



McKinsey on Payments

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Faster payments: Building a business, not just an infrastructure

To date, most discussions about building a “faster payments” system have focused primarily on speed and “plumbing.” Even more important, however, are the innovative products and services that an enhanced infrastructure will allow financial institutions to bring to market. These new products and services—in both consumer and corporate payments—can create new revenue streams and help banks and other players realize a return on their investment in a modernized payments system.

Rob Hayden

Grace Hou

It's about more than speed

In a recent article (“Transforming national payment systems,” *McKinsey on Payments*, September 2014) we discussed the importance of upgrading payments infrastructure to make it both faster *and* more effective, safer and secure, with designs based on specific use cases. Since then, the United Kingdom and Singapore have continued to lead the way; the UK with further growth in its Faster Payments system (see sidebar, page 27), and Singapore with its G3 Immediate Payments. Denmark launched a real-time payments solution in December 2014, Australia and the United States are making steady progress toward modernizing their payments systems, and several other countries are developing strategies for improving their systems.

In most of these countries, the banking industry is expected to pay for the new real-

time clearing system. Banks must thus invest years and significant resources in upgrading their platforms and integrating with the modernized system. The UK Faster Payments, for example, cost between £150 million and £200 million to build and operate for the initial contract period of seven years (2008-2015), plus up to £50 million for banks to connect to the central infrastructure. Because of these costs, improvements to payments systems must facilitate innovation and generate revenue streams for financial institutions.

Monetizing new payments systems

Financial institutions can monetize investments in a faster-payments infrastructure in several major areas: new products and services in both consumer and corporate payments, increased loyalty and retention, and new customer acquisition. The exam-

Faster payments, defined

Faster payments may also be referred to as *immediate payments*, *instant payments* or *real-time payments*. While faster payments have been defined in various ways, in this article we refer to them broadly as the modernization of payments clearing systems to include a “faster” component. Included in our definition are “domestic, inter-bank electronic payments systems in which irrevocable

funds are transferred from one bank account to another, and where confirmation back to the originator and receiver of the payments is available in one minute or less” (Clear2Pay). The most important features of these systems are real-time (or nearly real-time) clearing and availability of funds.

ples provided in these areas are not comprehensive but are meant to demonstrate the potential for innovation—and thus new revenues—in a faster, modernized payments infrastructure.

New products and services in consumer payments

A faster, modernized payments system will accelerate the convergence of mobile commerce and consumer payments by enabling real-time funds transfers that have value for both merchants and consumers.

Person-to-microbusiness payments:

Thus far, most innovation in the person-to-microbusiness arena has been on the front end, with products that make it easier for microbusinesses and small businesses to accept payments (e.g., Square and PayPal Here card readers). A faster back-end infrastructure would further improve the convenience of these apps. For example, in a used car sale today, a buyer usually gives the seller a check, sends a costly wire transfer or carries a sizable amount of cash to pay for the car. Faster-payments infrastructure will enable car buyers to send a real-time payment to the car seller on the spot, and drive away in a new car without the risk of a bounced check or a cash theft, and

without the cost of a wire. (Taking the example even further, one could imagine a single mobile app for the entire purchase process: researching and identifying cars, finding local sellers and prices, and making test-drive appointments.)

Bill payments: A real-time infrastructure combined with a ubiquitous merchant-biller directory—which would store and manage electronic payment identities for businesses so that they could be paid electronically—and integrated into mobile banking applications could create a frictionless bill-payment experience involving push notifications, a single-button and real-time confirmation of payment receipt. Consumers would have more control over their cash flow, a less costly and more convenient way to pay bills, and more certainty when making “consequence” payments (e.g., payments to restart a suspended utility service). The revenue opportunity here is significant, as bill payment touches every household. In India, for example, 10 billion to 12 billion bills are paid each year, and in the U.S., over 20 billion bills are paid per year.

Online commerce: With retail e-commerce sales worldwide forecast to grow to \$2.5 trillion by 2018, real-time payments infra-

structure can pave the way for new products and services based on nearly immediate delivery of online purchases. Since goods are typically released when a payment is received, real-time payments can enable real-time shipment and delivery. Online technology and e-commerce players such as Amazon and eBay are already moving toward faster and faster delivery; real-time funds transfer and availability can enable more merchants to do the same—with comparable payment speed and improved risk management. A new, real-time clearing system should enable more retailers to match the standard that offerings like Amazon Prime have set, thereby increasing customers' choices and furthering

Real-time payments may create a need for corporate customers to manage their intra-day liquidity more closely. Banks could generate additional revenue by offering liquidity management services such as intra-day loans or overdraft protection.

the shift toward mobile commerce. Financial institutions thus have the opportunity to provide improved e-commerce payments services to consumers and merchants. As an example, iDEAL in the Netherlands, an e-commerce payments system based on online banking, enables consumers to make real-time, lower-cost payments by directly transferring funds from their bank account to merchants.

New products and services in corporate payments

As with consumer payments, a faster infrastructure alone is insufficient for creating value in corporate payments. However, banks can use that infrastructure to build valuable, next-generation payments tools for corporate customers that offer the same ease-of-use, simplicity and customer experience found in today's emerging mobile and digital payments technology for consumers.

Just-in-time payments: Real-time payments allow businesses to control when payments are made and to increase their certainty. Real-time payments are most salient for one-time, lower-value, business-to-business payments, which account for an estimated \$11 billion in payments volume in the U.S. alone, according to McKinsey's Global Payments Map. Particularly for small businesses that need to tightly manage cash flow, faster clearing with real-time notification of payment would offer a way to avoid late payments and adopt just-in-time business models. For example, retailers might be able to reduce their inventory levels, since immediate payment receipt would enable immediate shipment of orders. Moreover, real-time payments may create a need for corporate customers to manage their intra-day liquidity more closely. Banks could generate additional revenue by offering liquidity management services such as intra-day loans or overdraft protection.

Direct deposit for temporary and hourly workers: In the U.S., the current ACH Direct Deposit system requires a transaction to be initiated at least 24 hours in advance. Consequently, many businesses have

Poland's Express ELIXIR

The Polish national clearing house, Krajowa Izba Rozliczeniowa S.A. (KIR), introduced Express ELIXIR in June 2012 after market research revealed high demand among end-users for real-time payments. Supporting credit-push transfers with real-time clearing and settlement, Express ELIXIR transactions are processed separately from the batched ACH payments system, ELIXIR (also operated by KIR). Express ELIXIR has yet to achieve widespread adoption, however, processing fewer than 1,000 transactions per day on average. (By contrast, Singapore's FAST system processed over 33,000 transactions for over S\$64 million in its first two days of operation.)

The reasons behind the tepid rate of adoption can serve as lessons for other faster payments systems:

- **Low bank participation:** With only eight to ten banks out of about 50 participating, the service lacks the ubiquity necessary to scale across end-users. The UK's Faster Payments system and Singapore's FAST system, meanwhile, have the participation and investment of all major banks.
- **Lack of value-added products and services:** At launch, Express ELIXIR's participating banks had not developed payments solutions that leveraged its infrastructure. Without innovative products and services that create seamless customer experiences, adoption is likely to remain low.

- **Weak differentiation from legacy ACH system:** The legacy ELIXIR system completes transactions at a relatively high speed, with three cycles of settlement per day and funds availability within a few hours (i.e., same-day ACH). Consequently, end-users are less likely to see significant added value in the faster payments system, particularly when the Express ELIXIR is priced at a premium compared to the legacy ELIXIR.
- **Alternative faster payments options:** Intense competition in the Polish payments space means that end-users have access to cheaper payments options—such as Blue Cash, which began as an e-commerce solution but has since expanded into a more widely used payments system in Poland.

Despite these challenges, adoption is likely to grow in the coming years, as major Polish banks are developing mobile payments solutions that will leverage Express ELIXIR. Additional services are planned for layering on top of the payments system, including a P2P mobile service with the use of alternative identifiers. Ultimately, the experience of Express ELIXIR illustrates the importance of building a business, not just an infrastructure, around faster payments.

drifted away from direct deposit toward prepaid cards. A faster payments system would allow more businesses to pay weekly workers through direct deposit. Given that 17 percent of workers in the U.S. are temporary employees, the potential savings is significant.

Automated e-invoicing solutions:

Enhancements to payments clearing systems could allow for new remittance data solutions that digitize the back office for businesses. While payments system modernization is not essential for e-invoicing, it

can be a catalyst for improved business-to-business e-invoicing solutions. For example, Australia's New Payments Platform aims to provide more information-rich transactions by enabling commercial overlays on top of the basic invoicing infrastructure. It would then be possible to develop products and services that automate e-invoicing along the entire procure-to-pay value chain, thus pushing the industry to realize the potential of e-invoicing. Converting invoices from paper to electronic yields a cost savings of up to about 70 per-

The UK's Faster Payments

With the launch of its Faster Payments service (FPS) in May 2008, the United Kingdom initiated the global shift toward faster payments. This real-time clearing infrastructure includes 10 member banks, and enables phone and Internet payments through a continuous, real-time clearing system. Payments take one of four forms: single, immediate payments; forward-dated payments; standing-order payments; and direct-corporate-access payments.

Single, immediate payments are the primary use case, and grew 40 percent CAGR from 2009 to 2014, reaching 8 percent of transactions in 2014. Over 90 percent of transaction accounts in the UK can receive FPS payments. Banks generally do not charge consumers for sending payments through the system, but they do charge corporate customers.

Since 2012, participating banks have been building customer-facing products and services that leverage FPS. Barclays Pingit, for example, enables users to send and receive payments using a mobile number. More recently, the system has expanded to allow customers to purchase and use bus tickets through their smartphones, and to send and receive electronic gift cards using mobile payments.

Launched in April 2014, the UK Payments Council's PayM service enables customers of 16 participating banks to send and receive payments using a mobile number as a proxy. Some banks, such as HSBC, have extended PayM to business customers as well.

Another mobile payments service that leverages the Faster Payments service infrastructure is Zapp, which is expected to launch this year. Zapp is owned by UK banks and can be integrated into existing mobile banking apps so that users can make in-store and online purchases through mobile devices.

These innovations demonstrate the ability of a back-end, real-time clearing system to facilitate products and services that create value for customers and enable banks to compete more effectively against non-bank financial service providers. How widely adopted these products and services will be, and how banks will monetize them—whether through direct fees or through increased customer engagement and cross-selling opportunities—is still an open question.

cent per invoice; the value of automated invoicing, then, is indeed significant.

Strengthening customer relationships

Person-to-person payments: Person-to-person (P2P) payments products and services enabled by a faster payments infrastructure could play a critical role in banks' efforts to strengthen and retain existing customer relationships. This is particularly relevant today, as the space is under siege by non-banks. Emerging payments players such as PayPal, Venmo, Alibaba's Alipay, and Tencent's WeChat have used P2P payments to gain a user base for adjacent services, particularly e-commerce. Large technology players such as Apple, Google and Facebook are working on their

own P2P solutions as they seek to intensify their engagement with existing customers and solidify their control over the mobile commerce experience.

A real-time payments system would allow banks to offer a P2P product that provides immediate funds availability—something not widely available today, and a service that younger consumers are coming to expect. The product should be simple and easy to use, allow end-users to choose a payments speed, and be supported by a P2P identity directory that stores users' payment information and enables ubiquitous payments across banks. Banks that offer a product with these features could retain and increase their current cus-

tomers' engagement, slow the shift in market share toward third-party providers, and create new revenue streams in digital financial services.

To capture the monetization opportunities presented by a modernized payments system, financial institutions must relentlessly focus on design, customer experience, accessibility and convenience.

Acquiring new and previously underserved customers

A modernized payments infrastructure would also enable banks to better meet the needs of “underbanked” consumers. Approximately 18 to 25 percent of the 25 million underbanked consumers in the U.S. say they use non-bank/alternative financial services providers because they are faster. The ability to receive payments and use funds in real time could help banks win share among these customers. With the underbanked segment spending \$89 billion just on interest and fees for alternative financial services, the value at stake in the U.S. alone is high.

Furthermore, the prevalence of mobile phones and mobile financial services among underbanked consumers suggests that the mobile channel could be a cost-effective way to scale distribution of mobile payments tools built on a faster-payments infrastructure. New products and services could be designed specifically to bring segments of the

underbanked into the mainstream banking arena; for example, small-dollar, immediate loans could be provided in near-real-time through text notification. A number of startups are already attacking this space; for example, Affirm enables merchants to offer customers instant lines of credit for purchasing items on their sites.

Infrastructure is only the beginning

While some existing revenue streams (such as paper-based services) will no doubt be impacted by a modernized system, the digitization of information, the rise of mobile commerce, and end-users' rapidly changing expectations all create the opportunity for banks to boost customer engagement, gain a greater share of wallet, and acquire new customers.

New revenue streams will be the primary source of return on investment in a modernized payments infrastructure, but it is worth noting that additional cost savings could be significant if banks seize this opportunity to integrate their payments architecture. Some banks may gravitate toward payments hub architecture, which helps usher innovation into production—and thus to expedite revenue growth. Often, however, it is more cost-effective for banks to integrate payments platforms through multiple, smaller integration points, such as the fraud management system or the transaction banking system. Based on case examples from around the world, McKinsey estimates that banks can reduce their payments-related IT spending by 20 to 30 percent when they integrate their payments architecture.

To capture the monetization opportunities presented by a modernized payments sys-

tem, financial institutions must relentlessly focus on design, customer experience, accessibility and convenience. Building the infrastructure is a necessary condition for success, but banks will need to strengthen their front-end product development capabilities in order to fulfill the new system's

potential. If they do, the investment in faster payments will be well worth the return.

Robert Hayden is a senior expert at GC Insights, a wholly owned subsidiary of McKinsey & Company. **Grace Hou** is an associate principal in McKinsey's San Francisco office.