



Future of payments

Evolving beyond transactions

How payments institutions can pair value and volume to drive growth.



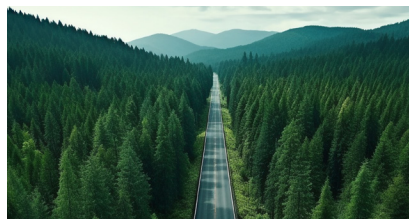
Introduction

In a world where change is the only constant, the realm of payments is no exception.

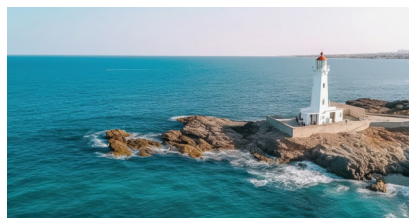
Transactions are undergoing rapid upheaval, and many organizations lack a single view of payments. Processes are siloed.

To evolve beyond transactions means amping up volume and creating value. For many financial institutions—whether banks, issuers, acquirers, or payment networks—the path forward appears uncertain.

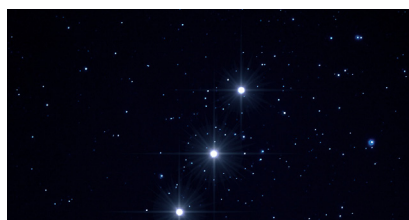
We offer a strategic roadmap based on three horizons, each operating in parallel and together reflecting the dynamic nature of our vision:



Horizon One compels the payment industry to confront the imperative of modernization and the adoption of standards across the participant value chain.



Horizon Two simultaneously launches them beyond transactions and into open ecosystems, where frictionless payments and innovative partnerships redefine the payment experience.



Finally, **Horizon Three** encourages proactive experimentation to prepare for new stores of value such as CBDCs and NFTs, and “everywhere, anything” purchases.

The three horizons aren’t sequential but rather run in parallel, driving growth through a multifaceted approach to innovation that pairs efficiency and customer experience.

It’s time for payments institutions to evolve beyond transactions: To scale fast or exit, double down on efficiency, and be bold. The three horizons are their compass for navigating the payment journey—and positioning their organizations to thrive.

Horizon One:

Simplify and build a modern payments core



The digital age is about instant everything. To make it happen takes a modern payment platform that offers the streamlined processes and hassle-free real-time experiences that customers expect.

Several forces are driving the transition to cloud-based platforms and API-first approaches. A large part of the world has already adopted real-time payments. Across Europe, banks are working to comply with the European Commission's [legislative proposal](#) on instant payments. In the US, banks gained their second real-time payment rail when the Federal Reserve launched [FedNow](#) earlier this year. Dozens of banks have signed on.

Speed and standardization go hand in hand. ISO 20022 is the de facto standard for any company working on instant payments.

ISO 20022 provides the much-needed common language for the payment community to interact seamlessly.



Although co-existence phases exist, adoption is occurring at a rapid pace, and with good reason: In addition to facilitating interoperability, the new standard provides an extendable data-rich language capable of carrying more information and offering greater transparency.

Despite the standard's clear advantages, however, attitudes vary regarding its utility. While ISO 20022 offers obvious benefits for the complexities of cross-border flows, some view it as overkill for domestic retail payments.

Countries are moving at different speeds in their adoption as they coordinate the huge numbers of banks that need to recertify for the new standard. In addition, fragmentation is an issue as different versions of the standard have started to appear in countries.

Implementations also vary. Some institutions take a strategic view of ISO 20022 while others are tactical. If a bank does not implement ISO 20022 from front to back, there can be data truncation issues, and therein lies the problem: For ISO 20022 to fulfil its potential as a common messaging standard, adoption needs to be uniform.

“Historically, the incompatibility of proprietary systems, together with the varying domestic interpretations of past ISO standards, have resulted in payment acceptance infrastructures that differed between countries. This means stakeholders face huge integration headaches and massive costs when expanding into, or setting up in, multiple geographies. International ISO 20022 based protocols address this problem. Payments institutions need fast, simple and global payment acceptance by standardizing the exchange of data between all stakeholders.”

- Jacques Soussana,
Secretary-General, nexo standards

Setting the course for Horizon One

Most **banks** have begun to develop and implement modern payment hubs. Top priorities moving forward should include a full-scale adoption of ISO 20022 and deployment of instant/real-time payment capabilities. This is also a time to begin building out end-to-end observability, including AIOps and automation.

“The world of payment processing is becoming increasingly complex, and customers are demanding simplicity. A modern payment hub as a mature aggregation point that communicates with any payment-related system, both internally and externally, can significantly increase speed, efficiency and security”

- Fred van Pouderoijen,

Tech Domain Manager for Payments,
B2B and Consumer Finance, Rabobank Netherlands

For **issuers**, the key focus is the transition from legacy to modern card management systems. Building the flexibility to support ISO 20022 in the future may become important. So will strategizing to future-proof platforms with a digital-first value proposition that supports new card products such as virtual cards, wearable payments, digital wallet enablement, and provisioning.

Given **acquirers'** pivotal role in processing payment transactions, their top objectives need to include platform rationalization initiatives and preparation for seamless integration through payment orchestration. Acquirers should begin undertaking initiatives such as ISO 20022 from [nexo standards](#), the non-profit organization established to create a unified global card payments acceptance ecosystem.

Having omni-channel capabilities is important for payment providers. Rolling out new ways to accept payments such as cloud and mobile POS and QR codes is key. Also critical are capabilities for international alternate payment methods (APMs) and local payment methods such as Giro pay in Germany and iDEAL in the Netherlands, and exploring new options such as pay-by-bank account (open banking) and mobile wallets.

Next steps for **payment networks** begin with strategizing and implementing a network modernisation plan. Key objectives should include deploying new capabilities such as continuous settlement, open access and a range of value-added services. Preparation for payments' changing nature is among networks' top priorities. It's critical to future-proof platforms with flexibility to support ISO 20022, and to prepare for compliance and regulatory initiatives such as data localization and PCI-DSS v4.0.

Horizon Two:

Embrace open ecosystems and value creation



The coming quarters are shaping up as the time in which open ecosystems come into play.

Open ecosystems will form the foundation for the payment industry's evolution from processing transactions to creating value. We expect to see big changes as the industry not only harnesses the insights from payments data but also joins forces for rich ecosystems of partners, providers, and products.

For example, ISO 20022 purpose codes, which denote the reason for payment transactions, have the potential to generate deeper insights and creation of personalized offers. By tapping into codes such as CCRD (Credit Card Payments) and HLRP (Home Loan Repayment), financial institutions can offer customized card or home loan rates. The BEXP code (Payment of Business Expenses) can serve as the basis for exclusive corporate memberships and deals.

There's great interest in leveraging Generative AI capabilities across the participant value chain, with payments purpose codes being one the active focus areas.



In addition to launching pilots to apply gen AI for basic use cases such as intelligent assistants and streamlined payment processes, banks are exploring its application for purpose codes that automate personalised offers.

Cross-border transactions are also set to benefit from open ecosystems. Multilateral and bilateral networks are tackling the complexities of international payments. Traditionally plagued by high fees and low transparency, cross-border transactions are seeing a wave of competitive solutions aimed at improving international payments. For instance, initiatives are underway to connect the instant payment networks of Singapore, Thailand, and Malaysia to enable easy payments among the three nations. SWIFT, too, is on a mission to make payments affordable, fast, and transparent.

Ecosystems also play a growing role in enabling invisible, frictionless customer journeys. Contactless payments have helped to boost the in-store experience, but friction remains part of e-commerce, where it's not uncommon for completion of a transaction to require consumers to move through half a dozen screens. Removing friction in the digital CX is a major focus for the payment industry. Partners are doubling down to Uber-fy payments, making the process largely invisible and automatic.

“The nature of embedded financial services is evolving due to the demand from customers to have frictionless experiences built into their everyday lives. Regulators and the industry have responded with the advent of new payment rails, and open finance and data initiatives to drive the embedded experience further and enable continued innovation in the space.”

- Sara Castelhana,
EMEA Co-head of Payments
and Commerce Solutions, J.P. Morgan

So far, open banking initiatives have focused on everyday bills and purchases, also known as fast money. Open finance takes that access a step further, aiming at slow money—pensions, mortgages, and investments—to provide consumers with a 360-degree view of their finances. Broadening the aperture even wider is the concept of open data. Its goal is to expand data sharing to include telcos, utilities, and other service providers who, with customers' consent, can harvest data and make intelligent decisions around it for, say, personalized service bundles.

Both concepts face steep hurdles toward acceptance. Open data raises privacy questions, and open finance has met initial resistance from payment providers who question whether the risks of sharing data outweigh the benefits. Will other companies use the data to draw customers away?

Open ecosystems also present an evolving threat of fraud and next-generation financial crime. Fraudsters are using deepfake and AI to create counterfeit documents for establishing false identities and deceiving identity verification systems. AI and machine learning (ML) models need to be one step ahead of bad actors to prevent complex frauds.

Fortunately, AI/ML systems excel at churning through data and detecting fraudulent patterns among transactions, user behaviour, and analytics. AI-powered tools are already being used to detect money laundering.

Setting the course for Horizon Two

Financial institutions can take a series of steps as they look to redefine the payment experience.

For **banks**, it starts with a full implementation of ISO 20022. The standard offers the opportunity to drive value by leveraging structured data like purpose codes in a variety of ways, from personalization and cross-selling to new product development and KYC/AML improvement. Establishing expanded partnerships will trigger important advances in cross-border transaction experiences such as confirmation of payee, conversational payments, and request to pay.

Key here is the potential to use open ecosystems—and open finance and open data. For example, since launching its Open Finance initiative two years ago, Brazil has received 17.3 million consents from users to share personal and banking data with financial institutions. Phase 4 of the initiative will focus on broadening the scope by including data from non-banking participants.

By combining ISO 20022 and valuable partnership ecosystems, banks have the opportunity to act as a digital front door to a wide array of value-added services.

Hyper-personalised offers and dynamic rewards programs are at the heart of **issuers'** next steps. Embedded payments are becoming the norm and an integral part of mobile commerce in which partnerships with fintechs are valuable. Consider and accelerate diversification into adjacent lending products such as “buy now pay later” that are gaining traction with younger consumers.

For **acquirers**, innovating with embedded and frictionless payments should be a top priority. Newer payment methods like biometric and

IoT payments are going mainstream, and collaborations in these areas can make a big difference. For example, through partnerships with Visa and Mastercard, Mercedes-Benz's Pay+ service allows customers in Germany to [make payments](#) using an in-car fingerprint sensor.

Pursuing partnerships that go beyond payments—such as F&A, invoicing, payroll, HR, loyalty, CRM, and other value-added services—can help create embedded and integrated business propositions. This is also a good opportunity for acquirers who are experiencing compressed margins from their traditional business to generate new revenue streams by offering these integrated solutions via subscription models.

An additional area of focus for acquirers is expansion into marketplaces for open third-party development such as Clover, Fiserv's point-of-sale and business management platform.

Advances in sending money quickly and inexpensively around the world are influencing the strategic direction of **payment networks**. Here, too, partnerships play a key role. For example, payment networks should explore bilateral and multilateral partnerships for innovating cross-border payments and global instant payment systems, such as the Bank for International Settlements' (BIS) [Nexus network prototype](#). Also, alternate cross-border payment solutions like Wise are [enabling higher speed and lower cost](#) of transactions by disintermediating the traditional rails.

Partnerships can also help payment networks create multi-rail strategies that include payment rails in B2B and account-to-account transfers and capitalize on opportunities in the open ecosystem, such as open finance and open data.

Horizon Three:

**Prepare for
“everywhere,
anything” of value**

A truism about money is that its definition is always evolving.

Two forces set to reshape payments are the rise of everywhere commerce and anything of value.

A central question for banks and payment providers is how to make digital assets tradeable through networks.

Horizon Three is about looking into the future and experimenting with new stores of value. NFTs, or **non-fungible tokens**, provide the ability to tokenize anything of value.

Central bank digital currencies (CBDCs) are fast emerging, while regional maturity levels vary widely. Transactions using China's digital yuan hit 1.8 trillion yuan (\$249.33 billion) at the end of June, [cementing the country's role](#) as a leader among countries that are developing digital tokens issued by central banks.

Latin America and the Caribbean [are also at the forefront](#) of adoption of digital currencies, with the Bahamas and Jamaica having gone live with CBDCs. Payments played an important role in Jamaica's rollout of its digital currency: The first 100,000 customers who signed up for the CBDC via the digital wallet and transaction platform Lynk received [\\$2,500 in JAM-DEX](#).

Banks need to be ready to move beyond experimentation and make bold moves for early market advantage. **Smart contracts** are set to possibly revolutionize financial transactions. The self-executed programs reside on distributed ledgers and are executed based on pre-defined encoded rules, automatically enforcing and executing transactions on a blockchain. Programmable payments leverage

these digital contracts, enabling automated, conditional transfers of funds. For example, property ownership change contracts can be programmed and executed automatically. Once the buyer pays the seller, the smart contract can automatically change the asset's ownership.

Countries are also experimenting with offline payments. China is integrating its digital yuan app with "super SIM cards" that process payments even when the phone is turned off. India's central bank [introduced](#) "conversational" payments and offline functionality for users of the country's Universal Payments Interface (UPI) digital payments system. Conversational payments ensure seamless transactions even in areas with limited network access by allowing users to make offline payments using natural language interactions and near-field communication (NFC) technology.

"Everywhere, anything" of value isn't evolving without industry concerns. Questions about new stores of value range from the viability of the business cases to concerns about privacy, sustainability, and network interoperability. Regulatory intervention also looms. How quickly will regulators respond to the changing landscape? So far there's been little discussion about how to protect digital assets. In addition, environmental impact remains a key consideration:

The world's second largest cryptocurrency, Ethereum, successfully slashed its emissions by 99.99% after an unprecedented experiment to ditch power-hungry mining in favour of a new approach.

Still, there's no end date to the exploration of new stores of value. It's the nature of technology and innovation to bring new ideas to market. They offer financial institutions a clean-slate advantage as they learn from Horizon One and Horizon Two initiatives. Equally important, experimenting with new stores of value positions banks to serve the [GenY and Gen Z banking customers](#) of the future.

Banks and the customers they serve would operate in two worlds: One is the current world of fiat currencies, card payments, and e-commerce, and the other is the emerging world of new stores of value.

The first isn't going to go away any time soon, even as the emerging second world steadily takes shape.



“Financial Institutions can play a part in enabling the new digital economy by proactively experimenting with tokenized forms of value, like CBDCs and tokenized deposits. To remain future-proofed, it is essential that they begin exploring the tokenization of real-world assets and currencies today. Additionally, open industry collaboration as it relates to blockchain network interoperability and standards are critical to not only transforming single institutions, but entire financial markets.”

- **Richard G Brown,**
Chief Technology Officer, R3

Setting the course for Horizon Three

Enabling and supporting new payment methods like crypto, CBDCs, and NFTs are key actions for **banks, issuers, and acquirers**. Acquirers may also want to explore their role in hyperlocal models that democratise e-commerce such as India's [Open Network for Digital Commerce \(ONDC\)](#). Payments will be fundamental to the success of such hyperlocal models.

Payment networks' future roadmap should include exploration of the expanded definition of money, which is anything of value. Given the size of the opportunity, networks may also consider moving towards a “value movement network”. In addition to building capabilities to support new payment methods, networks need to understand their role and prepare for open, decentralised digital ecosystems such as ONDC and Beckn for pan-sector economic transactions.

To navigate the fast-evolving payments technology landscape, all financial institutions need to experiment with newer technologies. The experiments offer two important benefits. First, they provide valuable insights into the technologies' feasibility, challenges and optimisation opportunities. Second, they can help drive innovation agendas and enable companies to stay competitive.

In addition to roadmaps and experimentation, the foundation for successful, sustainable stores of value rests on several strategic considerations. For one thing, as financial institutions explore new stores of value, it is imperative that they prioritize stability to ensure the asset's value remains relatively steady over time. For another, integrity and trust are paramount, necessitating robust security measures. Strong governance and user adoption strategies are also critical. Finally, a viable business case should underpin the store of value, providing a tangible value proposition.

Conclusion:

**Forge a path
that fits your
organization**



The optimal path to move beyond transactions will look different for every bank and payment provider.

The first step is always to establish a baseline by assessing the enterprise's true maturity, and the three horizons serve as a useful framework to evaluate organisational maturity. A word of caution here: Don't confuse true maturity with one-off successes. That is, launching a generative AI agent doesn't make a bank mature and takes it to Horizon Three.

Instead, growth starts by building strong foundational capabilities with modernisation at the heart of the transformation agenda. Include initiatives such as the adoption of ISO 20022 and leveraging of the standard's benefits through a front-to-back implementation.

Here are three guidelines to keep in mind to ensure your organization stays at the forefront of payment innovation and remains relevant in the changing payments landscape:

Scale fast or exit.

The payments business is about economies of scale. With margins shrinking globally and legacy run costs increasing, financial institutions should assess the long-term viability of their payments business to either scale or exit. The decision to scale will mean strategic shifts to growth through avenues such as partnerships for improved product distribution like embedded payments; pursuit of M&As that provide sector or geography advantage; and evaluation of platform-based service models.

Double down on efficiency.

Running better means employing all the levers to drive efficiency. This is where firms should critically evaluate their IT estate to hollow out the core and deploy automation and generative AI to optimize processes. For strategic areas, they can also launch "speedboats" to replace legacy super-tanker systems over time. Deep fakes are another area where they can use technology to their advantage. Using good AI to counter bad AI is becoming imperative.

Be bold.

As financial institutions prioritize payments as a growth area, they need to step up innovation within and outside the organization. Setting up innovation labs dedicated to payments enables firms to rapidly develop and test their ideas. Future success will require a bold mindset where firms intuitively imagine and build new customer journeys.

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