

Top Trends in Payments: 2020

What you need to know



TABLE OF CONTENTS

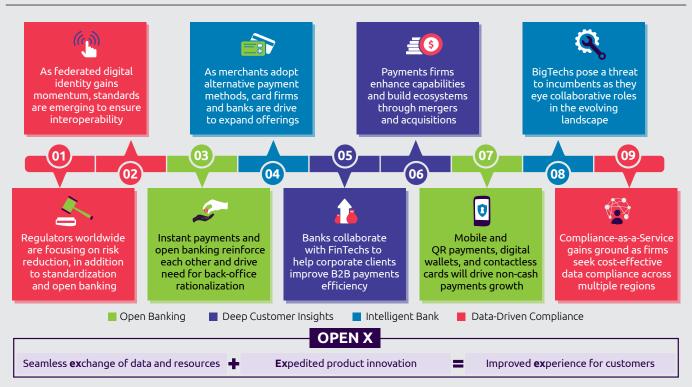
Introduction	3
Trend 01: Regulators worldwide are focusing on risk reduction, in addition to standardization and open banking	4
Trend 02: As federated digital identity gains momentum, standards are emerging to ensure interoperability	6
Trend 03: Instant payments and open banking reinforce each other and drive need for back-office rationalization	8
Trend 04: As merchants adopt alternative payment methods, card firms and banks are driven to expand offerings	10
Trend 05: Banks collaborate with FinTechs to help corporate clients improve B2B payments efficiency	12
Trend 06: Payments firms enhance capabilities and build ecosystems through mergers and acquisitions for an OpenX future	14
Trend 07: BigTechs pose a threat to incumbents as they eye collaborative roles in the evolving landscape	16
Trend 08: Mobile and QR payments, digital wallets, and contactless cards will drive non-cash payments growth	18
Trend 09: Compliance-as-a-Service gains ground as firms seek cost-effective data compliance across multiple regions	20
Conclusion	22
About the Authors	23

Introduction



Similar to other financial services domains, payments is evolving into an open ecosystem. The EU's Payment Services Directive (PSD2) pioneered open banking by encouraging banks and established payments players to securely open their systems to foster competition, innovation, and more choices for customers. In such a scenario, we foresee a future state of the industry that we define as Open X, in which leading industry players leapfrog Open Banking and enter an era characterized by more effective and open collaboration with new industry players facilitated by API (application programming interface) standardization and shared customer data insights. In combination with the growing non-cash transactions market, this is driving banks and payments firms to expand their existing array of payment methods and channels. Governments are also promoting the adoption of non-cash payments to encourage financial

Exhibit 1: Top trends in payments 2020



Source: Capgemini Financial Services Analysis, 2019

inclusion. Increasingly, merchants and corporates seek to offer alternative payment systems because of widespread popularity among consumers. Alternative payments also enable merchants to provide real-time and cross-border payments to boost business efficiency. Banks, payment firms, card firms, BigTechs, FinTechs, and other players are continuously developing new technology to cash in on market changes. Amazon's cashier-less stores, sameday deposits by JP Morgan, the development of systems, such as ToneTag that offer payments service offline, and Facebook's promised digital currency *Libra* are among the events expected to expand the payments market horizons. However, data breaches and fraud continue to hinder payments space innovation as firms devote countless resources each year to address security issues. To enable cybersecurity, payments firms and banks continue to collaborate and leverage data to secure their systems. Many governments are also designing new regulations to reduce ecosystem threats. All these measures are expected to make the current ecosystem much more secure and simple for the players as well as customers in the future.

Top Trends in Payments: 2020 aims to understand and analyze the top trends in the payments ecosystem this year and beyond.

Trend 01: Regulators worldwide are focusing on risk reduction, in addition to standardization and open banking

With the proliferation of disruptive technologies and the rise of new entrants, regulators are stepping up the fight against fraud, money laundering, terrorism financing, and cybercrime.

Background

- A dynamic industry can be fraught with system-related risks due. Therefore regulators have become keenly alert to impending vulnerabilities.
- According to World Payments Report 2019, Anti-money laundering (AML) and counterterrorism financing (CTF), data privacy and protection, cybersecurity, cryptocurrency, and FinTech protocols were top of mind for regulators in 2018–19.

Key Drivers

- Europe's May 2018 implementation of the General Data Protection Regulation (GDPR) has had a global impact, with more than 100 countries announcing initiatives to develop or bolster their respective data protection regulations.¹
- As a result of PSD2 and open banking initiatives, cybersecurity has become a priority for banks, businesses, and customers.
- Regulators are taking varied approaches in dealing with cryptocurrencies to tackle issues related to tax evasion and money laundering.
- Regulators are also making efforts to regulate the technology giants and BigTechs to ensure a level playing field for all participants.

- Major countries and regions the United States, EU, Hong Kong, and Singapore have ramped up their AML/CTF guidelines, and Brazil, Japan, India, Mexico, and New Zealand are aligning themselves with these policies.
 - Japan's Financial Services Authority (FSA) has urged all financial institutions in the country to scale up their activities in CDD/KYC and suspicious transactions.²
- The United States and Brazil introduced new privacy laws, while India is deliberating the introduction of new legislation. The privacy protection trend is expected to continue in 2020.
 - The California Consumer Privacy Act (CCPA) and Brazil's Lei Geral de Proteção de Dados Pessoais (General Data Privacy Law or LGPD) are enforceable from 2020, while Bahrain's new data protection law went into effect in August 2019.³
 - India's draft bill on the topic introduces certain safeguards for personal data and a data protection authority to oversee the activities.⁴
- In the wake of PSD2 and the global impetus around open banking, significant focus has been placed on cybersecurity initiatives, particularly as lines between fraud and cyber-attacks begin to blur.
- ¹ DLA Piper, "Data Protection laws of the world," <u>https://www.dlapiperdataprotection.com</u>, accessed September 2019.
- ² AML Partners, "Upcoming FATF review has Japan studying its AML Compliance efforts,"
- https://amlpartners.com/news/aml-compliance/fatf-review-japan-aml-compliance, accessed October 2019. ³ IAPP, "GDPR match up: Brazil's general data protection law," October 4, 2018, https://iapp.org/news/a/gdpr-matchup-brazils-general-data-protection-law.
- ⁴ Asia Times, "India gears up for the historic data protection law," June, 2019, <u>https://www.asiatimes.com/2019/06/article/india-gears-up-for-historic-data-protection-law.</u>



- In the United States, new requirements related to application security and data disposal requirements were added to New York State's cybersecurity guidelines in April 2019.⁵
- Sentiment about cryptocurrency regulation varies widely across jurisdictions, while in an attempt to set uniform standards, Eurozone governments and central banks contemplate the launch of a pubic digital currency in response to competition such as Facebook's *Libra*.⁶
- Initiatives such as setting up sandboxes, formulating a FinTech policy, and developing a regional framework for fostering the FinTech ecosystem are in force in Asia-Pacific.

Exhibit 2: Regulatory focus areas for risk reduction



Source: Capgemini Financial Services Analysis, 2019

Implications



- Globally, a broad range of watchdogs have taken or are planning initiatives to ensure uniformity amid different standards, which will ensure interoperability of the new payments ecosystems apart from minimizing systemic risks.
- As the industry moves to a more open and collaborative ecosystem, data protection and cybersecurity will become critical success factors.
- Without regulations that ensure a level playing field, a highly unstable industry dominated by cash-rich technology giants could result.
- As regulators drive initiatives on multiple fronts, stakeholders will have to make operational adjustments to comply within a more standardized environment.
- Collaboration between regulators and industry stakeholders continues to ramp up to ensure regulation parity, prevent risk, and foster prompt and safe industry innovation.

⁵ Appknox, "A glance at the United Stated cybersecurity laws," <u>https://www.appknox.com/blog/united-states-cyber-security-laws</u>, accessed October 2019.

 ⁶ Reuters, "France, Germany blast Facebook's Libra, back public cryptocurrency," September 13, 2019, <u>https://www.reuters.com/article/us-facebook-cryptocurrency-france/france-urges-eu-rules-on-cryptocurrencies-warns-of-libra-risks-idUSKCN1VY0H3</u>

Trend 02: As federated digital identity gains momentum, standards are emerging to ensure interoperability

In a future defined by open data, a robust digital identity mechanism will ensure secured access and data integrity, the success of which will depend upon standards facilitating the interoperability of discrete systems.



Background

- Several countries globally are transitioning from paper-based to digital identifications and rolling out digital ID schemes over 2019 and beyond.
- As this trend progresses, industry associations and industry stakeholders are contemplating standards that will help overcome the security-related challenges.

Key Drivers

- Synthetic identity fraud cases in which personally identifiable information (PII) is misused
 – are on the rise. Exposure of consumer PII records in the United States increased 126% year
 over year from 2017 to 2018.⁷
- Increased bots usage, password-less authentication, and similar trends necessitating establishing the identity of an individual are spurring the need for a standardized digital identity platform.
- Increasing user ownership and democratization of identity-related information calls for a standard digital identity (DI) solution that can be used commercially.

- Increasingly, countries are promoting the use of centralized digital identity databases/ schemes for customer due diligence (CDD).
 - More than 60 countries have set up a national ID scheme, including Estonia, Belgium, Portugal, Malaysia, and South Africa.⁸
 - The Reserve Bank of India has allowed FIs in India to leverage Aadhaar (a 12-digit unique identity number) for due diligence requirements.
 - Other examples include BankID (Sweden), Gov.UK Verify (UK), and Bank verification number (Nigeria).
- There are several national-level DI systems that facilitate attribute collection and storage at a centralized location. However, this multiplicity is creating a fragmented landscape that is hindering seamless data sharing.
- Globally, various industry associations and industry stakeholders have taken the responsibility of formulating uniform standards for ensuring a common digital identity framework.
 - The World Economic Forum launched a shared Platform for Good Digital Identity to bring together existing and new digital identity solutions that are inclusive, trustworthy, safe, and sustainable.⁹



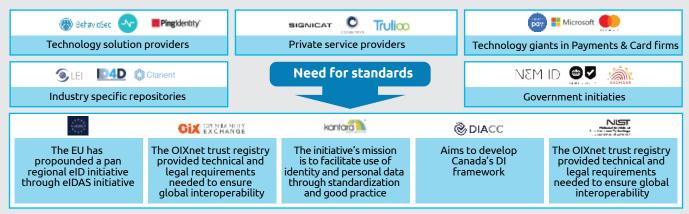
⁷ ITRC Identity theft resource center, "2018 End-of-Year Data Breach Report," February 2019, <u>https://www.idtheftcenter.org/wp-content/uploads/2019/02/ITRC_2018-End-of-Year-Aftermath_FINAL_V2_combinedWEB.pdf.</u>

⁸ Gemalto, "5 reasons for national ID cards," <u>https://www.gemalto.com/govt/identity/5-reasons-electronic-national-id-card</u>, accessed October 2019.

⁹ World Economic Forum press release, "World Economic Forum Launches Shared Platform for Good Digital Identity," September 25, 2018, <u>https://www.weforum.org/press/2018/09/world-economic-forum-launches-shared-platform-for-good-digital-identity.</u>

- The US National Institute of Standards and Technology (NIST) published new guidelines on digital identities.¹⁰
- Industry stakeholders are also calling for DI standards as market players collaborate to create their own DI solutions. For example, MasterCard and Microsoft partnered to develop a decentralized universal ID system and worked with Samsung Pay for a DI solution.¹¹
- The World Bank and the international Group of 20 (G20) forum are partnering in support of the Global Partnership for Financial Inclusion (GPFI) is an inclusive platform for all G20 countries. As a result, a digital identity onboarding report published in 2018 highlights the significance of digital identity in financial inclusion.
- Distributed ledger technology (DLT) offers promise in creating borderless and open digital identity systems.
 - Organizations such as the United Nations High Commissioner for Refugees (UNHCR) are exploring the use of DLT to identify refugees, link digital wallets, and introduce document verification registers.¹²
 - A broad ecosystem of more than 300 participants across multiple industries from the private and public sectors is working with enterprise blockchain software consortium R3 to develop financial products on Corda, its open-source blockchain platform.¹³
 - The Dubai International Financial Centre (DIFC) joined forces with Mashreq and Norbloc to create a production-ready KYC blockchain for corporations.¹⁴

Exhibit 3: Standards are needed to streamline the crowded DI landscape



Source: Capgemini Financial Services Analysis, 2019



Implications

- Formulating universal standards can facilitate the synchronization of disparate systems to make them interoperable for commercial use.
- Banks can explore DI-related revenue streams by becoming custodians of DI data as they have already invested in infrastructure and data supporting digital identities, which are trusted by other stakeholders such as insurers, retailers, utilities.

¹⁰ DIG Watch, "NIST published new digtal identity guidelines," June 12, 2019, <u>https://dig.watch/updates/nist-publishes-new-digital-identity-guidelines.</u>

¹¹ Biometric Update, "ID document stakeholders call for digital identity standards as Mastercard and Samsung team up," Chris Burt, May 24, 2019, <u>https://www.biometricupdate.com/201905/id-document-stakeholders-call-for-digital-identity-standards-as-mastercard-and-samsung-team-up.</u>

- ¹² Better Than Cash Alliance, "Distributed Ledger Technology and Digital Identity: Prospects and Pitfalls Ahead," Camilo Tellez-Merchan and Rodrigo Mejía Ricart, June 6, 2019, <u>https://www.betterthancash.org/news/blogs-stories/distributed-ledger-technology-and-digital-identity-prospects-and-pitfalls-ahead.</u>
- ¹³ R3, "Who are we," <u>https://www.r3.com/about</u>, accessed October 2019.

¹⁴ Khaleej Times, "DIFC, Mashreq Bank, norbloc join hands for blockchain KYC consortium," August 1, 2019, <u>https://www.khaleejtimes.com/</u> <u>business/corporate/difc-mashreq-bank-norbloc-join-hands-for-blockchain-kyc-consortium.</u>

Trend 03: Instant payments and open banking reinforce each other and drive the need for back-office rationalization

Back-office optimization/rationalization will boost efficiency while helping banks fulfill infrastructure requirements to accommodate new payment methods and seamless collaboration with partners.¹⁵

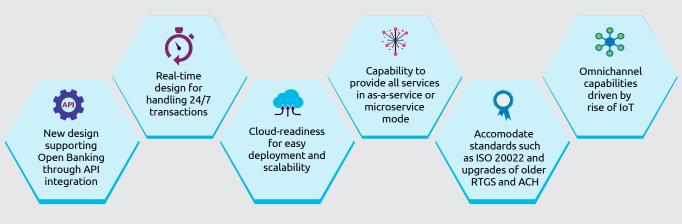
Background

- Banks have been focusing on front-end activities to gain competitive advantages and improve customer experience, which has often led to a deprioritization of back-office digital transformation.
- Legacy infrastructure and siloed systems are triggering disjointed customer experiences that could be a potential hindrance for banks to emerge as leaders in the new payments ecosystem.

Key Drivers

- The line between front- and back-office functions is blurring as customers interact digitally with banks.
- Open banking initiatives expose bank data, systems, and channels making back-office optimization necessary.
- The adoption of instant payments in conjunction with open banking will give rise to new payment methods, which will require more modern processing approaches, and increased back-office efficiency.
- Payment hubs need a revamp to efficiently integrate multiple payment systems and meet real-time open banking API requirements.

Exhibit 4: Factors driving back-office rationalization



Source: Capgemini Financial Services Analysis, 2019

¹⁵ Rationalization is the review and reduction, virtualization, or redistribution of technology, software, or infrastructure to ensure maximum operational capability and flexibility at lowest cost.

Trend Overview

- Substantial investment in Instant Payments (IP) infrastructure by several banks across the globe, heightens the need to leverage rails for processing other transactions and to maximize RoI.
 - Processing transactions using IP rails gives financial institutions and PSPs a twofold advantage. First, they can provide customers with a seamless instrument or method transaction experience. And, second, resources can now be redirected to the back end based on IP rails, so cost savings can be funneled to customerexperience-boosting initiatives.
 - Integrating instant payments into core offerings can help banks with messaging standardization, enhanced collections, and omnichannel access.
 - Further, integration becomes even more significant because instant payments infrastructure is an open banking pillar that enables capabilities far beyond account balance inquiry and account aggregation.
- The central banks of major economies are either implementing Real-Time Payment Systems (RTP) or have announced deployment plans.
 - The Eurosystem implemented the Target Instant Payment System (TIPS) in November 2018, Sweden launched mobile payment system *Swish* in 2012, and India introduced its Unified Payments Interface (UPI) in April 2016.
 - In the United States, the Federal Reserve Board announced its intention in August 2019 to develop an around-the-clock, real-time payment and settlement service, *FedNow*, to support faster payments at more than 10,000 US financial institutions.¹⁶
- In an OpenX era that is fast approaching, several banks are implementing front-end functionalities that help customers access back-end data through multiple touchpoints.
 - Commonwealth Bank of Australia introduced chatbot *Ceba* to respond to customer questions about accounts and bank products while collecting data about customer interactions, which the bank mines to create targeted offers that drive growth.¹⁷
- Traditional payment hubs need to be transcended to open banking hubs that are capable of processing all transactions, including one-time payments, scheduled and future-dated, as well as bulk payments.
- Regulatory initiatives such as payments infrastructure modernization across several jurisdictions, the UK's New Payments Architecture (NPA), and large-value system upgrades in Europe are forcing banks to rationalize back-office functions.

Implications

- A rationalized back office will help banks prepare for the open ecosystem of the future by enabling third parties to access bank systems and data seamlessly.
- Increasingly, banks will collaborate with FinTechs to improve back-office functions that are now focused primarily on customer-facing and internal efficiency tasks.
- Rationalization initiatives will help banks plug in new technologies, such as API and AI, that interact with back-office functions.
- Fraud detection and Direct Debit Authority (DDA) activity would happen in real time as part of back-office rationalization and to support the instant payment ecosystem.





 ¹⁶ US Federal Reserve press release, "Federal Reserve announces plan to develop a new round-the-clock real-time payment and settlement service to support faster payments", August 5, 2019, <u>https://www.federalreserve.gov/newsevents/pressreleases/other20190805a.htm.</u>
 ¹⁷ Bank Innovation, "Meet Ceba, Commonwealth Bank of Australia's AI-Powered Chatbot," January, 2018, <u>https://bankinnovation.net/editorial/exclusive/meet-ceba-commonwealth-bank-of-australias-ai-powered-chatbot/.</u>

Trend 04: As merchants adopt alternative payment methods, card firms and banks are driven to expand offerings

Spurred by merchant preferences, banks have started to offer payment systems that compete with those from new-age payment players.

Background

- Alternative payments with real-time transaction capabilities find priority among customers in an environment dominated by e-commerce.
- Merchants have multiplied their payments options with alternative methods to cater to customers with different needs.

Key Drivers

- Gen Z, with US\$200 billion in purchasing power, is embracing alternative payment methods, which has forced merchants to respond accordingly.¹⁸
- Economic changes, such as the widespread use of digital wallets and net- banking services, are driving the adoption of alternative payment methods.
- Factors such as user convenience and faster checkout processes are contributing to the growth of alternative payment methods.
- Over half of all online payments are forecasted to be transacted using alternative payment methods by 2021.¹⁹

Trend Overview

- Globally, alternative payment sources (e-wallets, mobile, and net-banking solutions) have outpaced traditional payment sources (cash and cards) as far as merchant payments are concerned.
 - PayPal ranks among the top three payment methods in almost all countries in Europe for e-commerce transactions.²⁰
 - In 2019, India-based digital payments player Paytm logged 1.2 billion merchant payments volume in the first quarter alone.²¹
- Banks are looking to offer several new services to their existing offerings to provide customers experience on par with new-age players.
 - BBVA and Uber joined forces in Mexico to provide a third-party app that enables Uber to pay unbanked drivers digitally.²²
- Banks are creating smart PoS for merchants to generate a robust point of interaction with multiple payment options for customers.
- ¹⁸ Gauge, "Increase Conversions with Alternative Payment Methods," Kali Keesee, April 5, 2019, <u>https://gauge.agency/articles/increase-conversions-with-alternative-payment-methods.</u>
- ¹⁹ Payments Journal, "Alternative Payment Methods Are Taking Over Global Online Businesses," Bruce Dragt, March 23, 2018, https://www.paymentsjournal.com/alternative-payment-methods-are-taking-over-global-online-businesses
- ²⁰ Ecommercenews, "Top 3 of payment methods per European country," February 14, 2018, <u>https://ecommercenews.eu/top-3-payment-methods-per-european-country/.</u>

²¹ Livemint, "Paytm registers over 1.2 billion merchant payments in first quarter," September 9, 2019, <u>https://www.livemint.com/industry/banking/paytm-registers-over-1-2-billion-merchant-payments-in-first-quarter-1568036156119.html.</u>

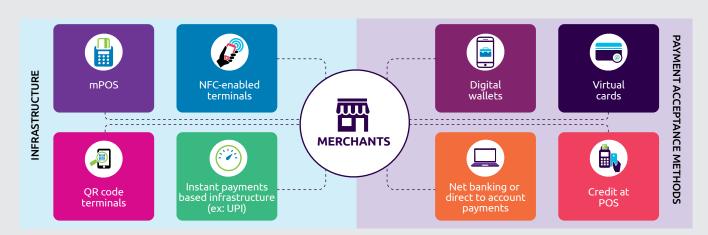
²² BBVA, "BBVA, in alliance with Uber, launches first banking product in Mexico that operates in third party app," July 2, 2019 <u>https://www.bbva.com/en/bbva-in-alliance-with-uber-launches-the-first-banking-product-in-mexico-that-operates-in-a-third-party-app.</u>





- ING began piloting a software-based tap-on-phone app that transforms mobile devices into point-of-sale terminals in July 2019. The app poses a threat to dongle-dependent mPOS technology because it accepts payments with no additional hardware plugins.²³
- Visa is working with Samsung and First Data to develop a software-based system that lets merchants accept contactless payments of any amount on their handsets with no additional hardware.²⁴
- On the other hand, card firms have also launched a slew of new products and services that match those offered by alternative payment players.
 - Visa cashed in on the installment payment trend with the debut of an API solution that allows merchants to provide installment payment choices at checkout using visa cards.²⁵
 - Visa's *mVisa* (a QR code-based money acceptance method) was launched in 2017 and was adopted quickly by more than 33 banks, and close to 330,000 merchants across India, Kenya, and Nigeria based on the technology's mobile, infrastructure-free money acceptance advantage.²⁶
 - Mastercard's Send is a global platform that allows banks and businesses to push money to a recipient with only their debit card number. It enables merchants to disburse instant payments globally via a secure platform.²⁷

Exhibit 5: Merchants expand acceptance modes to capitalize on market opportunity



Source: Capgemini Financial Services Analysis, 2019

Implications

- Merchants can leverage transaction-related data from alternative payment providers to create new offerings to facilitate conversational commerce.
- Banks can expand their revenue streams by offering merchants digital payments acceptance methods. At the same time, merchants can expand their reach by accepting alternative payment methods.
- Innovative point of sale devices would make acceptance easier and add new payment methods without requiring retailers to regularly replace hardware.

²⁴ Finextra, "Visa, Samsung and First Data team on dongle-less mPOS payments," September 9, 2019, <u>https://www.finextra.com/newsarticle/34356/visa-samsung-and-first-data-team-on-dongle-less-mpos-payments</u> ²⁵ Visa, "Nisa Usural Lastallance Dava and Clavible Markton Dava", June 27, 20

²⁵ Visa, "Visa Unveils Installment Payment Capabilities to Give Shoppers Simple and Flexible Way to Pay," June 27, 2019, <u>https://usa.visa.com/about-visa/newsroom/press-releases.releaseId.16441.html</u>

²⁶ Directpay, "The Development of the mVisa Payment Option," November 22, 2017, <u>https://blog.directpay.online/the-development-of-mvisa-payment-option/</u>

²⁷ Mastercard, "Mastercard Send," <u>https://www.mastercard.us/en-us/issuers/products-and-solutions/customer-needs/consumer-solutions/</u> <u>mastercardsend.html</u>

²³ Finextra, "ING tests software that turns mobile phones into POS terminals," July 23, 2019, <u>https://www.finextra.com/newsarticle/34151/ing-tests-software-that-turns-mobile-phones-into-pos-terminals.</u>

Trend 05: Banks collaborate with FinTechs to help corporate clients improve B2B payments efficiency

Banks are involved in targeted collaboration with FinTech firms to improve B2B payment interactions by leveraging the expertise of their partners.



Background

- The entry of FinTech and BigTech players has revolutionized the B2C payment space with a multitude of payment offerings.
- Governments around the world have launched or are developing 24/7, real-time payment systems and cross-border payment systems.
- The revolution in the B2C space, along with government interventions in payments, has led B2B players to expect a similar experience from their service providers, i.e., banks.

Key Drivers

- Corporate customers expect offerings from banks that can break the silos between various platforms, for instance accounts payable, accounts receivable, procurement, and treasury management.
- B2B clients are more interested in purchase process transparency with visibility into all aspects of the transaction and post-transaction process.
- Organizations are looking forward to having effective solutions in place for a wide range of payment scenarios to increase flexibility and ease of use. They expect banks to support digital initiatives as they are unable to transform on their own due to a lack of insights, industry knowledge, and other niche capabilities.
- The B2B space needs real-time, cross-border payments, and banks are building expertise by leveraging new-age tech players as well as government infrastructure such as UPI, TIPS, etc.

Trend Overview

- Banks are collaborating with FinTechs to leverage their technological agility, advanced data analytics, and machine learning capabilities for B2B accounts payable and supplier financing.
 - HSBC announced a USD26 million investment in FinTech Proactis to leverage its accelerated payment facility to promote faster B2B payments to small suppliers.²⁸
 - Citi Treasury and Trade Solutions partnered with Vietnam-based intermediary payment service provider Payoo to facilitate last-mile consumer-to-business collections for corporate clients in the country.²⁹
- Banks are partnering with technology players to provide instant payments services to customers in cross border payments.
 - UAE's Abu Dhabi Commercial Bank (ADCB) is collaborating with Singapore-based FinTech dltledgers to pilot blockchain-based cross-border trade finance transactions for corporate clients.³⁰

²⁸ Proactis, "Proactis secures £20M funding from HSBC UK to tackle SME liquidity," February 28, 2019, <u>https://www.proactis.com/uk/company/news/2019/february/proactis-secures-hsbc-funding/.</u>

²⁹ Finextra, "Citi enters partnership with fintech Payoo," April 29, 2019, <u>https://www.finextra.com/newsarticle/33738/citi-enters-partnership-with-vietnams-payoo#targetText=Citi%20Treasury%20and%20Trade%20Solutions,corporate%20clients%20in%20the%20country.
 ³⁰ CISION, "ADCB launches real time trade finance for customers on dltledgers Blockchain platform," September 3, 2019, <u>https://www.prnewswire.com/news-releases/adcb-launches-real-time-trade-finance-for-customers-on-dltledgers-blockchain-platform-300910397.html</u>.
</u>





- Wells Fargo and B2B cross-border payments provider TransferMate have partnered to reduce friction between borders for their international clients.³¹
- Banks are also collaborating with FinTechs to break barriers in trade and financing interactions, which are heavily reliant on paper and manual processes.
 - Standard Chartered partnered with Traydstream to offer AI-powered trade document matching services to bank clients and to mitigate delays in the trade financing cycle.³²
 - JP Morgan invested in India-based FinTech Global PayEx to provide clients more transparent electronic invoices and quicker reconciliation.³³

Exhibit 6: Collaboration gains ground across a range of B2B areas



Source: Capgemini Financial Services Analysis, 2019

Implications



- More and more corporate clients will take advantage of sophisticated offerings from banks – such as improved data management, reconciliation process, and efficient cash cycle management – to streamline their operations.
- Banks will be able to offer customized solutions to their corporate clients, leveraging their existing database, and deploying technology from their FinTech partners.
- Clients can eliminate manual accounts payable and supplier financing processes to improve their overall supply chain operations.
- Businesses would have a single payment source to perform international cross-border payments to their vendors, suppliers, clients, and employees.

³¹ Finextra, "Wells Fargo turns to TransferMate for business payments tool," May 20, 2019,

https://www.finextra.com/pressarticle/78451/wells-fargo-turns-to-transfermate-for-business-payments-tool.

³² Financefeeds, "Standard Chartered Bank to introduce Traydstream's digital trade document matching services to clients," September 3, 2019, <u>https://financefeeds.com/standard-chartered-bank-introduce-traydstreams-digital-trade-document-matching-services-clients/.</u>
 ³³ Finextra, "JP Morgan invests in Indian fintech," May 13, 2019, <u>https://www.finextra.com/pressarticle/78353/jp-morgan-invests-in-indian-</u>

fintech.

Trend 06: Payments firms enhance capabilities and build ecosystems through mergers and acquisitions for an OpenX future

To become end-to-end players, payments firms are continuously looking to improve their skills through the purchase of specialized firms.



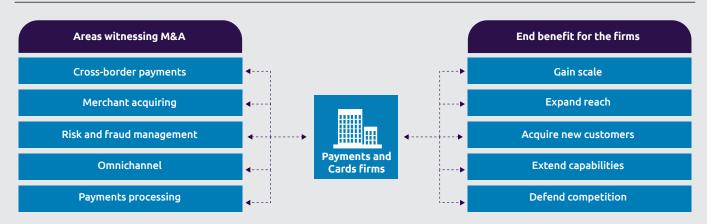
Background

- The proliferation of mobile payments, open banking regulations, and the shift from cash to digital payments are driving firms to acquire new capabilities and strengths.
- The payments industry continues to undergo mergers and acquisitions that are leading to significant consolidation.

Key Drivers

- Digitalization has highly fragmented the payments value chain, resulting in maintaining the scale of operations critical for sustenance.
- The commoditization of payment service providers' core offering has placed significant pressure on fees and has gradually eroded profit margins, leaving acquisitions as a natural course to gain access to new markets and customers.
- Merchants expect superior service as they balance digital transformation and regulatory compliance.
- Developing end-to-end capability is also a crucial driver for firms.

Exhibit 7: Payment firms look to emerge as end-to-end players



Source: Capgemini Financial Services Analysis, 2019

- Payment firms have been leveraging mergers and acquisitions to create end-to-end payments platforms from issuance to acceptance and spanning across borders.
 - Global Payments and Total System Services (TSYS) finalized a merger deal in July 2019 to create a combined pure-play payments technology company with expertise in integrated payment solutions.³⁴

³⁴ GlobalPayments, "Global Payments Completes Merger with TSYS, Creating Preeminent Technology-Enabled Payments Company," September 18, 2019, <u>https://investors.globalpaymentsinc.com/news-releases/news-release-details/global-payments-completes-merger-tsys-creating-preeminent.</u>

- In the same month, FIS acquired Worldpay to enhance its overall acquiring and payment offerings to position the new powerhouse company to offer best-in-class enterprise payment capabilities to financial institutions and businesses worldwide.³⁵
 - Fiserv acquired First Data in 2019 for \$22 billion in an all-stock transaction to create a
 payments ecosystem with services spanning from account processing and digital banking
 to integrated payments and the Clover POS system for their customers. Fiserv is now one
 of the world's largest payments and financial technology providers.³⁶
- Payment players are adding omnichannel capabilities to support merchants expanding their offerings beyond their traditional channels.
 - To gain omnichannel capabilities in the small merchants' space, PayPal acquired iZettle, a pioneer in payment products that lets merchants meet customers across multiple channels – online, in store, or via mobile.³⁷
 - ACI Worldwide acquired Western Union's SpeedPay to create a unified bill payment platform and unlock new cross-border and cross-currency payments opportunities.³⁸
- Visa and Mastercard are also actively acquiring payments firms to maintain their market share.
 - To create an integrated payment solution for merchants and acquirers, Visa purchased Payworks in July 2019 to leverage the Germany-based payment gateway's cloud-based solution for in-store payments processing.³⁹ Earlier in 2019, Visa acquired Earthport, a company that provides cross-border payment services to banks, money-transfer service providers, and businesses. The move is expected to enable Visa to reach the vast majority of the world's banked population to allow easy, quick, and secure money movement worldwide.⁴⁰
 - In August 2019, Mastercard announced an agreement to acquire the majority of the Corporate Services businesses of Nets, a leading European PayTech company. Nets technology and teams strengthen Mastercard's account-to-account (A2A) capabilities and add services such as data analytics and fraud protection.⁴¹

Implications

- Consolidation among payment firms will lead to the creation of global firms with a presence across multiple geographies.
- Payment firms that adopt omnichannel capabilities will streamline payment processes for their business as well as that of customers.
- Many end-to-end payment players will join the ecosystem with solutions for issuers, acquirers, and e-commerce in addition to niche-area specialists.
- However, consolidation among acquirers could reduce competition within the traditional processing market, which could trigger a jump in merchants' overall costs of acceptance.

- ³⁶ PMNTS, "Fiserv-First Data Merger Is Complete," July 29, 2019, <u>https://www.pymnts.com/news/partnerships-acquisitions/2019/fiserv-first-data-merger-complete.</u>
- ³⁷ BusinessWire, "PayPal Completes Acquisition of iZettle," September 20, 2018, https://www.businesswire.com/news/home/20180920005368/en/PayPal-Completes-Acquisition-iZettle
- ³⁸ Finextra, "ACI Worldwide acquires bill payment firm Speedpay for \$750 million," February 28, 2019, <u>https://www.finextra.com/newsarticle/33453/aci-worldwide-acquires-bill-payment-firm-speedpay-for-750-million.</u>
- ³⁹ PMNTS, "Visa Acquires Germany-Based PayWorks," July 17, 2019, <u>https://www.pymnts.com/news/partnerships-acquisitions/2019/visa-acquires-germany-based-payworks.</u>
- ⁴⁰ BusinessWire, "Visa Acquires Control of Earthport," May 08, 2019, <u>https://www.businesswire.com/news/home/20190507006199/en/Visa-Acquires-Control-Earthport.</u>
- ⁴¹ Mastercard, "Mastercard Advances Its Leadership Position as a Multi-Rail Payments Company with the Acquisition of Nets' Account-to-Account Payment Business," August 6, 2019, <u>https://newsroom.mastercard.com/press-releases/mastercard-advances-its-leadership-position-</u> <u>as-a-multi-rail-payments-company-with-the-acquisition-of-nets-account-to-account-payment-business.</u>





³⁵ FIS, "FIS Closes Acquisition of Worldpay, Enhancing its Global Technology Leadership Serving Merchants, Banks and Capital Markets," July 31, 2019, <u>https://www.fisglobal.com/about-us/media-room/press-release/2019/fis-closes-acquisition-of-worldpay-enhancing-its-global-technology-leadership.</u>

Trend 07: BigTechs pose a threat to incumbents as they eye collaborative roles in the evolving landscape

BigTechs playing multiple roles are making their presence felt worldwide across all payments verticals.

Background

- BigTechs created payments platforms primarily to complement their core activity, which they are now trying to leverage.
- BigTech payment offerings that were created to complement their core activities have now been modified into standalone applications after gaining a significant customer base and delivering new revenue streams.

Key Drivers

- Massive and loyal customer bases including millennials and GenZ bolster BigTech dominance across the world.
- Insights from data collected through customers' core activities give BigTechs an advantage over traditional players when it comes to creating superior offerings.
- The lack of industry-driven boundaries allows these tech giants to follow a technology-first philosophy and disrupt the payments industry.

- BigTechs continuously add new features and services to their payments offerings platforms, which helps them earn a leadership role in regions where they have a significant customer base.
 - Google Pay added credit- and debit card support to its India Google Pay app in addition to its original UPI for payments.⁴²
 - The Apple Card launched in collaboration with Goldman Sachs and Mastercard in the United States in August 2019. The card is part of the iPhone Apple Wallet app.⁴³
 - Amazon launched Amazon Paycode in association with Western Union, which lets users select Paycode at checkout and pay cash at one of the Western Union locations.⁴⁴
 - BigTechs are investing in FinTech players to support their growth while they take a back-end player role.
 - Tencent invested in Argentinian mobile banking startup Uala in 2019, to expand its presence in the Latin American region, which has a significant unbanked population. In 2018, Tencent invested USD 180 million in Brazil-based FinTech Nu Pagamentos (NuBank), which offers a mobile-app controlled credit card.⁴⁵
- BigTechs are continuously expanding their presence in new countries.
 - Ant Financial's Alipay is collaborating with Finland's ePassi and Pivo, Norway-based Vipps, Spain's MOMO, Portugal's Pagaqui, and Austria's Bluecode to adopt a unified QR code in a bid to bridge the region's fragmented mobile payment landscape. All six digital wallets have five million users combined and around 190,000 merchants in their payment networks in Europe.⁴⁶



⁴² LiveMint, "Google Pay will now support tokenised debit and credit cards," September 19, 2019, , <u>https://www.livemint.com/technology/tech-news/google-pay-will-now-support-tokenised-debit-and-credit-cards-1568879219091.html.</u>

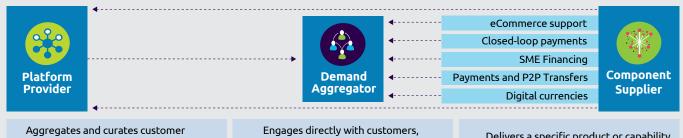
⁴³ Finextra, "Apple unveils credit card," March 29, 2019, <u>https://www.finextra.com/newsarticle/33583/apple-unveils-credit-card</u>.

⁴⁴ PMNTS, "Amazon Ups Its US Online Cash Payments Game With PayCode," September 23, 2019, <u>https://www.pymnts.com/amazon/2019/</u> <u>amazon-ups-its-us-online-cash-payments-game-with-paycode.</u>

⁴⁵ PMNTS, "Tencent Invests In Argentinian Mobile Banking Startup," April 23, 2019, <u>https://www.pymnts.com/news/investment-tracker/2019/</u> tencent-uala-digital-banking-argentina.

- Tencent partnered with Amsterdam Airport Schiphol to enable Chinese customers to make purchases using WeChat Pay.⁴⁷
- BigTechs also play a collaborative role when they invest in startup technology.
 - Amazon invested in India-based Fintech ToneTag, a developer of technology that makes payments possible without the internet.⁴⁸
 - To develop financial services based on its digital currency Libra, Facebook acquired Israelbased startup Servicefriend to leverage its Hybrid Bot Architecture. The Libra digital wallet is expected to be available in Facebook Messenger, WhatsApp, and as a stand-alone app in 2020.⁴⁹
- BigTechs are developing new products to create market segments with high entry barriers by leveraging their technological prowess and access to markets.
 - Facebook is partnering with multiple firms in support of its digital currency Libra, which is built on a blockchain platform and targeted to encourage Facebook users to move to digital currency.⁵⁰
 - In September 2019, Amazon began an initiative to boost the presence of its voice assistant Alexa via Echo Loop, a smart ring that puts Alexa on consumers' fingers. The ring pairs with the wearer's phone for a data connection (iOS or Android) through the Alexa app, and activates with a small button.⁵¹

Exhibit 8: Potential roles of BigTech firms in financial services



Aggregates and curates customer demand information and (component) supply information for the ecosystem Engages directly with customers, surfaces options, and facilitates decision-making for their financial lives

Delivers a specific product or capability when triggered by a specific need

Source: Capgemini Financial Services Analysis, 2019



Implications

- Boosted by their size, vast data collection, established network, and customer reach, BigTechs will continue to play multiple roles as they work to establish their presence across all financial offerings.
- Banks are expected to deliver advanced products that provide a better customer experience as they collaborate more with technology companies.
- Expect more regulations as governments work to maintain global financial stability in the face of BigTechs' growing portfolio of financial services offerings.
- ⁴⁶ Epassi.fi, "ePassi and European Mobile Wallet Collaboration," June 10, 2019, <u>https://www.epassi.fi/fi/blogi/epassi-and-european-mobile-wallet-collaboration.</u>
- ⁴⁷ Technode, "Tencent expands in Europe with WeChat Pay tool in Amsterdam airport," May 20, 2019, <u>https://technode.com/2019/05/20/</u> briefing-tencent-expands-in-europe-with-wechat-pay-tool-in-amsterdam-airport.
- ⁴⁸ Economic Times, "This Amazon-backed startup makes digital payment possible without Internet," September 9, 2019, <u>https://economictimes.</u> <u>indiatimes.com/small-biz/startups/features/this-amazon-backed-startup-makes-digital-payment-possible-without-internet-tonetag/</u> <u>articleshow/71042246.cms</u>
- ⁴⁹ Expresscomputer, "Facebook Acquires AIStartup Servicefriend To Boost Cryptocurrency Libra Experience," September 24, 2019, <u>https://www.expresscomputer.in/internet/facebook-acquires-ai-startup-servicefriend-to-boost-cryptocurrency-libra-experience/42104.</u>
- ⁵⁰ CNBC, "Facebook-led Libra Project announces its 21-member council after exodus of top payments companies," Lauren Feiner, October 24, 2019, <u>https://www.cnbc.com/2019/10/14/facebook-forms-its-cryptocurrency-council-after-key-backers-drop-out.html</u>
- ⁵¹ The Verge, "Amazon's new Echo Loop puts Alexa in a discreet smart ring," Chaim Gartenberg, September 25, 2019, <u>https://www.theverge.</u> <u>com/2019/9/25/20884044/amazon-echo-loop-smart-ring-hands-on-photos-alexa.</u>

Trend 08: Mobile and QR payments, digital wallets, and contactless cards will drive non-cash payments growth

As customers move away from cash, a new set of payment methods look to capitalize on the opportunity to become the preferred payment option.



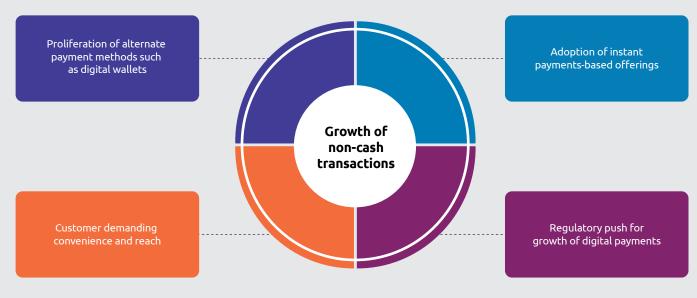
Background

- Global non-cash transactions reached 539 billion during 2016–17 and were expected to reach 1046 billion by 2022.⁵²
- Cards form a huge share of non-cash transactions while mobile payments, digital wallets, and QR payments are up year over year in terms of the number of transactions.

Key Drivers

- A dip in the cost of internet and mobile devices has spurred the use of mobile-based payments, digital wallets, and QR codes for payments.
- Geopolitical factors, including the development of super apps such as WeChat Pay and AliPay, demonetization in India, regulations such as the EU's PSD2, and open banking regulations in the UK, Japan, and Southeast Asia have contributed to the growth of payment firms and their adoption.
- Digital payments using contactless cards and QR codes are supplanting the use of cash for merchant payments as well as peer-to-peer payments thereby driving non-cash payments.
- Sweden, Finland, and South Korea are moving fast to become cashless economies.
- Further e-commerce growth is expected to contribute to the increase in non-cash transactions.

Exhibit 9: Factors driving non-cash payments growth



Source: Capgemini Financial Services Analysis, 2019

⁵² Capgemini, World Payments Report 2019, https://worldpaymentsreport.com/resources/world-payments-report-2019/.

Trend Overview

- Payment firms have grown multifold with expertise in various areas of payments and with technology designed as per the requirements of their customers.
 - The global QR-code market accounted for nearly USD 908 million in 2017 and is expected to reach more than USD 2,100 million by 2026 at a CAGR of 9.8%.⁵³
 - Firms such as AfterPay, Klarna, and Simpl that offer the option to buy now and pay later, have gained significant global market share.
- BigTechs have actively invested in payment areas to create their own payment systems and continue to invest in new payment technology.
 - Amazon introduced cashier-less stores in the United States and plans to expand the concept globally.⁵⁴
 - Google added payment with credit- and debit card options to its Google Pay app in India, and Apple has launched its own card in the United States.
- Governments globally have realized the digital transactions can improve financial inclusion, and therefore, they are actively promoting their growth.
 - India introduced the Unified Payments Interface (UPI) in 2016 for faster payments, and the system has logged nearly a billion transactions.⁵⁴

Implications

- Instant payments, coupled with increased adoption of alternative payment methods, will further drive the growth of global non-cash transaction volume.
- Emerging markets will be the bellwether of global non-cash trends with innovative initiatives such as QR codes.
- Merchants' growing adoption of mPOS and NFC-enabled terminals is also expected to drive non-cash payments.

⁵³ BusinessWire, "QR Code Labels - Global Markets to 2026: Trends, Drivers, Constraints, Opportunities, Threats, Challenges -ResearchAndMarkets.com," September 19, 2019,

https://www.businesswire.com/news/home/20190919005342/en/QR-Code-Labels---Global-Markets-2026.

⁵⁴ The Verge, Amazon reportedly planning 3,000 cashier-less Go stores by 2021, September, 2018, <u>https://www.theverge.com/2018/9/19/17880530/amazon-go-cashier-less-stores-new-locations-2021</u>
⁵⁵ During and To day. Constant of During any matching of the store of the

 ⁵⁵ Business Today, Google Pay now allows payments via debit, credit cards, September, 2019, <u>https://www.businesstoday.in/technology/news/google-pay-now-allows-payments-via-debit-credit-cards/story/380072.html</u>
 ⁵⁶ Financial Express, "Vision cash-lite: A billion UPI transactions is not enough," October 7, 2019,

https://www.financialexpress.com/opinion/vision-cash-lite-a-billion-upi-transations-is-not-enough/1728284.



Trend 09: Compliance-as-a-Service gains ground as firms seek cost-effective data compliance across multiple regions

Multiple data focused regulations and stringent adherence requirements are spurring payments players to outsource compliance to specialist firms.



- Regulatory compliance has been a critical priority as multiple firms face million-dollar fines because of violations and non-compliance.
- Firms that handle regulatory compliance in-house often struggle to fulfill assessments, mainly due to the dynamic nature of data protection regulations across the world.

Key Drivers

- The Compliance-as-a-Service (CaaS) model is gaining popularity among payments firms thanks to its potential to reduce associated costs.
- Smaller firms that lack internal resources are leveraging CaaS for significant cost savings.
- CaaS can be configured to keep pace with new mandates and updates, which enables firms to maintain their data compliant in real time.
- Compliance-as-a-Service can also handle cross-jurisdictional/regional regulatory compliance.

- Payments industry associations now recognize cloud service providers (CSP) as regulatory compliance support partners.
 - The PCI security standards council updated its Payment Application Data Security Standard document to address cloud use.⁵⁷
 - A few CSPs are also helping firms tokenize data traditionally handled by payments processors.
- Several banks and payments firms have partnered with CSPs for compliance-related solutions.
 - Expertise around regulations such as GDPR is a yardstick for banks seeking cloud service partners.⁵⁸
 - Madrid-based BBVA partnered with Amazon Web Services (AWS) for compliance-related support in addition to other cloud-based infrastructure services.
 - The Commercial Bank of Dubai adopted Microsoft Azure cloud services as part of its overall digital transformation and to bolster its compliance and security initiatives.⁵⁹



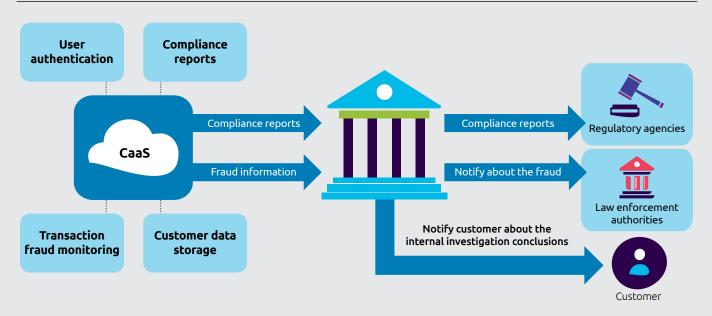
⁵⁷ The PCI Security Standards Council (PCI SSC) is a global forum for the ongoing development, enhancement, storage, dissemination and implementation of security standards for account data protection.

⁵⁸ Cloud Monitor 2018, "Banking Goes Cloud: How Security and Compliance Stay on Track," Christian Sternkopf, June 17, 2019, <u>https://www.knowis.com/blog/banking-goes-cloud-how-security-and-compliance-stay-on-track.</u>

⁵⁹ Zawya, "Commercial Bank of Dubai adopts the Microsoft Cloud to accelerate digitization," October 14, 2019, https://www.zawya.com/mena/en/press-releases/story/Commercial_Bank_of_Dubai_adopts_the_Microsoft_Cloud_to_accelerate_ digitization-ZAWYA20191014110131.

- Cloud providers deploy tools and processes to monitor countries' regulatory changes as well as clients' internal policy changes to help them achieve compliance in real time.
 - Microsoft added an Azure cloud feature that isolates a firm's compliance data in a single place for easy auditing, no miscalculations, and real-time changes.⁶⁰
 - Alibaba Cloud has over 70 security certifications and in June 2019, earned Outsourced Service Provider's Audit Report (OSPAR) accreditation in Singapore, demonstrating its ability to maintain compliance across geographies.⁶¹

Exhibit 10: How compliance-as-a service works



Source: Capgemini Financial Services Analysis, 2019



Implications

- Cloud service providers will increasingly offer bundled services that include compliance and infrastructure-related services.
- More RegTech players are likely to offer exclusive piecemeal cloud-based compliance services.
- Governments will proactively provide compliance advisory and related resources to build an environment suitable for the growth of payment technology firms.

⁶⁰ Microsoft, "Easily apply guardrails on all your resources," <u>https://azure.microsoft.com/en-in/services/azure-policy</u>, accessed October 2019.
 ⁶¹ Channel Asia, "Alibaba Cloud secures data validation from Banks of Singapore," James Henderson, June 24, 2019, <u>https://sg.channelasia.tech/article/663230/alibaba-cloud-secures-data-validation-from-banks-singapore.</u>

Conclusion

The shape of the new payments ecosystem is the result of technological trends and developments such as the entry of non-traditional players and new regulatory initiatives – all as customer expectations grow and evolve. The BigTech foray into payments stoked a paradigm shift in banks' approach to innovation and customer needs. At the same time, banks realized the potential surrounding FinTech partnerships. Expect collaboration to become more evident in the B2B segment in 2020 and beyond.

Standardization and risk reduction are top of mind for regulators and will remain front and center for the next three to five years. Why? As more banks embrace the true spirit of open banking – increased competition, innovation, and more customer choice, data protection and customer privacy must not be compromised. Banks must recognize the inter-relationships of the elements of transparency and actively support robust cybersecurity, data protection, and digital identity mechanisms.

Non-cash transaction volumes will grow at a rate of at least 14% until 2022, which means banks should beef up their transaction processing capabilities. The enormous potential of digital payments combined with open banking and instant payments will fuel the need even more.

Although bank attitudes toward open banking are still rather lukewarm, firms must realize its untapped potential. In three to five years as corporate and merchant segments wholeheartedly support open banking and instant payments solutions, the strategic imperative for banks will be unavoidable.

Emerging technologies such as AI, data analytics, and APIs are all strength-rendering aids in banks' race to the new payments ecosystem.

Disclaimer

The information contained herein is general in nature and is not intended, and should not be construed, as professional advice or opinion provided to the user. Furthermore, the information contained herein is not legal advice; Capgemini is not a law firm, and we recommend that users seeking legal advice consult with a lawyer. This document does not purport to be a complete statement of the approaches or steps, which may vary accordingly to individual factors and circumstances, necessary for a business to accomplish any particular business, legal, or regulatory goal. This document is provided for informational purposes only; it is meant solely to provide helpful information to the user. This document is not a recommendation of any particular approach and should not be relied upon to address or solve any particular matter. The text of this document was originally written in English. Translation to languages other than English is provided as a convenience to our users. Capgemini disclaims any responsibility for translation inaccuracies. The information provided herein is on an 'as-is' basis. Capgemini disclaims any and all representations and warranties of any kind concerning any information provided in this report and will not be liable for any direct, indirect, special, incidental, consequential loss or loss of profits arising in any way from the information contained herein.

About the Authors

Srividya Manchiraju is a manager with the Market Intelligence Group at Capgemini Financial Services with over seven years of experience specializing in banking and payments.

Karthik R is a consultant with the Market Intelligence Group at Capgemini Financial Services specializing in banking and payments.

The authors would like to thank the SMEs listed below for their contributions to this paper:

- Jeroen Holscher, Global Payments & Cards Practice Head
- Christophe Vergne, Global Payments Solutions Leader
- Elias Ghanem, Vice President, Global Head of Market Intelligence Group
- Chirag Thakral, Director, Market Intelligence Group
- Kalpesh Kothari, Portfolio Manager, Market Intelligence Group
- Tamara Berry, Editor, Content Manager, Market Intelligence Group
- Kalidas Chitambar, Director, Creative Services
- Pravin Kimbahune, Senior Consultant, Creative Services
- Sourav Mookherjee, Manager, Creative Services
- Dinesh Dhandapani Dhesigan, Consultant, Market Intelligence Group





About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms.

Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of over 200,000 team members in more than 40 countries. The Group reported 2018 global revenues of EUR 13.2 billion.

Visit us at

www.capgemini.com

Learn more about us at: <u>www.capgemini.com/payments</u> or email: <u>payments@capgemini.com</u>



People matter, results count.

The information contained in this document is proprietary. ©2019 Capgemini. All rights reserved. Rightshore® is a trademark belonging to Capgemini.