

# McKinsey on Payments

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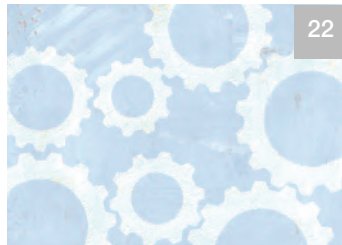
Technology innovations driving change in transaction banking



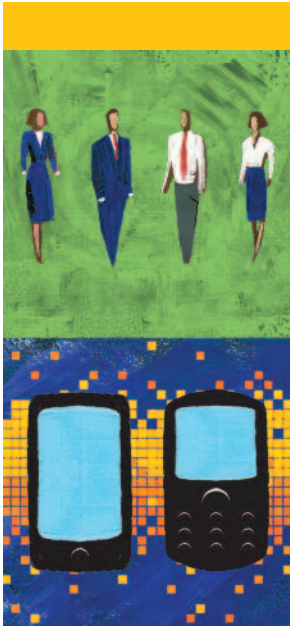
Cooperation and competition in the U.S. P2P market



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## Cooperation and competition in the U.S. P2P market

The disruptive threat that FinTech innovators pose to traditional banking institutions has been an ongoing source of debate and analysis. In the U.S., some of the most significant recent developments are unfolding in the peer-to-peer (P2P) payments space. The success of mobile solutions including Venmo (acquired by PayPal in 2013) and Square Cash has validated consumer interest in digital transfer capabilities, particularly among Millennials—a segment in which U.S. banks have until recently shown only nominal interest. The recent retooling of the bank-owned clearXchange network following its purchase by Early Warning Systems signals renewed focus on a financial institution-led collaborative initiative that will compete head-to-head with non-bank solutions that have demonstrated exponential growth.

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Many observers ask which model will prevail; however, this question presumes a battle between banks and non-banks with a single winner. McKinsey expects the two models will continue to co-exist, either addressing different aspects of the P2P ecosystem, or collaborating to integrate existing solutions or build new ones.

As with some other payments technologies (e.g., the implementation of EMV card protocols) the U.S. has lagged behind other countries in P2P capabilities, largely because of the adequacy of legacy solutions and the lack of a clear path to monetization (Exhibit 1, page 10). For instance, M-Pesa's

well-documented success in Kenya was in part born of necessity, given the country's high unbanked rate and lack of branch access. In North America's present network-building stage, P2P functions as an engagement tool rather than a profit generator—analogue to the launch of remote deposit capture for which some banks briefly assessed a fee before reversing course in favor of its benefits of cost reduction, balance gathering and customer satisfaction.

Conditions are favorable in the U.S. for banks and FinTechs to reboot their P2P initiatives and close the gap with other geographies in this persistent pocket of high-friction pay-

ments transactions, delivering customer satisfaction in the process. Leveraging examples from other markets of ubiquity, branding, collaboration and pricing will greatly enhance the probability of success for all parties.

### New environment, new rules of engagement

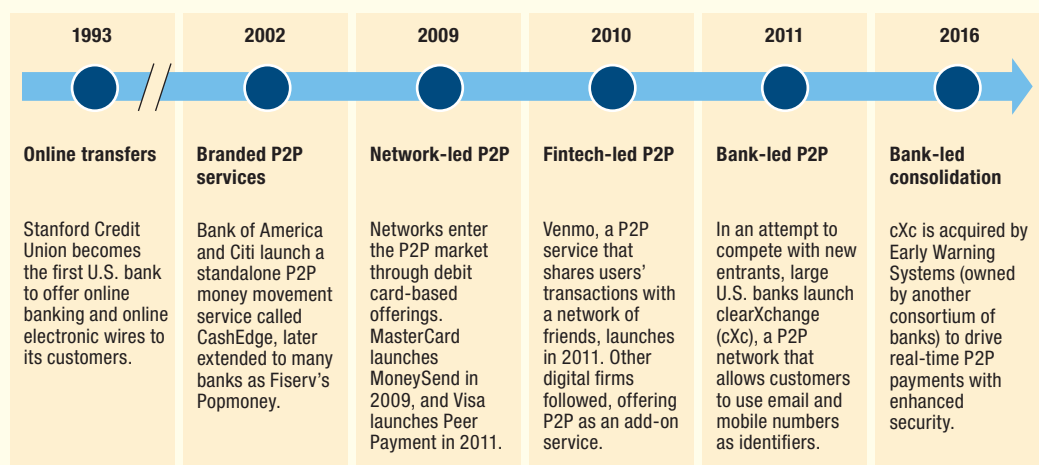
Digital P2P's reach has gradually expanded to appeal to ever larger groups (PayPal first found traction as a means for settling eBay transactions). The Venmo app enjoys prime position on the smartphones of a high percentage of U.S. college students in particular. Its volume now exceeds \$1 billion per month, having roughly tripled in the past year. Meanwhile digital currencies, led by Bitcoin, have launched a new paradigm for exchange of value. Although these virtual currencies have yet to gain mainstream acceptance, the underlying blockchain technology has attracted billions of dollars in bank investment and the interest of central banks, promising to alter the landscape further.

The checking—or demand deposit—account remains the fundamental building block of most consumer banking relationships. Consequently, any new provider or product that diminishes banks' perceived value in providing such services has been regarded as a significant threat. As younger consumers increasingly view banking as a service performed both virtually and across multiple platforms, financial institutions must maintain their position as go-to providers of such services; otherwise, incumbent status for other products (lending, investments) could soon be similarly jeopardized.

Globally, electronic payments are moving toward a 24/7/365 model, with funds available to the payee in seconds. Successful roll-outs of “faster payments” in other geographies have led the U.S. to pursue upgrades to its own legacy payments infrastructure (e.g., Same-Day ACH, the Federal Reserve's Payments Improvement initiative), despite concerns from industry observers about a perceived lack of valuable use cases.

Exhibit 1

## The evolution of P2P payments solutions in the United States



Source: McKinsey & Company

With handset manufacturers like Apple and Samsung contemplating proprietary P2P solutions in their branded wallets, and messaging services (Facebook, SnapChat) launching money transfer in their apps, banks are under pressure to defend their core assets (Exhibit 2).

Enter clearXchange, a bank-owned venture launched in 2011 with the objective to streamline U.S. P2P payments through the use of mobile apps and email address tokens. Despite the ownership stakes and market reach of several U.S. banking market leaders, adoption was slow and critical mass proved elusive in the initial rollout. Limited bank participation undermined the promise of “paying anyone with an email address,” and the enrollment and authentication process—designed to address regulatory requirements and manage risk—fell short of expectations established by mainstream mobile apps like PayPal. The institution of a fee for many transactions

further impeded uptake. A similar offering from Fiserv—branded PopMoney encountered many of the same challenges.

Non-bank FinTech providers are not subject to the same regulatory requirements as financial institutions. This lack of regulatory oversight creates opportunities for innovative approaches and customer experiences. FinTechs are often focused on a single product, and may not face the same challenges as banks in the introduction of new products and services (e.g., concerns about brand equity, competition with established profit centers for IT resources). On the downside, FinTechs cannot access payments infrastructure and bank accounts directly. The lack of visibility into account balances presents risk management challenges, leading to FinTech solutions consisting of prefunded P2P accounts funded through an existing banking relationship or payments made within the solution.

Exhibit 2

**P2P payments providers and offerings**

| Providers                              | Example companies                       | Value proposition/offering  |
|--|---|---|
| <b>Non-bank financial institutions</b> | PayPal<br>Venmo<br>Square Cash          | Online and in-person P2P/C2B payments using checking accounts and credit and debit cards. Some providers offer working capital loans to small business customers.   |
| <b>Social/messaging platforms</b>      | Facebook<br>Snapchat<br>kik             | Online P2P/C2B payments and customer service couched within messaging experiences, using credit and debit cards. Services typically do not require strong authentication to complete a transaction, removing friction from the process. |
| <b>Mobile OS/device manufacturers</b>  | Several major smart phone manufacturers | Online and in-person C2B payments, using credit, debit and gift cards. Services leverage card tokenization and device-based thumbprint authentication for enhanced security and ease of use.  |

Source: McKinsey & Company

## WeChat's Red Envelope rollout

WeChat, mainland China's leading mobile messaging service, used a creative approach to leverage its installed base to introduce a payments feature. Branding its service around the "red envelope" tradition of exchanging monetary gifts for the Lunar New Year, WeChat built awareness through a series of celebrity promotional giveaways. It also incorporated a gamification aspect—in addition to conventional P2P gifting, a popular feature enabled group gifting across a network of friends, with the size of each randomly assigned within user-set parameters. Subsequent analysis showed that in many cases the exchange of value between friends netted to near zero—they simply enjoyed the process of tagging each other and joining the flow.

The strategy proved highly successful. In its third year of operation the service delivered over 32 billion digital red envelopes during the six-day holiday, a nearly 10-fold increase from 2015.

More importantly, these holiday-themed promotions have spurred a broad base of new enrollments, positioning the service for expansion into adjacent use cases. Tencent, the internet company that owns WeChat, reported that over 500 million users either made or received red envelope payments in early 2016. Not surprisingly, the vast majority of these are in the mobile-savvy age 20-29 demographic. WeChat is now launching programs to encourage these users to extend their use from P2P into C2B payments needs like utility bills, local services and broader e-commerce.

### Collaboration as a key to ubiquity and success

Given the recent momentum in P2P adoption, there are a proliferation of solutions, partnerships and players entering the space. Large banks have redoubled their efforts, as evidenced by the acquisition of clearXchange by Early Warning Systems, a consortium with broader bank participation. This purchase allows for repositioning of the clearXchange offering with an emphasis on security and real-time execution.

In the U.S. and elsewhere, financial services stalwarts have teamed up with FinTech startups to explore mutually beneficial solutions:

- BBVA and Dwolla collaborated to deliver the bank's US P2P offering, leveraging Dwolla's "real-time" model (essentially a book entry transfer). This move is notable because although BBVA conceptually possessed the capabilities to move forward independently, it opted to leverage a FinTech's consumer experience knowledge to move forward more rapidly.

- Kakaotalk, Korea's leading messaging service, launched its Kakao Pay digital wallet as part of a consortium with the 16 largest Korean banks along with South Korea's Financial Telecommunications and Clearing Institute.
- Western Union and WeChat (see sidebar above) forged a partnership that allows WeChat's U.S. customers to send money to other users via Western Union's transfer network.

The same challenges remain, however—delivering a compelling user experience and endpoint ubiquity. This is a daunting task in an ecosystem with over 10,000 depository institutions.

With the precedent set by no-fee solutions in the market today, it will be difficult for banks to charge for low-value P2P payments and also develop a sufficiently robust user network (see sidebar on Interac, page 15). Once critical mass is established, however, there are value-added use cases for which a

fee is plausible: cross-border payments, escrow-like services, B2B and B2C. Additionally, P2P has been successfully extended to broader use cases in other countries, for example Barclay’s Pingit app in the UK.

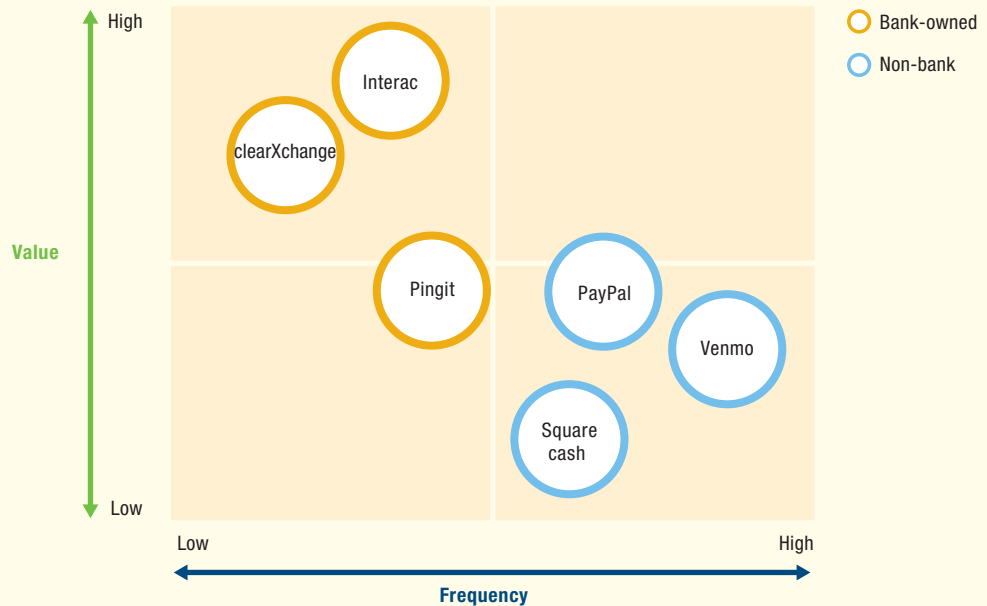
**Beyond pure P2P**

One natural approach to segmentation divides payments use cases into low/high value and low/high frequency (Exhibit 3). The four resulting quadrants imply different use cases and opportunities to eliminate friction or design a compelling user experience. This construct also illustrates that many consumers do not regard P2P and consumer-to-business (C2B) as distinct activities. For instance, the average transaction value through a bank-offered P2P solution is over \$300, confirming that many consumers are using these services for use cases beyond “textbook” P2P.

Checks account for 10 percent of P2P payments in the U.S., and the opportunity exists to digitize these transactions as well. According to research by the Federal Reserve Bank of San Francisco, the average value of a P2P check payment is \$128, four times larger than the average P2P cash transaction (\$32). Checks are costly for banks to process, and savings can be realized from bank-based P2P solutions displacing these paper items. Bank-offered P2P solutions often have higher per transaction and daily/weekly limits than FinTech solutions, with the added benefit of real-time funds access because banks can confirm availability. The structure of many P2P offerings lends itself to smaller, frequent payments. The average transaction value on FinTech P2P products in the U.S. is around \$35, in the range of a P2P cash transaction. Meanwhile, the daily and weekly limits imposed by Fin-

Exhibit 3

**Bank-led P2P solutions tend to support higher-value, lower-frequency transactions**



Source: McKinsey & Company

Tech P2P solutions are substantially lower than the limits on bank-offered solutions (e.g., \$3,000 per week vs. \$3,000 per transaction). FinTech providers do not have visibility into the DDA account balance and cannot confirm good funds payments from the account. To limit credit risk and to provide real-time availability of funds, many P2P solutions offer a dedicated prepaid account.

The most widely adopted FinTech P2P solutions to date are available to customers regardless of banking relationship. They focus on delivering a differentiated experience that transcends the payment itself, whereas bank-offered solutions have emphasized the transaction over the social/interactive aspect of a payment. Since cash satisfies most perceived consumer needs for low-value exchange and ubiquitous acceptance, the key to expanded digital acceptance may be in the non-financial social aspects of the experience. Smartphone-based payments apps can include support for messages (including emoticons) and pictures, and can even support group chat as part of the payments process—a very different experience than a cash transaction. FinTechs have gamified the P2P transaction and have created a social component to the payment (Venmo), spurring adoption. Other social media heavyweights are now striving to integrate P2P payments into their messaging platforms.

Cash remains the most common form of P2P payment in nearly every country. Cash transactions remain relevant in the retail environment also, representing 40 percent of retail payments in the U.S. in 2014. The digitization of retail cash payments represents a very attractive opportunity for banks, payments networks and FinTechs alike. In jurisdictions where P2P solutions are more entrenched,

bank-offered P2P options have made the jump to retail payments. MobilePay in Denmark, Swish in Sweden and Zapp in the UK have extended their capabilities to support direct transfers between bank accounts to support C2B payments. Canada's Interac has focused on extending its account-to-account solution to support the replacement of business-to-consumer (B2C) check payments through the introduction of bulk payments capability. These approaches may come to the US from offerings like clearXchange and PopMoney. FinTech solutions in the U.S. have thus far focused on P2P payments only and have not ventured into the C2B or B2C space.

### **Room for multiple winners**

P2P offerings from banks and FinTechs currently deliver different value propositions, with consumers using the products differently. P2P is not an area that necessarily lends itself to a single clear winner. Banks can leverage risk and fraud management expertise to enhance and expand their real-time, account-to-account payments offerings; FinTechs can continue to engage customers with features and functionality that create a unique payments experience. Interac and WeChat provide examples of successful P2P products established by banks and FinTechs, respectively.

Over time, technology and regulation will continue to evolve and existing sources of differentiation may be challenging to maintain. The U.S. launch of Same Day ACH payments will allow FinTech providers to provide faster funds availability directly from a bank account for customers, closing the value proposition gap with bank solutions. Banks are learning from and partnering with FinTech providers to engage

## Interac's success in a bank-led Canadian model

The evolution of Interac's e-Transfer service, which facilitates secure, real-time account-to-account money transfers using an email address or phone number, offers valuable lessons for U.S. bank-sponsored P2P solutions.

Ubiquity has been a key driver of growth. The service was launched in 2004 by six banks; today over 200 financial institutions support Interac e-Transfer and provide over 99 percent of Canadian bank account holders with access to this service. In 2015, Interac processed 100 million e-Transfer transactions totaling C\$42 billion in value.

The same basic payor/payee experience is offered across all participating banks. Customers access Interac e-Transfer through their financial institution's online banking application to ensure a secure authentication process. To ensure that funds can only be deposited by the intended payee, each transaction requires the payer to include a security question. Transaction-related notifications are sent to users by email or SMS. The interface includes a general message section which allows for the inclusion of free text information (e.g., a message to the payee, details about a payment such as invoice number) which is helpful for small business users.

The service is provided under a single brand (Interac e-Transfer), allowing participating financial institutions to complement proprietary initiatives with industry-level marketing campaigns to drive awareness and adoption.

The solution is built so that every transaction passes through Interac to support fraud management. In the early days of the service, Interac instituted a 30-minute funds availability delay for fraud mitigation. Interac has invested significantly in security, and works closely with participating institutions to manage fraud at the account level.

Consequently, fraud on the service is currently 3 basis points of total volumes, substantially lower than other P2P solutions in market. Risk and fraud management capabilities have evolved and the 30-minute delay now applies to only about half of transactions. It is anticipated that by 2017, 90 percent of transaction notifications on the service will be provided in seconds, allowing for instant payee access to funds.

Banks pay a flat fee to Interac for each transaction based on a tiered volume schedule, and historically have charged a fee to send an Interac e-Transfer (about C\$1.50). As usage has grown and volumes drive scale economies, banks have begun using price as a differentiator: some now offer reduced-fee and no-fee transfers. Declining transaction fees will likely spur continued growth as consumers increasingly adopt Interac e-Transfer as a replacement for cash as well as checks.

Interac is extending its transfer capabilities, recently introducing a bulk payments feature to offer businesses and governments an alternative to checks. Early use cases include benefit disbursement and payroll. Functionality to be launched in 2017 includes support for auto-deposit (eliminating the need for security questions on recurring payments) to streamline the payee experience.

customers more effectively, and are leveraging their fraud and risk management experience to simplify the end user payments experience. Although there may be some convergence between the products offered by banks and FinTechs, these providers will continue to focus on different business objectives. A broad range of solution providers

will ensure current and future customer needs are met, and the evolution of the market overall.

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