hold for six months due to the impact of COVID-19.
- The Ministry of Business, Innovation and Employment has released its [discussion document](#) on open banking and a Consumer Data Right in New Zealand. MBIE aims to use any feedback given to determine if New Zealand needs a CDR and if so, then how it should be designed.

⁶⁰ <https://www.rbnz.govt.nz/research-and-publications/reserve-bank-bulletin/2020/rbb2020-84-02>



Theme 5: Payments security and authentication is a key concern

The way we make and receive payments is evolving rapidly, as are the sources of threat to the safety and security of those payments. Finding the right balance between a low friction user experience and the safety and security of payments in an ecosystem which is increasingly characterised by open technologies, collaborative relationships and partner dependent offerings is now a more significant challenge.

Major Takeout From 2020 Refresh

Each year our reliance on digital connectivity plays a more substantial role in enabling global and domestic commerce, social interaction and overall economic prosperity. Data security, robust digital identity, and the ability to prevent the disruption of operations and critical infrastructure from cyber threats is now mission critical for financial institutions, payment system users, payment associations, and regulatory and policy bodies.

Selected Examples

- Consumers demand seamless connectivity, low friction, highly personalised retail experiences. These experiences often rest on a wide range of commercial partnerships being formed. Regrettably, that can expose an increasing range of attack vectors that put personal data at risk. There is an increasing opportunity for providers of all types of digital services to differentiate themselves by adding value through better protection of data and through instituting common frameworks to ensure potential cyber risks are well mitigated.⁶¹

⁶¹ <https://sloanreview.mit.edu/article/digital-convenience-threatens-cybersecurity/>

- COVID-19 has caused a mass move to remote working, greater reliance on online commerce and lower levels of consumer due diligence when undertaking transactions online, with vulnerable consumers especially exposed. These conditions are much more favourable for payments related fraud.⁶²
- COVID-19 has caused some debate about whether national governments should approach cybersecurity policy in the same way public health policy looks at the health of a diverse population. Viewed through that lens, national cyber security policies would be more 'joined up' and would be based on building cybersecurity and resilience across a diverse group of communities and business interests.⁶³
- The need for an overarching approach to addressing cyber threats to the financial system has resulted in the World Economic Forum partnering with Carnegie's Cyber Policy Initiative to develop an International Strategy for Cybersecurity and the Global Financial System (2021-2024). The strategy is expected to be finalised by the northern hemisphere fall of 2020.⁶⁴
- In Europe, the rise of new risks from the use of innovative technologies, IoT devices, 'data in flight', data stored in interconnected devices, and data in the cloud have been documented by the European Payments Council (EPC). The EPC has also established the Payment Scheme Fraud Prevention Working Group. The aim is to contribute to operational payment fraud prevention by facilitating SEPA payment scheme fraud data collection and analysis, information sharing and prevention measures.⁶⁵
- The digital identity landscape is at risk of becoming crowded, with digital identity solutions being offered by a range of private and public sector entities and initiatives. There may be a growing need for common standards and frameworks to make these solutions interoperable.⁶⁶
- Distributed ledger technology is being deployed in concert with other innovations such as biometric data and mobile technologies, to support a range of digital ID solutions that have the potential to identify those subject to financial exclusion and to link them with digital wallets and document registers.⁶⁷

⁶² https://www.accenture.com/_acnmedia/PDF-123/Accenture-10-Ways-COVID-19-Impacting-Payments.pdf#zoom=40

⁶³ Australian Strategic Policy Institute

⁶⁴ <https://carnegieendowment.org/specialprojects/fincyber/about/>

⁶⁵ <https://www.europeanpaymentscouncil.eu/sites/default/files/kb/file/2019-12/EPC302-19%20v1.0%202019%20Payments%20Threats%20and%20Fraud%20Trends%20Report.pdf>

⁶⁶ <https://www.biometricupdate.com/201905/id-document-stakeholders-call-for-digital-identity-standards-as-mastercard-and-samsung-team-up>

⁶⁷ <https://www.capgemini.com/es-es/wp-content/uploads/sites/16/2019/11/Payments-Trends-Book-2020.pdf>

- Artificial Intelligence (AI) and Machine Learning (ML) technologies bring the potential to transform the operation of banks and financial services organisations. A recent survey by Fintech Futures revealed most respondents see these technologies as being deployed to improve data analytics (86%) and to increase productivity (77%). More than three-quarters (83%) of respondents said the deployment and development of AI and ML systems would become a core part of their business strategy going forward.⁶⁸ According to a survey by KPMG 63% of banking leaders are investing in transaction monitoring using rules and ML.⁶⁹
- Responding to concerns about standardisation and security in signing open banking APIs and at aligning European APIs onto one security model, Open Banking Europe has published a draft Open Banking API Signature Standard.⁷⁰
- The idea open banking may require a reassessment of security protocols is gaining traction due to the different trust model that is involved and the potential for APIs to be another attack vector.^{71 72}
- Methods of detecting and preventing criminal economic activity remain at the forefront of policy debate around the world. Europe's 5th AML Directive came into effect in early 2020. That directive imposes extensive obligations on banks and financial institutions, including requiring registries of beneficial ownership to be established and customer due diligence to be completed on pre-paid cards above a certain value.⁷³

In New Zealand:

- Payments have the potential to provide early use cases for digital identity solutions that emerge from New Zealand's work on a Digital Identity Transition Programme.
- Payments NZ is a founding member of Digital Identity NZ and is represented on its Executive Council.

⁶⁸ <https://www.fintechfutures.com/files/2020/01/AI-Machine-Learning-Report-2020.pdf>

⁶⁹ <https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/01/the-future-is-open.pdf>

⁷⁰ https://www.openbanking-europe.eu/media/1752/pr_20200430_json-web-signature-profile.pdf

⁷¹ <https://www.business-reporter.co.uk/2020/06/02/open-banking-and-the-need-for-a-new-approach-to-fraud-prevention/#gsc.tab=0>

⁷² <https://www.finextra.com/blogposting/18176/why-open-banking-standards-mean-a-security-first-approach-to-api-management-is-needed>

⁷³ <https://www.swift.com/news-events/news/what-does-the-5th-aml-directive-tell-us-about-registries-and-their-role-in-combatting-financial-crime>



Theme 6: Payments associations face rising expectations

To maintain a position of relevance in the payment ecosystem of the future, payment associations and allied bodies need to consider an ever-widening group of issues and an increasingly broad group of stakeholders.

Major Takeout From 2020 Refresh

Payment associations continue to find themselves needing to manage a broad range of relationships across the ecosystem, including with incumbent financial institutions, early stage growth companies, global technology platforms, and regulators and policy bodies. Those regulators and policy bodies continue to have a growing influence on how ecosystems develop and the role of payment associations in that ecosystem.

Selected Examples

- PayUK has partnered with banks and building societies to develop and launch Confirmation of Payee. This functionality helps protect consumers and businesses from certain types of fraud and misdirected payments by letting them know if the account name they have entered matches the account name of the recipient.⁷⁴
- Given the UK's open banking implementation phase will soon come to a close, UK Finance (a representative body for the banking and finance industry in the UK) commissioned Accenture (UK) Limited to develop an end state operating model for open banking which would see, among other things, industry ownership and governance transitioning from a Competition and Market Authority Special Purpose Vehicle (the Open Banking Implementation Entity) to a market led one.⁷⁵

⁷⁴ <https://www.wearepay.uk/confirmation-of-payee-service-launches-in-uk-to-help-reduce-fraud-and-misdirected-payments/>

⁷⁵ <https://www.ukfinance.org.uk/system/files/Open-Banking-Futures-FINAL.pdf>

- The Emerging Payments Association Asia (EPAA) has been active in documenting the challenges, opportunities and recommended approaches for open banking across the Asia-Pacific region. The output of the EPAA's work was delivered to the APEC Business Advisory Council in February 2020.⁷⁶
- In Australia, Auspaynet was scheduled to publish the results of its consultation on "A Future State for Australia's Payment Systems". The consultation reflected the need for a strategic view of the possible future state of Australian payment systems and a plan for their sustainable evolution. Publication has been postponed to the second half of 2020, in light of COVID-19.⁷⁷
- In the United States, Nacha is requesting industry feedback on its "Meaningful Modernization" proposals. These proposals are designed to improve and simplify the ACH user-experience by, among other things, facilitating the adoption of new technologies and channels for the initiation of consumer ACH payments.⁷⁸
- The Payments Association of South Africa worked with the Banking Association of South Africa, as well as BankservAfrica's (Africa's leading automated clearing house) clients, to produce a case for South Africa to adopt an easy-to-use, real-time, low-cost electronic payments system. That case highlights the opportunity cost that would be incurred if South Africa did not advance its payments modernisation journey through such a payments system, as a strategic priority.⁷⁹
- Extensive collaboration with key industry partners, including financial institution members and regulators, has allowed Payments Canada to publish ISO 20022 messages for Lynx, which is expected to launch in 2021, and will replace the Large Value Transfer System and process large value, time-critical payments with real-time settlement finality.⁸⁰
- COVID-19 has demonstrated that financial institutions of all types have to cooperate to be able to support a wide range of customer needs through digital, rather than physical, channels. The World Economic Forum note *"policy-makers should leverage the strengths of the entire financial system, including fintechs, to rapidly deliver support to small businesses and households. Moving forward, banks can explore partnerships with fintechs to quickly and safely introduce new products. Policy-makers should also*

⁷⁶ <https://fintechnews.sg/37980/openbanking/singapore-open-banking-apac/>

⁷⁷ <https://www.auspaynet.com.au/insights/consultations/future-state>

⁷⁸ <https://www.nacha.org/news/nacha-seeks-industry-feedback-meaningful-modernization-rules-proposals>

⁷⁹ http://www.pasa.org.za/docs/default-source/default-document-library/modernisation/modernised-real-time-electronic-payments_-a-case-for-change-for-south-africa_.pdf?sfvrsn=2

⁸⁰ <https://www.payments.ca/about-us/news/payments-canada-publishes-iso-20022-messages-lynx-canada%E2%80%99s-new-high-value-payments>

encourage banks to continue to explore other technologies and partnerships that enable them to better serve digital-first customers and to operate in a more agile fashion.”⁸¹

- To progress policy issues relating to payments modernisation, and especially cross border payments, some countries and regions are establishing payment councils to create greater public-private dialogue. One example would be the ASEAN e-Payments Coalition which is focused on supporting the development of an integrated and harmonised digital payment framework across ASEAN, with the goal of supporting the growth of cross-border e-commerce.⁸²

In New Zealand:

- In December 2019 The Minister of Commerce and Consumer Affairs wrote to API providers, setting out his concerns about the progress of industry led open banking initiatives under the umbrella of the API Centre. The Minister has outlined he expects API providers to:
 - Ensure open banking is a clear priority within their organisations.
 - Implement v2.0 of both the Payments Initiation and Account Information standards within six months of their release.
 - Meet the API Council's reporting requirements fully and openly.
 - Commit to seeking shared industry solutions that promote the interests of the ecosystem.

⁸¹ http://www3.weforum.org/docs/WEF_Impact_of_COVID_19_on_the_Global_Financial_System_2020.pdf

⁸² <https://weforum.ent.box.com/v/epaymentsrecommendationpaper>

Conclusion

Conclusion

- Our 2019 Environmental Scan and our ongoing Payments Direction initiative remain in step with the payment ecosystem developments taking place in 2020, with the caveat that the global health emergency has the potential to bring about far reaching change to parts of the ecosystem. For example, it is possible COVID-19 might spur:
 - Further increases in the speed, reliability and coverage of broadband networks, to make remote working a more viable long term option, especially where some of the business processes that are being executed remotely carry specific regulatory requirements. In the context of COVID-19 and regulatory requirements *“some companies will be torn between complying and operating effectively, or at all.”*⁸³
 - Initiatives to establish identity in an environment dominated by remote working and living.
 - More need for virtual reality and augmented reality technologies to support immersive digital experiences.
 - New business models because of the significant shift from the physical to the digital.
 - A significant investment in logistics and delivery infrastructure to support an increased volume of location specific deliveries.
- Irrespective of COVID-19 our work in Payments Direction, which speaks to greater openness, convenience, availability and speed in payments that leverage common standards, remains in step with the global ecosystem developments.
- What’s not yet clear, and may not be for some time, is how future payment behaviours are likely to unfold in a world where consumers may have restrictions on their movement (either required or self-imposed), households may have higher rates of saving, and the path to economic recovery is still opaque. Some of the changes we think of as temporary, may well become permanent.

⁸³ <https://www.linkedin.com/pulse/impact-assessment-covid-19-payments-apac-john-ryan/>

- The need for all jurisdictions to have a modern, fast, efficient payment systems is clearly evident. That said, speed alone is not sufficient. The way payment instruments and systems around the world are continuing to evolve speaks to the increasing scope and scale of digital interactions that dominate our personal, business and social lives.
- The payment ecosystem of the future is going to need to leverage the power of data analytics, artificial intelligence and common standards to meet the needs of more diverse customer groups, offer class leading security and fraud detection, and be responsive to complex and changing regulatory requirements that are unfolding at pace.

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