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Real time payments: Solving today's problems for tomorrow's success

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Finextra

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01 | Introduction

Banks understand what they need from real time global payments, but reaching a position where they can leverage the full benefits available is a significant challenge.

While multiple projects are underway around the globe in an effort to bring real time to multiple markets, before banks can tap in to the advantages of real time, they must first get their technological house in order.

Banks must consider how real time payments should interoperate with each other, and create real time global settlement and clearing.

Why does this remain such a challenge? It is all related to what is happening in the payment structure of traditional banks.

Whether it's a tier 1 bank encumbered by legacy systems, or a smaller bank with limited coverage of cross border capabilities, in almost every financial institution, payments tend to be segregated.

High value and low value payments are treated differently, while international payment components are entirely separate to a bank's domestic payment components. This needn't remain the case, and financial technology providers are working in collaboration with financial institutions to bring these payments closer together, with the ultimate goal of breaking down the distance between domestic and international payments.

The ability for organisations to move transactions globally and as quickly as possible, is one part of the problem. Often carried out by multiple teams across a bank, the pressure to converge these processes is increasing.

At the end of the day, it shouldn't matter what type of payment is being sent. Banks should be searching for the fastest, cheapest, and safest way to get every payment completed. They should also be striving to send the maximum amount of remittance data along with the payment as possible. Historically banks have relied on SWIFT and correspondent banking networks to complete international payments, however a significant amount of uncertainty surrounded these transactions as payees and payers were not provided with transparency around transfer costs, timing, and confirmation.

As the technology now exists to make international payments with significant transparency, banks must update their tech suite to meet these new standards. As a result, there exists a real division between the technical ability to deliver a message in country, in territory, or in currency – how a bank goes about de-risking the settlement aspect of this is the next step.

RTGS.global and similar organisations are trying to solve for this, as are the card schemes which already provide global settlement.

While we are seeing payment transfer companies see significant success, these tech-driven firms are still heavily reliant on correspondent banking. If payments remain subject to transfer between three or four correspondent banks, delays and costs are only going to increase.

This impact study will explore the current challenges faced by banks in their efforts to meet instant payment objectives, how the global real time ecosystem is driving pressure on financial institutions to evolve, canvas key trends pushing the real time agenda, and the best way for banks to orient themselves for real time success.

02 | Internal conflict: Why banks face an uphill battle toward instant payments

International payments are plagued by a myriad of hurdles stemming largely from the complex web of correspondent banking networks; a dearth of modern, interoperable instant-payment rails; and the slow pace at which financial institutions are able to digitally transform.

The [Bank of England](#) outlines a number of legacy hurdles that banks currently have to face when trying to process cross-border payments:

- **Fragmented and truncated data formats:** as data standards and formats vary significantly across jurisdictions, systems and message networks, the translation required to allow these payment messages to be recognised and processed is time consuming.
- **Complex processing of compliance checks:** given the discrepancies between regulatory regimes across the globe, banks may use different sources to conduct their compliance checks, which can lead to payments being incorrectly flagged. The more intermediaries that exist within a chain, the greater the likelihood of these false flags arising, which in turn makes compliance checks more costly, hampers automation and leads to delays in payments. In fact, in certain cases, cross border payments can take several days and cost up to 10 times that of a domestic payment because of such delays.

- **Limited operating hours:** Naturally, payments can only be processed when the relevant payment system is online. Typically the settlement system in a given country is aligned to regular business hours, but even where systems offer extended operating hours, cross-border payments over large time zone differences can be severely impacted. This has a carry-on effect on a bank's liquidity, as unknown fluctuations in exchange rates between the beginning and the end of the payment cycle must be accounted for.
- **High funding costs:** Providing funding in advance, typically across multiple currencies, is often required in order for banks to achieve quick settlement. Banks therefore need to set aside capital to cover this funding, reducing their ability to spend on other activities.
- **Long transaction chains:** The cost of maintaining banks in every jurisdiction means that banks rely on correspondent institutions to facilitate payment corridors. This increases costs and adds exposure to issues with data corruption throughout the banking chain.
- **Weak competition:** While this is slowly changing, the significant barriers to entry in the cross-border payment space have meant that incumbents have not been pressured to evolve and improve their services, and the costs of using the existing system has been passed on to the end user.

Given the magnitude of these challenges, it isn't entirely surprising that instant international payments have taken such a long time to take off.

What and where are the pain points in banks' current tech stacks?

When it comes to the pain points in banks' current tech stacks, it is clear that legacy technology platforms prove to be a significant hurdle in a financial institution's efforts to improve international payments. Financial institutions' systems to facilitate cross-border payments were constructed and iterated when paper-based processes first shifted to electronic systems. Limitations such as a dependence on batch processing, lack of real-time monitoring, and low capacity for data processing, create real barriers toward the automation of interacting payments systems.

Why does this need to be addressed?

By definition, transacting cross-border payments is more complex than domestic payments, and given the significance of the challenges in the space, it is understandable that progress in the sector has been slow. Yet, as the expectations of consumers and corporates alike begin to demand more user-friendly, secure, and above all, fast, payment services, the current status quo for international payments will become uncompetitive, and eventually, redundant.

03 | The global real time environment today

Today, the real-time global payments ecosystem is an industry in flux. While legacy financial institutions continue to rely on sluggish correspondent banking models and disjointed payments rails, worldwide pressure is building toward revamping international payments both from the top-down, and from the bottom-up.

Six years ago, only 14 countries had real-time payments capabilities, whereas today, over 56 nations have such systems enabled. While an impressive improvement, this is fewer than one-third of the world's countries.

Pressure to improve from the top is best evidenced in the G20's 2020 request to the Financial Stability Board (FSB) and other standard-setting bodies, to co-ordinate a three-stage process to develop a roadmap for the enhancement of cross-border payments. The G20's three corresponding reports were published throughout 2020, and set the improvement of cross-border payments as a priority, which has injected a significant boost of global momentum toward improving the status quo.

The FSB's **first progress report** was published in October 2021, and states: "Most of the milestones set by the roadmap for 2021 have been successfully completed or are close to finalisation. The breadth of the work underway and the recognition of the importance of conducting sufficient external outreach has led some of the timelines to be extended. But the end-goals of the overall roadmap remain firmly on-track."

The UK's Bank of England is a leading player in the initiative, providing support through the Committee on Payments and Market Infrastructures (CPMI) and the

CPMI's Cross-Border Payments Task Force. The UK's Real-Time Gross Settlement (RTGS) service is well positioned to improve domestic real-time payments, and importantly, will allow the UK's payment system to meet global interoperability requirements set out in the G20 roadmap.

Across Europe, the region's automated clearing houses (ACHs) migrated from TARGET2 to the TARGET Instant Payment Settlement (TIPS) system in March 2022, supporting the wider roll out of instant payments across European nations. The ECB Governing Council's obligation that all PSPs that had adhered to the SCT Inst scheme must be reachable in TIPS means that ultimately all European citizens will be able to send and receive electronic instant payments to and from any country in the EU.

In Australia, the New Payments Platform began operating in February 2018, while Brazil's central bank launched PIX in December 2020, allowing for round the clock settlements. Canada's Realtime Payments Rail is expected to launch this year, and Peru, Indonesia, New Zealand and Colombia are also positioned to launch instant payment systems in the coming years.

While worldwide instant payment systems operate alongside the more traditional systems that already exist, there is an increasing expectation that all payments must be instant and frictionless. It is easier to achieve this on a domestic level, compared to a global level as the payments industry is in a constant state of evolution and adaptation.

Dave Sissens, chief executive officer of RTGS.global, a cross-border liquidity network for banks that locks in and transfers liquidity ownership in real-time, told the [Digital Money Institute](#) that in addition to the domestic-international divide, the wholesale settlement system has lagged behind retail. "The retail space has changed dramatically in the last few years and instant domestic payments are the norm. But the wholesale club hasn't evolved in step, and this is having a detrimental impact on cross-border payments."

The retail space is nurturing a burgeoning class of players, many beginning their offering by catering specifically to international remittances – Wise, Azimo, Remitly and MoneyGram are well-known examples. Tackling the wholesale conundrum more aggressively, RTGS.global recognises that improving visibility of inter-bank liquidity makes for a highly practical resolution to delivering faster, more efficient international payments within current frameworks.

A strong example of an incumbent leveraging tech opportunity to improve their international payments offering, is Santander. Through Santander's One Trade solution, Santander's SME and corporate clients in Spain can make immediate international payments to recipients in Brazil, in Brazilian real. Part of PagoNxt's Trade business unit, the One Trade solution allows international transfers to be completed in minutes, allowing senders to comply with FX documentation requirements, while the recipients are spared from closing or signing local FX contracts – as BRL will automatically be credited to the local account.

While fintechs have been quickly carving out ground in the space, Santander was the first European bank to launch a payments solution that allows customers to make real time transfers into Brazil in local currency.

Santander is the first of what is anticipated to be a surge in interest by financial institutions which have the technology and/or technology partners to be able to launch such innovative solutions across the globe.

04 | Trends pushing real time payments forward

What lessons can be taken from card schemes?

Global card schemes which have long dominated the lives and wallets of retail payments paved the way for international payments to be tackled efficiently. The recent emergence of solutions like Visa Direct provide a clear example of this. The Visa Direct Payouts APIs enable fast payments to over a billion cards across the globe, reducing complexities often associated with managing and sending money across multiple networks and intermediaries. Supporting both real-time domestic and cross-border person-to-person, business-to-small business, and business-to-consumer use cases, users can move money globally through a single connection to VisaNet. This move demonstrates that even card schemes are considering how they can remain competitive in payments, beyond the card.

But even the card pioneers are under pressure with the emergence of digital wallets and influential e-commerce players. A clear example of this is the 'global truce' struck between Amazon and Visa after a stand-off on credit card fees in February 2022. As shoppers turned online during the Covid-19 pandemic, retailers were able to increase pressure on card providers like Visa to reduce their fees.

What additional value does Request to Pay promise?

Request-to-Pay (R2P) is also poised to play a leading role in the evolution of instant payments, further driving the impetus for financial institutions to upgrade and improve their payments infrastructure. R2P offers billers the ability to request payment for a bill, rather than simply sending an invoice. This flexible new mode of

requesting payment will complement existing payments infrastructure, and promises to dramatically improve payments automation with significant upside for consumers and small business. Pay.UK estimates that R2P could save the UK economy between £2-£3 billion.

Incorporating such a tailored type of service at a systemic level urges financial institutions to improve their offering not only to meet baseline R2P standards, but to compete with new digital players, who are inevitably more agile. R2P will drive urgency into banks' efforts to upgrade their instant, cross-border payments offering.

How will ISO 20022's enriched data shape the future of real-time payments?

A fundamental pillar of the constantly evolving payments ecosystem is the migration to the data-rich ISO 20022 messaging format. While real-time, high-value payment systems have already adopted the new standard, the significance of the shift will unfold as more currencies begin switching to the new format. **According** to Stephen Lindsay, SWIFT's head of standards, "Major currencies will be operating with ISO before 2025 to reap the benefits."

The significance of ISO 20022's impact on international, instant payments is closely tied to its ability to provide additional remittance information, its traceability, and the transparency it engenders. Domestic or regional instant payment schemes are largely built upon the ISO 20022 standards, which means that once financial institutions or payments platforms have adopted the standard, they are able to reap the rewards that ISO 20022 promises, instantly.

As ISO 20022 messages hold much more remittance information than their predecessors, they significantly reduce time taken to reconcile payments as additional transactional data does not need to be pulled from other sources. The standardised format of ISO 20022 presents all relevant information tied to the payment to each party, allowing granularity and transparency of transactions.

On top of streamlining payments and granting access to instant payment networks, the migration to ISO 20022 by financial institutions is also predicted to spur a flurry of innovation, as firms begin exploring the ways in which value-added services can be crafted using the additional data gleaned from every transaction.

How can banks prepare for CBDC optionality?

Another macro trend which is predicted to shape international instant payments is that of central bank digital currencies (CBDCs). Governments and central banks, increasingly in consultation or cooperation with private sector players are actively investigating how CBDCs could be integrated into current financial systems, along with the potential risks and advantages such a change would bring.

While some nations including China, the Bahamas, and several other Caribbean countries, have already adopted a CBDC, Western countries are taking a cautious but active approach to the opportunity. Though wary of risks CBDCs may present, Western countries/regions including the US, UK and EU are reluctant miss out the potential upside that a national CBDC could bring.

As described by the **Bank for International Settlements** (BIS) retail CBDCs could ensure open payment platforms and a competitive, level playing field which is conducive to innovation. With the ability to enable instant settlement between two parties remotely, CBDCs could transform wholesale markets through, for instance, the instant remote settlement for securities transactions or foreign exchange. In the retail space, real-time person-to-person transfers with instantaneous settlement, is also possible, but above all, a CBDC network could facilitate direct cross-border monetary relationships established under a central bank's supervision.

While certain financial institutions – generally large banks with significant financial and technical resource – have already begun trials and projects examining how CBDC could be leveraged, there will be significant technical upgrades required by banks to begin providing such a revolutionary service.

05 | Conclusion

As **McKinsey** states, it's no wonder banking-technology executives, including CIOs, chief architects, and CTOs, are exponentially increasing their use of APIs. When it comes to instant payments, banks are now considering how payments APIs can enable real-time connectivity through instant settlement, reducing transaction risk while improving liquidity and cash flow concerns.

What objectives do you follow when implementing APIs?

Respondents' ranking of key goals



1 Reduce IT complexity



2 Enable agility



3 Enable partners



4 Comply with regulatory requirements



5 Drive innovation

How many APIs do you currently have and how many do you plan on having in 5 years?

Distribution of APIs %

		Relative growth		Absolute growth
		Today	In 5 years	
Internal APIs	Internal APIs APIs used by developers within the enterprise	77	73	x2
	External APIs			
	Partner APIs APIs used by business partners	18	19	x2
	Public APIs APIs used by external developers	5	8	x3

Source: **McKinsey**

Considering the influence such trends are expected to bear on the financial services industry, it is essential that banks begin orienting their technical capabilities toward a future that demands adaptability and customisation.

There is therefore an underlying need for banks to consider how they can leverage technical solutions, not least of which being APIs, to accelerate their innovation and maintain a competitive edge. Fortunately, with a blossoming API ecosystem driven in no small part by initiatives such as Open Banking, banks have the luxury of choice when it comes to selecting technology providers as partners.

About

Finextra Research

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