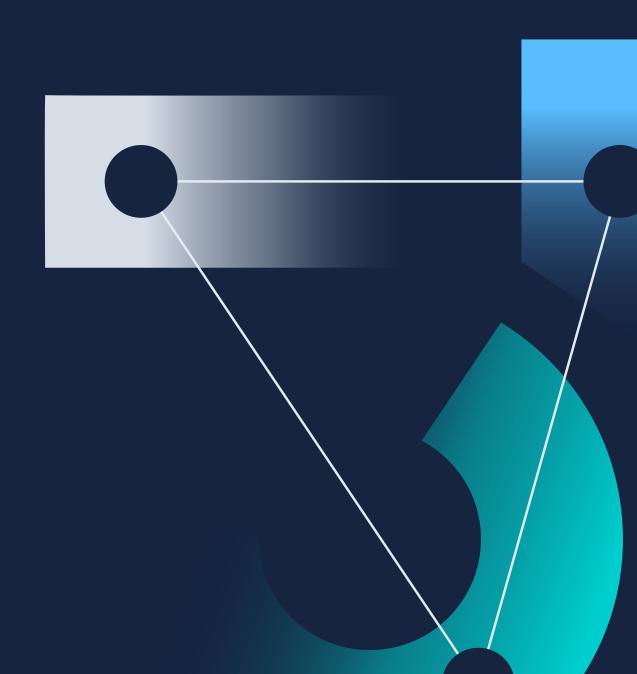


Faster payments:

Does interoperability matter?

Webinar wrap-up





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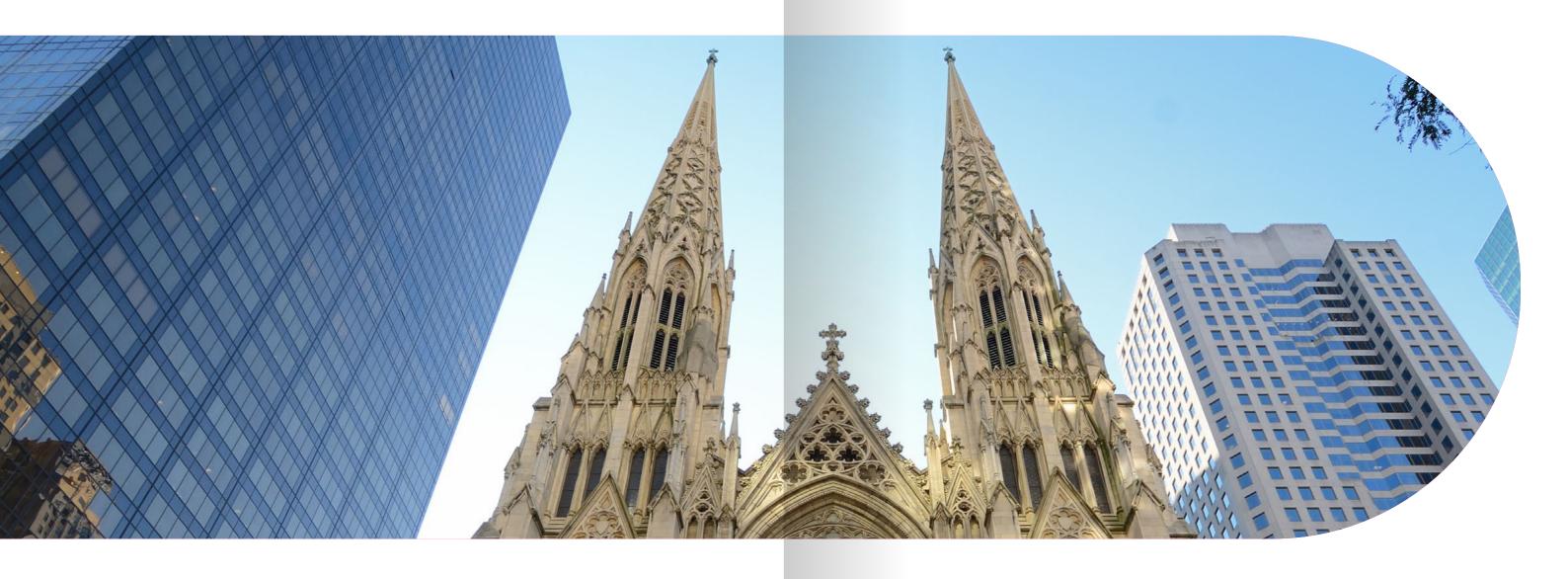
Introduction

Since the launch of RTP in 2017, the adoption of real-time payments in the US has increased rapidly, with over 200 banks now using the system. Fast forward to today, and the upcoming launch of FedNow is set to be another major milestone in the continuing adoption of real-time payments.

But how these two systems will coexist is another matter. At this stage it is not certain when – or even whether – FedNow will eventually interoperate with RTP, particularly in light of a recent communication from the Federal Reserve. So how will the two systems interact?

Which system should be used in different scenarios? And what are the options for banks wishing to take advantage of both systems?

This report looks at the differences between RTP and FedNow, the importance of interoperability in real-time payments, and the factors that will likely drive adoption in the US.



A tale of two systems

Today, around 50 countries around the world have real-time payments systems either already in place, or currently in the pipeline. The US first stepped into this arena in 2017 with the introduction of RTP, the real-time payments system from The Clearing House – and with the arrival of FedNow expected in the summer of 2023, there's no doubt the US is moving forward rapidly with its adoption of real-time payments.

But questions continue about what the existence of the two systems will mean for banks and their clients. Adding to the complexity, in September 2022, the Federal Reserve released Operating Circular 8, which specified the following:

"A FedNow Participant may not send a payment order through the FedNow Service identifying an originator or beneficiary that is not either (i) a FedNow Participant or (ii) a holder of a deposit account on the books of the FedNow Sender and FedNow Receiver, respectively, in the United States."

In other words, the FedNow service should not be used for onward remittance to other faster payment systems. This is perhaps unsurprising, given that FedNow and RTP will not interoperate. But why would this be the case, given that both systems handle real-time payments, and both are based on ISO 20022?

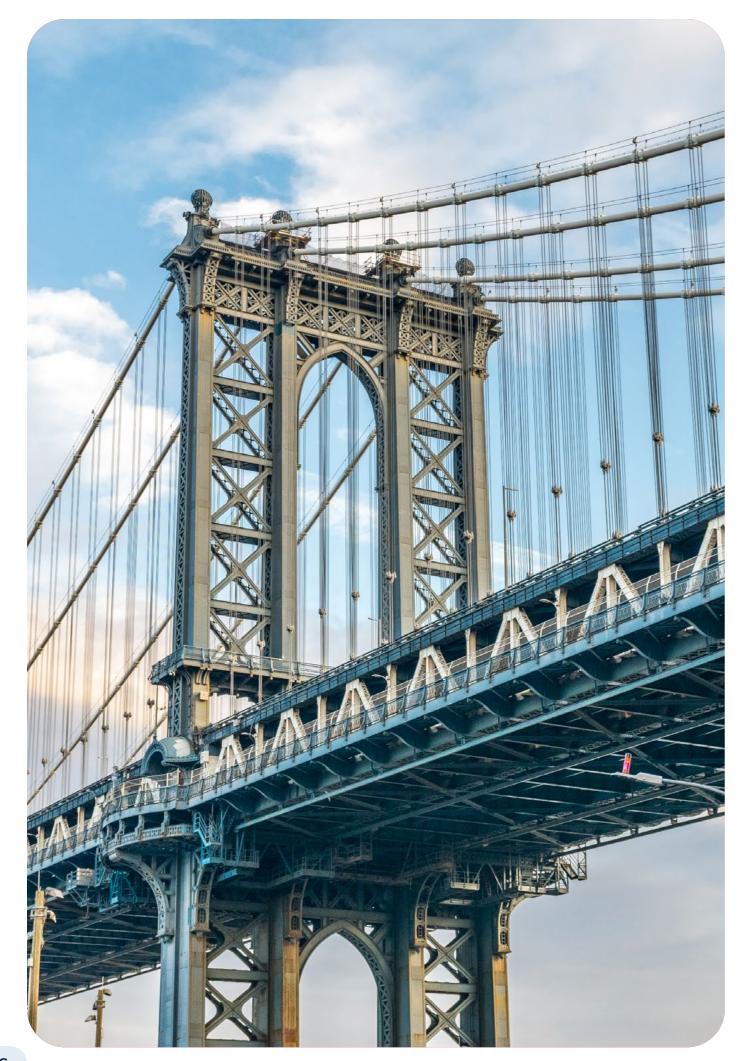
"Having two systems effectively doing the same thing in the US has created a number of questions for banks and their clients around how these two systems will interact."

David Scola, General Manager – US, Form3

In a nutshell, explains Irfan Ahmad, Managing Director, Head of US Payments, GTS at Bank of America, "When you're on ISO 20022, you're speaking the same language – but you may not be speaking the same dialect."

A tale of two systems

Faster Payments: Does interoperability matter?



Work in progress

When TCH was developing RTP in 2015, FedNow, for example, allows for more the broader ISO community had not yet pinned down how the ISO message set would be adopted for instant payments. Indeed, the development of RTP was arguably part of the process that helped to shape how this question was addressed. But that also meant decisions had to be made before the ISO committee had defined what the standard would mean for instant payment systems.

In practice, ISO 20022 has considerable scope for variation when it comes to the flow of messages that are sent and received, as well as the structure and amount of data included in messages. And given that FedNow is a later development than RTP, the Fed has had more time to explore how to implement ISO 20022 in a more globally compliant way.

information in its messages than RTP - an approach which comes with some challenges as well as benefits. "For example, when you're a bank, and you suddenly have all this remittance information, do you choose to display that remittance information?" comments Ahmad. Other implications of longer message sets include practical questions about online channels and databases, and how to deal with fraud.

"There are global working groups in place, like the Swift Instant Payment Plus Working Group, to have that dialogue about how to align across different schemes globally. But that would require one of them to start opening up to more global types of transactions. And if there's no real pressure right now to align, maybe they will just compete to see where we end up."

Michael Knorr, CIB Industry & Advisory Lead, Wells Fargo

Faster Payments: Does interoperability matter? Work in progress

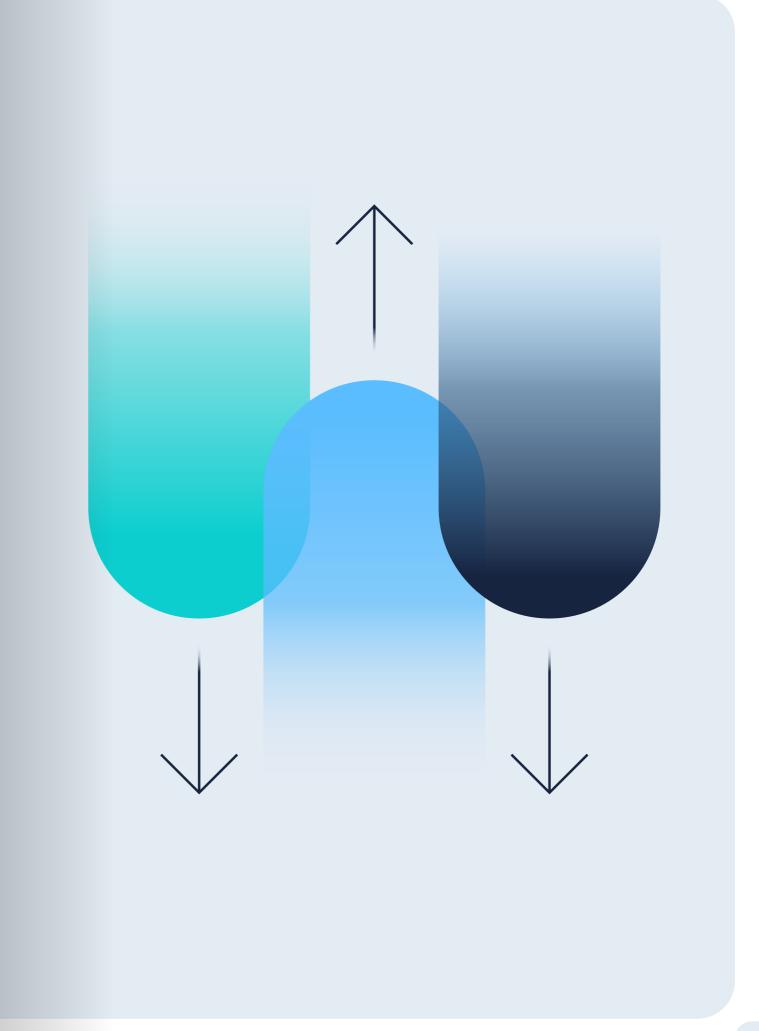
The interoperability challenge

At the same time, the lack of interoperability between the two systems presents something of a challenge for banks – but what does it mean in practice?

Interoperability has a number of facets, as Ahmad explains. "There's the interoperability between the networks, which isn't there," he says. "There's the interoperability between banks – how do you get something from somebody who's on RTP to someone who's on FedNow, which clearly wouldn't be allowed here? And how do you then facilitate some sort of forward remittance or correspondence on the network as well?

In practice, it's likely that the outcome will be similar to the world of wire payments. As Ahmad predicts, "Your reach is really going to start depending on those banks that are originating into both networks. So you'll have the receiveonly banks dependent on the banks that are originating from both sides, similar to how things work with CHIPS and Fedwire."

For banks, the question will be at what point the incremental reach offered by FedNow will represent a clear value proposition in terms of originating to both networks. For banks that proceed with FedNow, much of that decision will be driven by the network's value proposition, and by the reach the network offers for customers





For banks, it is important to understand how the disparities between the two systems should be addressed. Essentially, banks wishing to take advantage of instant payments as soon as FedNow comes into effect will need to join both FedNow and RTP in order to provide as close as possible to a nationwide reach for their retail, corporate and institutional clients. However, there are different ways of achieving this.

"They could go about it by building and accounting for code that accounts for the differences between the two payment rails, potentially even building two backend systems," comments Eralda Hasani, Director, Immediate Payments Product Management at BNY Mellon. "Or they could look for a technology type provider that does the majority of the technical lift

to account for the differences, allowing the bank to focus on other aspects of managing two payment rails."

In BNY Mellon's white label bank segment, says Hasani, the bank seeks to streamline the technical connectivity differences between the two systems. "We then make it easier for the banks by presenting them with one set of specs for them to ingest on their side, and be able to provide instructions to us or receive payments through us." She notes that there are multiple providers in the market that are able to support banks in a similar way.

In practice, there are a number of points that banks need to think about when seeking to operate both systems. These include:

1. Liquidity management

RTP uses a prefunded model, whereby the bank holds a balance with RTP's joint account, and can defund that account via a funding agent or on a self-funded basis. FedNow, in contrast has taken a completely different approach, with transactions settled in the master account.

2. Accounting

The Fed is moving to a seven-day accounting model with the introduction of FedNow, which may be a significant change for some financial institutions.

3. Reconciliation

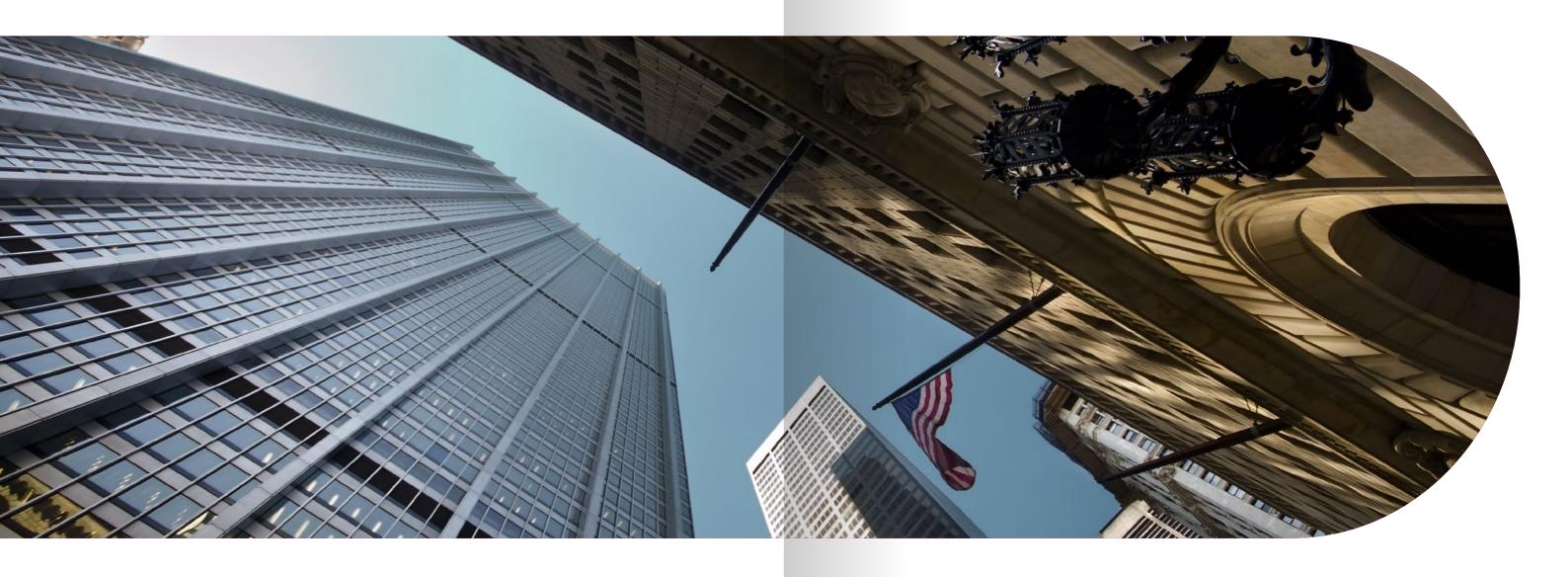
While both systems run on a 24/7 basis, there is a lack of alignment between their definition of a business day. Whereas RTP's business day runs from midnight to midnight, FedNow aligns with Fedwire, with the business day running from 7pm to 7pm. While this discrepancy doesn't make much difference from a processing perspective, financial institutions will need to reconcile two different files with two different times.

Remittance information

On another note, Hasani highlights some of the challenges associated with remittance information in the context of B2B payments. Where outbound payments are concerned, she notes that banks have a certain amount of control over what they provide for their clients, and how the differences between the two systems are accounted for in the back end. But what about the changes banks may need to make to their own systems for inbound payments?

"You've got different types of messages from two different networks, and there's complexity even on the back end," she observes. "Do you wait for remittance to put it together? Do you present it separately? It's definitely challenging to account for that difference."





FedNow and the impact of excluding intermediary banks

In any payment system, building scale and creating network effects is critical. And given the unique banking landscape of the US – which includes not only large banks, but also numerous smaller banks that only operate in certain towns, states or particularly important.

As such, providing other access models through banks and third party providers might have provided an effective way of scaling up quickly. Conversely, the chosen approach – in other words, excluding intermediaries – may have resulted in

confusion and delays, notes Michael Knorr, CIB Industry & Advisory Lead at Wells Fargo.

Likewise, there is some uncertainty over whether there will be enough vendor capacity to facilitate the transition, and regions – enabling wider participation is a risk that usability may be hampered by the longer implementation process.

"Not offering alternative access and correspondent models within FedNow might impact how quickly the rest of the country can participate in the model," Knorr reflects. "I think there may be some lost opportunities there."

That said, there are also some benefits to the chosen approach. "Both networks have looked at efficiency in payments, and not adding more 'hops' truly allows for these payments to settle in less than three seconds," notes Hasani, From a cost

perspective, she notes that minimising the number of parties involved in a payment keeps the costs of those transactions down, resulting in economic benefits for end users.



Understanding the use cases

The larger message set for FedNow messages arguably provides an opportunity to solve for a much broader set of use cases. So to what extent will the traffic going through the two systems be affected by the use cases they cater for?

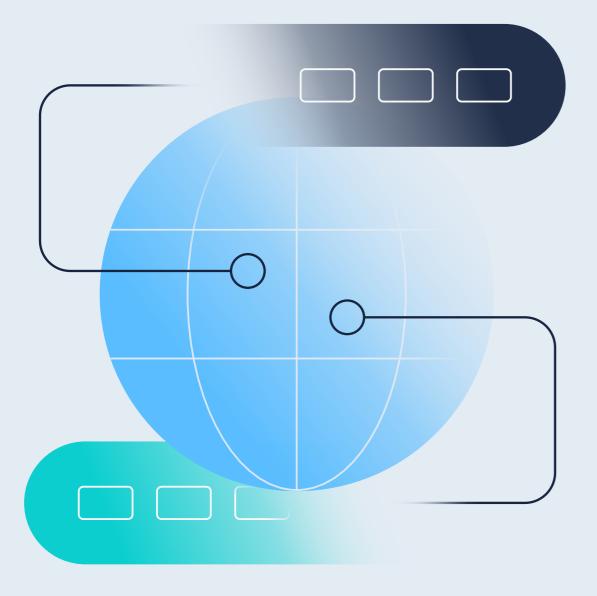
Knorr points out that real-time payments were originally developed with a particular use case in mind – but this has evolved over time. "Some of those response times make sense for point of sale-initiated transactions, where you want to have this very fast return," he says. "In other use cases, it can take longer."

Cross-border payments, for example, will take longer to process, and will not be point of sale transactions. As such, Knorr argues that the industry may need to look at how response times might vary based on different transaction types and use cases.

In any case, argues Ahmad, the extensive message set for FedNow is less about use cases, and more about aligning Fedwire and FedNow. Going forward, a significant question is whether the data included in FedNow messages will need to be presented to customers.

"If you're going to have that detailed message set from a use case perspective, then there has to be an obligation on the receiving bank to be able to receive and provide that information to their customers," he comments. "It really kills the value proposition of having all that data in there if the originator cannot rely on the receiver getting that information."

Irfan Ahmad, Managing Director, Head of US Payments, GTS, Bank of America



Cross-border payments and beyond

Looking at real-time payments more broadly, another key topic is the impact of developments in crossborder payments on the traditional correspondent banking model.

Notable developments include the pilot programme for immediate cross-border (IXB) payments by TCH, EBA and Swift, as well as the P27 joint initiative for a pan-Nordic payment infrastructure. Exploration of cross-border instant payments is also underway in APAC and the Middle East.

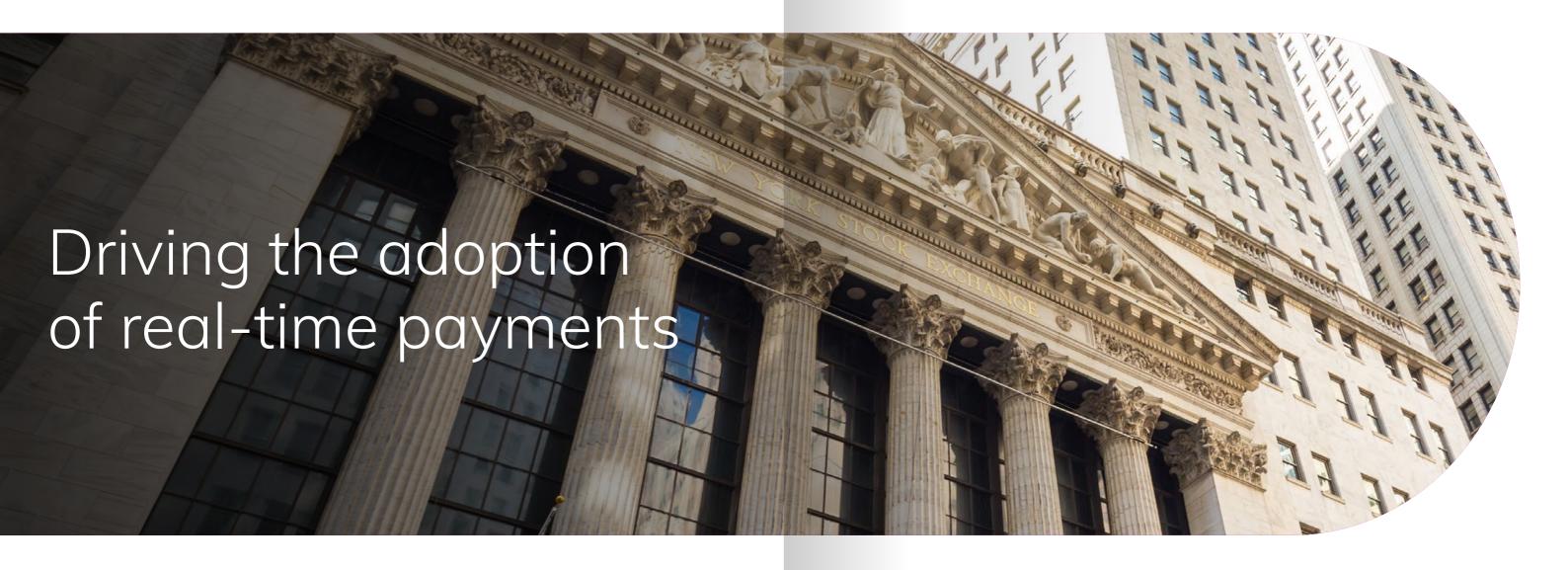
Arguably, the most significant challenge of such initiatives is not the technical aspect, but the issues involved in addressing the legal and regulatory frameworks. Different initiatives are approaching the challenge of cross-border instant payments in different

ways. One, says Ahmad, is to "get to one leg out on instant payment schemes domestically" – an approach that involves leveraging existing infrastructure, "and then do the last mile over instant."

For true end-to-end instant payments, meanwhile, initiatives like IXB are seeking to link together market infrastructures. This option is likely to enable quicker growth within the relevant markets. But as Ahmad points out, it is "a bit of a change to how we traditionally deal with cross-border transactions in SLAs, and some of the value proposition."

"I think there's definitely an appetite for being able to do cross-border transactions in a real-time fashion. However, how successful each of the initiatives will be is yet to be seen."

Eralda Hasani, Director, Immediate Payments Product Management, BNY Mellon



Finally, with different adoption models emerging around the world, what could the US instant payments landscape look like in five years' time? For example, could the rapid adoption of the Pix system in Brazil provide a glimpse of future adoption levels in the US?

"With the diversity of banks in the US, it will be a longer ramp up to get there," predicts Knorr. "Likewise in Europe, there are 1,600 banks within the Eurozone – it's a different scale than you have in Brazil." He adds that public sector participation will be key: "In the UK, when they rolled out Faster Payments, the government disbursements were right on top of it, using that system. What brings that initial volume is that push of the largest

payer in the market, and sometimes the public sector."

In some parts of the world, government mandates have played a significant role in driving adoption of instant payments. "In other places, it's necessity," says Ahmad. "In markets where they didn't have established payment infrastructure – albeit 40 years old – there was a jump from effectively cash to a digital way of conducting banking or exchanging payments."

In the US, in contrast, it is likely that adoption will be driven by market demand – and that will depend on which features and functions the banks create, and the level of reach achieved on the relevant networks. Another factor is the concern in some quarters that faster payments mean faster fraud – so sophisticated fraud monitoring systems and information sharing may play a role in driving the adoption of instant payments.

"Everybody talks about the speed of payments," Ahmed concludes. "But really, the value proposition lies in transparency – knowing the outcome of the transaction – as well as availability, because none of our other payment rails are available nights and weekends and holidays." Together with ubiquity, he argues, this value proposition "is what's going to drive adoption."

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The speakers

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- O3 Irfan Ahmad
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