the payments association

King for a Day:

Charting the future of cross border payments

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Foreword

When we hear the words "cross-border payments," imagery comes to mind that's coloured by our experiences, perspectives, and 50 years of few changes – I call this "familiarity bias." But let's not forget that the market is diverse and massive – over $150T – so there's plenty of room for different ideas, commercial constructs, and new entrants. Yet oddly, the number of correspondent banks, the foundation to the familiar, is falling materially.

Jonathan Tyce, the author of this whitepaper, has researched, analyzed, identified, and shared his findings and artful thoughts, and poses some intriguing questions. Given the complexity of the ecosystem, extreme diversity of use cases, and new tech and paradigms – he's had to limit his focus as we consider ways to make cross-border payments safe(r) and efficient for all constituents.

However, some of what this whitepaper discusses is rarely addressed, despite being the root causes to why cross-border payments are high-risk and inefficient. Addressing these root causes requires new software across the ecosystem and a radical re-think of global tech and interoperability, or infrastructure, as well as new approaches to liquidity. This is tough stuff (perhaps why it is rarely discussed) and requires capital, re-education, and significant change.

This whitepaper is more than the "same-old, same-old" about cross-border – it's a thoughtful analysis of fresh insights from industry experts (not typically quoted), recognition of the category's incredible

growth as well as salient facts that demand and inspire new ideas to challenge the status quo as we materially improve cross-border payments.

Looking ahead, The Payments Association envisions a world where the barriers that made international payments slow, expensive, only available through a relatively small percentage of financial institutions, and only if the recipient had a bank account – ubiquitous and inclusive. Competition in all forms and at every point in the ecosystem, which drives innovation and efficiency in every industry, is necessary to achieve our vision. Imagine if any bank or other properly licensed entity, regardless of size or location, could enable customers to send money to anyone, anywhere – even the unbanked – safe, fast, and reasonably priced.

"We're optimistic about what's on the horizon - a smoother, quicker, and more trustworthy system that stands to benefit us all."

We must believe that we can eliminate the 2 to 5% of global GDP, or $800 billion to $2 trillion that's laundered annually through banks.

As for safety, we must believe that we can eliminate the 2 to 5% of global GDP, or $800 billion to $2 trillion that's laundered annually through banks. But change is required, as evidenced by the fact that a few years ago, banks were fined more than $10 billion for non-compliance with anti-money laundering regulations. More regulation hasn't worked, increasing compliance budgets hasn't worked, and even as regulators have "de-risked" banks – money laundering and fines persist. What's needed? Again, new tech and paradigms are essential for financial institutions to become effective defenders of payment systems.

Also, we can't fear or overreact to change within the category. While globalisation has supercharged cross-border payment growth in big-ticket and trade for 50 years – there are signs this is slowing or reversing. Let's be smart about use case dynamics, whether declining mega transactions, expanding and evolving needs of SMEs, the growth and unique needs of on-demand and ex-pat workers, global marketplaces, and the old reliable - remittances. Technology and new constructs are essential to ensure "all ships rise" versus a nationalist look inward or an opportunistic focus on the next "hot" sector.

Crucially, this whitepaper poses questions about making this vision a reality when we break from the past and energise pathways of creativity, action, and change. We're optimistic about what's on the horizon - and while the road will have bumps, our commitment to re-imagining and building new paradigms that enable better outcomes remains steadfast.

I want to thank everyone, especially our author Jonathan Tyce, who has poured their expertise and passion into these pages. Your conversations and contributions are the fuel that powers our vision and mission. We're not just chasing innovation for the sake of it; we're here to inspire changes in how financial institutions and the ecosystem operate so that those who make and receive cross-border payments have better, safer, efficient, and inclusive experiences – this touches everyone on the planet.

So, as you read this, think about the possibilities and resist familiarity bias.

Gary Palmer
Founder, Chairman and CEO
Payall

1 *Estimates from the United Nations Office on Drugs and Crime (UNODC).*

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Introduction

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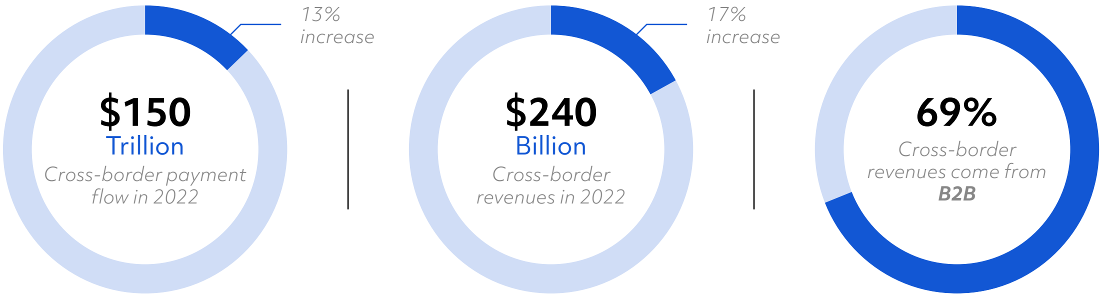
"If I were king for a day, I would let the old systems continue to run and I would create a new system that everybody is forced to use."

HENRY RITCHOTTE, FOUNDER, **RITMIR VENTURES**, EX-DEUTSCHE BANK, CHIEF DIGITAL OFFICER

Of course, as Ritchotte rightly concludes, it will never be possible to build and enforce the use of a new global system for the $150 trillion (2022) cross-border payments industry. That does not mean, however, that new systems that sidestep issues dogging legacy tech cannot be created and implemented across domestic payments systems.

A snapshot of the cross-border payments landscape



10%
B2B and B2C payments increased in 2022. C2B and C2C payments increased to double digits in 2022.

11%
of cross-border remittances come from US-LatAm Corridor

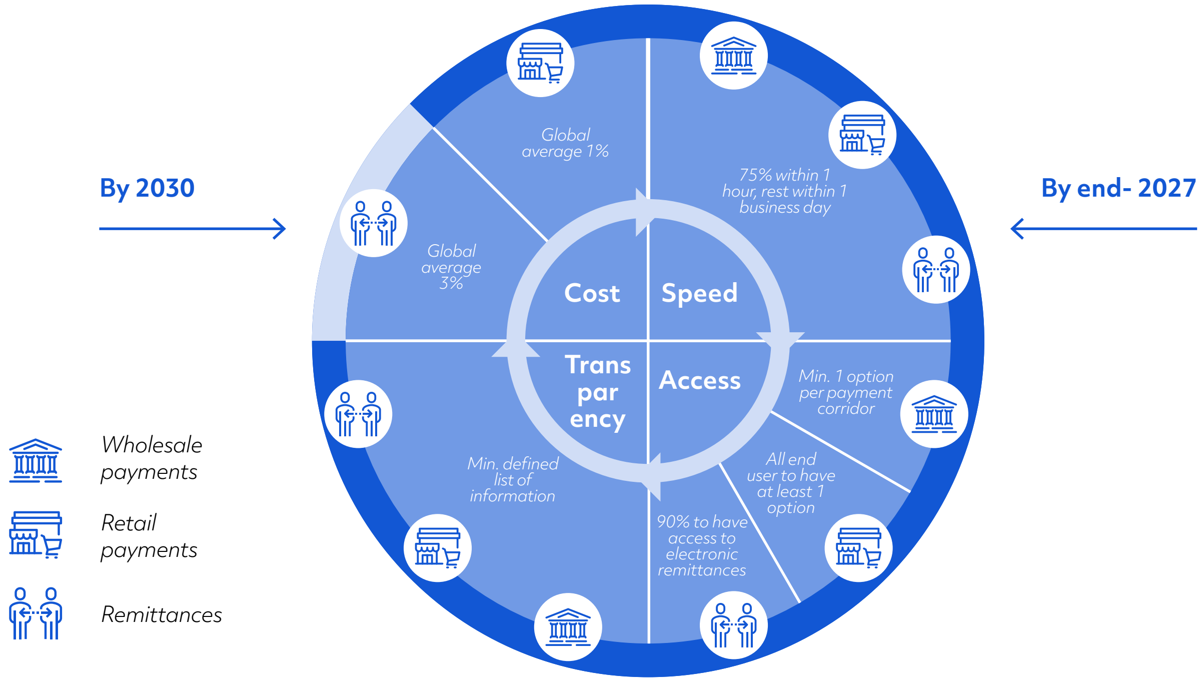
20-30%
operating costs can be reduced by the modernisation of banks' technology stacks

30-50%
increase in fraud detection productivity by using AI to accelerate current manual activities

Source: Mckinsey & Company 'The 2023 McKinsey Global Payments report'.

Nor does it mean that a blank sheet of paper isn't actually a very useful place to start when exploring solutions to the well-understood cross-border challenges (e.g. cost, speed, access, transparency) or better still, developing an entirely new paradigm. "Best practice is already pretty well established," he added, "but getting there is really hard."

Cost, speed, access and transparency



Source: G20 Targets on Roadmap for Enhancing Cross-border Payments, October 2023

The goal of this paper is to condense the insights and views from many in-depth interviews with senior industry executives, as well as a survey by The Payments Association, into some insightful conclusions (see **10 key takeaways**, below). Where and how should most innovation and change be expected? In the future of cross-border payments, what is possible and what is merely wishful thinking?

This paper will not attempt to guesstimate industry growth rates, market sizes and shares, nor cost and margin trends. Instead, the numerous forecasts widely available within very good industry outlook papers elsewhere will be leveraged here. Furthermore, growth should and likely will play second fiddle to the twin drivers of new technologies and the degree of regulatory support / pragmatism applied country by country.

The tail will not wag the dog; innovation, where permitted to flourish, can augment growth, foster greater safety and competition as well as create a better user experience for both sender and recipient. Collectively this can bolster growth rate for cross-border payments, from a $240 billion revenue base in 2022 (about 10% of the global payments pool) to almost certainly double digits, with consumer payments increasingly the key driver.

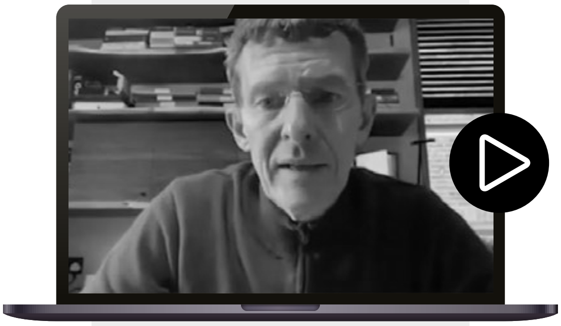
For winners and losers, incumbents and newcomers, backing the right technology and picking the right partners can unlock many billions of dollars of value. Social change, growth in trade and financial inclusion for the 1.4 billion adults that, according to the **World Bank**, are still unbanked is another worthy goal. The economic and financial benefits and prizes to all stakeholders in the global payments nexus are clear to see.

To explore the potential of cross-border payments, it is also vital not to become mired in debate about legacy issues known to be holding the industry back, some stemming as far back as the 1970s. It is clear, however, that while history is unlikely to be an accurate guide to the future, it is invariably a good place to start, albeit briefly.

10 Key takeaways

1 A greater pivot to tech solutions from legacy debate is needed

Industry scrutiny must pivot further from attempting to resolve big picture, legacy regulatory issues and harmonisation of rules and focus on implementing technologies, with adjustable, rules-based inputs, that can interface between distinct regimes. Real-time, perpetual verification is now possible and can do much to build trust, the Achilles heel of cross-border payments. Identity authentication and data security is at the top of this tech wishlist. Archaic systems – many a hotchpotch of 1980s, 1990s and 2000s technology – should no longer be a key stumbling block for payments. This is notably the case in the cross-border space, where, according to [FXC Intelligence](#) flows could top $190 trillion this year and reach $290 trillion by 2030.



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The Financial Stability Board's Priority Themes for its G20 Roadmap for Enhancing Cross Border Payments (October 2023)

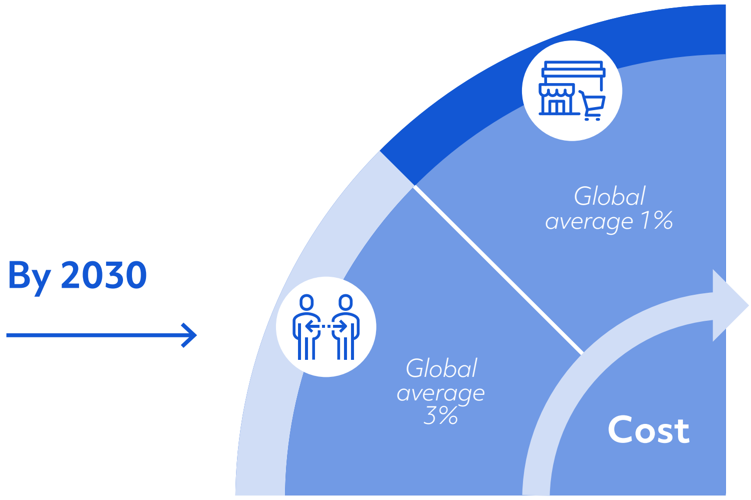
Priority theme on legal, regulatory and supervisory frameworks

Action 4: Improving consistency of bank and non-bank regulation and supervision
Establishing a level regulatory and supervisory playing field between bank and non-bank PSPs is important for ensuring that entities involved in similar business activities and offering the same payment services are subject to the same or similar rules and suspension ('same activities, same risk, same rules'). At the same time the application of regulation and supervision to non-banks should be proportionate to the risk they pose.

Source: FSB's G20 Roadmap for Enhancing Cross Border Payments, October 2023

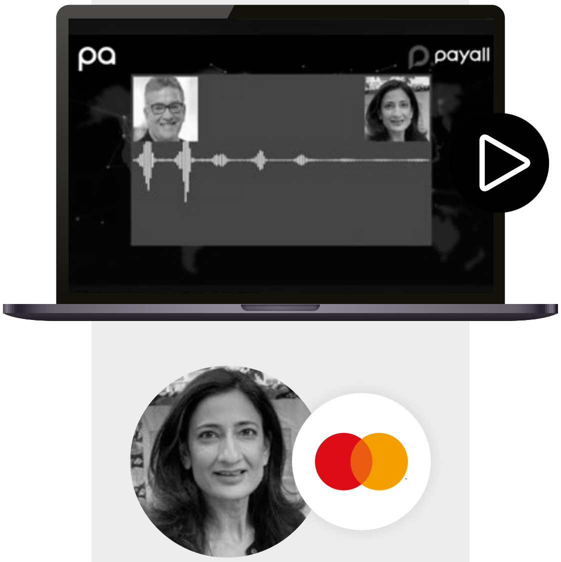
2 The regulatory obsession with efficiency is premature

The regulatory obsession with efficiency should, for now, take something of a back seat to cooperation and innovation, to combat the twin threats of the increasingly inward focus of individual countries and inflation's impact on industry costs. This is key to ensuring that private sector investment flourishes and new cross-border channels are opened. The G20's twin goals of average charges of 3% for remittances and 1% for retail payments, remain worthy but are something of a red herring, near term. There is no race to the bottom yet, although competition in certain domestic systems is hotting up. Efficiency in payments is ultimately cost per transaction, which technology will lower over time.



Source: G20 Targets on Roadmap for Enhancing Cross-border Payments, October 2023

"The problem is that the industry is, in some cases, still using 40 to 50 year old technology and arrangements like correspondent banking to address a $156 trillion cross-border payments sector."



RASIKA RAINA
SENIOR VICE PRESIDENT FOR STRATEGY AND SOLUTIONING, TRANSFER SOLUTIONS
MASTERCARD

3 A roadblock of incentives means some things will never change

A truly autonomous, supranational agency to harmonise regulations and requirements and drive global cross-border payments growth cannot succeed or function effectively while national interests can ultimately override or unduly influence decisions. The roles of the FSB (Financial Stability Board), BIS (Bank for International Settlements) and CPMI (Committee on Payments and Market Infrastructures) in payments will, of course, remain vital in fostering cooperation to drive change, but countries' differing needs and views of systemic risk make harmonisation all but impossible. This is clearly demonstrated in the 2022 SWIFT ban on certain Russian banks, and the ECB's goal of 'strategic autonomy' with the launch of the digital Euro.

MARIUS JURGILAS
SVP FOR RESEARCH AND INNOVATIONS
SUPER HOW?

"There's a strong strategic rationale for safeguarding the future of the Euro in a digital environment, as we are facing changes in payment technology in the decades ahead. Security, privacy, and inclusiveness must be key features, reflecting our shared values."

— *Paschal Donohoe, President of the Eurogroup, June 2023*

Source: www.consilium.europa.eu/en/press/press-releases/2023/06/28/statement-by-the-eurogroup-president-paschal-donohoe-on-the-publication-of-the-european-commission-s-single-currency-package/

4 Technology needs to reposition and redefine the correspondent bank role

Improved application of technology can address two key impediments to correspondent banks' success and help redefine the role. Thanks largely to a 33-50% drop in the number of active correspondent banks across Africa, Central and South America and Europe in the past decade, naysayers cite regulatory pressure on 'failing' institutions to exit, as well as cost and complexity, as justifications for their demise. A more targeted geographic focus can potentially help smaller banks, but tech and fresh thinking can also help resolve the current need to maintain a staggering 1,100 – 1,400 bilateral agreements for many. Digital settlement, and automation of manual processes can also give regulators comfort that best practice is adhered to and enable cross-border banking relationships to function more smoothly.

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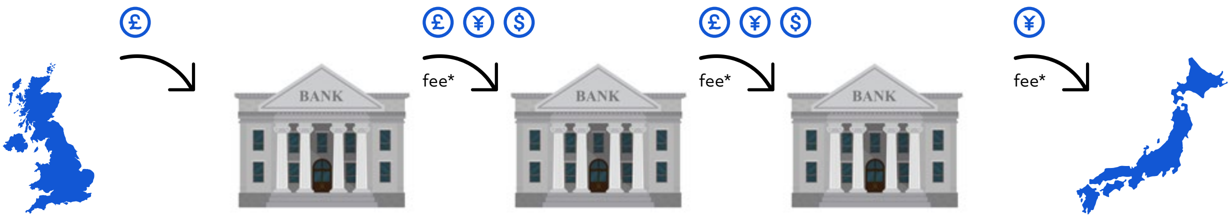
Correspondent banking



Sender

Sender's Bank (Originating bank)

Correspondent Bank

Recipient's Bank (Beneficiary bank)

Recipient

Source: www.tradefinanceglobal.com/correspondent-banking/

5 'High Risk' classification needs an overhaul – via the ID Authentication Key

Once again, it is increasingly clear that technology can help to address this patently inequitable situation. The regulatory paradox and unintended consequences of ever-increasing and more complex rules for remittances – which aren't the primary source of nefarious activities – can be eased with, for example, the ability to verify identity without needing confirmation from a central authority. Establishing standards to share ID and associated information, with data privacy jurisdictional disparities resolved automatically, could – similar to a passport's utility for airline passengers – reduce regulatory fears and speed cross-border flows and efficiency, notably in the remittance and SME space.

"The biggest scandals and cases of money laundering have occurred in the financial institutions industry, not in remittances. But if you look at the classification of risk factors, it's remittances which suffer most because of the inability to document the source of funds, you don't know the counterparty because that is the nature of remittances — there is no account present."

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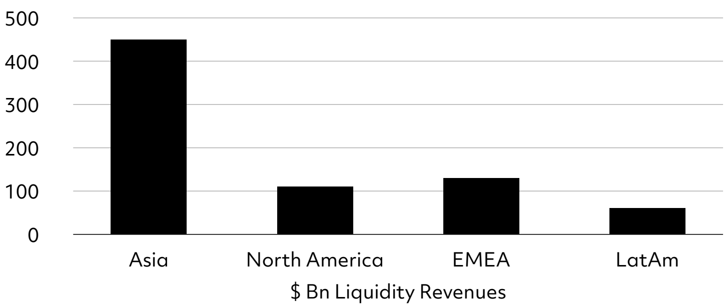
6 The convergence of cross-border and domestic will yield many easy wins

An acceleration of convergence between cross-border and domestic payments' best practices, products and technology means that cross-fertilisation will generate easy wins and high returns-on-investment. Cross-border payment, for example, still lags behind its domestic sibling in terms of transmission mechanisms for relevant data but best practice and technological solutions can be shared. Adoption of ISO20022 will help, in part, but is far from a panacea to this challenge and will take time (see survey in Appendix below for more info). Conversely, embedded fraud detection technology – which is increasingly a given in the cross-border space with artificial intelligence a growing driver – should now be more widely introduced into domestic payments services and products.

7 Liquidity optimisation – hidden gold?

Liquidity optimisation tools and technological improvements are set to be a major focus and competitive advantage for winning business and lowering costs across the payments industry in 2024 and beyond. Technology has enabled increased client visibility into liquidity positions. Higher interest rates have increased scrutiny of this multi-trillion dollar 'float' of cash held across the pipelines of global payments networks. McKinsey's 2023 [Global Payments Report] estimates that liquidity revenues in 2022 totalled $750 billion globally, with Asia at about 60% of the total and the majority of this coming from the commercial side. Watch this space.

Account-related liquidity revenues, 2022



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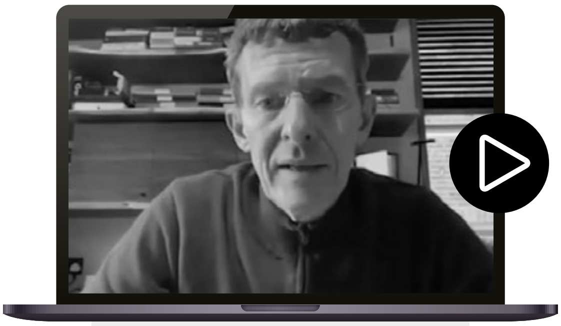
Source: [McKinsey 2023 Global Payments Report]

8 Economic reset is a double-edged sword

The impact on the payments competitive landscape from a spike in inflation and a structural reset of interest rates globally is only now beginning to unfold. A smaller number of start-ups will be able to access funding, skewing the competitive landscape. Potentially more destructive, the trillions of dollars of cash passing through payments networks weekly will no longer be a source of free or cheap funds, and interest income drove half of the payment industry's $200 billion of revenue growth in 2022. The more sophisticated customer will demand interest, and the regulators will ensure that the less sophisticated is not disadvantaged. Paradoxically, this should encourage the industry to focus on removal of friction points and speed up transaction times to minimise this newly emerging drag.



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9 Crypto, CBDCs, blockchain: not the answer but a component

Crypto and central bank digital-currencies (CDBCs), as well as associated blockchain and distributed ledger technologies, can undoubtedly make a fair contribution to the build-out of global payments in coming years but they are only one piece of the solution, not a solution in their own right, and regulations may limit their scalability.

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10 A central bank consortium would speed change

Attempting to resolve cross-border differences of regulation, capital requirements and best practice on a global basis is a long-term project with limited prospects for success. There is scope, however, for a group of like-minded nations and central banks to cooperate more closely on standards for KYC, KYT, money laundering and anti-crime best practice which could deliver real change, thereby unlocking the potential of technology to improve the cross-border experience.

Along similar lines and thinking back to the recent energy crisis in the aftermath of Russia's invasion of Ukraine, these same actors could explore a use-case and industry-based hierarchy to establish faster and more guaranteed payments rails for critical services. Traditionally thought of along geographic boundary lines, a new system to guarantee payment for and flows of, say energy, in times of crisis would be a worthy discussion. Certainly, in today's global digital economy, physical borders mean less than they did before and national interests cut both ways, with autonomy vs the needs of the people a difficult balance at times.

Future-proofing cross-border payments

The three most surprising areas of change since the international payments system was first cobbled together are: **1, Volumes; 2, Regulation; and 3, Technology.**

The fact that tracking growth in cross-border payments since inception is not possible is a reflection of the disjointed nature of development globally, and the disparate systems. CHIPS data harking back to 1970 for the US domestic system can, however, exemplify the explosive nature of volume and numbers of transactions that the industry has witnessed.

From an average 8,000 transactions a day in 1971 to 530,000 daily last year, and $1.1 trillion value traded in its first full year to $350 trillion in 1998, one lesson for the future is clear. **Don't underestimate growth potential.**

Two other observations. Shifts in the economy can clearly be seen to impact payments growth, with 2000-2003's dotcom bust and the aftermath of the financial crisis hitting hard. The point in the economic cycle when new tech is launched is an important consideration. Secondly, with mainstream adoption, volume of transactions may continue to grow at the same trajectory but the average value of trades will likely drop. In this case, average dollar amount per payment peaked in 1994, and using 2023 data, has very nearly halved since.

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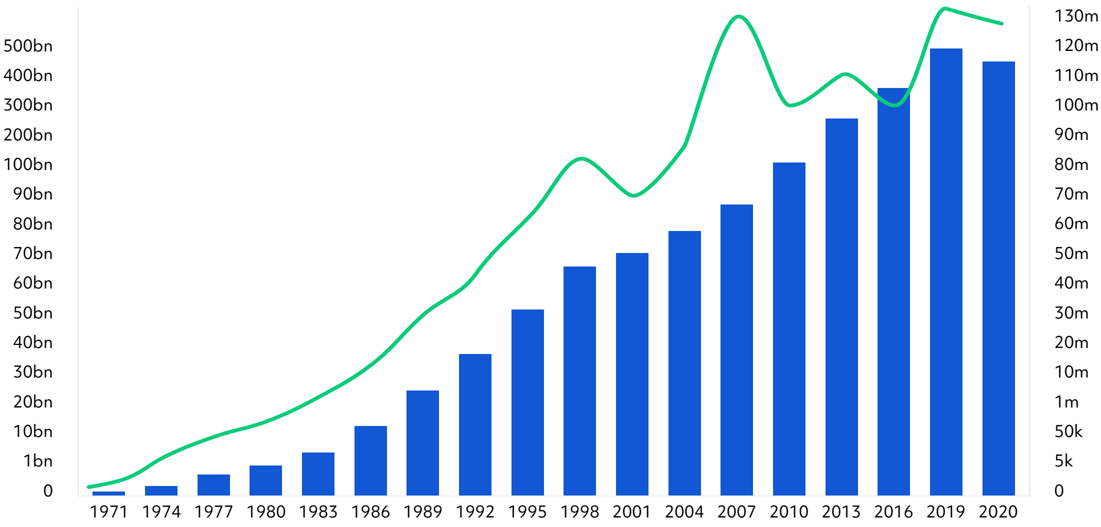
"Had people sitting back in the 1970s been thinking through those three factors, they would probably have designed things very differently."

HENRY RITCHOTTE, FOUNDER, **RITMIR VENTURES**, EX-DEUTSCHE BANK, CHIEF DIGITAL OFFICER

CHIPS annual statistics from 1971 to 2020



Source: The Clearing House Interbank Payments System

Remittances, C2B, SME volume continue to surprise

Nobody expected these kinds of volumes - it was impossible to conceptualise the volumes across business and finance, as well as consumer remittances. The fact that most banks would have built different architectures and systems had they known this is irrelevant from a historical perspective. It is, though, a critical reminder for the industry of pitfalls ahead – underestimate at your peril and timing and longevity of a product will hugely influence growth and profitability profiles.

For the coming decade, volumes in remittances, consumer-to-business and SME will almost certainly surprise to the upside, with double digit growth a minimum and technology the driver of how far this segment can overshoot expectations. Wholesale payments volume growth will likely lag, with 5-6% more likely while very strong momentum looks assured in the retail space.

KYT and KYC

Regulatory change has also been enormous since the 1970s and continues to be a major source of friction across the cross-border payments industry. This shift effectively moved banks from an arena where the focus on cross-border due diligence was around knowing the correspondent bank, and how strong their KYC (know-your-customer) and KYT (know-your-transaction) systems were, to one where this was no longer acceptable.

While there is limited scope to add value here, it is clear once again that the appropriate technology can provide regulators – across all the jurisdictions of a transaction – with the appropriate level of transparency and trust. In keeping with **Key takeaway 1**, time will likely be better spent exploring how technology can smooth regulatory wrinkles and open new channels, rather than debate how and where regulations and requirements can be harmonised. The impact of technology will continue to surprise.

Segmenting a $290 trillion opportunity

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“When I think about how to run a complex financial institution, I think about creating almost like a Lego block of services, and payments is an incredibly important service that can be shared across any product, any client base.”

HENRY RITCHOTTE, FOUNDER, **RITMIR VENTURES**, EX-DEUTSCHE BANK, CHIEF DIGITAL OFFICER

Richotte’s simile is a good one, highlighting how pervasive the business of payments is across the many facets of banking and finance. Each business line will, of course, have a different value proposition. Mastercard’s view is similar, pointing out that from a compliance and regulatory framework, there are some differences but it can ‘deploy different variations on the same technology’ to service a disbursement vs a remittance vs an SME payment.

Instant payments and digital wallets are two critical areas where the battle for the higher margin, higher growth retail segment – both domestically and cross-border – will be fought and innovation will be most visible. Whether estimates for the overall industry to grow by more than 50% this decade to $290 trillion prove correct, it seems all but guaranteed that most innovation and growth can be expected in the low value ($100,000 and below) payments arena.

RASIKA RAINA
SENIOR VICE PRESIDENT FOR STRATEGY AND SOLUTIONING, TRANSFER SOLUTIONS
MASTERCARD

“Ultimately if banks can adapt they will be in pole position, especially in the cross border payments sector, to provide services to clients – it is just easier, it’s one less hop… I anticipate many fintechs, in order to compete, will slowly start acquiring banking licences as a result.”

RASIKA RAINA
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Wholesale and high value battle already won?

The market share and sophistication of incumbents in the high value wholesale cross-border payments space, estimated to top $140 trillion this year (75% of total cross-border flows, FXC Intelligence estimates), suggests that significant change is unlikely and scale challenges will hamstring new entrants. From a regulatory perspective, the ‘high risk label’ applied broad brush to payments has become an impediment in a world where 99% of the world is paying the price for the 1% that is committing crimes. And that 1% is invariably found in the wholesale space.

AML compliance failures and policy violations hinder cross-border transactions

$2B Fine
Danske Bank
(misleading US banks about its deficient AML system)

€238M
Credit Suisse
(tax fraud and money laundering investigation)

£107.7M
Santander
(repeated AML compliance failures)

$140M
USAA Federal Savings Bank
(failure to implement and manage an appropriate AML program)

Sources: www.sec.gov/news/press-release/2022-220.
www.reuters.com/business/finance/credit-suisse-settle-french-tax-probe-with-prosecutors-court-hearing-2022-10-24.
www.fca.org.uk/news/press-releases/fca-fines-santander-uk-repeated-anti-money-laundering-failures.
www.fincen.gov/news/news-releases/fincen-announces-140-million-civil-money-penalty-against-usaa-federal-savings.

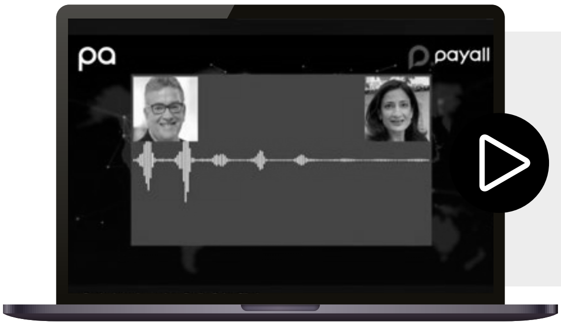
High value payments are, by and large, very well serviced by the banks with rates agreed upfront. It is unlikely that, excluding M&A and big cross-border deals which remain a distant hope, the structure and players in the high value and wholesale payments industry will change dramatically in the coming year.

Big ticket correspondent banking battle is already won

JPMorgan Chase & Co.
Bank of America
citibank
HSBC
Deutsche Bank
standard chartered
BARCLAYS
WELLS FARGO
BNP PARIBAS
SOCIETE GENERALE

‘Nuisance payments’ offer non-banks significant growth

Sometimes described as ‘nuisance payments’ by the banks, low value transactions offer the greatest opportunity for innovation because there are so many service gaps. It is here that smaller challengers and tech innovation can flourish, enhancing correspondent banks’ offerings and opening up new channels in the remittance, C2B and SME segments. As discussed in **Key takeaway 2**, additional services and new products are likely to dominate and it is too early in this fast-growing segment for costs to drop materially although the card networks of Visa and Mastercard are best positioned. The FSB’s 3% average remittance cost will remain a pipedream while 2024 inflation is expected to average 12% across Africa, 15% in Eastern Europe and 25% in Latin America.



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Remittance overview in 2022

$626B *Value of remittances in 2022*	**6.25%** *Global average cost of sending remittances*	**12.10%** *Cost of sending remittances through Banks*	**$16B** *One year could be saved if costs diminished by* **5%**

Sources: World Bank: “An analysis of trends in cost of remittance services: Remittance Prices Worldwide.” Issue 45, March 2023. World bank: www.worldbank.org/en/news/press-release/2022/11/30/remittances-grow-5-percent-2022

Central banks and targeted cooperation

Cooperation between central banks is one of the key determinants of how quickly cross-border payments can develop. It will likely be more important for the wholesale payments industry and high value transactions than for retail and remittances, where technology and the cross-border rails of Visa and Mastercard are already driving rapid change.

A consortium of like-minded central banks will slowly introduce best practice

Setting aside the issues of national self-interest and rollout of a variety of central bank digital currencies that will emerge over the coming 3 to 5 years, it is likely that progress will be made between a select group of central banks and regulators to agree and implement standards at a very high level that will help build cross-border trust and accelerate change.

Areas of commonality of interest including KYT, KYC, money laundering and financing crime will be the bedrock across which a number of basic standards will ultimately be agreed. These can then be built into technologies at the interface of different geographic payments regimes, smoothing flows and cutting transaction times, complexity and costs. Central banks will not open their ledgers but progress on interfaces can help supplant the overreliance on swap lines to keep the taps on.

Shift from border-driven to use-case thinking in some industries

Historically, infrastructures and cross-border standards have used geographic, physical borders as a delineation. Realistically, however, there are certain sectors and commodities that are nationally critical for which global leaders are prepared to override convention to maintain. Think oil and gas, Russia and its war on Ukraine. Think the vital need to maintain a telephone line between North Korea and the rest of the world.

A shift towards use-case and industry/sector segmentation could be another way of addressing blockages and disruption across international payments. Clearly only for certain segments but like-minded governments could agree a new best practice to keep the funding flowing to keep the lights on, quite literally, in times of crisis and global stress.

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Data + tech + new paradigm = success

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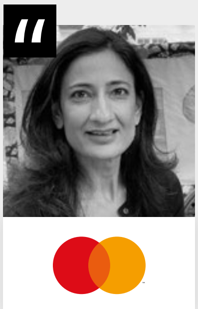
"When I inherited my position at Deutsche Bank we had close to 10,000 different types of systems. We cut that dramatically but even then, there were different instances of the same application running slightly differently, some off-the-shelf, some hybrid and some internally designed. The point is legacy software systems is still a major problem."

HENRY RITCHOTTE, FOUNDER, **RITMIR VENTURES**, EX-DEUTSCHE BANK, CHIEF DIGITAL OFFICER

Technology remains the key delta in the race for cross-border payments domination and, as ever, how and why the industry got to its current situation is a useful starting point. It has been an open secret in the banking community for several years now that much of the hundreds of billions of dollars earmarked as 'digital investment' and 'IT spend' across banks globally have in many cases been allocated to create sticking plasters over creaking, incompatible legacy systems.

The biggest US banks would appear to have stolen a march on European peers in terms of development. As a starting point, it is reasonable to assume that it will be many years before any large multinational bank can claim to have widely integrated, up-to-date systems.

Rasika Raina, Mastercard's Senior Senior VP, Strategy and Solutioning, Transfer Solutions summed up the challenge with regard to technology noting that "our competition is archaic technology" adding...

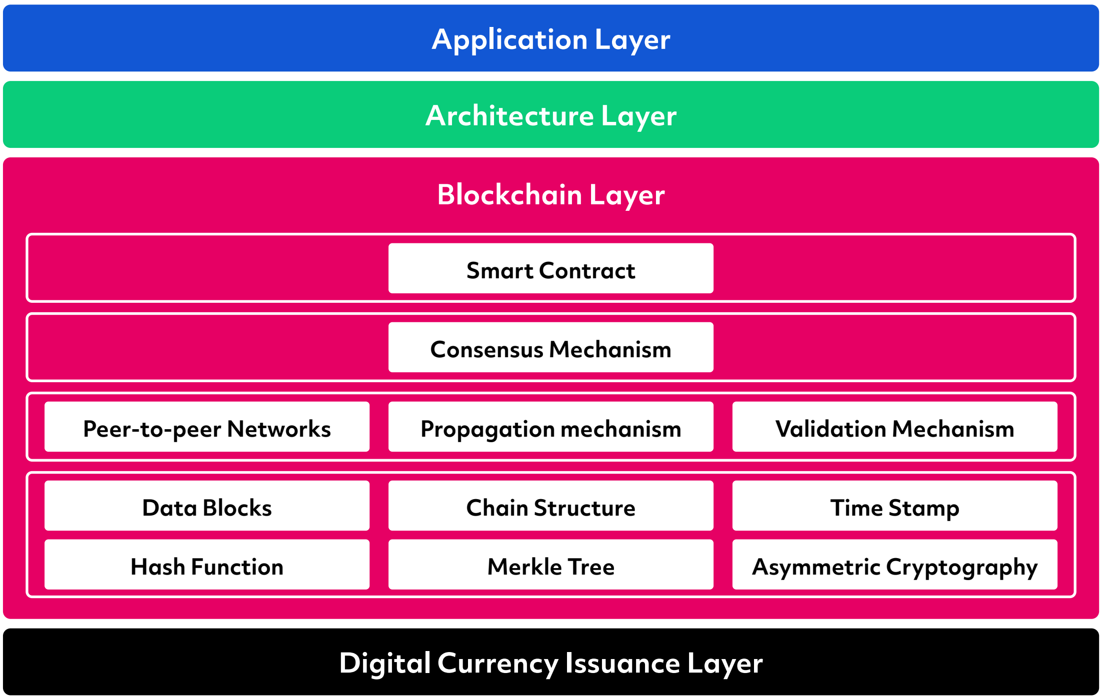


."..The problem is that the industry is, in some cases, using 40 to 50 year old technology and arrangements like correspondent banking to address a $156 trillion cross-border payments sector."

RASIKA RAINA, SENIOR VICE PRESIDENT FOR STRATEGY AND SOLUTIONING, TRANSFER SOLUTIONS, **MASTERCARD**

What does payments technology need to deliver?

Data Layering, Oracles and Distributed Ledger Technology
Perhaps stating the obvious but a useful caveat – if you do not have the data, technology will not create the data. Application of the likes of Distributed Ledger Technology (DLT) can ensure that data – the truth – once established, can be maintained and can be trusted. Provided that the originator of a transaction and the digital record and the recipient of the data reside on the same data layer, the technology already exists to ensure that this transmission can be trusted.



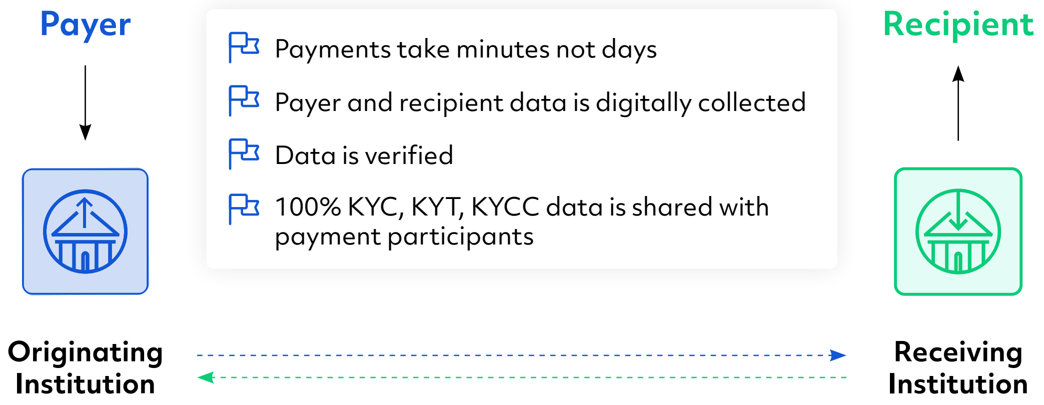
The challenge, and a major source of friction across the multi-layered financial services industry, is how to use this data when the recipient and originator exist on different layers. In financial services, think brokers vs exchanges vs clearing houses vs depositary institutions vs central clearing counterparty – all technically on different data layers. If pricing data is required for a transaction, and the source is external, a so-called Oracle (DLT-speak for the tech to connect blockchains to external resources, enabling the creation of advanced hybrid smart contracts) is used to onboard but this can create a trust issue.

Technology can be used to improve transparency and trust between layers. The current multi-layered system – a legacy of regulators' needs to ensure the problem of incentives didn't compromise best practice and execution – will not be undone. However, technology can perhaps be used to build systems that integrate into smaller groupings effectively reducing the number of layers and smoothing transaction frictions, thereby improving speed, lowering costs and building trust.

Mitigating the 'high-risk' label in low value space
In order to mitigate the 'high-risk' classification applied to many undeserving payments categories, certain criteria will need to be met. The very best new technologies will enable a flexible interface, adaptable institution by institution, capable of harmonising requirements across borders and products to deliver the necessary data across one platform between Originating Institutions (OI) and Clearing Institutions (CI). The OI and CI should be able to select and calibrate as many or as few of the steps in the process to be automated as is required in each case. With iterations, AI and machine learning can begin to automate this process of selection as well.

As with the "king for a day" metaphor, a global, single-shared platform would of course be the most beneficial place to start.

Global single shared platform



Key deliverables would include:

1. Simplifying the manual processes that hamper correspondent banking – KYC data submitted digitally, pre-designated forms uploaded to avoid manual processing
2. Digitally collecting, verify and store customer data and documentation as well as transparent ID authentication
3. Enabling payments to be routed via countries and correspondents that fulfil pre-set criteria, including data-sharing rules
4. Automating pre-determined risk management, compliance checks and standard operating procedures to de-risk transactions and ensure compliance with AML (Anti-Money Laundering) and CFT (Combating the Financing of Terrorism) requirements

So what?

In conclusion, there is no quick or easy fix to many of the long-standing frictions in cross-border payments but technology, a fresh way of approaching certain legacy challenges and a willingness of like-minded central banks and regimes to agree high level standards and use tech to implement them will be a very good start.

The dramatic shifts in the geopolitical and economic outlook in the last 2-3 years have reset the order of priorities for private industry and public agencies alike. As we emerge from the aftermath of a Covid-hit world where everything was going digital, expectations have been reset to more realistic levels.

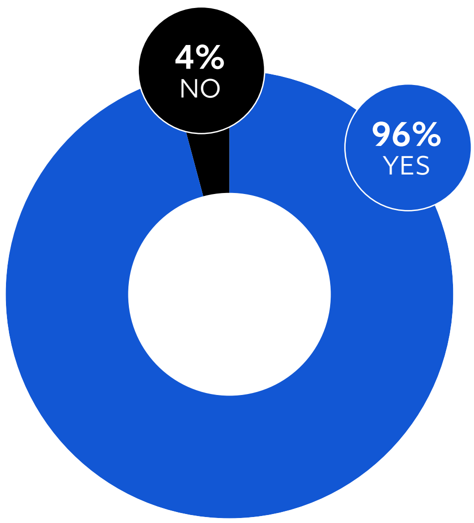
Efficiency is critical but should not simply be viewed in absolute cost-terms but rather improved speed, functionality and choice. Ultimately lower costs will be a clear outcome but in the interim, and in a new world of higher rates and inflation, it is more important to avoid strangling innovation than it is to deliver on the order of thinking established several years back before the world changed.

Appendix – survey findings

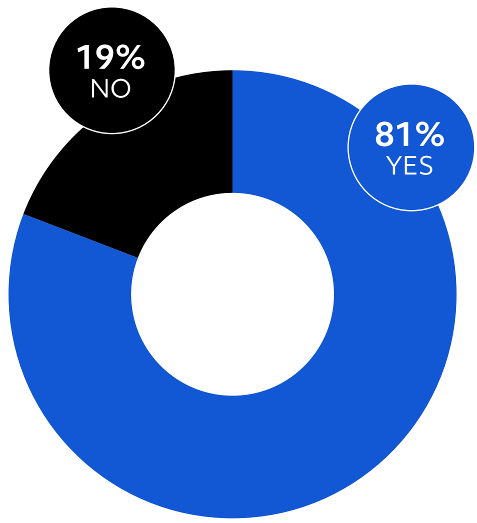
Results from a comprehensive survey conducted across The Payments Association's membership and contacts focused on the current structure of the cross-border payments landscape and its readiness to meet future challenges facing the industry. Interestingly, there was almost unanimous agreement that there can and will be credible alternatives to the correspondent banking network which has been shrinking for many years now.

This likely reflected growing confidence in the ability of technology and innovation to overcome many of the legacy cross-border hurdles that have plagued the industry for many years. Suggestions proffered as to what this may look like centred on numerous calls for blockchain-based cross-border payments networks and distributed ledger technology. P2P and digital wallets for the retail space were widely mentioned as was embedded finance and interconnected open banking. Outliers included 'an alternative to SWIFT' and wholesale CBDCs and RTGS.

Can there be a credible alternative to correspondent banking model?



Can tech enable XB payments to become global, seamless?

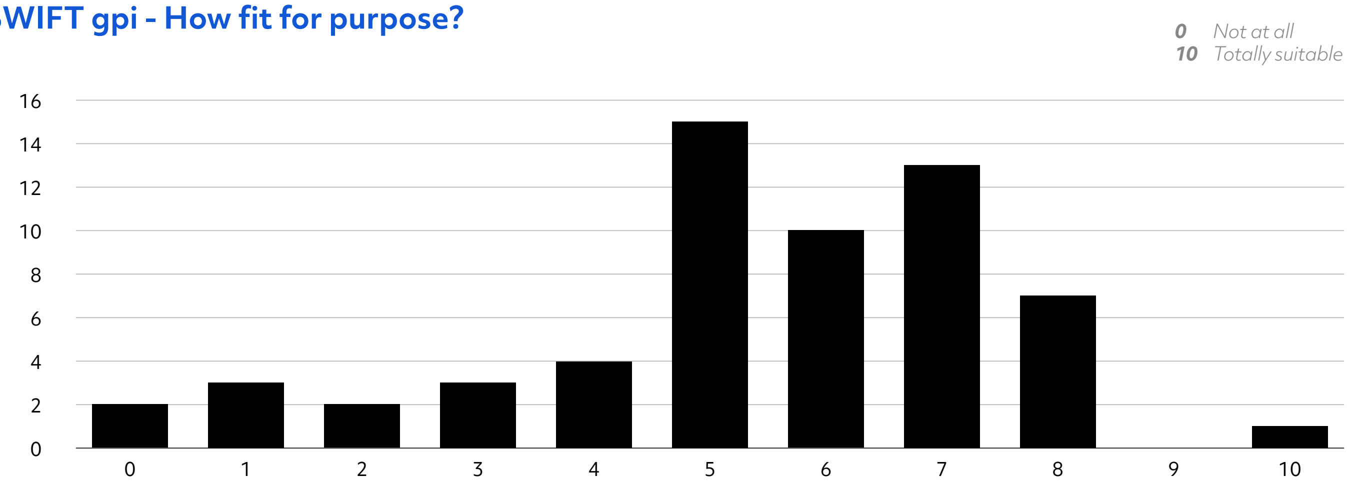


Agreement that technological solutions were the way forward was almost as widespread, with establishment of a global language and best practice standards the basis of this optimism.

Source: https://dkp4zo9jcyg.typeform.com/report/Cet0a7Rn/g5V1MZqPQLVKlxhP

To that end, while there was much scepticism that SWIFT gpi was fit for purpose to address and resolve the challenges ahead, with an average score of the likelihood of 5.4, the likelihood of ISO20022 succeeding as the international language for payments was more enthusiastically view, with a score of 6.4.

SWIFT gpi - How fit for purpose?



To conclude, some of the more interesting suggestions for how to make cross-border payments safer, cheaper and faster are set out (anonymously) below:

- Embrace the Unite Global cross-border hub and use a universal settlement currency based on WOCU.
- Remove correspondent banks from the picture, as their existing business model and legacy does not incentivise them to provide a much better experience and value proposition.
- A shared big data lake where only cash operational segregated accounts are shared, having the chance to manage treasury and FX spreads apart to keep revenue confidential.
- Super centralised liquidity hub.
- Utilising tech that provides transparency which enables an instant KYC and processing of payments.
- An online platform powered by tech like blockchain and generative AI plus CBDC where dependence of manual processing at a Financial Institution is minimal.
- Disintermediation of the traditional banking institutions and payment methods, that operate non-realtime, batch-based systems. Stronger 2FA method and processing.
- A synergistic blend of technology, regulatory reforms, and collaborative efforts among the financial sector, governmental bodies, and international organisations is imperative to realise genuinely cost-effective, expeditious, secure, and seamless cross-border payments. Advancements in this realm hinge on stakeholders' readiness to embrace innovative technologies and adopt progressive practices.
- Change the data model, change the liquidity model, change the settlement model.
- Unified format as ISO 20022 replaces correspondent banking with CBDC or regulated stable coins with near-time processing pre-validation services swarm based fraud and AML screening (fraud and money laundering is going global, but screening is still processed local).
- Stop focusing on tech as the answer and instead think about what drives business model changes with G-SIBs.

Source: https://dkp4zo9jcyg.typeform.com/report/Cet0a7Rn/g5V1MZqPQLVKlxhP

About the Author

JONATHAN TYCE, DIRECTOR OF RESEARCH AND INVESTMENT, **ALPHAONESTRATEGIES**

Jonathan Tyce started working in Financial Services in 1995 and throughout his career has focused solely on the financials space. From launching and running a pan-European financials hedge fund at JO Hambro Capital Management to 12 years helping build out Bloomberg Intelligence (based in UK and Hong Kong) and run the financials research, including Payments, his breadth of experience and industry contacts offer a unique mix. Having left the City in May 2023, he now works for himself, ideally on interesting projects across the financial services space. He graduated from St. Anne's College, Oxford University in 1995.

About the Interviewees

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HENRY RITCHOTTE, FOUNDER, **RITMIR VENTURES**, EX-DEUTSCHE BANK, CHIEF DIGITAL OFFICER

Henry Ritchotte is based in London and is the Founder of RitMir Ventures, investing in financial services businesses with a focus on regulatory and technology driven business models.

Most recently, Henry served as Chief Digital Officer of Deutsche Bank, creating the blueprint for a digital challenger bank within Deutsche Bank. The digital bank aimed to deliver extraordinary customer experiences through intelligent use of technology, data and mobile devices.

Previously, Henry was Chief Operating Officer and a member of the Management Board and Group Executive Committee at Deutsche Bank. As Chief Operating Officer, he was responsible over various periods for Group Strategy, Technology, Operations, Corporate Services, Corporate Security, Business Continuity, Information Security and the Bank's global digital transformation agenda. From 2010, Henry was Chief Operating Officer of the Corporate and Investment Bank and a member of its Executive Committee. He was previously Chief Operating Officer of Global Markets, based in London. Between 2004 and 2008 he was Head of Global Markets in Tokyo, where he became a member of the Global Markets Executive Committee, and from 2001 to 2004 Head of the Institutional Client Group Asia in Singapore.

MARIUS JURGILAS, SVP FOR RESEARCH AND INNOVATIONS, **SUPER HOW?**

Marius Jurgilas, PhD, is the SVP for Research and Innovations at SUPER HOW?. He is also the Co-Founder and CEO at Axiology –financial securities tokenization platform. Marius has more than 15 years of experience in central banking payments infrastructure, supervision, and financial innovations. He is a former board member at the Bank of Lithuania, former BIS Innovations network CBDC working group chair, and a former member of the ECB Digital Euro High-Level Task Force. Marius has also worked at Norges Bank (Central bank of Norway) and the Bank of England.

RASIKA RAINA, SENIOR VICE PRESIDENT FOR STRATEGY AND SOLUTIONING, TRANSFER SOLUTIONS, **MASTERCARD**

Rasika joined Mastercard in 2016 and has been instrumental in establishing Mastercard's cross-border payments offering, which combined with Mastercard's other money transfer solutions, enable financial institutions to send payments to over 180 markets covering 95% of the world's population.

In her current role, Rasika is responsible for defining the strategic direction for the company's Remittance and Disbursements business.

Rasika has over 15 years of payments industry experience having worked for companies including Western Union and Travelex.

Rasika has also held senior roles at the United Nations Development Program's Treasury workstream, where she led the design of the agency's funds disbursements activity globally.

Rasika is a graduate of Columbia University's School of International & Public Affairs.

Cross Border Payments Working Group

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CHRYSSI CHORAFA
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SENIOR MARKET DEVELOPMENT MANAGER
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GARY PALMER
FOUNDER, CHAIRMAN AND CEO
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JILL DAVIES
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ROBERT TURNER KERR
RELATIONSHIP MANAGER
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thepaymentsassociation.org/portfolio/project-cross-border

About The Payments Association

The Payments Association is the largest community in payments. Founded in the UK in 2008, the association now operates communities in the UK, EU and Asia, helping almost 300 companies enhance their commercial interests, solve societal problems such as financial exclusion and evaluate new opportunities for innovation in payments.

Our purpose is to empower the most influential community in payments, where the connections, collaboration and learning shape an industry that works for all.

We operate as an independent representative for the industry and its interests, and drive collaboration within the payments sector in order to bring about meaningful change and innovation. We work closely with industry stakeholders such as the Bank of England, the FCA, HM Treasury, the Payment Systems Regulator, Pay.UK, UK Finance and Innovate Finance.

Through our comprehensive programme of activities for members and with guidance from an independent Advisory Board of leading payments CEOs, we facilitate the connections and build the bridges that join the ecosystem together and make it stronger.

These activities include a programme of monthly digital and face-to-face events including our annual conference PAY360 and awards dinner, CEO round tables and training activities.

We run six stakeholder working Project groups: Inclusion, Regulator, Financial Crime, International Trade, Digital Currencies and Open Banking. The volunteers within these groups represent the collective view of The Payments Association members at industry-critical moments and work together to drive innovation in these areas.

We conduct exclusive industry research. This research is not legal advice. It is made available to our members through our Insights knowledge base to challenge and support their understanding of industry issues. This include monthly whitepapers, insightful interviews and tips from the industry's most successful CEOs.

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the payments association

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