Real-time payments

Value realization is here

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Real-time payments reach over half the planet

As of late 2017, more countries and regions joined the global real-time payments movement. With the arrival of European Banking Association Real-Time 1 (EBA RT1), SEPA Instant Payments, The Clearing House (TCH) Real-Time Payments (RTP) System, Zelle Network, and the Australian New Payments Platform (NPP), real-time payments now have the potential to reach nearly 1 billion more people. Layered on top of other live and in development schemes, over half of the global population will potentially have access to real-time payments.[1]

As the reach of real-time payments expands, so do value-added capabilities. And when combined with other digital and payment trends such as mobile wallets, open banking, and modern data standards, the possibilities for value realization multiply.

The next stage in real-time evolution is here

While the US and EU countries are new to the scene, for years and even decades, real-time payments have been engrained in the payments ecosystem of regions worldwide. And yet, it is not only the veterans like the United Kingdom (UK), Switzerland, or Singapore that are moving swiftly to add new functionalities and target ever-larger audiences. US and EU schemes are already reaching a new stage in their evolution as request for pay (RfP) provides new opportunity to innovate value-added services for merchant and corporate markets including payments across billing, B2B, and consumer disbursements.

The move towards instant, multicurrency payments is also in flight. The European Central Bank (ECB) TARGET instant payment settlement (TIPS) system will go live in 2018. In Asia, the ASEAN Payments Network (APN), driven by Malaysia's PayNet, is exploring cross-border links with Thailand and Singapore. Following this path, the next logical stage in real-time payments evolution is a global network that supports the fast, digitally sophisticated and open payments ecosystem.

During this time of disruptive evolution, banks must consider how to achieve more than just a fast payment transaction through participation in the real-time movement. They must take a position that allows them to efficiently scale alongside the changing ecosystem and grow their business through customer-centric innovation and reach into new markets. Real-time readiness should be viewed as a strategic leap towards modernization, both from a business model and technology perspective. The right choices now raise the odds of long-term success in what is rapidly becoming the world's fastest growing payments mechanism. This paper, drawing on the insights of KPMG, ACI Worldwide and Vocalink, aims to show how to best seize the growing opportunities and stay in the competitive game, today and tomorrow.

"The next stage in real-time evolution is already here, and it's wrapped into the open, digital payments landscape. It is not just about fast payments anymore; it's about securing a winning place in the new, broader ecosystem."

From adoption to innovation: What maturing markets reveal

United Kingdom – Proven adoption

The Faster Payments Service (FPS) in the UK was launched in 2008 and has since become firmly entrenched in the country's payments ecosystem. Eight years after its launch, FPS accounted for 19 percent of total account-based payments (BACS and FPS) volume. In 2017, FPS processed over 1.7 billion payments, a 16 percent increase over 2016, for a total value of more than 1.4 trillion British pounds (GBP), compared to GBP1.2 trillion the year before.[2] Over 25 percent of all direct credits in the UK are processed through FPS. In fact, all major payment mechanisms have also grown apart from check and cash.

Pingit and Paym entered the market in 2012 and 2014 respectively, providing a digital, frictionless and instant payments experience for consumers. Since entering the market, Pingit and Paym cover approximately 5 million accounts in payment services.[2]

While the pace of adoption in maturing real-time payments markets is telling, it is also revealing to examine the growth patterns of major payments innovations introduced. Let's consider credit cards, initially only available to the affluent, requiring more time for banks to gain comfort with a wider user base. ATMs saw slower adoption at first, too, due to costly network requirements.

On the contrary, debit cards were adopted at a faster pace because the existing network of acceptance points was in place. Online and mobile banking similarly took off due to the availability of personal computers/access and mobile penetration. In the same way, the basic conditions are in place for the EU and US to see rapid adoption of real-time.

From the Nordics to Singapore – Real-time mobile innovation spurs cashless trends

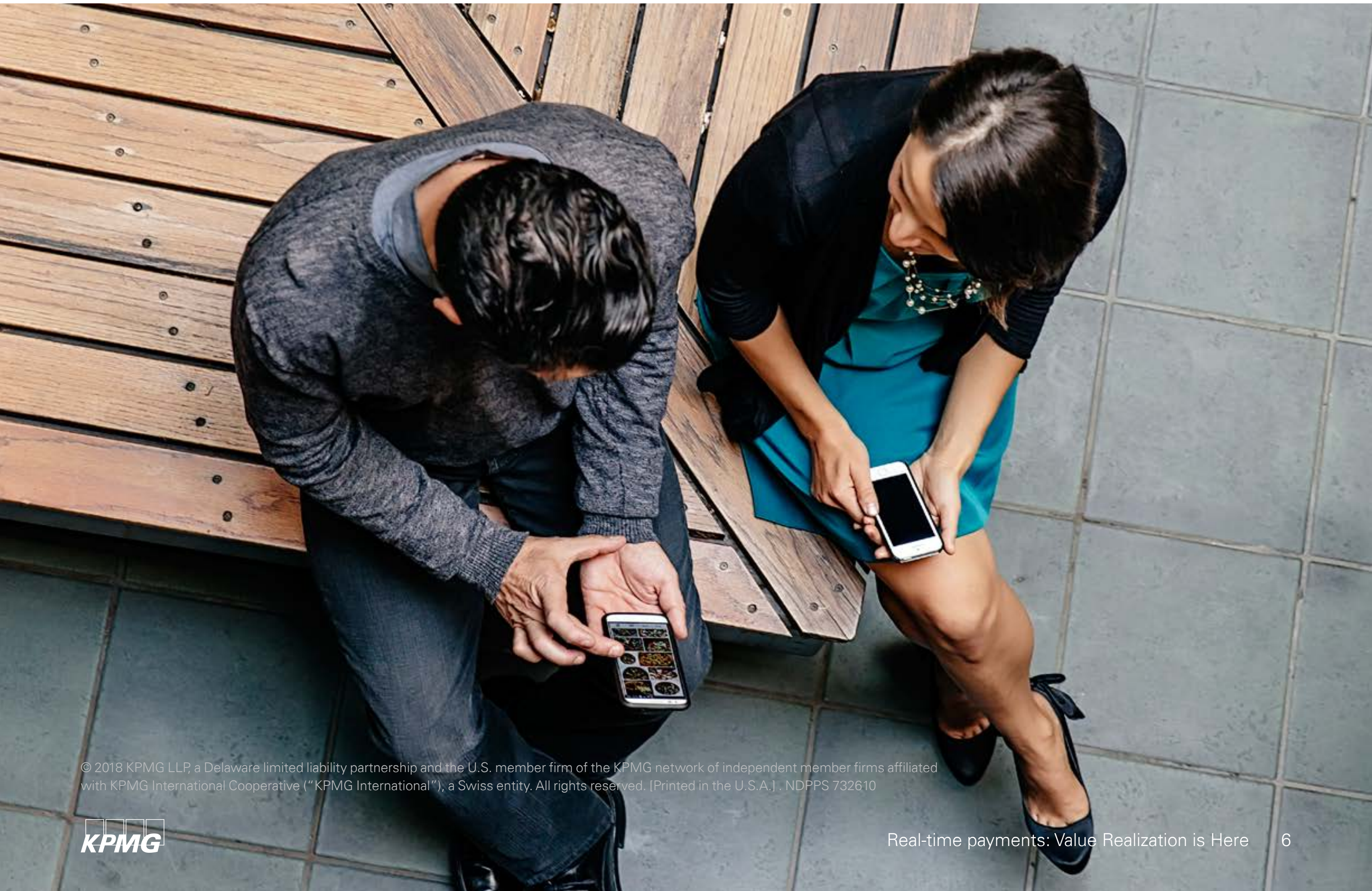
The Nordic region has gained remarkable traction with real-time payments technology. This region, often cited as flag bearers for the cashless economy, has seen a solid uptake of real-time mobile payments based on consumer preferences to adopt new and different payment methods. A strong, collaborative culture within the Nordic payments ecosystem has enabled the co-creation—across banks and nonbanks—to build out real-time mobile payment solutions. By 2020, it is projected that 50 percent of all payments in Denmark will be made using a smartphone.[3]

Swish and Siirto, Swedish and Finnish mobile instant payments solutions, allow for 24/7 real-time P2P and P2B payments using a mobile phone number. Adopted by nearly half of the Swedish population, Swish is now used to make more than 9 million payments a month.[3] Siirto, launched in March 2017, is the first mobile payment platform that follows the new rules of the PSD2 regulation enabling account information and payment initiation services. It is recognized as a major step forward in the digital banking and real-time payments landscape in Finland.

In Singapore, an overlay service, PayNow, was introduced, allowing payment using QR codes via mobile phone. This new service, deployed in 2017, is a strong example of how innovative services can be built on top of real-time rails.

Summary: Key insights from maturing real-time regions

- **Real-time payments make the pie bigger** and create a new market demand, growing the ecosystem in both volume and value.
- **Real-time payments grow at the expense of checks, first**. Between 2008 and 2016, check use plunged GBP1.06 trillion—almost the exact size of FPS's GBP1.19 trillion market share. While the initial impact has been on checks, the future impact on wires is on the horizon as higher-value transaction limits take off. Singapore's FAST increased from US $10,000 to US $50,000 to address corporate needs.[4] UK Faster Payments is projected to increase significantly in the future from the current limit of GBP 250,000.[2]
- **When banks leave a gap, others rush in.** UK accounting software providers, for example, offered specialized payment services for retailers and small businesses once the Faster Payments rails opened. The EU and US are following close behind with open banking models. The opening playing field also nurtures collaboration among incumbents and alternative providers. Fintechs in the UK, for example, have "white labeled" their solution for banks eager to meet the demands of digital savvy customers.
- **Modernized infrastructure drives momentum.** Adoption only took off when new infrastructure capabilities achieved the right balance of digital enablement and customer value.



UK Faster Payments service – Key highlights[5]

Value – YOY growth of **18 percent** from 2016 to 2017

Average FPS in 2017 was **845 GBP**

Volume – YOY growth of **16 percent** from 2016 to 2017

GBP 250k Scheme limit is projected to increase significantly in the future*

*Details are still subject to regulatory approvals

Key Highlights[5]

— Business use of Faster Payments and other remote banking exceeded the use of checks for the first time in 2016.

— Adoption matured from retail, internet and telephone banking to an increased business focus towards direct corporate access.

— Customers will develop expectations for real-time, all the time. Vocalink estimates 49% of UK FPS are made outside business hours.

— The majority of the new initiatives in the UK are being designed on the rails of Faster Payments.

A broadening real-time horizon and the imperative to act now

It's indisputable that the entrance of real-time payments means more change is on the horizon. The seeds are planted for it to take off in the US and EU, with digitally sophisticated, open and highly banked markets. Pile onto this already existing overlay services, such as Zelle Network in the US, iDEAL in the Netherlands, Vipps in Norway, and Jiffy across Europe, and the stage is set for a faster time to market for new innovations.

United States

The Federal Reserve Board has organized industry participants into a Faster Payments Task Force. That task force has called on the industry to work together to achieve a ubiquitous real-time US payments system by 2020.[6] It is aiming to foster competition to help derive many potential solutions, each to be tried, tested, and judged by the ecosystem of users. This approach is showing early signs of success as multiple real-time payments systems have launched.

The Clearing House (TCH), owned by a consortium of banks, launched one such solution in November 2017. TCH's RTP uses the ISO 20022 messaging standard and enables new request for pay (RfP) capabilities.

The use of ISO 20022 promotes interoperability with other jurisdictions who are also implementing this new standard, creating a foundation for a global network.

Repurposing existing rails to create next-generation customer experiences

Zelle and Venmo products demonstrate the US market is primed for real-time payments with already successful overlay services and an uptick in mobile payments adoption. Zelle Network, a solution from Early Warning Services, focuses on P2P and B2C near real-time mobile payments. Even if actual settlement is not "real-time" (for the moment), Zelle's member banks have agreed bilaterally to make the funds available immediately for the benefit of its users. With its dominant access to US bank accounts and a clear pathway to consumer payments innovation, Zelle has been gaining new customers at the rate of almost 100,000 per day and processed 247 million transactions with a value of US $75 billion in 2017.[7] This is a 45 percent year-over-year growth in volume and 36 percent year-over-year growth in value.[8]

Social media trends stand to impact consumer adoption like they have for PayPal's Venmo. Venmo's socially driven experience of P2P payments has helped it grow rapidly; it processed US $9 billion in payments in the third quarter of 2017, nearly seven times the US $1.3 billion it processed at the start of 2015.[7,8] Venmo cleverly emulates real-time payments for consumers with confirmation of funds in a closed loop system. While actual settlement is delayed for both Zelle and Venmo, their success paints a picture that consumers (and small businesses) are eager for real-time, ubiquitous, and frictionless payments. Non-bank competitors may seize this market if banks fail to enter it aggressively.

Credit card giants are also adding real-time payments functionality and two-way messaging to their existing networks, which already has global reach. These card companies, which have the advantage of trusted brands, are branching out beyond P2P to promote B2B, B2C, and C2B solutions. They also have agreements in place with Zelle to extend their P2P ecosystem with a symbiotic relationship that enhances ubiquity for each of the solutions.

Eurozone

The European Payments Council (EPC) estimates that real-time payments will manage approximately 50 percent of credit transfer transactions within its jurisdiction over the next five years. This is no surprise given the new schemes on the horizon for 2018. Pan European TARGET Instant Payments, (TIPS), Belgium, Slovenia, Spain, and Portugal will all launch, with France, Holland, and Hungary (via a mandate) following close behind. With a handful of unique, local schemes, liquidity management and cross-border operability will be critical to solve for.

"The EPC expects rapid adoption and estimates that real-time payments will manage approximately 50 percent of credit transfer transactions within its jurisdiction over the next five years."

Open Banking is for the taking

PSD2 (The Revised Payment Services Directive) went live in November 2017, allowing third-party companies to operate financial services on behalf of consumers, with the cooperation of existing banks.[9] There is opportunity to turn this regulation into innovation. According to a new Ovum global payments survey, 69 percent of EU banks said they believe partnerships with third parties via APIs will improve their customer proposition. The Ovum survey report also predicts three-quarters of a trillion euros in annual retail expenditure is set to switch to instant payments across Europe by the end of 2027.[10]

The open banking opportunity is for the taking and some EU banks have already introduced their strategies for realizing new, value-added services riding on the PSD2 mandate. With the convergence of real-time payments and open banking trends, traditional banking business models will take new shape as customer centricity becomes the key to competitive wins. While similar change is expected in non-mandated regions such as the US, regulation in the EU has pushed banks into this open ecosystem, ready or not.

Real-time is named the new norm

Part of the EU is also recognized for its role in embracing real-time infrastructure as the new norm. The Netherlands is planning to move all processing to real-time payments in an effort to move away from legacy platforms. Some Dutch banks have already embarked on this journey by routing SEPA batch payments lower than 15,000 euros to EBA RT1. And per the 2017 Ovum payments survey, it is not just the Dutch investing in modern payments efficiencies. Sixty-two percent of surveyed institutions in Europe are increasing budgets for payments-related projects, and increased operational efficiency is the biggest single ROI expected from these investments.[11]

As additional regulation (such as MIF), digital services, partners, and real-time payment schemes are implemented, more silos and integration layers are introduced. For this reason, approaching a solution which addresses the new marketplace holistically will be critical to lasting success.

Open digital payments spur opportunities everywhere

"Sixty five percent of institutions globally believe partnerships with Third Party Providers (TPPs) will improve their customer proposition."[11]

Open Banking

The emergence of open banking is a force of change that will transform the payments ecosystem and value chain as we know it. The EU is further ahead in its shift to opening access to financial and customer data because of its PSD2 mandate. However, the US is naturally progressing towards open banking as banks make efforts to connect and build a broader, digital ecosystem of partnerships.

As banks open the value of information across all customer accounts—retirement, investment, mortgage, checking, insurance, car loans, etc.—a new door to innovation opens and the opportunity is no longer just around the payment. For example, with a click or a swipe, consumers can now see a single picture of all their financial accounts and gain new insights on how to realize potential savings or avoid overdraft fees.

Banks have equal opportunity to both partner with TPPs seeking to aggregate customer data and/or play the role of aggregator themselves, which can be extremely beneficial. Imagine how much easier it will be for a bank to underwrite a mortgage when it can easily access a homebuyer's complete financial status. Similar benefits can be realized when pricing other loans and insurance premiums. And it is not just the retail side of the bank that stands to capitalize on open banking. Open banking will also permit banks' business and corporate customers to access and view many kinds of financial information more broadly and efficiently. For example, with open interfaces, companies can connect their ERP systems directly to their banking information for improved payment efficiencies.

Open banking exposes even more potential when combined with the rich data carried by real-time payments. The UK FPS is expecting growth to accelerate to 25 percent[1] per year because of PSD2's open banking requirement. The possibility of instant access to consolidated financial data from multiple institutions is simply too powerful for innovation not to occur.

As TPPs and tech-savvy Fintechs begin leveraging customer financial data, banks that do not respond could begin to lose grip on their customer relationships. In instances where new competition wins once loyal customers, banks merely maintain the payments "plumbing."[12] Banks need to keep an open mind and a converged real-time and digital transformation strategy in order to win with first-of-a kind partnerships and new customer experiences.

The next digital disruption has arrived on the rails of real-time

As previously mentioned, request for pay (RfP) capabilities are being built into the next generation of real-time payments. Traditional pull-payment experiences are less efficient and prone to communication issues among parties interested in completing a transaction.

With RfP, there is no danger of insufficient funds. Fraud risk is also minimized as there is inherent multifactor authentication embedded in the process. Sensitive payment credentials are not shared externally, with common tokens such as phone numbers or e-mail addresses facilitating easier payment credentials.

That means safety, convenience, and no risk of bounced checks or refused direct debits. This totally controlled payments experience will appease the many consumers still uneasy about direct debits.

RfP capabilities stand to revolutionize payments, especially in the bill pay space. Consumers and businesses for example, can be warned about upcoming bills through mobile alerts and have quick pay options at the touch of a button. In 2016, US consumers paid approximately 14.7 billion bills which totalled $3.9 trillion in US spending. Utilities, credit cards, cable/TV/internet, and cellphones accounted for nearly half of all bills paid.[13]

RfP also introduces new benefits to businesses as it carries transaction-critical data, enabling straight through processing. It offers a real-time guarantee of funds that are reconciled without a risk of fraud or chargeback—a particularly big advantage for the many businesses that currently rely heavily on checks and cash.

Financial institutions have an enormous opportunity to gain a greater wallet share given the trillions of dollars in bills each year that is growing at very high double-digit growth rates.[2] RfP can disrupt legacy bill pay capabilities as it provides data-enriched, two-way nonfinancial messaging that opens up the entire transaction experience. For banks, RFP cuts communication times, improves billing and collection rates, and enhances the customer experience.

Real-time value realization

Reinventing the card experience

As real-time payments grow in the market, there is some concern about the impact on card services. As evidenced by the UK Card Association, card spend increased 6.8 percent across debit and credit between April 2016 and April 2017. For hypothetical color: if merchants offer real-time payments options during checkout—and offer to pass on savings from lower transaction fees—consumers may eventually use their cards less. Banks should prepare for a broad swathe of disintermediation scenarios like this, especially within e-commerce.

If banks adopt suitable strategies, card use can grow alongside real-time payments. That is especially true for credit cards, both corporate and retail. But the goal is not to "save" credit or debit cards. The goal is to offer consumers options that enhance their experience while growing banks' bottom lines. For banks that have cards as a significant part of their business, three measures have shown success in doing just that:

— **Assess rewards and incentives**. As real-time solutions become common, the right rewards and incentives program can maintain consumer and business interest in cards.

— **Strengthen cobrand relationships**. Co-brandings cards correlate strongly with usage, and stronger co-brandings can keep cards top of wallet.

— **Offer real-time payments of your own**. If customers switch from cards to real-time payments, the bank should let them do it in house. Banks may want to enable real-time payments for merchants on check-out pages and at points of sale.

Customer-centric innovations and cost savings

Winning in the real-time ecosystem requires a new way of thinking about payments strategy. It is no longer just about the transaction but rather what new offerings are possible through enhanced speed and data capabilities. With the right approach, new digital volumes can be found and ways to reduce costs can be revealed.

Cost efficiencies

When products combine the speed and availability of data-rich messaging with a ubiquitous directory service, operational costs fall and funds move more efficiently. To take just one aspect, KPMG estimates that the shift to faster, ubiquitous payments by US $74 billion, of which US $17 billion will be revenue opportunities for B2B vendors.

Based on the history of maturing real-time markets, banks can also expect a reduction in check and cash handling costs.

Business innovations

At the heart of all new payments objectives should be a razor-sharp focus on how to transform customer experience.

Businesses from small to medium enterprises to large multinational corporations can gain significant value through:

- Robust data capabilities that support the end-to-end supply chain beyond just the payment itself
- Immediate settlement, improving management of cash flows and working capital
- Improved bill pay efficiencies and customer experiences through RfP
- Automated AP/AR matching and reconciliation
- Irrevocable transfers, promoting a more efficient, digitized trade value chain
- Cross-border efficiencies, providing greater control over liquidity and cash management

"Real-time payments enable transformative experiences across all customer segments. Institutions that take advantage of these first of a kind speed and data capabilities will be well positioned to win in this new payments landscape."

Consumer innovations

When considering how to best leverage real-time payments for consumers, a focus should be on creating value through added convenience. Open banking partnerships is a critical means for realizing some of the opportunity, where addressing consumer demand could depend on connections with third-party providers.

- Person-to-person communication in cases where immediacy is useful
- Fast disbursements, like merchant refunds, overpaid utilities, or complaint resolutions
- Emergency payments such as insurance payouts or legal claims
- Immediate bill pay options through RfP such as emergency utility or small business services
- Pay direct from account options at retail checkouts
- Account aggregator services single view of all finances, eliminating the need to log into multiple applications

Catalyzing banking as a platform

Investing in real-time payments is investing in a platform for the future. The technology giants are investing in this space, especially with their ferociously loyal customer relationships and their treasure troves of data. Banks must offer a compelling alternative to fend off the competition, both from a product perspective and through more nimble technology. If they succeed, they will bring more customers into digital banking, of which real-time and open banking are an integral part.

Real-time payments: Strategies for success

A shift in culture could be as important as a shift in technology when laying out the blueprint for real-time payments and open banking. Banks must identify what success looks like for them in this new world, where customer data is shared and value chains are potentially fragmented.

Quick tips:

— **Act now**. The US and EU have already seen a wave of early adopters, and the next stage in real-time evolution is already unfolding across the globe. The role of real-time in the new payments world is increasingly vital. If you do not offer new real-time services to your customers soon, another business will.

— **Build a modern, fit-for-purpose environment**. A real-time payments solution should align with a larger renovation strategy. One agile system for one new payments ecosystem will allow banks to streamline enterprise-wide requirements and speed time to market for new innovations. This is critical for modern payments world survival.

— **Achieve global interoperability**. The ideal solution provides operability in a future global payments platform. This platform would enable banks to compete competitively with non-bank players, who are currently gaining ground in cross-border payments.

— **Use straight-through processing (STP) to streamline processes and minimize costs**. Opportunities include decommissioning inefficient payment systems, rationalizing disparate infrastructure, promoting automation in back-office processes, and replacing high-unit-cost options such as checks and cash with efficient, low-cost real-time payments.

— **Jump start your move with the cloud**. Cloud solutions can speed access to real-time schemes, reduce transaction costs with economies of scale, and help manage uncertain volume projections as banks embrace early adoption. Nonfunctional solution attributes will allow banks to start with cloud gateway services and incrementally pursue system renovations at their own pace.

The right real-time solution bridges the opportunities across the new payments world. If banks do not start somewhere now, they risk losing more than payment volumes, they risk losing their customers. Banks must keep themselves front and center in their customers' lives with lucrative offerings that meet demand. Real-time payments may thus be the key not just to payment success, but to a broader renewal of banks' business models and customer relationships.

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