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Payment space bursting with innovation: industry initiatives and the opportunities they present

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Depending on whom you ask, change in the payments industry is either occurring at a snail's pace or at lightning speed. Regardless of which side of the debate you're on, it's apparent that the payments industry poses a prime opportunity for innovation. Innovators abound in the payment space, and the winners and losers are yet to be determined. Here's a brief look at some of the efforts that could ultimately impact your payment practices and efficiency:

Federal Reserve faster payments – In October 2012, the Federal Reserve outlined a plan to improve the U.S. payment system within a decade. The plan centers on three areas of improvement: 1) moving transactions faster from origination to settlement, 2) functioning more efficiently and securely, and 3) satisfying end-user preferences. To this end, the Federal Reserve is engaging the industry in discussions on how to improve the U.S. payment system. A Federal Reserve task force has been created, comprised of various industry stakeholders, and in February 2016 it published criteria for a faster payment system, thus providing guidance on developing and accessing faster payment solutions.

Same-Day ACH – Same-day ACH will use the existing ACH system to provide a ubiquitous same-day capability for both credit and debit ACH transactions as all Receiving Depository Financial Institutions (RDFIs) are required to receive same-day transactions. Existing one-day and two-day processing and settlement won't be impacted. The first phase, which will be implemented in September 2016, will support same-day ACH credits. Same-day ACH debits will become available in September 2017.

In the first phase, companies may benefit by using same-day ACH to issue a last payroll payment in cases of employee termination, as several states require that the employee receive their final payroll on their last day of employment. In the second phase of same-day ACH processing, companies can offer their consumers expedited payment processing in the case of late or missed payments.

clearXchange (cXc) – clearXchange is a network formed in 2011 to move payments from paper to electronic by simplifying the process. Customers of financial institutions in the digital payments network have the ability to send money to anyone with a bank account within the United States, using just their email address or cell phone number. cXc member banks include: Bank of America, BB&T, Capital One, FirstBank, JP Morgan, PNC, U.S. Bank and Wells Fargo. These banks represent

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over 100 million online banking and 50 million mobile banking consumers. cXc offers both standard (three business days) and real-time (within five minutes) payment processing. Late last year, Early Warning, a leader in fraud prevention and risk management, acquired cXc. The combined entity will bring together immediate funds availability, integrated authentication and fraud management capabilities into a single platform.

While cXc supports both recurring and one-time payments, it is uniquely positioned to be able to support one-time B2C payments. This is because consumers register only once with cXc and then anyone can pay them. Corporations don't need to solicit and maintain banking information with consumers who have already registered with cXc. This provides companies the opportunity to electronify their one-time disbursements to consumers without incurring the expense associated with enrolling the recipients.

Visa Original Credit Transactions/ MasterCard Send – These solutions enable businesses and consumers to send funds to a consumer's bank account using the debit card network. Companies can send funds to the consumer's bank account or prepaid card using the debit card number associated with that account. Historically, the debit card network supported credit payments as they related to refunds. With this recent enhancement, payments can be credited to the consumer's account without requiring a purchase. Funds are typically made available within seconds. As with any card-based transaction, payment card industry compliance is required. Additionally, each card-issuing institution can establish individual limits.

This solution may be attractive to companies that need to make payments to the "unbanked," as the payments can be made directly to the consumer's pre-existing prepaid card. It also may be a cost-effective method to pay consumers who may be temporarily located internationally.

Popmoney® – Popmoney is a person-to-person (P2P) payment service developed by Fiserv and launched in December 2010. The service enables consumers to send, receive and request money using an email address, mobile phone number or account number. Popmoney is available at approximately 2,400 financial institutions serving 70 million online banking consumers. Popmoney supports standard (two to three business days), next-day and instant (10 seconds) payment processing and settlement.

The Clearing House real-time payments initiative – In December 2015, The Clearing House (TCH), which is owned by 24 of the largest U.S. commercial banks, announced it signed a contract with VocaLink, the UK-based faster payment system provider. TCH plans to develop a comprehensive real-time payment network available to all financial institutions. This network will enable U.S. consumers and businesses to send both real-time payments and payment messages (request for payment, remittance delivery, payment acknowledgment) directly from their bank accounts to accounts at any

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financial institution using an email address, mobile phone number or account number.

The network will be built on ISO 20022 standards, which will position it to support cross border commerce and interoperability with other networks as real-time capabilities evolve in the global marketplace. The implementation target is early 2017.

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	Same-day ACH	Original credit transaction	clearXchange	TCH Real-time payments	Popmoney
Application	B2C C2B B2B	B2C P2P	B2C P2P	B2C C2B B2B P2P	P2P
Type of payment	• Credit (Sept. 2016) • Debit (Sept. 2017)	Credit (available)	Credit (available)	Credit (2017)	Credit (available)
Information required	Bank account and route transit number	Debit card number	• Email address or • Mobile number	• Email address or • Mobile number or • Bank account and route transit number	• Email address or • Mobile number or • Bank account and route transit number
Receiver availability	• End of day (Sept. 2016) • By 5 p.m. local time (March 2018)	Typically within seconds: 30 minute SLA	• Standard: 3 business days • Real-time: 5 minutes	Within seconds	• Standard: 2-3 business days • Next day: 1 business day • Instant: 10 seconds

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Blockchain: a future game-changer for financial transactions

Blockchain has inspired a gold rush of venture capital-fueled startups and established tech giants, all seeking practical ways to apply the emerging technology to ordinary business purposes. Leading financial institutions are also actively exploring methods to harness blockchain to provide faster, more efficient and economical applications for their corporate customers.

Although blockchain developments might not bear fruit for several years, staying abreast of them will position treasury managers to be prepared when that day dawns.

“Like any new technology, blockchain has the capability to be thoroughly disruptive,” says Christopher Swanson, vice president, research and development for U.S. Bank. “It has the potential to fundamentally change much of what we do,” he adds.

As Swanson explains it, blockchain, best known as the technical foundation of the digital currency bitcoin, lives at the intersection of database technology, distributed networks and cryptography.

Seeking the “truth”

Traditionally, one definitive record of most financial transactions resides at a clearinghouse, such as a bank, trust company or the Federal Reserve. “The entity that sits in the middle of transactions provides a golden record of the ‘truth’ to all parties to a transaction,” Swanson says. “The parties use that intermediary to determine what the ‘truth’ is.”

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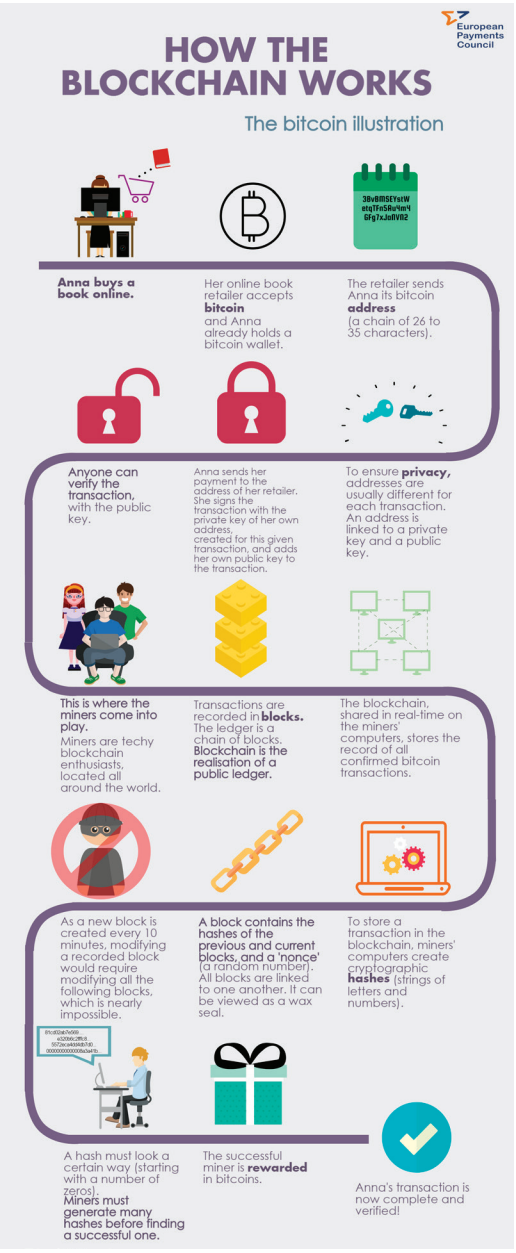

European Payments Council blockchain technology poll, May 18, 2016.

In contrast, in a blockchain "distributed ledger," each party has a set of information. An established protocol disseminated by peer-to-peer file sharing requires each party, electronically, to arrive at a consensus on the validity of a pending transaction before a new set can be accepted. The role of the intermediary is eliminated, and the parties to the transaction have sufficient information — secured using advanced cryptographic measures — to determine which transactions can go through and which can't.

Steps in a blockchain-based transaction

While anybody can conduct transactions via bitcoin — it's known as a "permissionless" blockchain — businesses can choose, instead, to establish closed networks composed only of accepted players. Here are the steps that would be involved in a blockchain-based sale of goods from one business to another:

1. Company A agrees to purchase 100 widgets from Company B at a set price, and pay for them 24 hours after they are delivered.
2. That agreement is entered into a distributed ledger system, creating a "future state."
3. Time passes, and then B ships the 100 widgets to A. The shipment is tracked electronically, such as with an embedded radio-frequency identification (RFID) chip.
4. When the widgets arrive at A's loading dock, the fact and place of their arrival are automatically transmitted electronically to the ledger system, where they are reconciled with the original terms of the contract.
5. The ledger system, recognizing that the contract requirements have been satisfied, starts the 24-hour countdown to payment.
6. After 24 hours, A automatically pays B to complete the purchase.

What's special about this blockchain-based process is that no humans are involved in these steps after the original agreement is completed and input into the ledger. The payment can take any form the parties agree to. "It could be bitcoins, it could be digital representations of dollars, it could be anything, really," Swanson says.

Broader commercial application

Initial testing of blockchain-based transactions have included sales of securities, such as bank-to-bank trades involving interest rate and credit default swaps — deals that don't always include a clearing agent. If a clearing agent or custodian does participate, their involvement can be minimal and not bog down the process. Such high-dollar transactions are a prime proving ground for blockchain because increased efficiency in such transactions can have a larger bottom-line benefit.

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Broader commercial application of blockchain systems might be many years off. Implementation standards have yet to be established, cybersecurity systems need to be adapted, and the legitimate legal and regulatory concerns (particularly those involving banks) need to be sorted out.

Finally, people will need to become comfortable with such an intangible system. “It’s very different to send a transaction up into the ether where the code and the math determine whether that transaction is going to be allowed,” Swanson says.

He’s confident that day will arrive, however. “Watch this space,” Swanson advises.

Charitable organization uses mobile banking to support daily money movement activity

Minnesota Philanthropy Partners (MN Partners) — a charitable network managing $1.3 billion in assets on behalf of 2,000 charitable organizations and donor funds — executes thousands of dollars in book transfers as part of its daily financial operations. The organization found it was increasingly difficult to do this with a limited number of authorized signers.

“We execute book transfers to move money on a daily basis in order to invest our donor contributions in a timely manner and ensure liquidity for distributions to our community nonprofit partners and beneficiaries,” explains Christine Searson, vice president of finance at MN Partners.

A decade ago, to gain efficiencies by reducing paper-driven processes, MN Partners adopted SinglePoint®, the U.S. Bank online treasury management portal. SinglePoint allowed the financial staff to collect internal authorizations and execute book transfers electronically and more efficiently, working from desktop computers.

It was a big leap forward, but MN Partners still faced a major challenge: due to board member concerns regarding control over funds transfer activities, the organization only has four authorized account signers: its CEO, two other executives and Searson. What’s more, because the other three executives’ jobs keep them out of the office regularly, Searson has become the go-to person whenever a book transfer needs to be approved. Her accessibility to fulfill this function has become critical.

For that reason, the emergence of smart mobile devices was a big benefit. Searson began using the U.S. Bank mobile banking service, Mobile SinglePoint, which enabled her to access SinglePoint by a web-optimized site. She continued to use the SinglePoint desktop web portal to execute book transfers when she was in the office, but used Mobile SinglePoint to execute those transactions when she was traveling on business or was otherwise away from her office.

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Migrating to the app

U.S. Bank introduced a downloadable Mobile SinglePoint app alternative for iPhone and iPad tablet users in 2014, and Searson participated in the pilot of the Mobile SinglePoint app for Android phones in late 2015.

The mobile app displays content in a format designed specifically for each device, and users can complete tasks with fewer prompts. "The app is more intuitive and user friendly," Searson adds.

Overcoming security concerns

When she was considering the Mobile SinglePoint app, Searson needed reassurance that it was secure. Data security is a top-of-mind concern, as evidenced by her organization's recent data security audit. "I asked about using Mobile SinglePoint in unsecured places like coffee shops and hotels, places where I would want to use it, and we discussed the platform security on the bank's end that would prevent anyone from using my mobile device to gain access to our accounts," Searson says.

Mobile SinglePoint uses the same security standards and policies as SinglePoint. Banking data and credentials are never stored on the device. U.S. Bank securely encrypts all communications to and from our Mobile SinglePoint users. Plus, the bank doesn't allow caching or storing of network request response data. Tokens are also used to protect ACH and Wire Transfers and, optionally, can be used to protect all services.

Contributing to the business continuity plan

The convenience and security of Mobile SinglePoint, and how it enables Searson to be available for book transfer approvals, were key selling points for adoption. She also sees value in the service from a business continuity perspective — particularly given her organization's home in the Upper Midwest, where winter snowfalls are sometimes measured in feet rather than inches.

"We know that if we had to make emergency disbursements and our offices were inaccessible, we could use SinglePoint for that, and certainly we could use Mobile SinglePoint as well," she says. "We've written that into our business continuity plan."

Blazing the trail

According to a July 2015 report by research and advisory firm Aite Group, only about 10 percent of corporate treasurers perform bank transactions through the mobile channel. However, at MN Partners, mobile banking is a good fit, Searson says.

"Having a limited number of authorized signers makes Mobile SinglePoint a necessity for us," she says.

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