From vision to reality:

PLANNING YOUR NEW INSTANT PAYMENT INFRASTRUCTURE

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# Contents

Introduction

The financial industry is transforming into an increasingly open ecosystem. Now, driven by vast amounts of data, non-financial players are bringing innovative use-cases to the market. Central to this transformation is the widespread adoption of instant payments. Worldwide, institutions have embarked on ambitious projects to modernize their financial environments and, as of 2022, 64 real-time payment schemes exist globally – resulting in a value of US$525 billion in 2022 for e-commerce transactions alone. This number is expected to grow with an estimated compound annual growth rate (CAGR) of 13% through 2026 (FIS® Global 2023), and even more countries are planning to embark on an instant payment project of their own.

This paper draws from extensive experience in instant payment projects and focuses on the key considerations to implementing a new payment infrastructure from both product and project management perspectives. It serves as a resource for those at the forefront of the financial industry's transformation who plan to implement instant payments and as a tool to help leaders successfully navigate the complex and rewarding journey of payment transformation.
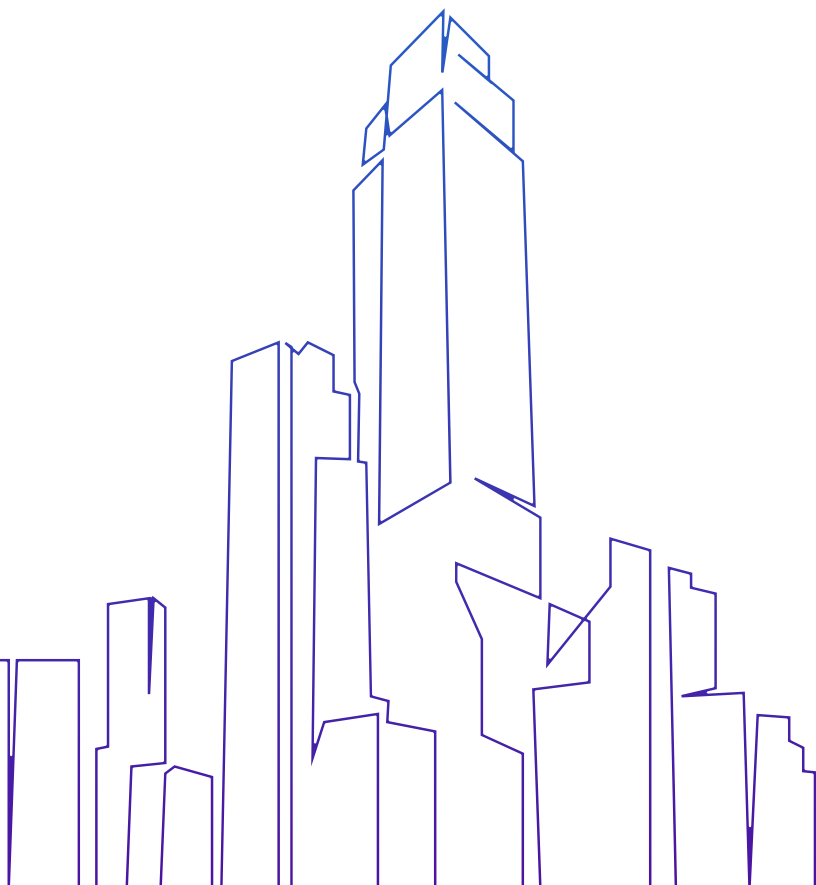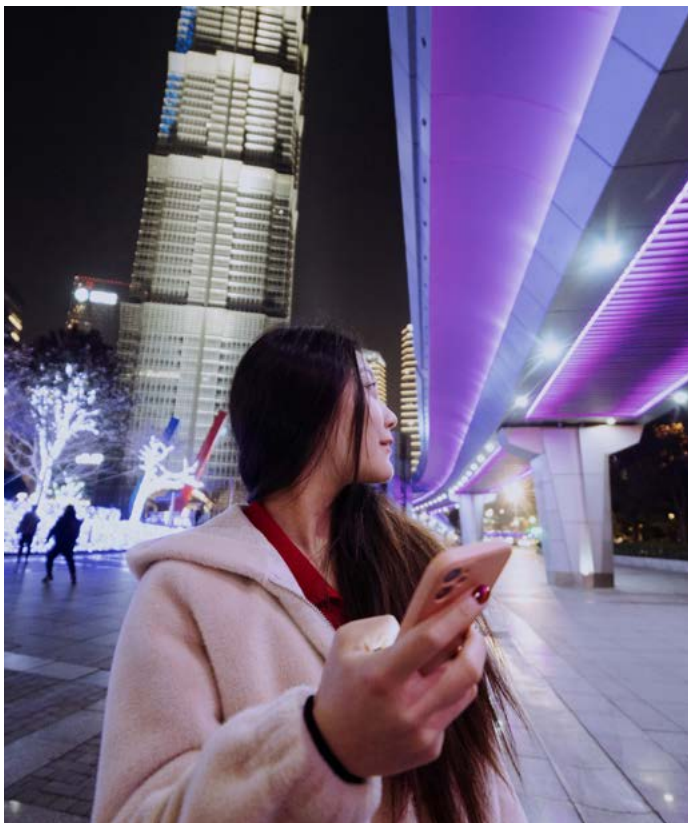
Why instant payments?

Instant payments refer to a financial mechanism that enables monetary transfers between banks to be settled and finalized in central bank money within seconds. These payments, also known as real-time or immediate payments, stand in contrast to traditional payment methods, which can take hours or even days to settle. Instant payments operate around the clock, every day of the year, to provide immediate transaction confirmation and instantaneous availability of funds to the recipient.

Another important component of most modern instant payment infrastructures is the use of the ISO20022 messaging standard. These eXtensible Markup Language (XML) messages allow for the transmission of rich and structured data alongside the payment transaction, which enhances informational flow within the financial ecosystem. This increase in data transfer adds significant value to payments as it opens new possibilities for automation, reconciliation, analytics and value-added services.

Likewise, instant payment systems often offer additional functionalities such as Request to Pay, Alias/Proxy and even third-party access. The combination of speedy transactions and comprehensive data capabilities provided by ISO20022 messages make instant payments a powerful tool for modern financial ecosystems.

Who benefits most from instant payments?
Instant payments bring a multitude of benefits for various stakeholders including banks, businesses and consumers. The potential benefits these stakeholders reap from the implementation of instant payments are plentiful, and the list will continue to grow as we see the technology evolve.

Banks
Instant payments provide banks with a competitive edge in today's digital-first financial landscape as they:

• Foster a modern and digital brand among consumers

• Increase the volume of transactions

• Allow banks to offer new value-added services
  (e.g., real-time lending)

• Optimize banks' liquidity management

Businesses
Businesses, including merchants and gig workers, can reap some of the same benefits as banks – such as increased digital branding or new use-cases. In addition to these, other interesting benefits for businesses include:

• Improved cash flow with money instantly settled into accounts

• The option to offer new payment methods to customers

• Improved supply chain management

Consumers
Instant payments offer the convenience and flexibility requested by customers and include:

• Brand new use-cases with easier ways of paying and being paid
  (e.g., peer-to-peer payments)

• Increased transparency and immediate updates to account statements, both of which are particularly beneficial in managing personal finances

Instant payments represent a significant evolution in the financial industry, offering substantial benefits to all parties involved. These new capabilities have the potential to foster innovations we may not yet comprehend. On a higher level, introducing a modern instant payment platform also has a positive macro-economic impact in terms of enhanced economic growth through its higher level of cashflow and increased levels of financial inclusion as third parties enter the interbank space and, in turn, lower the barriers for end-users to access new digital payment services.

Hopefully, the above lists are useful examples of how wide-reaching the benefits are and how the introduction of a modern instant payment platform provides beneficial outcomes for all parties involved.

Who are your stakeholders?

Once an organization decides to implement instant payments, it must identify relevant stakeholders to be involved. Stakeholder management is critical in any project; however, it is especially important when implementing an infrastructure with such an integral and widespread impact.

Implementation of an instant payments system cannot be a solitary endeavor. As with any type of network, the value of the network is directly correlated with its level of reach – in this case, the number of banks involved and reachability of its accounts. To launch a successful instant payment infrastructure, we must view the implementation as a community project that involves various stakeholders, each with their unique interests, concerns and contributions.

The project itself can be initiated in a range of ways: some are pushed by banks, others driven by the national bank or clearing house of a country and some are even forced through legislation. Regardless of how the project is initiated, it is important to underline the significance that community collaboration has on its success. Effective stakeholder management is, therefore, critical.

Key stakeholders in the implementation of an instant payment system typically include:

1. **Banks:** Banks serve as participants in the system as well as the channels through which the end-user will use the infrastructure. Their collaboration and active involvement are crucial to designing a system that is efficient, secure and fits the specified market.

2. **Regulatory entities:** Regulatory entities, such as governments and central banks, play a critical role in licensing the system, and they often provide a range of necessary requirements to operate a payment infrastructure within their jurisdiction. They also provide oversight to ensure compliance and protection of the interests of all parties.

3. **End-users:** End-users of the system include individual consumers, organizations and businesses. These are customers of the banks and will act as primary users of instant payments as they send transactions to friends, pay supplier invoices or pay recurring utility bills. There is rarely a direct relationship between the operator of the system and the end-users, so it is important that the participating banks include customer feedback at the heart of their planning and use-case design so that operators have clear insight into the wants and needs of customers.

It is also worth considering other stakeholders such as technology providers, payment service providers and industry associations from the beginning of the project.

Implementation as a community project

As highlighted above, the implementation of an instant payment system impacts a broad community of actors. One of the most common pain points of implementation is the readiness of participating banks. Banks are subject to pressure from regulatory entities, market competition and customers. These are common reasons why implementing instant payments unfortunately becomes deprioritized. Because of this, it is critical to include banks in the early phases of planning so they understand the benefits they can reap and what will be expected of them. This will help set a realistic timeline for everyone and avoid delayed go-lives. After all, the banks are the ones facing the end-users and therefore must also be part of the launch to market (a point that will be touched upon later).

Approaching implementation as a community project fosters collaboration, encourages shared ownership and ensures that the system meets the needs and expectations of all stakeholders. It also helps to build trust and support for the project, which can be instrumental in overcoming challenges and achieving project objectives.

Treating the project as a community project is a mindset and a commitment to the idea that the operator and participating banks must work collaboratively for the joint success of the network. It means each taking ownership, carrying responsibilities and working together despite the otherwise competitive nature of the industry. It means establishing informal dialogue (in addition to the formal project governance) and working together to overcome project obstacles.

Banks must not only see themselves as paying customers with the infrastructure served on a platter, but rather as partners who actively partake in discussions, review documentation, and complete early testing, and as stakeholders who help set the future direction of the platform. Participating banks must be involved as contributors to the project as much of the success of the system relies on their readiness and offerings to their customers. Engaging banks in the early stages increases the likelihood of them being properly prepared and therefore ensures greater reachability from the beginning. This is a pivotal factor in fostering widespread adoption and utilization of a new instant payment system.

A fitting example of a banking community coming together to successfully launch instant payments is in Slovenia, where local payment processor Bankart led the effort in close collaboration with the central and commercial banks to successfully launch a new instant payment infrastructure. The release was launched with an intense marketing campaign, and 11 of the country's banks were prepared to launch in 2019.

Key consideration #1:
Who are our stakeholders and how do we foster the idea of a "community project"?

Which use-cases do you want to offer?

Once you have identified stakeholders, you must create long-term goals for the project. The value you will get from implementing an instant payment infrastructure is dependent on its ability to meet the needs and expectations of its users. This is why developing and introducing the right use-cases is crucial. By identifying potential applications for instant payments and strategically launching these use-cases to the market, you can ensure the system delivers the most value to your community.

While there are common themes across countries, it is worth noting that the adoption of different use-cases varies greatly. For instance, in regions with low card payment adoption, QR-code payments have seen significant uptake compared to countries where card payments are more prevalent. This highlights the importance of understanding the payment landscape and user preferences in each country when developing use-cases for instant payments.

Understanding potential use-cases for instant payments

Use-cases for instant payments vary widely depending on the specific needs and circumstances of users. It is important to understand which use-cases would be most beneficial in each environment. Often, peer-to-peer (P2P) payments are the first use-case to be launched because there often are no good digital alternatives for P2P payments, and people resort to cash. Introducing P2P payments is considered simpler than many other use-cases, such as invoicing, which requires more back-office processing. By offering a fast and convenient digital alternative for P2P payments, instant payment systems can fill this gap and deliver significant value to users from the beginning.

Examples of popular use-cases

Leveraging modern technology such as APIs and its rich data in ISO20022 messages, a new platform can open a range of use-cases benefiting from its speed. In this chapter, we will go over some of the most common examples.

1. **Peer-to-peer (P2P) payments:** Due to its relative simplicity, lack of digital alternatives and increasing importance to everyday life, P2P payments are often the first launched use-case. A common scenario is the transfer of funds via mobile phone between friends to split a restaurant bill. The approach of launching a P2P app has had great success in Scandinavian countries where apps like Swish (Sweden), Vipps (Norway) and Mobilepay (Denmark) have all been driving digital transaction growth.

2. **Invoicing and bill payments:** Instant payments can streamline the invoice and bill payment process. Businesses can send an invoice and a request for payment including all necessary information for the customer to make a payment with the push of a button. This helps customers avoid late fees and companies provide better cash flow.

3. **Point-of-sale (POS) payments:** Another popular use-case is POS payments. A popular example of this is in-store payments completed via mobile app by scanning a QR code. By utilizing instant payment rails, merchants get a reduced transaction cost and access to funds instantly in contrast to the several-day settlement period we see commonly today.

4. **E-commerce:** Consumers can select an instant payment option through "pay-by-bank" apps when purchasing goods online. This not only enhances the customer experience, but (like POS payments) also improves cash flow for businesses and provides payments with reduced fees and instant access to funds. In Brazil, the real-time payments scheme PIX doubled the account-to-account (A2A) share of e-commerce transaction value between 2021 and 2022 (FIS Global, 2023).

5. **Instant business-to-business (B2B) payments:** Instant payments can revolutionize B2B transactions by enabling real-time transfers between businesses. This can be particularly beneficial in supply chain management, where instant payments facilitate timely procurement of goods and services, enhance liquidity management, reduce risks and improve operational efficiency.

6. **Funding/defunding of wallets and other accounts:** Individuals can fund or cash out accounts at different institutions instantly. This is especially useful in situations where immediate access to funds is needed and can help individuals manage their funds and investments quicker. This same logic even applies to business treasuries.

7. **Government payments:** Businesses and individuals can make payments – such as tax payments – to governments, who in turn can make payments such as tax refunds, pension payouts or other time-sensitive transfers to businesses and individuals.

8. **Emergency payments and disbursements:** Payments that rely on a quick resolution would benefit from the instantaneous nature of instant payments. Examples include insurance companies disbursing funds to people during an emergency or parents transferring funds to their child who has spent their month's budget too soon.

These use-cases are a few of the many solutions instant payments can help provide. With open APIs, third parties (e.g., fintechs) can gain access to the payments sphere in a way not previously possible, leading to the development of more innovative use-cases. It is important that you, as the infrastructure provider, have a clear sense of which areas are collaborative (e.g., the payment rails) and which areas should be competitive and open for innovation (e.g., wallets and payment applications).

Key consideration #2:
Which use-cases will provide the most benefit to our community?

Prepare and prioritize

Once you have identified stakeholders and outlined the use-cases you wish to launch, it's crucial to establish a timeline. A strong suggestion is to create a phased timeline based on the use-cases you have planned. There are endless possibilities for use-cases on top of a proper instant payment network, so be sure to plan and phase your use-cases according to your market.

Keep the first phase simple
Start the first phase by establishing a functioning production environment in which the participating banks can send and receive payments at a basic level. Planning a simple launch is beneficial for several reasons:

1. New systems will inevitably encounter challenges in the beginning. You can ensure easier resolution of early hiccups by limiting the launch's scope and complexity.

2. The introduction of a new instant payment system will trigger surrounding changes as well, such as the need for 24/7 support or a larger migration to a new messaging standard like ISO20022. Allowing time for adaptation of these new processes is essential.

3. Even initial transactions will provide value to your participating banks and their customers despite not having all value-added services enabled from day one. Therefore, don't prolong your go-live date to wait for such services – they can be added later. Deliver value to banks and end-users immediately.

4. As banks and end-users start using the system, new ideas and needs will unveil themselves. As they do, you must be able to adapt and be ready to prioritize on the fly.

5. Operators of the platform can begin generating revenue from participating banks, contributing to the funding for future phases of the project.

6. Simplifying the first phase, which can be difficult in a complex environment such as payments, helps set you and your community up for initial success.

In essence, avoid spending an excessive number of hours planning out every detail of your project. While it is crucial to have your vision and conceptualization of the future eco-system, it is equally as important to get started as emphasized above.

Key consideration #3:
What is truly needed for our go-live?

The launch

While instant payments provide numerous benefits, they will only materialize if the platform gains sufficient traction among end-users. The critical question then becomes: how does one achieve this?

Factors when launching to the market

While there is no universal manual on how to launch, here are some key factors to keep in mind when planning your launch.

1. **Reachability:** The efficacy of the network heavily depends on its reachability. A large percentage of participating banks covering a substantial percentage of the community's bank accounts is essential. Notably, the widespread acceptance of Visa and Mastercard credit cards has played a big part in their success within the card payment space, allowing end-users to transact with confidence.

2. **Soft launch vs hard launch:** Distinguish between a soft launch and hard launch. Launching early with a limited scope and without marketing can be helpful in building routine and confidence and is what we typically consider a soft launch. The soft launch provides several benefits, as covered above, but the main purpose is not user adoption. Once ready for wider user adoption, it's best to undergo a hard launch through marketing campaigns such as advertisements, influencers, sponsorships, cash-back or loyalty programs. This will help to get the transaction uptake needed to boost the launch of the system.

3. **Use-cases:** When gearing up for your hard market launch, ensure that you have the proper use-cases in place for end-users to be lured in. Recognize that end-users are more interested in the experience itself rather than the intricacies of the payments, so showcase the new use-cases that resonate with their interests.

4. **Remove barriers:** Payments thrive on volume, so avoid creating barriers like member exclusivity or transaction fees, which will deter uptake of usage. You want to encourage end-users to use instant payments by any means possible. Keep in mind that different types of offerings have different levels of price elasticity. Offerings to merchants and businesses are typically more inelastic than offerings to consumers (i.e., consumers do not want to pay for transactions). Ensuring proper uptake on your platform will also move traffic away from legacy systems, ultimately reducing costs associated with manual processes and maintenance.

A strategic approach to launching in which reachability and accessibility are key factors is crucial for a successful launch and provides a strong foundation for your community's instant payment journey.

Key consideration #4:
What, when and how do we launch?

Conclusion

This paper has outlined key projects and product considerations implementors must make when initiating a project to establish a new instant payment infrastructure. The considerations include stakeholder management, use-case development, timeline and market launch and are intended to help guide you throughout your project.

To summarize the key considerations, they are:

#1: Who are our stakeholders and how do we foster the idea of a "community project"?

#2: Which use-cases will provide the most benefit to our community?

#3: What is truly needed for our go-live?

#4: What, when and how do we launch?

While additional resources must be considered such as legal, security, compliance and of course non-functional requirements (and it is crucial to get your own independent advice on these matters), it is our hope that these highlighted aspects will provide a sound foundation for the implementation of the project from a product and project management perspective. Hopefully, instant payments will be a step toward a future where financial transactions are not just faster, but also more integrated and attuned to the evolving needs of consumers and businesses alike.

Good luck with your project!

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