IMPACT NOTE

JANUARY 2018

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Top 10 Trends in Retail Banking & Payments, 2018: Accelerating Evolution

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INTRODUCTION

In like a lion, out like a ... lion? The global geopolitical environment was volatile entering 2017, and the year exits on a similar note. Recent polls show that the majority of Brits regret the vote to leave the European Union, even as the EU is facing its own turmoil and uncertainty as Germany struggles to form a new coalition government. In Asia, the Chinese economic outlook looks cloudy, while India is firing on all cylinders and appears poised to reclaim the title of world's fastest-growing economy. The U.S. political environment continues to be polarized and acrimonious, and the unstable relations between the U.S. and North Korea prompted Nobel laureates to warn that nuclear destruction is "one impulsive tantrum away."

Amid the global rhetoric and uncertainty, consumers are enjoying a stronger economy, and they still need to transact, bank, save, and invest. The mobile device is increasingly the fulcrum for these interactions, while behind the scenes the use of artificial intelligence (AI)-based technologies, such as machine learning and natural language processing (NLP), are helping to better inform and enrich these interactions. Transactions are accelerating, with faster payments initiatives progressing around the globe (much to the delight of criminals, who are capitalizing on the speed and innovation to find new sources of ill-gotten gains). Both financial technology and tech firms continue to try chipping away at the edges of banks' revenue streams, and in Europe and parts of the Asia-Pacific, regulation is providing a helping hand.

Aite Group identifies 10 trends that will shape retail banking and payments around the globe in 2018 and beyond:

- Tech firms become banks
- · Banks become tech firms
- Real-time push payments go mainstream
- Conversational platforms become the new digital banking user interface
- Identities become dynamic and anonymous
- Credit card rewards find the fast lane
- Financial institution (FI) fraud prevention moves to mobile-first
- FIs embrace AI for anti-money laundering (AML)
- New retail credit products arrive
- The great payments divide accelerates

^{1.} David Meyer, "Humanity's Annihilation is 'One Impulsive Tantrum Away', Nobel Peace Prize Winners Warn," Fortune, December 11, 2017, accessed December 26, 2017, http://fortune.com/2017/12/11/ican-nuclear-war-warning-kim-trump/.

TEN TRENDS FOR 2018

TREND #1: TECH FIRMS BECOME BANKS

By Julie Conroy

"People need banking, but they don't necessarily need banks." This 2015 quote from the then chief digital and marketing officer at Citibank is more relevant than ever at the dawn of 2018. Tech and fintech firms are taking ever-bigger chunks out of banking revenue streams. Changing customer demographics, preferences, and technology are creating fundamental risks to retail banks' business models in the following ways:

- The bank's brand is becoming an ingredient brand. As more transactions become
 digital, customers are no longer making a conscious decision about what payment
 mechanism they use for an increasing proportion of their transactions. This
 relegates the FI to the status of an ingredient brand; if the brand of the merchant or
 wallet is central for the consumer, the importance of the FI's brand is diminished.
- FIs are facing the risk of disintermediation on a variety of fronts. The examples are already abundant. As payments become more and more embedded in the commerce experience, tech and fintech firms are finding ways to remove payments from the payment card rails and reduce their cost of acceptance. Online lenders have made their substantial mark on small-business lending and now have their sights set on consumer lending. The rise of varied forms of prepaid accounts means many consumers no longer feel the need for traditional banking relationships.
- Technology and regulation are increasing the risk of commoditization. This risk is
 front and center in Europe, as regulation designed to increase competition threatens
 to reduce banking services to a set of utilities.

Alibaba and Tencent have already made substantial inroads into traditional retail banking revenue streams in Asia. Insight into customer data for both risk management and marketing purposes has traditionally been one of the key assets that protects banks from disintermediation; however, this bulwark is being dismantled in Europe by the second Payment Services Directive (PSD2). No longer is there a clear line between the traditional financial institution and the merchant. The PSD2 concept of the payment initiation service provider is blurring that line by mandating that FIs open up their customer data files via application programming interfaces (APIs).

The U.S. is in a deregulatory cycle entering 2018, and tech and fintech firms are seeing this as an opportunity to obtain limited banking charters themselves. Being a regulated institution is not new territory for many of these firms. PayPal has long held a banking charter in Europe. Walmart, which operates its payments operation more like a tech firm than a traditional

^{2.} Phil Simon, "People Need Banking, Not Banks: The Case for Thinking Different," Wired Magazine, February 2015, accessed December 5, 2017, https://www.wired.com/insights/2015/02/people-need-banking-not-banks-the-case-for-thinking-different/.

merchant, has a bank charter in Mexico. In the post-Dodd-Frank era, credit card interchange and consumer lending revenue are the most profitable product lines left to retail banks, so the potential encroachment and disintermediation represent significant long-term impacts to retail banks.

Two big existential questions will play out for banks in 2018 and beyond. First, as tech firms increasingly come under direct regulatory scrutiny, will they be able to manage the burden? While there are many reasons that banks are traditionally slow to evolve, regulation is certainly one of the top two drivers (legacy technology being the other). Second, will banks be able to overcome their technology hurdles and more nimbly leverage two of their greatest assets—customer data and customer trust? Not all banks will be able to do so, but those that can will not only survive but thrive.

TREND #2: BANKS BECOME TECH FIRMS

By David Albertazzi

Despite being armed with deposit accounts, lending relationships, a strong focus on security and regulatory compliance, and a robust infrastructure for clearing and settlement, banks have to fight to remain well-positioned, to continue delivering financial services, and to stay relevant for their customers. Many companies—including digital giants such as Amazon and Alibaba, retailers, and startup fintech firms—have understood this and have already made substantial inroads into traditional banking revenue streams.

FIs need to change entering 2018. They need to fundamentally shift their mindset, business model, and operating model. They must be equipped to fight for the modern consumer—who, because of technology, has a whole new set of expectations. The modern consumer doesn't want a traditional branch bank. They want their transactions to happen on their mobile devices in real time and on-demand. This is why FIs must become tech companies and provide elegant, nimble, and technologically sophisticated solutions to their customers.

Aite Group believes that in 2018 this shift will manifest itself in the following ways:

- Continued improvements to the customer experience: User interface development
 is moving beyond designing for just clicks, taps, and screens, and is now including
 voice-enabled interactions, virtual-reality experiences, and Al-powered digital
 assistants.³ In this context, banks will continue to focus on improving the customer
 journey and digital interactions.
- Strong agile development adoption and continued increase in API consumption:
 While software companies in Silicon Valley have been utilizing a development
 methodology known as agile over the more traditional waterfall approach for quite
 some time, developing products with incremental releases and focusing on a
 satisfying customer experience, Fls do not yet widely use this methodology. This will

^{3.} See Aite Group's report *Chatbots and Interactive Assistants: Building an Engaging Digital Experience*, October 2017.

change rapidly; Fls' adoption of agile will accelerate to better meet customer needs and decrease time to market. In addition, Fls will continue to increase API usage and consumption with their providers, partners, and customers.

• Sharp increase in digital transformations: Digital transformation cannot be a project run by a function or department but rather has to be a complete change in development mindset for the FI. More FIs will embark on the journey to transform the entire FI into a true digital player. Large FIs especially will launch digital-only subsidiary banks, partner with or acquire fintech companies, and hire strong technology talent outside of the banking industry in order to gain technology leadership. Forward-thinking FIs are bringing in talent from the digital giants to help accelerate this process, though merging these two cultures is not always easy.

A strong understanding of customer engagement, especially the ability for FIs to measure the degree of engagement and assess customers' response to the banking offering, will be table stakes for FIs competing for the retail customer's business. New data streams created by new digital experiences can provide insights that FIs can use to better serve customers and to help them meet their financial goals in this digital world. Quickly bridging any potential features and functionality gaps through technology leadership and providing technology-driven next-generation customer engagement activities will be even more important for retail banks.

Going forward, the banks that quickly adapt and recognize this shift will stay relevant to their customers and even gain a stronger foothold in the market. Those that do not will struggle to acquire and retain customers, and to survive.

TREND #3: REAL-TIME PUSH PAYMENTS GO MAINSTREAM By Talie Baker

Facebook Messenger, PayPal, Zelle, Visa Direct, and Mastercard Send are among a growing number of proxy services looking to provide faster payments in the U.S. and abroad. Proxy services allow users to exchange payments without exchanging bank account details the way they do with checks or direct deposit. Instead, users rely on mobile phone numbers, email addresses, and/or debit card numbers to send money. Proxy services help alleviate some of the friction involved in faster payments as well as ease the hesitation users have around sharing personal financial information, thereby eliminating the need to carry cash. Other common proxy services include Fiserv's Popmoney, FIS' People Pay, and First Data's newly launched disburse-to-debit solution.

In addition to proxy services, organizations such as Early Warning, The Clearing House, Fiserv, and FIS are leveraging their networks to help financial institutions and billers increase digital engagement with consumers by facilitating real-time payments. These types of services have increasingly been powering digital person-to-person (P2P) payments, business-to-consumer (B2C) disbursements, and consumer-to-business (C2B) payments for the past couple of years and are poised to catch fire in 2018.

P2P PAYMENTS

Zelle is positioned to move money in real time for 100 million customers via the 34 FIs that are part of the network. Early Warning also has agreements with Visa and Mastercard that allow it to use real-time push-to-card capabilities to reach nearly every bank account in the U.S. In 2018, Early Warning will begin more aggressively marketing Zelle, bringing much needed consumer education to the digital P2P payments space. In addition to the launch of Zelle, PayPal, Venmo, and Square Cash also offer Visa and Mastercard's push-to-card capabilities for real-time payments. In 2018, real-time digital P2P payments will become a reality across all demographics.

B2C DISBURSEMENTS

Consumer demand for faster payments (driven by real-time P2P payments capabilities) will become a key concern for businesses that produce a high volume of consumer payouts, such as insurance claims, rebates, refunds, commissions, and more. These businesses will look for ways to drive competitive advantage by offering faster payment methods. By partnering with Zelle, Visa Direct, Mastercard Send, or another similar service, businesses will deliver faster and easier payment methods that reduce the cost of payment acceptance, seeking to eliminate the friction associated with traditional disbursement methods. In 2018, digital B2C disbursements will accelerate the elimination of checks from payments processes.

C2B PAYMENTS

Consumer demand for faster payments is also bleeding into bill pay services. Consumers want to understand when funds will be debited and credited so that they can reduce overdrafts or late payment charges. Small businesses dealing with cash flow challenges want the ability to pay in real time when funds are available. In 2018, real-time bill pay will increasingly be the new norm.

TREND #4: CONVERSATIONAL PLATFORMS BECOME THE NEW DIGITAL BANKING USER INTERFACE

By Tiffani Montez

In 2017, chatbots and interactive assistants were the new black. Forty-eight percent of executives who work at an FI with more than US\$50 billion in assets indicate that they deployed one or more AI-based interactive assistant solutions, while another 28% indicate they plan to have a solution implemented within 18 months. If all goes as planned, almost three-quarters of U.S. FIs with more than US\$50 billion in assets will have implemented an AI solution by the end of 2017.⁴

In the past, digital banking was focused on building an experience that led a customer to a product or service as quickly as possible. Careful consideration was given to building the right architecture that accomplished this end. Online design was focused on using the functionality of a mouse, coupled with content, buttons, and graphics to allow users to point and click their way through the site. As the mobile channel emerged, the smartphone and the tablet gave the

See Aite Group's report Chatbots and Interactive Assistants: Building an Engaging Digital Experience, October 2017.

mouse the finger, and user experience was built on taps and swipes. To build these digital experiences, FIs employed talented customer experience people who could build beautiful graphical user interfaces while reducing the number of clicks it took to get to an answer.

With conversational platforms, the art is designing a great experience centered on words. How do you move from designing around content, graphics, and buttons to recognizing what a customer is asking, maintaining the context of the conversation, providing relevant responses, and executing actions for the customer? More importantly, how do you communicate with customers in the way that they describe financial concepts and terms? In the past, digital experiences took a user down a deeper path to find an answer. This assumes a user has enough knowledge to make the right choice throughout the digital journey to find the answer. With conversational platforms, FIs will have to consider the many ways that a consumer asks a question with no clear starting or ending point. Customers do not speak in bank jargon but use acronyms, slang, and emojis, and weave in and out of topics when they communicate. In conversational platform design, information architecture will consider the many ways a customer can ask a question or give a command.

In the next couple of years, the industry will see a hybrid approach to user interface design. Conversational platforms will continue to use traditional website graphics—such as charts, graphs, and videos—or other content to complement the experience. As these solutions get smarter over time and as consumers grow more accustomed to using voice and text to communicate with brands, the dependency on traditional user interface components to fill the communication gap will lessen.

TREND #5: IDENTITIES BECOME DYNAMIC AND ANONYMOUS

By Ron van Wezel

Digital identity management plays a pivotal role in financial services. Fls need to assert the identity of a digital customer requesting a service in real time while keeping friction in the transaction to a minimum. Static authenticators, such as passwords, are vulnerable to fraud and will increasingly be replaced by dynamic factors representing the individual's digital identity and transactional behavior. Almost paradoxically, it will become possible to establish customers' identity with near certainty while protecting their anonymity. This way, a customer's personal data is much less exposed to data breaches, which is necessary to comply with privacy regulation such as the EU's General Data Protection Regulation (GDPR).

Today, the initial process of establishing identity is still very much a physical one. During onboarding, FIs prove the identity of the customer by checking his or her legal documentation (such as a passport or national identity card) and will often verify the data against external data sources. This needs to be done either in person at a branch or remotely via document capture and/or facial recognition to satisfy regulatory Know Your Customer requirements. Based on these checks, the FI will create an account for the customer and issue secure access credentials that allow the FI to verify the customer's digital identity.

In the early days of electronic banking, such credentials were very much static and based on user ID and password protection. Massive data breaches and lack of customer security awareness

have compromised such data, and identity fraud is now a major issue. To mitigate the risk, FIs have relied on two-factor authentication, using tools such as hardware tokens or out-of-band authentication techniques (e.g., a one-time password). However, the digital world is rapidly becoming mobile-centric. Mobile customers, while on the move and working on a smaller screen, have little tolerance for security methods that make the checkout or banking process inconvenient and clunky, or require them to carry around a separate physical token. The question is how to obtain proof of a customer's identity in real time and with high accuracy, without the customer even being aware that such a check is being made.

The answer is to build a digital identity that is dynamically linked to the customer's digital life. A variety of technologies is making this a reality by leveraging the vast amount of data connected to customers' transactional history, their device use, and their online behavior to build a unique digital identity. The combination of static elements captured during onboarding with a large number of dynamic elements is nearly impossible to fake. When the customer requests access to a financial service, e.g., to access an account or make a payment, the FI can match the digital parameters against the stored digital identity and apply a risk score based on the result. If the score lies within acceptable boundaries, the transaction can be approved automatically without any user intervention.

Building such a detailed profile of an individual can raise concerns about privacy and data protection. However, the elements constituting the digital identity can be tokenized, replacing personal data with randomized strings of characters that are meaningless to fraudsters. This way, it becomes possible to authenticate a person with high accuracy without knowing who they actually are. This "pseudonymization" of personal data is a technique that significantly reduces the risk of such data being exposed and helps to meet the data protection requirements of regulations such as GDPR.

Dynamic digital identities are highly reliable, and their use will become ubiquitous in securing transactions in the financial services and digital commerce businesses. The technology could conceivably provide a lot of value in the Know Your Customer process as well. However, this would require the standardization of digital identity management to enable regulatory scrutiny and approval of such methods, which is not on the agenda in the foreseeable future.

TREND #6: CREDIT CARD REWARDS FIND THE FAST LANE

By Kevin Morrison

The days of introductory offers with over-the-top credit card rewards are coming to an end. In an effort to drive customer acquisition in the extremely competitive U.S. market, multiple issuers have been offering a combination of large sign-up bonus points and/or rewards based on a specific amount of spend in the first 90 days, a waiver of the first annual fee, and/or 0% APR for the first year. The marketing strategy appears to be bringing in new business. Based on a Q4 2017 consumer survey conducted by Aite Group on credit card rewards programs, 54% of U.S. consumers say they had applied for a credit card in the last 24 months based on its rewards program. In the same survey, 72% state the last rewards credit card they applied for and received became their primary card.

While these offers promote card usage in the short term, there could be long-term retention risk with these new customers. Short-term incentives promote short-term use and can also tempt the consumer to engage in a type of "gaming" to take advantage of the initial incentive offers, then close the account and move on to the next opportunity. Leveraging a strong card rewards program to maintain cardholder retention will be critical in 2018, as key economic indicators point to a downturn. Household debt has surpassed prerecession peaks, and banks have begun to increase loss provisions for the coming quarters.

The other key capabilities needed to ensure long-term rewards card retention will be the ability to earn and redeem rewards in the evolving digital transaction process. As contactless wallet transactions continue to ramp up and as consumers' expectations of real-time redemptions grow, having an integrated loyalty/rewards payment option will be table stakes.

Real-time reward-point redemption is a key capability, and the limited variations currently in the market already show promise. The ability for a consumer to convert loyalty or rewards currency and then redeem in real time at the point of sale (POS) addresses current process friction for the customer and increases potential for the merchant to see higher transaction volume and/or increased spending.

Program providers that are introducing ubiquitous loyalty solutions specifically for the mobile wallet at the POS will allow the consumer to convert loyalty points from participating programs on their mobile device and redeem as part or all of a transaction. These capabilities are generally tied to a specific closed-loop private-label program or a POS terminal-based software application, or are custom-coded to an open-loop payments processing environment. Some solutions are card-based while others are application- or mobile-wallet-enabled. Providers report increased spend and higher customer retention in programs that allow cardholders to redeem points at the POS.

How loyalty currency ubiquity will affect consumer loyalty to a specific brand is yet to be seen; however, the ability to monetize points and redeem value in a few clicks inside an app will have unintended consequences. Consumers' level of brand awareness, breakage liability modeling, fraud, and transaction volume variability are all areas that should be closely monitored. As with any new digital capability put into the hands of the consumer, the key variable is human behavior.

TREND #7: FI FRAUD PREVENTION MOVES TO MOBILE-FIRST

By Shirley Inscoe

Consumers are in love with their mobile devices and don't go anywhere without them. As consumers become increasingly dependent on these devices, they are demanding more and simpler methods to transact. Fls recognize this reality and are beginning to deploy new functionality to the mobile channel first, with online development a secondary consideration (if it is a consideration at all). This is good news for Fls because the mobile device itself can be used to help ensure the person on the other end of a transaction is indeed the legitimate customer. Leading Fls are realizing that the mobile device can be used to secure all delivery channels,

helping to improve the customer experience while at the same time removing friction. Here's how this will manifest in 2018 and beyond:

- Contact center: Perhaps the greatest challenge FI contact centers currently face is the threat of organized fraud attacks; unlike true customers, fraudsters don't mind calling in repeatedly until they are able to overcome the controls in place and successfully impersonate the targeted customer. Rather than add unnecessary length and friction to the call by asking multiple knowledge-based authentication questions, the FI can send a one-time password to the customer's known device and have the caller supply it to the agent. While this won't work in all cases, employ the old 80-20 rule. After all, there is no silver bullet in fighting fraud, and a solution that works in the majority of cases is worth utilizing, particularly when it also improves the customer experience and allows most customers' needs to be met more quickly than the current process. Similarly, the mobile device can be employed as part of the authentication process for all delivery channels. Additional authentication steps can be added for high-risk activity, but the mobile device can serve as the foundation of authentication.
- POS: Leading FIs are also using the biometric features housed on mobile devices as
 part of the authentication process. Knowing that a device has been associated with
 the customer in the past for undisputed activity and that a biometric stored on the
 device is used as part of the authentication process vastly reduces the odds that an
 unknown party has obtained and is using the device. In most cases, the only
 remaining threat is that of family or friendly fraud, which can be mitigated in other
 ways.
- Online: When high-risk transactions are initiated online (e.g., sending a real-time payment or changing contact information for an account), the mobile device can be used to verify that the legitimate customer is performing the activity. This can easily be accomplished by sending a one-time password or push notification to the known device and requiring the customer to input the password online to authorize the activity.

As the use of mobile devices outpaces the use of computers, FIs will develop new capabilities for the mobile channel first, then determine when or if to develop the capability for the online channel. Technology will continue to offer more convenient processes for authenticating applicants' identities and enabling mobile to be the most secure delivery channel available, resulting in a real win-win for consumers and their FIs.

TREND #8: FINANCIAL INSTITUTIONS EMBRACE AI FOR AML

By Kristina Yee

Mounting international sanctions, increasing payment volume, and painful enforcement actions are dictating that financial services firms look to new and better ways to ensure AML compliance. While the AML function has typically lagged its fraud counterparts in the use of advanced analytics, the use of forms of AI for AML will become an FI priority in 2018.

The deepening use and acceptance of cloud computing and digital solutions throughout financial services organizations, coupled with a burgeoning data democracy movement within the enterprise, will make the use of Al-driven AML a reality as more data and user-friendly analytic tools are introduced. In addition, the emerging use of data-warehouse-as-a-service from companies such as Snowflake Computing has reduced the need for expensive data management implementations. Perhaps most significantly, the increased availability of robust machine learning solutions and growing levels of regulatory acceptance of such solutions will be a major adoption driver.

Established solution providers and new regtech entrants offering proven and scalable AI, machine learning, robotic process automation (RPA), and NLP and natural language generation (NLG) solutions will find the need for their services rising exponentially as the volume, fines, and scope of the money laundering problem reach a critical point for FIs worldwide.

- Machine learning: Machine learning encompasses analytics techniques that can
 identify patterns of behavior through iterative optimization. It has been widely used
 in fraud detection for years and is now finally starting to be used for AML, as
 financial firms are able to demonstrate to regulators that these models can provide
 explainable outcomes while simultaneously improving detection and reducing false
 positives.
- RPA: RPA is the use of advanced analytic technologies to handle high-volume, repeatable tasks that traditionally require human intervention. AML is rife with examples of these types of tasks. The head of AML for a large North American FI recently stated at the Pitney Bowes Financial Crimes and Compliance Executive Forum that the AML analysts on his team currently spend 60% of their time on data gathering and 20% on actual analysis. The FI's goal is to flip that ratio through the use of RPA over the next two years. Many other large FIs are following suit, looking to RPA as a way to create efficiency without running afoul of the regulators.
- NLP and NLG: NLP is software that can read language and turn it into structured data. NLG is the converse—software that turns structured data into narrative text. Both of these have a high degree of utility in AML. NLP can be used to improve negative news processes by adding context to the searches and helping to reduce false positives. NLG, provided by vendors such as Narrative Science and SAS, is being used by FIs to bring efficiency to the Suspicious Activity Report creation process. The NLG software can automate the narrative creation by pulling from data in the FI's case management system, reducing the time analysts waste writing the text of the report.

In 2018, FIs will double down on AI technologies in light of rising global money laundering activity and mounting regulatory expectations.

TREND #9: NEW RETAIL CREDIT PRODUCTS ARRIVE

By Christine Pratt

In 2018, emerging consumer credit products will gain credibility and generate more FIs' creative thinking for borrower-centric offerings that can entice consumers back to credit and encourage them to stay. New retail credit products are very rare, so what changed? The U.S. banking industry has dealt with convergence since 1993's deregulation and suffered through the great recession, the tepid recovery, reactionary regulations, and the arrival of formidable competitors for borrowers, such as insurance companies and online finance companies. Another big gap has been a lack of qualified new loan applicants, mainly due to the recession's residual impact and generational shifts in the distribution of wealth.

Lenders large and small believe that to compete successfully for new customers, self-serve options and a streamlined digital experience are table stakes. But what's next is a big question mark. Thanks to improving financial conditions and margins, FIs are gearing up (often with fintech partners) to identify and deliver needed new borrowers with good risk profiles. Already in play are three offerings, each built on a credit foundation with savings components. Financial inclusion, self-help, and digitalization are key program pillars. The products pack a powerful benefits message, not only for consumers but also for lenders.

The first is Self Lender, an Austin, Texas venture-backed startup that partners with FIs to provide small-dollar, one-year term loans to borrowers who have little or no credit history. Self Lender encourages consumers who have been denied credit to submit an online loan application. Most apply via smartphone. If the application passes fraud (not credit) screens, the loan is approved. A bank partner deposits loan proceeds in the customer's name in an FDIC-insured CD. The borrower repays the loan in 12 monthly installments. At the end of one year, proceeds of the paid-off loan are available to the customer, and credit history is established or improved. A fair amount of online repayment education information is delivered to the consumer.

Another Austin-based firm, Kasasa, is an online lender that in 2017 launched a program for community FIs to be able to offer applicants with marginal credit histories an unsecured fixed-rate personal loan. A differentiator is that borrowers can make extra payments to reduce interest with no pre-payment penalties. If needed during the repayment process, the borrower can retrieve the extra funds, and the amount taken back is reapplied to the loan. The borrower has an interactive dashboard to manage his or her own loan and payments.

Switching credit gears, San Francisco-based First Republic Bank designed a large-dollar, low-interest student loan finance plan geared to discover employed college graduates with good credit scores and significant education debt (between US\$40,000 and US\$300,000). Loan applicants must establish a First Republic ATM rebate checking account, agree to automate loan payments, and transfer their main source of income to the account via direct deposit. Checking account fees are not charged if balances are maintained at US\$3,500 or above. The borrower gets to consolidate all student loans at a very low interest rate, and the bank has the opportunity to increase its client base for advisory services while introducing these customers to other financial products and services.

What all three products have in common is that an innovative FI or fintech firm discovered a borrower need and creatively designed a solution that works for both lenders and customers.

This is a theme and an opportunity poised to gather steam in 2018, especially as FIs find that consumers are still not eager to borrow but have lots of choices when they do.

TREND #10: THE GREAT PAYMENTS DIVIDE ACCELERATES

By Thad Peterson

As the payments industry rings in 2018, noncash payments are growing across the globe. Some estimates show that the growth rate for global noncash payments will be around 10% over the next few years. The growth is not being driven by mature payments markets such as Europe and North America; it's coming from markets new to the ecosystem, such as China, Kenya, and India. The estimated compound annual growth rate for markets like these from 2016 to 2020 is rocking along at nearly 20%. Mature markets will grow at about 6% in the same period. This is great news for the payment networks, the processing community, and issuers, since more customers and more transaction volume will create new opportunities, right?

Nope. The growth that's happening in these new markets is from products such as WeChat Pay, Paytm, and other mobile money platforms that have nothing to do with the existing payment infrastructure. Faster growth in markets not using traditional payments as much as mobile money means that the industry is facing a world with two equally powerful and completely separate payment universes.

Mobile money first exploded in countries where two things were missing:

- Very little banking or financial service infrastructure existed, and what little was there supported the wealthy, not the much larger, poorer population.
- The wired telecommunications infrastructure was inadequate for technologyintensive use cases such as payments.

With a limited banking system and poor telecommunications, an opportunity emerged for a new way to move money using the mobile phone. The first form of commerce in this ecosystem was prepaid mobile phone top-up, since a significant percentage of the devices in these markets were prepaid. From there, it was a logical step to P2P payments. And since many merchants in these countries lacked any POS infrastructure, they were dependent on cash payments with all the risk and complications that accompany cash into commerce. Mobile money helped merchants get rid of cash and accept more transactions without implementing a complex POS infrastructure.

Due to their simplicity, mobile-to-mobile payment solutions have emerged quickly across the globe. A primary accelerant happened in China, when Alipay and WeChat Pay were launched. Their success is legend; according to the Groupe Speciale Mobile Association (GSMA), 88% of the Chinese population uses mobile payments, and virtually all of those are through mobile money.

^{5. &}quot;World Payments Report 2017," Capgemini, accessed December 8, 2017, https://www.worldpaymentsreport.com/.

In spite of the tenure, stability, and power of the traditional card-based payment ecosystem, it's possible that noncard mobile money will soon become a viable candidate to be the dominant global payment platform. This will result in two powerful, competitive ecosystems geographically divided between developed and developing market payment models. Traditional payments will remain globally ubiquitous, supporting transactions worldwide, but mobile money may soon have the greater volume.

Neither platform has a way to interoperate with the other, creating a new set of challenges for current players and potential opportunities for new entrants. The dominant payment platform in each market will be driven at a country level with consumers and merchants adopting what works best for their lives. The biggest challenge could be for the networks and the organizations that support traditional payment platforms, which could lose the opportunity to grow in new markets. Can they adapt to support a new way of doing things, or will they be relegated to a steady state growth rate for the foreseeable future? No one knows, but the certainty is that the space will continue to be interesting for a long time to come.

CONCLUSION

In 2018, Aite Group anticipates the following trends in retail banking and payments:

- Tech firms become banks. Tech and fintech firms are taking ever-bigger chunks out
 of banking revenue streams. Fls' ability to overcome organizational and technology
 constraints and turn data into intelligence will dictate whether they can survive and
 thrive.
- Banks become tech firms. Fls will need to fundamentally shift their mindset, business model, and operating model to be equipped to fight for the modern consumer.
- Real-time push payments go mainstream. Real-time P2P payments, B2C disbursements, and C2B payments are poised to catch fire in 2018.
- Conversational platforms become the new digital banking user interface. In 2017, chatbots and interactive assistants were the new black. As consumers continue to grow more accustomed to using voice and text to communicate with brands, the dependency on traditional user interface components will lessen.
- **Identities become dynamic and anonymous.** Dynamic, tokenized digital identities are highly reliable, and their use for securing transactions will become ubiquitous in the financial services and digital commerce businesses.
- Credit card rewards find the fast lane. The days of over-the-top credit card reward introductory offers are coming to an end. Leveraging a strong card rewards program to maintain cardholder retention will be critical in 2018.
- FI fraud prevention moves to mobile-first. Leading FIs are realizing that the mobile device can be used to secure all delivery channels, helping to improve the customer experience while at the same time removing friction. FIs will develop new capabilities for the mobile channel first, then determine when or if to develop the capability for the online channel.
- FIs embrace AI for AML. In 2018, FIs will double down on AI technologies such as machine learning, RPA, and NLP and NLG in light of rising global money laundering activity and mounting regulatory expectations.
- New retail credit products arrive. In 2018, emerging consumer credit products will
 gain credibility and generate more FIs' creative thinking for borrower-centric
 offerings that can entice consumers back to credit and encourage them to stay.
- The great payments divide accelerates. Faster growth in markets not using traditional card-based payments as much as mobile money means that the industry is facing a world with two equally powerful and completely separate payment universes.

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