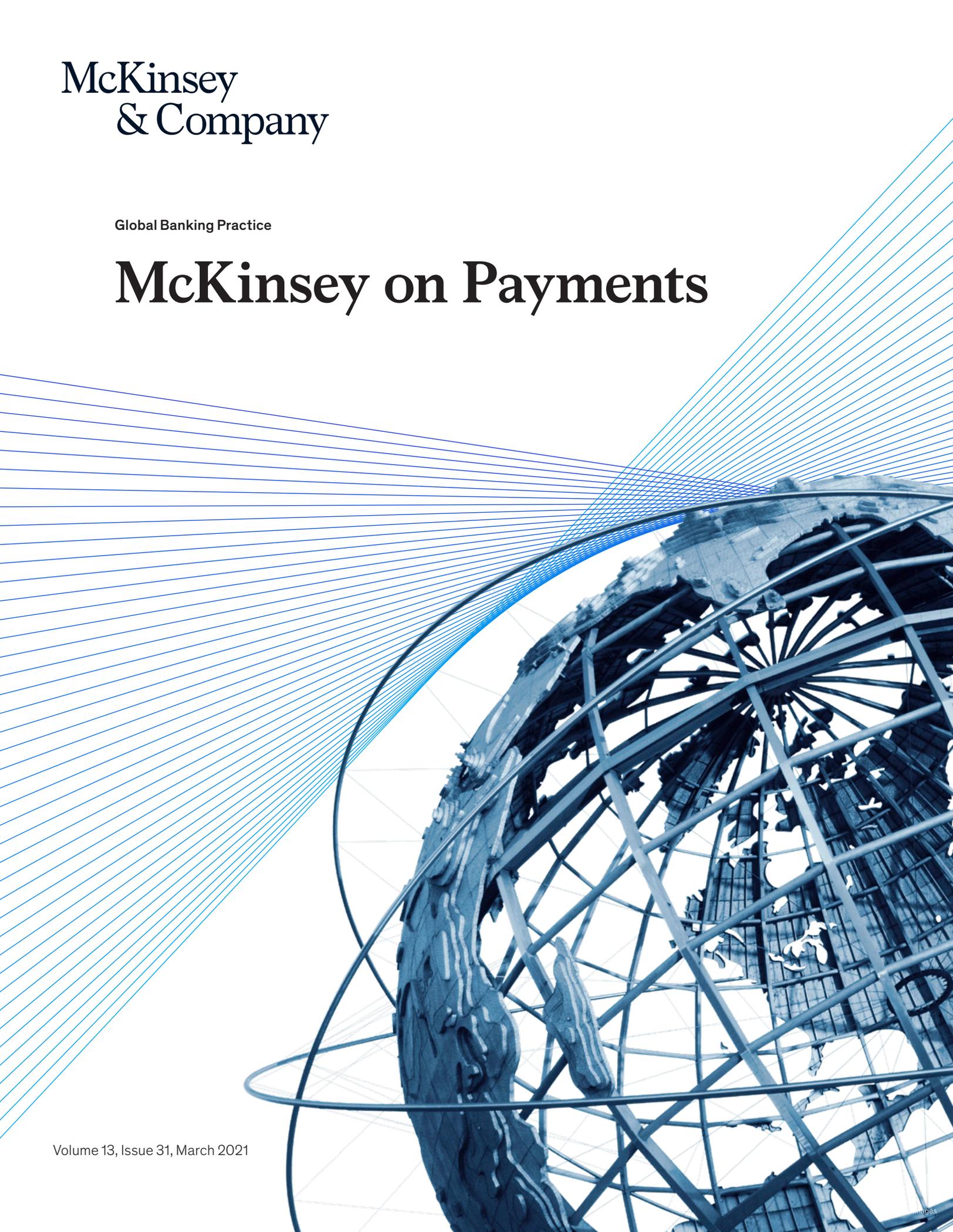


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Global Banking Practice

McKinsey on Payments

Volume 13, Issue 31, March 2021



Global Banking Practice

McKinsey on Payments

Covering trends and opportunities in the world of payments

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Contents

US digital payments: Achieving the next phase of consumer engagement	2
The future of payments is frictionless—now more than ever: An interview with Square CFO Amrita Ahuja	8
Reimagining transaction banking with B2B APIs	13
Building a successful payments system	19
A strategy for a new normal in European payments: An interview with Worldline CEO Gilles Grapinet	25
Banking utilities: Succeeding amidst acceleration	31
European consumer finance: Moving to a “next normal”	38
How the COVID-19 crisis may affect electronic payments in Africa	45

US digital payments: Achieving the next phase of consumer engagement

McKinsey's survey of US consumers confirms deeper digital engagement, but some new concerns about trust.

by Lindsay Anan, Alyssa Barrett, Deepa Mahajan, and Marie-Claude Nadeau



For the past six years McKinsey's annual Digital Payments Consumer Survey has documented the steady adoption of mobile payments and digital wallets by US consumers, with 2019 results signaling a potential inflection point. Our 2020 update inevitably reflects the significant impact of COVID-19. The results confirm deeper digital engagement while shedding new light on barriers to the "last mile" of consumer adoption. Key takeaways include:

- COVID-19 has reinforced the trend of digital adoption in payments and retail commerce, across payment types and demographics
- The digital growth picture is not entirely rosy, however—consumer trust has eroded slightly and although consumers are turning to digital payments in increasing numbers, it is not clear whether all recent behavior shifts will prove to be permanent.
- Despite growing awareness and adoption, nearly half of consumers either have not heard of contactless payments or remain uninterested

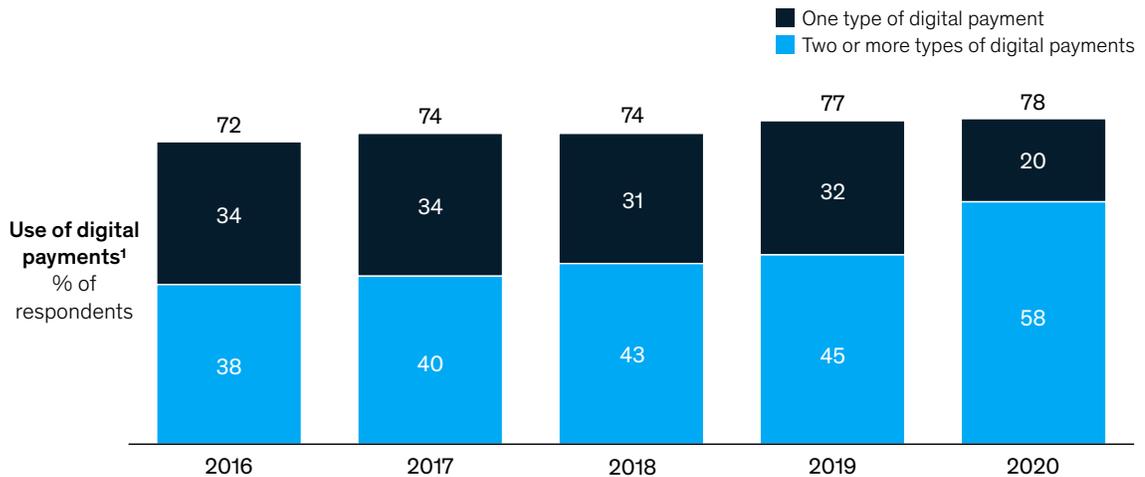
in them due to perceptions of value, security, and availability, posing a continuing challenge for merchants and card issuers in effectively communicating the value and enabling ubiquity of digital solutions.

More than three-quarters of Americans use some form of digital payment, which we define as any of the following: browser-based and in-app online purchases, in-store checkout using a mobile phone and/or QR code, and person-to-person payments. Although penetration of digital payments reached 78 percent in 2020, recent growth has been incremental, implying that some systemic barrier must be overcome to reach the remaining group.

Significant gains have been recorded, however, in the share of consumers using two or more digital payments methods, which jumped from 45 percent last year to 58 percent in 2020 (Exhibit 1). This indicates a deeper level of digital engagement, which can presumably be tied in part to pandemic-related behavior. The two most common forms of digital payments (in-app and online, used by 57 and 53 percent of consumers, respectively) lend

Exhibit 1

While digital payments penetration has largely stabilized, omnichannel adoption had grown markedly.



¹Digital payments include: online (browser-based purchases of goods/services); in-store (tapping mobile device at a point-of-sale/scanning a code to pay); in-app (purchase of goods/services through an app); and peer-to-peer (send/receive money through a digital service/platform).
Source: 2020 McKinsey Digital Payments Consumer Survey

themselves to remote shopping models and were also the fastest growing, accounting for nearly all the gains over 2019.

In a similar vein, more than half of US consumers reported shifting purchases online from brick-and-mortar stores since the onset of COVID-19 (Exhibit 2). Just as importantly, more than one-third expect to further increase their share of online shopping in the coming six months, versus 11 percent who plan to revert to brick-and-mortar channels. This is a strong indicator that many new shopping and payments behaviors prompted by COVID-19 are likely to persist for the long term.

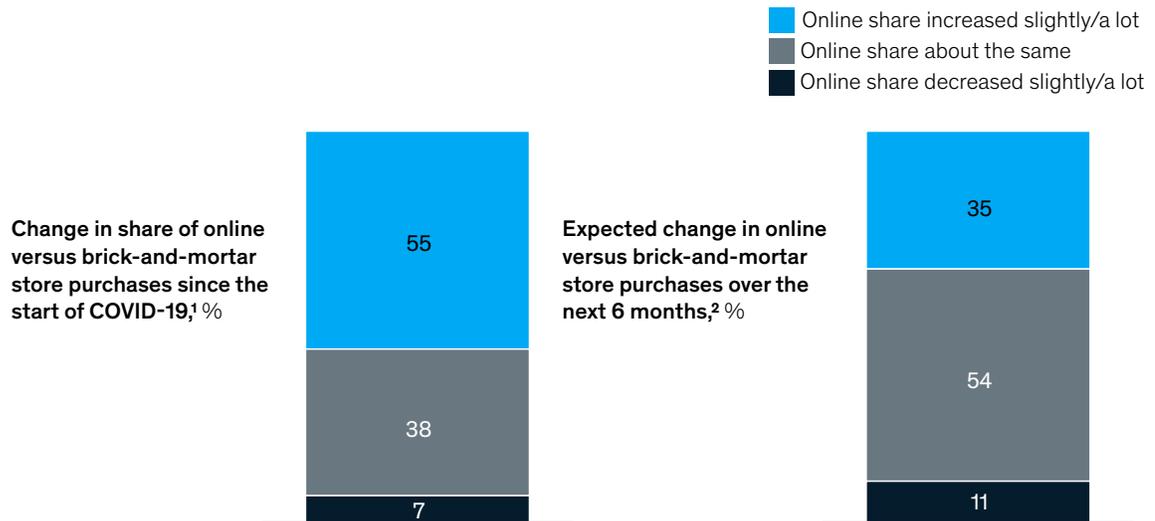
The perception that younger demographics are more inclined to embrace digital payments channels is borne out by the data—but only to an extent.

Adoption among 18 to 34 year-olds has grown to 93 percent, with the share of non-users falling by half since 2018. On the other end of the spectrum, 38 percent of over-55 consumers are digital holdouts, a ratio that has remained stubbornly consistent. Digital users in both the 35-54 and over-55 groupings, however, showed the greatest uptake in a second digital payment method during 2020.

Though not yet severe, one potential area of concern is a slightly eroding level of consumer trust in digital payments. More consumers reported a deteriorating perception of digital payments security over the past year (15 percent) than an improving one (11 percent). Major “next generation” payments players like Amazon and PayPal continue to be awarded consumer trust on a par with banks and traditional network providers. An analysis of the data, however,

Exhibit 2

Consumers report increasing their share of online purchases during the COVID-19 pandemic.



¹How did the share of your in-store (brick and mortar stores) versus online (computer/mobile browser or mobile app) purchases change since the COVID-19 crisis began?

²Over the next 6 months, how do you expect your share of in-store (brick and mortar stores) vs online (computer/mobile browser or mobile app) purchases to change?

Source: 2020 McKinsey Digital Payments Consumer Survey

reveals growing concern with payments made via social apps and “Internet of Things” devices.

The one category for which consumer comfort has materially improved is contactless debit and credit cards. Although a contactless card transaction is not fully digitized,¹ it represents an area where health concerns stemming from COVID-19 could boost a technology that has struggled to find a US foothold. Awareness of these cards has grown markedly since 2019, with the share of consumers reporting possession of such an enabled card more than doubling (Exhibit 3).

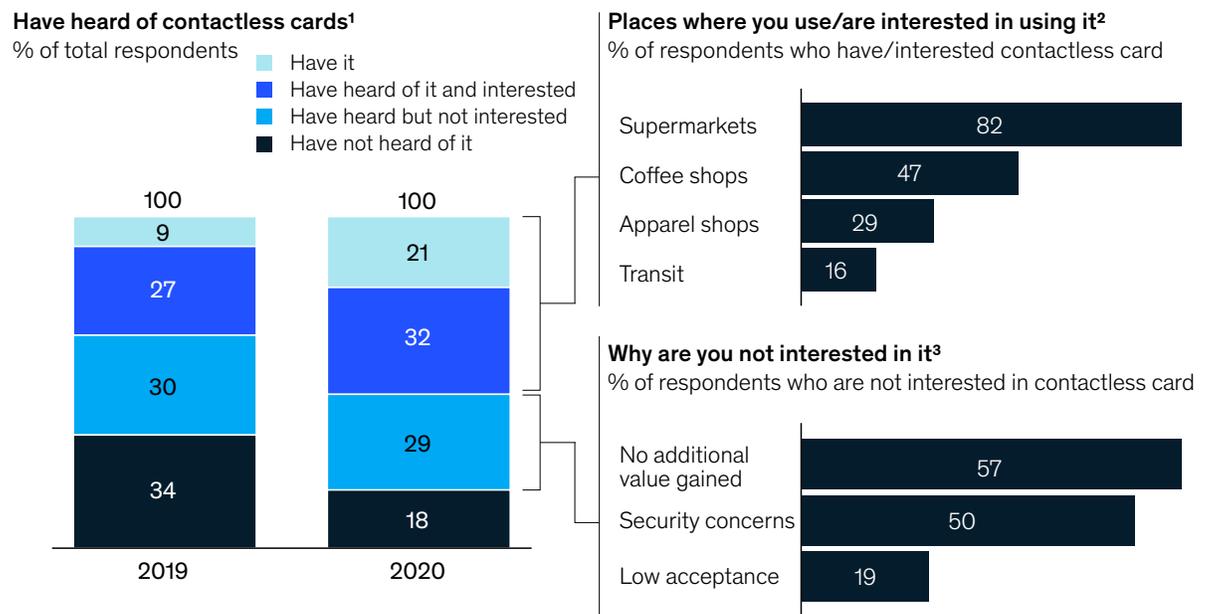
Significant hurdles to widespread adoption must still be overcome, however. The 21 percent of consumers who report having a contactless card is less than half the share indicated by issuers’ distribution data—which implies that a meaningful number of

people are unaware they are already contactless-enabled. More troubling, nearly a third of consumers familiar with contactless technology remain uninterested in it, citing a lack of incremental value and security concerns. Given that most experts consider contactless payments to be as safe as or safer than swiped or inserted EMV equivalents, more aggressive communications campaigns appear to be in order.

Point-of-sale lending remains a high-profile opportunity reshaping the retail experience. Although our survey did not detect a material uptick in the share of consumers using (27 percent) or interested in using (8 percent) such “buy-now-pay-later” digital financing in 2020, additional volume from the established base has delivered 26 percent average annual revenue growth over the past five years, with 18 percent growth projected through

¹In our survey, “tap and go” payments are not considered digital transactions.

Exhibit 3
Contactless card awareness and adoption have roughly doubled in the last year.



¹Have you heard of contactless cards?
²Where do you generally use/plan to use the tap-and-pay feature of the contactless card?
³What are the reasons which stop you from using these cards?
 Source: 2020 McKinsey Digital Payments Consumer Survey

2024—by which point POS financing is forecast to generate \$57 billion of annual US revenue.²

Both retailers and card issuers can take action to optimize their positions given these findings. While the ongoing trend toward online and in-app shopping should surprise no one, retailers cannot afford to shortchange the brick-and-mortar channel that still constitutes the majority of sales for the vast majority of businesses. With consumers signaling their intent to carry out an increasing share of purchases with contactless cards or digital wallets (Exhibit 4), retailers should also ensure these channels are enabled and capable of delivering a seamless experience.

With many customers opting for fewer trips to the store, the inability to complete a sale in the

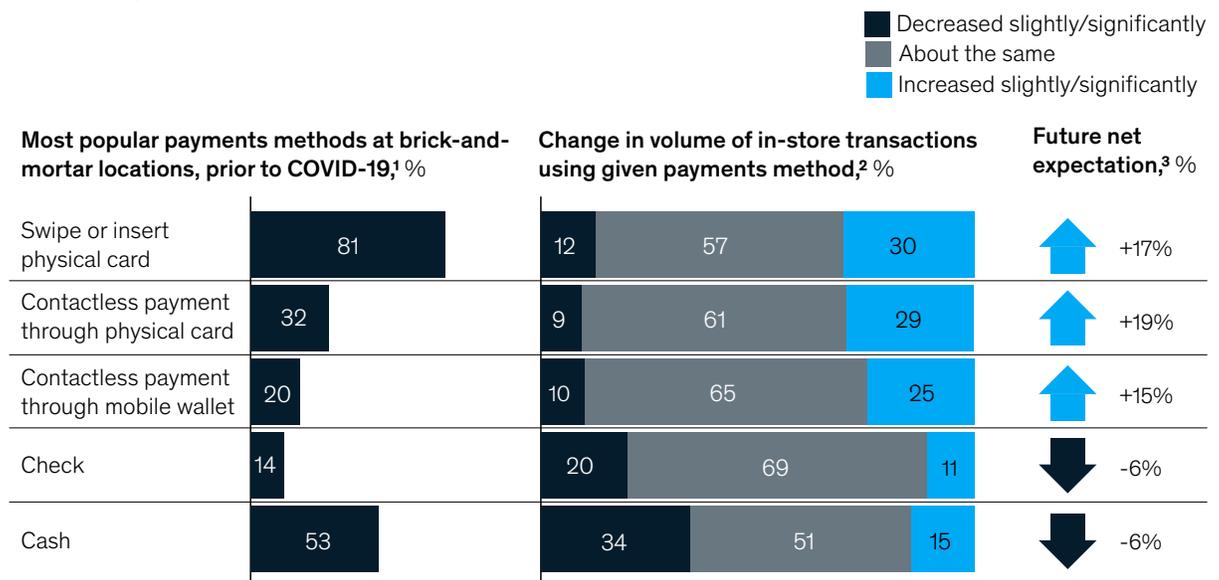
customer’s desired mode carries added risk. Optional customer experiences to minimize in-store interaction at the consumer’s discretion (e.g., curbside pickup, leveraging QR codes and/or NFC to reduce checkout queues or eliminate the counter checkout process entirely) may also prove beneficial.

For card issuers, the available levers are more limited and center on rethinking top-of-wallet propositions. Shifts in spending patterns prompted by COVID-19 have reduced the appeal of travel rewards long relied upon by large issuers. This creates a window of opportunity for others to claim market share, particularly through campaigns focused on the growing use of digital wallets and in-app purchases. Issuers should also proactively address security concerns around contactless cards, build communication programs ensuring awareness among

²McKinsey US Payments Map.

Exhibit 4

Cards—both swipe and contactless—are gaining share, while cash usage has massively declined in brick-and-mortar stores.



¹ What methods did you use for purchases made at brick-and-mortar stores prior to the start of the COVID-19 crisis? Chart represents percentage of respondents who indicated a given payment method in their top 2 choices.

²For each payment method, how has your volume of purchases made at brick and mortar stores changed during the COVID-19 crisis?

³Over the next six months, how do you expect your in-store payments transactions to change? Future expectation is calculated by subtracting the % of respondents stating they expect to decrease spending from the % of respondents stating they expect to increase spending.

Source: 2020 McKinsey Digital Payments Consumer Survey

those in possession of such cards, and enhance messaging to improve their value perception. “Top-of-wallet” status remains the primary objective—regardless of the nature of that wallet.

About McKinsey’s Digital Payments Consumer Survey

Since 2015, McKinsey has on an annual basis measured consumers’ self-reported usage of and attitudes toward a variety of digital payments instruments. This year’s survey is based on input from nearly 2,000 US consumers gathered during August 2020.

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The future of payments is frictionless—now more than ever

Amrita Ahuja, the CFO of Square, explains how the company's payment platform and services have helped small enterprises stay afloat during the COVID-19 crisis.



Cash is king when it comes to maintaining corporate liquidity. It is in a somewhat less prestigious position when it comes to fulfilling consumer-to-business transactions. The onset of the COVID-19 crisis and ongoing fears of infection have prompted consumers and businesses to rely more on digital and contactless payment options when buying and selling goods and services.¹

McKinsey's Pooja Kumar and Roberta Fusaro recently sat down with Amrita Ahuja, the CFO of Square, a global provider of point-of-sale terminals and auxiliary equipment to small and medium-size businesses, to reflect on the changing market for payments software, hardware, and services. In this edited conversation, Ahuja explains how Square has supported small and medium-size companies during the crisis, describes new technologies that might affect the global payments industry, and shares her insights on what it means to be a CFO in the midst of a pandemic.

On managing through crisis

McKinsey: How have the past few months been, and what's changed for Square as a result of the crisis?

Amrita Ahuja: We're taking it a day at a time. We serve merchants, who we call sellers, and individual consumers. And we know that this has been an incredibly trying time for everyone, where a lot of people's livelihoods have been in question. The first thing we did was focus on our employees and their health. We shut down our offices on March 2. We wanted to do right by our communities and do our part to halt the spread of the virus. We took an all-hands-on-deck approach to understand what was happening in our customers' businesses and what was happening in our own business. Every single day in March and April felt like a year, frankly, in terms of our understanding and how fast things were moving. We ran through scenarios, and asked ourselves, "OK, if the situation resembles a V, or

if things look like an L, or if it looks like a U, what does that mean for us and our ability to serve our various stakeholders, employees, customers, and investors?"

We've had to be fast and clear with our communications during a time in which there are still so many unknowns. It was important to own up to this uncertainty and yet not downplay the severity of the situation. We met far more frequently with the board than the typical quarterly cadence. We held an update call with [investment bankers and analysts] outside the typical earnings cadence. We suspended our formal guidance to Wall Street, but we actually shared more information about the real-time views that we were seeing in our business across a number of different metrics and geographies. And with employees, we had a far more frequent and transparent mode of communication. We were sending weekly email updates, we built comprehensive and regularly updated FAQs, we set up a Slack channel for questions, and we held biweekly virtual all-hands meetings. We didn't know everything, but we had a process for learning things over time and communicating them transparently. Ultimately, that has served us well, in terms of motivating our employees, serving our customers, and giving stakeholders a clear understanding of where we are as a business and how we are proceeding.

McKinsey: How do you think finance functions will change because of the crisis?

Amrita Ahuja: For one thing, the experience of teams working from home over the past couple of quarters—and probably for a few quarters more, at least—has emboldened many finance leaders to think about work, collaboration, and community-building differently. Finance functions will still need to bring people together physically and socially—to onboard employees, for instance, or when teams reach milestones on key projects, or when teams need to gather for all-hands meetings. But they

¹ Philip Bruno, Olivier Denecker, and Marc Niederkorn, "Accelerating winds of change in global payments," October 1, 2020, McKinsey.com.

will also need to allow work to happen wherever employees feel most productive and creative, even if it's remote. Additionally, CFOs are thinking a lot more about digital transformation. We want processes, tools, systems that don't rely on the knowledge that's in any one person's brain. We want institutionalized processes and tools that enable the business to move faster, and we want them to be future-proof for any new products we may launch or new markets we may go after. We want our teams to focus more on creative work than manual work. I know I'm thinking a lot more about the investments we're making in such tools. I'm not alone; I've heard from other CFOs that COVID has helped accelerate their thinking on building out digital capabilities.

On innovation in the payments market

McKinsey: Square targets small and medium-size businesses with its products and services. How have their needs changed because of COVID-19?

Amrita Ahuja: We offer entrepreneurs and merchants tools and services that allow them to successfully start up and then grow their businesses. It's a critical market because about 90 percent of businesses worldwide are small and medium-size companies, and they represent 50 percent of employment worldwide.² They account for a major portion of the job creation and economic development that happens worldwide, and recent government data show the fastest rates of growth for new starts than we have seen in a decade. We think that small and medium-size businesses—and these new starts—can really contribute to a strong recovery.

COVID-19 has accelerated some trends for these companies. For instance, we're seeing a dramatic rise in cashless businesses. In February 2020, about 5 percent of Square sellers were cashless in the United States. That rose to 13 percent in August 2020, and for a period in between, it actually went up to 23 percent. People are pivoting their

businesses toward safe ways to meet their buyers. Becoming cashless, and accepting cards, is a key piece of that. We're also seeing an increased need for omnichannel tools. What does omnichannel mean? It means being present—whether offline, online, or on mobile—to meet your buyer. Many establishments pre-COVID didn't have a burning platform to have an online or mobile presence. They do now. Our volumes related to online channels grew 50 percent in the second quarter to 25 percent of our virtual volume.

We're also seeing more vertical blending, as we call it, which really just refers to the entrepreneurial hustle: it's the high-end restaurant that can't serve customers during shelter-in-place scenarios, and they've now become a grocer. It's the bakery that's now selling bread and cookies online. Or the flower shop that's scheduling in-store visits using an appointments system that a hair salon might have used. Those are the kinds of entrepreneurial pivots companies are making to adapt to this new environment. And they're doing it quickly—what might've taken three years, we've seen happen in three months. That is something we think could have a lasting impact even post-COVID.

For all that change, however, some things do remain the same. Our customers have always valued speed and trust. The question for us is, what do speed and trust mean in this new context? Well, it means transparency and simplicity around things like fees and policies and how our customers work with our business. And it means giving customers fast access to their own funds or to a credit line. These are the things that matter to them now and always.

McKinsey: How would you say the overall payments market is changing?

Amrita Ahuja: There are two big themes that could dramatically change how commerce is conducted in the payments space over the next decade. One is around artificial intelligence [AI]

²According to Investopedia, small and midsize enterprises (SMEs) are categorized as such when they maintain revenues, assets, ownership structure, or number of employees below certain thresholds that vary according to country.

and machine learning [ML], and the other is around cryptocurrency and blockchain. They're both incredibly nascent in how they're affecting society and commerce. Still, we want to experiment and learn. AI and ML, for instance, will enable companies to be more efficient with their employee bases and drive higher productivity. They will also enable a fintech company like Square to launch more digital products that support tasks that would have historically been handled with paper and pencil—for instance, digital forms that would have been faxed back and forth between a bank and a small business but now can be handled in a faster, simpler way that mitigates risk on both sides. And we're excited about the verifiability and transparency associated with blockchain and cryptocurrency. Crypto today is viewed as an asset, like gold, but down the road it has the potential to be a viable form of currency. There is a lot to be worked out, and it must be explored in a disciplined way, but we see attributes here for crypto to be disruptive in markets that need it most—in particular, where there is a lot of inflation, or where corruption is rampant with fiat currency.

McKinsey: Are specific product innovations emerging from Square—outside of or in the wake of COVID-19?

Amrita Ahuja: We know we are serving the little guys who often, frankly, don't have another option. So we remain focused on fast product innovation, like the on-demand-delivery, order-ahead, and pick-up options that have kept many of our customers in business during a really volatile time. People are using our Cash App to inbound stimulus funds or unemployment checks, or to send funds to friends or family members in need, or to facilitate social giving—online tipping or donations, for instance. Despite the turmoil, we're continuing to experiment and learn in a disciplined way. We've formed an independent open-source team called Square Crypto that we believe is going to help us explore and enhance the bitcoin landscape and the cryptocurrency landscape. We also launched the Cryptocurrency Open Patent Alliance, which is meant to benefit the broader market and drive innovation in the space. And more recently, we made

a \$50 million investment in bitcoin as a show of support to the community and our belief in the long-term sustainability of bitcoin.

On social issues

McKinsey: What specific advice do you have for women leaders in this COVID-19 era?

Amrita Ahuja: First, it's important to continue to look for learning and growth opportunities. Remember, it's a career lattice not a career ladder, so don't count on taking a vertical path and trying to rise. That works for some people. But seeking out multiple perspectives helps you build relationships. It helps you build new muscles. It helps you flex your thinking. It helps you build empathy. And the companies that rotate their staff continually get fresh perspectives in different areas of the business.

Second, seek mentors. I have always been surprised at how generous people will be with their time when you share a direct question with them and if you actually give them something to chew on, whether it's a career move you're thinking of making or a scope expansion or a new project or even a struggle you've got at home. People respond well to prompts, and people want to give back. They want to see others succeed.

Third, advocate for yourself. This applies to the work you're doing and making sure it is appropriately visible, but it's also important for maintaining the boundaries you need to stay sane during these difficult times. Companies are trying hard to look out for their employees, but they're not going to be able to anticipate every single personal situation out there. So people need to talk frequently with their managers and teams about what they need. During the pandemic, my kids have been doing their schooling from home. I really need those first few hours in the morning to get them set up on their video calls with their workbooks. So I try to start my day a little bit later at Square, which sometimes means I'm working later into the night. But I am a much more loyal employee knowing that I have that flexibility. I am much more

focused knowing that I've been able to take care of things for my family. I advocated for myself, and the company responded in a positive way, enabling me to have that boundary.

We are really focusing on inclusiveness and diversity at Square. We have more than 14 affinity groups at the company aimed at keeping diverse voices at the company. The groups help the company feel smaller; people can gather with others facing similar questions and challenges, and they can advocate for themselves and their colleagues with a louder collective voice. The parents community group, for instance, can help us construct programs like short-term leave for people who need it. As we think about recruiting, we train hiring managers on the concept of unconscious bias, and we hold jam sessions with recruiters to find diverse candidates to bring in, including women and underrepresented minorities. We enforce the idea that, for every single role, we should be interviewing candidates from diverse backgrounds before making a hiring decision.

McKinsey: Square's mission statement talks about creating access for all. How has that mission informed the company's recent social-justice actions?

Amrita Ahuja: We recently announced that we're steering \$100 million in funds toward underserved communities. Over time, we've seen systemic disparities in how communities are served and in how underserved communities are not included in building financial wellness. That problem has only increased during COVID, by the way; many underserved communities have been hit disproportionately hard. In 2019, we had started a program where we invested deposits with community-development and financial institutions across the various US markets we serve. We were looking to expand that, so when we saw the impact of COVID on many of these underserved communities, we saw the potential to move \$100 million of our corporate treasuries to support and invest in them. We're excited to work with the various partners we have in this space to make sure that the money Square provides—via loans, community projects, investment projects, and deposits—gets into the hands of people who need it and will help build sustainable economic growth in these underserved communities. We plan to monitor our progress in these communities along with various success metrics, such as job growth and new business formation.

Amrita Ahuja is the CFO and treasurer of Square. **Pooja Kumar** is a partner in McKinsey's Philadelphia office.

This article was edited by Roberta Fusaro, an executive editor in the Waltham, Massachusetts, office.

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Reimagining transaction banking with B2B APIs

APIs can help global transaction banks move closer in the value chain to their clients amid rising competition.

by Alessio Botta, Lalatendu Das, Nilesh Gupta, and Sandeep Sharma



In a globalized economy, organizations need to manage diverse pools of liquidity, fund cross-border trade, optimize working capital, and keep a close eye on risk. Banks traditionally support these priorities through a range of global transaction banking (GTB) services. However, amid rising competition from niche fintechs and digital banks, the market share of many incumbents is under threat. To respond, banks can use B2B application programming interfaces (APIs) to move closer in the value chain to their clients. These connective technologies offer clients easier access to GTB services from their own platforms and enable seamless interaction with third parties.

Leading banks are focusing GTB integration efforts on products that promise most growth. According to a McKinsey survey, executives expect cash

management and trade finance to be the growth engines over the next three years (Exhibit 1).¹ This in the context of a business that already generates global annual revenues of \$1 trillion.

As executives consider how to make the most of growth opportunities, four major regulatory and technology trends are reshaping the GTB landscape:

1. Open banking directives are leading to a more fluid and innovative systems landscape
2. Digital channels with smart personalization are replacing off-the-shelf applications
3. Advanced analytics are improving liquidity forecasting

¹ McKinsey Global Transaction Banking Survey, September 2019.

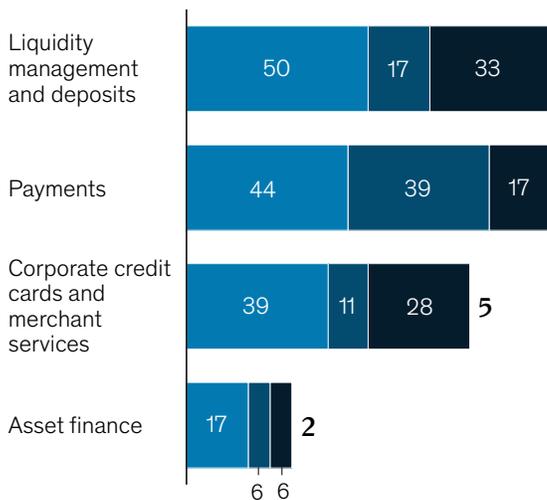
Exhibit 1

Executives expect volume growth will be driven by cash management and trade finance in the next three years.

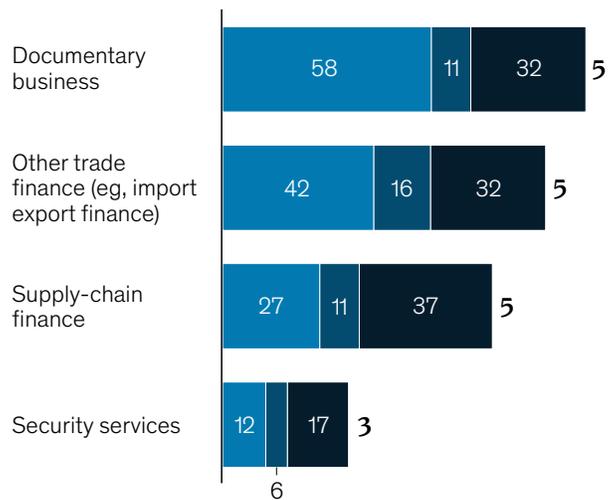
Survey respondents growth expectations for selected products/services, %

X Weighted average theoretical growth¹
■ <5% ■ 5-8% ■ >8%

Cash management



Trade finance



¹ Calculated using different growth brackets and percentage of respondents for each bracket. Source: McKinsey Global Transaction Banking Survey, September 2019

4. Blockchain and distributed ledger technologies are supporting the digitization of supply-chain finance

API platforms enable a flexible and iterative response to these trends. However, many banks have not invested sufficiently, and thus risk losing out to better-integrated competitors that can respond faster and more flexibly to client needs. The bottom line? Effective integration through B2B APIs should be a GTB priority.

B2B integration: The state of play

Traditionally, many banks have relied on technologies such as host-to-host file transfer, based on legacy web services, or secure file transfer protocol (SFTP), to integrate their GTB services with their clients' systems. These solutions are predominantly used for cash management services such as payments, transfers, and cash pooling. However, while they tend to work well for single-step transactions, they struggle when transactions require conditional routing. This prevents them from being used for integration of more complex products.

We see six major challenges around file-based integration:

- limited exception handling on format mismatches
- manual failure recovery following network or system outages
- weak controls for file tampering and man-in-the-middle breaches
- long customer onboarding times—as much as four to six months
- bulky file formats for enterprise resource planning (ERP) integration, requiring customization for each corporate
- higher operating cost to run and maintain the specialized software needed

Enter B2B APIs

B2B API platforms help banks make GTB services available to their clients and partners as discrete operations. They typically work in a closed network, helping embed GTB functionalities seamlessly and securely into client workflows. In one example, a leading Indian bank integrated its B2B payments APIs with an online delivery startup, enabling real-time settlement and instant salary payments. Similarly, many companies are leveraging cash management APIs to automate invoice reconciliation workflows in their ERP systems.

Emergence of open standards such as Europe's PSD2 and public goods infrastructure including India's Unified Payments Interface are also driving adoption. Given the potential upsides, it is not surprising that over 85 percent of respondents to our executive survey say they plan to invest in cash management APIs in the next three years and close to 50 percent plan to expand trade finance APIs as part of their digital innovation agendas (Exhibit 2).

Building a B2B API platform: Five success factors

A common challenge in building an API banking platform is balancing corporate requirements on process flow and flexibility with internal security and operational risk controls. A well-designed B2B API platform will address these competing priorities and create a culture of co-ownership with clients and partners, thereby spreading the cost of innovation and reducing time to market. Leading GTB players that have made the most progress tend to leverage five success factors:

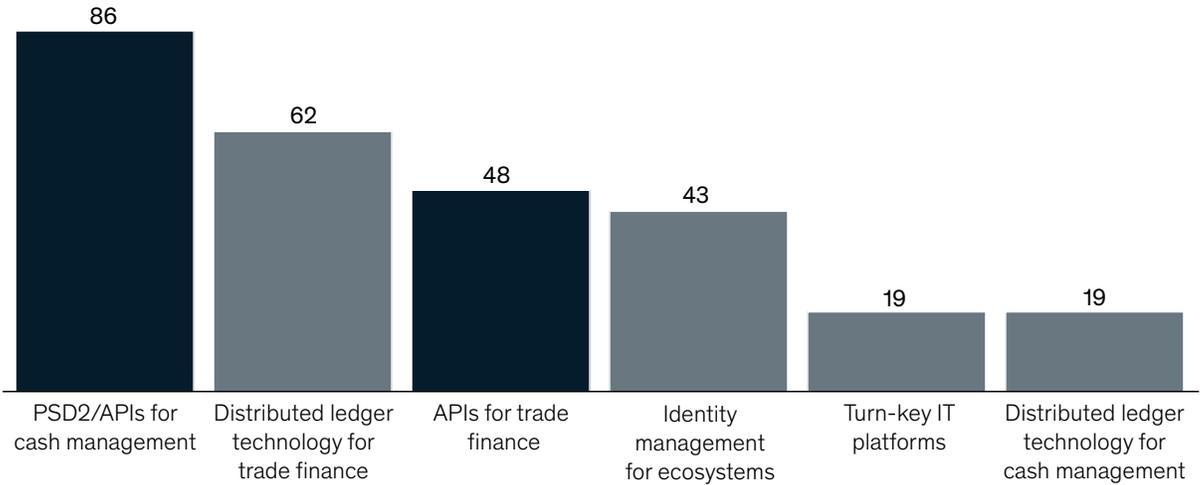
1. Embrace a product development mindset

APIs should be seen as products with their own lifecycles and requiring the same commitment to development, testing, and marketing as any other innovation. With that in mind, there are two critical elements:

- *Design for process control and orchestration:* Banks should design process APIs to enable end-to-end workflows in activities such as

Exhibit 2

B2B APIs are innovation priorities in the next 3 years for most surveyed banks.



Source: McKinsey Global Transaction Banking Survey, September 2019

domestic payments, import letters of credit advisory, and forex rate booking. IT teams should plan to create 40 to 50 build-to-stock APIs, ensuring that clients are able to orchestrate them in their ERP systems, perform necessary validations, and manage exceptions.

- *Weigh tradeoffs between a channel and product approach:* Building transaction banking APIs as new product offerings would require teams to individually develop workflows and data structures, before plugging them in to existing systems. Banks can avoid costly repetition by building APIs as channels to existing products (internet banking, trade finance systems) and therefore leveraging account mapping, business logic, and security controls that already exist in their systems.

2. Set up a modern API lifecycle management platform

Banks can choose a cloud-based or on-premise solution that is open-source or part of an enterprise

suite, while ensuring they offer the following key capabilities:

- *API gateway* for API exposure, access control, rate limiting, security enforcement, and orchestration
- *API publisher* for policy and version management, SLA performance management, and environment access (sandbox, UAT, and production)
- *API store and development portal* for API discovery, developer onboarding and management, API documentation, reporting, and key management
- *API analytics* for operational metrics, business metrics, billing, and metering

Individual application owners working on downstream systems can continue to own underlying business logic, error handling, logging, and enhancement. However, service contracts

should be rewritten to make them RESTful² and decomposed into microservices for easier maintenance and upgrades

3. Extend risk management and operational controls to API-based offerings

Executives should extend risk and operational controls to API-based solutions, ensuring that the bank continues to meet its regulatory compliance obligations.

- *Align security and regulatory controls:* B2B API services must conform to security and regulatory requirements by ensuring compliance with existing confidentiality, integrity, and availability models. These can be implemented with a combination of IP whitelisting, client ID and secret keys, digital signatures, and hashed payloads. One global bank chose to implement API security using a hardware security module (HSM) for dynamic key management in its collections API suite.
- *Amend client undertakings and legal contracts:* Contracts with corporate clients may not incorporate the necessary terms for API-based integration. Banks therefore may need to draft new terms to facilitate system-to-system interactions and straight through processing (STP), and to define transaction limits. One Asian bank created an STP authorization form as an addendum to existing contracts to enable the API channel for its clients.

4. Leverage partnerships and self-service solutions for customer acquisition

By building out their ecosystems, banks can unlock innovation opportunities, expand their networks, and acquire new customers.

- *Form partnerships with software-as-a-service finance companies:* GTBs can unlock new customer segments by providing downstream banking services to customers of cloud ERP providers and fintechs. An Asian bank was

successful in onboarding new SME customers by partnering with a cloud CRM solution provider to offer back-end banking services for vendor payments and customer refunds.

- *Simplify customer onboarding:* Banks that create marketplace offerings and design self-service onboarding flows can enable corporate client users with the appropriate authorizations to register their corporates to B2B API services. Several banks have set up API stores that provide test-and-learn platforms for customers to try out APIs and interact with API owners before incorporating them into their systems.

5. Define an API taxonomy to accurately assess system readiness, avoid proliferation of incompatible APIs, and prioritize for business value

An API taxonomy can help banks define ownership and governance rules. Banks should choose a taxonomy based on their own platform design. One common approach is to layer definitions as follows:

- *Experience APIs* are designed for a specific user experience and enable all data consumption from a common data source.
- *Process APIs* help manage workflows within a single system or across systems by simplifying the underlying implementation complexities of different source systems.
- System APIs control CRUD (create, read, update and delete) operations that provide access to core system data, insulate users from the complexities of underlying systems, and enable reuse of data across multiple projects.

Experience APIs should be owned by channel teams and process APIs by business owners. System APIs should be controlled by application owners. Another approach, used by one European bank, is to create a prioritization framework based on important use cases, in this case using umbrellas such as regulatory APIs, build-to-stock APIs, and

²Representational state transfer.

third-party APIs. The bank found that the approach helped drive internal innovation and monetize its APIs externally.

Successful GTB fintechs have achieved unicorn status (that is, valuations in excess of \$1 billion) by providing best-in-class services coupled with a full

suite of API functionalities, and integrating these into client systems. Forward-looking global banks, meanwhile, are investing their GTB IT budgets in technology enhancements, including API platforms. Banks that have not yet taken steps must therefore act urgently to enhance their own API propositions and partner with clients to ensure they keep pace and remain relevant in the fast-evolving landscape.

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Building a successful payments system

A look at what it takes to create a retail payments offering with staying power.

by Ashwin Alexander, Olivier Denecker, Andy Dresner, and Reinhard Höll



The past two decades have seen enormous growth in payments systems. Twenty years ago, contactless cards, mobile payments, and digital wallets were in their infancy. Today, they are ubiquitous. But as new payments systems continue to emerge, only a few are likely to survive in the long run. Of more than 200 systems introduced between 1993 and 2000, for instance, only PayPal emerged as a standout success.

What does it take to create a retail payments offering with staying power? It's a billion-dollar question with a fundamentally simple two-part answer: large-scale access to stores of value so that senders and receivers can exchange funds, plus a trusted operator that routes transactions between counterparties and enforces fair governance standards. However, the first of these requirements has historically made launching a new scheme difficult for all but incumbents that already manage checking accounts and credit lines. This competitive "moat" has been strengthened by network effects. Incumbents also benefit from the "last inch" problem in retail: how to enable a buyer to transfer their payments credentials to a merchant. Incumbents control physical point-of-sale (POS) devices, and extending them to other payments methods is a slow and costly process.

Yet the future may offer brighter prospects for new payments systems. A host of structural changes over the past few years may lead to many barriers to entry coming down:

- *Customers are congregating in ecosystems and marketplaces* where they consume similar services and can be more easily accessed, like Amazon, Alibaba, and Uber
- *Technological advances are enabling companies to quickly scale up new products* across critical masses of senders and recipients, creating large seed populations in digital marketplaces, social networks, and other groups
- *Application programming interfaces (APIs) are enabling payments to be easily integrated with other products* via underlying bank rails such as automated clearing house (ACH) payments and wire transfers
- *Higher digital spending is allowing new "plug and play" solutions* to be adopted without the need to roll out physical POS devices.

These changes have triggered a proliferation in new consumer-to-merchant payments networks and schemes over the past decade. New aspirants in developing countries—such as Alipay and WeChat in China, Paytm in India, and MercadoPago in Argentina—are leapfrogging physical card infrastructure. Tech companies are capitalizing on their consumer reach to establish intermediaries between card networks and consumers in the form of Apple Pay, Google Pay, Grabpay, and others. Card networks are diversifying their offerings via M&A, with Visa acquiring Earthport and Plaid and MasterCard acquiring Vocalink and Nets. Meanwhile, countries are quickly establishing new domestic standards of usage via ventures such as MobilePay in Denmark and Swish in Sweden.

Networks and schemes: What's the difference?

As payments providers broaden their horizons, it is helpful to clarify terms: "network" and "scheme" are often used interchangeably, but strictly speaking, they refer to different things:

- A *network*, at its simplest, is a directory of participants along with the information required to access their stores of value and settle transfers: names and addresses, account details, and so on. Primary networks, such as ACH and real-time gross settlement (RTGS), are integrated with bank systems and do not rely on any other settlement mechanisms to execute payments.
- A *scheme* also has a directory of participants, but what differentiates it from a network is that it also enforces rules and standards. As well as connecting to bank networks to transfer funds, it ensures that participants abide by rules and standards on fraud liability, participant eligibility,

data security, and other matters. Some “pure” schemes, such as the National Automated Clearing House Association (NACHA) in the US, focus only on managing their own rules and standards without maintaining a directory of participants. Examples of payments schemes include Visa, Mastercard, JCB, Amex, Girocard, China UnionPay, Zelle, and TransferWise.

- *Hybrid schemes* typically connect to both schemes and networks. They often include a store of value (that is, some kind of deposit account) and overlay their own rules to create a common set of standards. Examples of hybrids include Alipay, WeChat Pay, PayPal, and Twint.

How to start a payments system in 2020

Building a new payments system is no longer the exclusive preserve of financial institutions. Companies with strong ecosystems can take advantage of them to set up networks and schemes with their customers, suppliers, or other third parties. Incumbents, meanwhile, are venturing into new territories. Card schemes have used acquisitions to expand into networks and schemes catering to business-to-business (B2B), cross-border, and POS lending, while banks have invested in domestic debit networks and digital payments. For entrants and incumbents alike, a new network or scheme can be scaled up by following the approach outlined below.

1. *Identify an internal or external seed population with a critical mass* of senders and receivers that generates strong network effects for its members. With an internal population, the company builds on a customer base or marketplace of its own that currently uses other schemes to send and receive payments. With an external population, the company partners or targets an external entity with a growing or under-served population, develops scheme standards, and then acquires customers. Companies with payments systems at this stage include the ride-sharing app Uber, the US restaurant-delivery services GrubHub and Caviar, and the US education, healthcare, and travel payments platform Flywire.
2. *Collect payments information and enable internal payments.* Since direct-to-account payments methods are typically cheaper than card schemes, collecting payments information is financially advantageous. It is also getting easier, thanks to innovations such as Plaid for accessing bank accounts and API-based open-banking standards. Providers can enable internal payments within a target population before extending the scheme to external users. Amazon, which collects bank-account information to enable direct ACH transactions, exemplifies this stage of a payments system.
3. *Define pricing, rules, and standards.* Graduating from a network to a scheme involves enforcing rules and standards for participants. (Swish, a mobile payments scheme in Sweden, has reached this stage in its evolution.) Branding is one key decision point: will the scheme have a different brand from the parent company? Will accepting merchants be required to communicate or display their acceptance? Another set of choices relates to open-data standards and access: what information is transmitted with each transaction? What data is retained, for how long, and who stores it? What data do participants and third parties have access to? Then there is pricing: what price is applied to transactions versus dollar flows? Does it vary by underlying payments type? Do cross-border transactions incur additional fees? Finally, fraud liability rules must be determined: if an unauthorized user gains access to a member’s credentials and conducts a fraudulent transaction, does that member have any recourse? If so, who is liable for that amount, under what conditions?
4. *Create access channels and expand distribution.* Opening up a payments system to participants beyond the seed population requires new access points for different purposes. One is onboarding: allowing new participants to join the network and collecting their payments

information. Another is APIs access, to extend acceptance of the system via proprietary or third-party distribution channels. Yet another is dedicated marketing and sales, to expand the teams that drive acceptance. Finally, third-party channel access is needed to enable the system provider to work with regional acquirers to bundle a scheme as part of their merchant-acceptance packages. Payments systems that have reached this stage include PayPal, which offers payments via buttons embedded in e-commerce sites, and Alipay, which has expanded acceptance via its 2018 partnership with First Data (now Fiserv).

multiples higher than fintechs, banks, and credit card issuers (-4 to 14 percent).

Throughout history, as payments evolved from barter to coins to notes to cards to digital wallets, the underlying revenue model for each method (whether merchant, interchange, or flat fees) has remained much the same. However, as digital payments methods, omnichannel, and instant payments converge to transform the payments industry, revenue models are likely to change, too. New networks and schemes will aggregate volumes and build ecosystems that generate network effects, enabling them to maintain premium pricing for customers while using low-cost bank rails to transfer funds. For instance, systems offering POS capabilities typically charge merchants 2.5 to 3 percent of transaction value, while paying considerably lower wholesale rates on the back end.

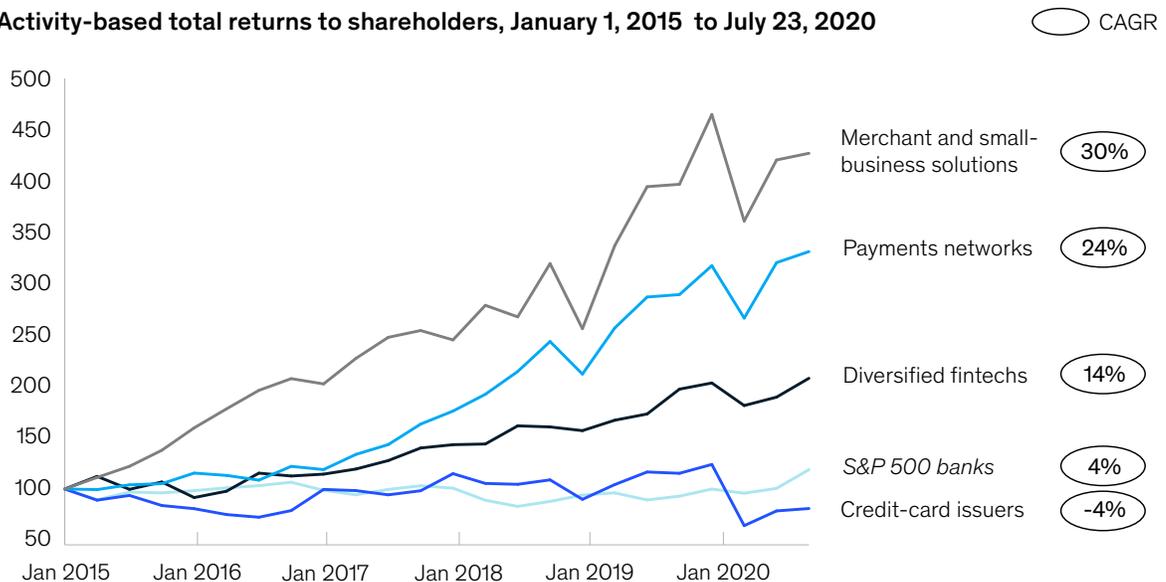
Is it worth it?

Successful payments systems have generated high returns in recent years (Exhibit 1). The returns of payments players (24 to 30 percent) have been

Exhibit 1

Most payments providers, except for credit-card issuers, have outperformed the broader banking index since 2015.

Activity-based total returns to shareholders, January 1, 2015 to July 23, 2020



Source: Capital IQ; McKinsey analysis

The outlook for incumbents

For payments providers of all kinds, the implications of these developments could be far-reaching.

Levels of disruption are likely to vary for different players in the incumbent value chain.

Banks face a broad strategic question: should they manage their own payments networks or have third parties manage them—which could create strategic dependency? Banks in small to mid-size markets that lack the scale to justify investing in new payments networks could instead form regional agreements to aggregate scale and work with third parties to manage technology infrastructure, while retaining strategic and economic control of new schemes. Banks in larger markets with the scale to operate their own networks will need sufficient market share to create a coalition that sets standards for the new scheme, like the large US banks that created Zelle and opened it up to other banks.

In all markets, launching a new payments method calls for caution in pricing. If banks capture too much economic value, they could antagonize regulators and attract new entrants capable of underpricing them. Other options banks could consider include improving existing networks and connecting national debit schemes across regional markets.

Global schemes are continuing to explore new ways to capture volume, such as investing in linkages to bank accounts. Visa's \$5.3 billion acquisition of Plaid—a maker of APIs that allow companies to easily execute bank-account payments—is a striking example of the kind of expansive move that global schemes are increasingly pursuing. Meanwhile, Mastercard has made significant investments focused on B2B payments, as seen in its acquisition of Transfast, SessionM, as well as Nets' account-to-account payments business.

Another option for global schemes is to establish co-acceptance partnerships. Examples include Visa's partnership with Tencent to gain access to

the WeChat Pay network in China and PayPal's deal with Google Pay to increase POS acceptance.

Acquirers can differentiate themselves and add value for merchants by becoming a one-stop shop for an expanding array of payments schemes. Conversely, confining themselves to one or two schemes could put them at risk of disintermediation should these schemes decide to go directly to merchants. Acquirers can also offer merchants value-added services such as fraud analytics and merchant lending and help them upgrade their capabilities for additional schemes such as Alipay and WeChat Pay.

Opportunities for new entrants

Operators of new networks and schemes can create value for participants by increasing their reach, delivering a superior experience, and reducing their operating costs.

In terms of reach, tailoring a new network or scheme to meet the needs of its intended users through customized governance, rules, and pricing enables operators to maximize the pool of participants. When it comes to user experience, in the payments business, the experience often is the product. Consider the latest generation of POS devices or the introduction of Apple Pay and Google Debit. Years ago, the introduction of payments schemes like Paypal and Venmo enabled users to move money more easily via fewer steps than with previous systems. New networks and schemes can do the same by tightly integrating the payments experience into their own regional marketplaces and ecosystems.

Finally, new networks and schemes are free from the legacy infrastructure costs that large global networks bear. This, combined with purpose-built design, allows operators to pass on cost savings to participants. If those participants perceive real value in broader reach, better experience, and operating cost savings, operators can quickly monetize their offering. They can do this

both directly, through transaction fees, lending, and pricing, and indirectly, through customer “stickiness” and increased brand reach and value.

Now may be the moment for incumbent providers to expand into new niches with specific needs, and

for other ecosystems to control their destiny by building their own payments networks and schemes. Though incumbents will face threats, the growth of payments methods looks set to continue, presenting opportunities for incumbents and disruptors alike.

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A strategy for a new normal in European payments

An interview with Worldline CEO Gilles Grapinet

McKinsey on Payments met with the CEO of Worldline to discuss the future of the payments-processing industry in the time of COVID-19.



The interview explored the “Europe of payments,” the potential for banks to participate, and Gilles’ perspective on change in the payments landscape at large. An edited transcript of the conversation follows.

McKinsey on Payments: How do you see the short-term impact of the COVID-19 crisis on payments?

Gilles Grapinet: As far as payments are concerned, 2020 got off to a flying start; it was looking set to be a record year when the crisis hit. As long as the COVID-19 outbreak was limited to China, its effect on our business remained minimal, despite seeing a 65 percent fall in Chinese travelers in our markets in February. By contrast, the closure of non-essential retail in most European countries resulted in a 30 percent drop in transaction volumes, despite a very significant increase in activity in the grocery retail sector and a rise in online purchases. The rise in online, however, was not as high as it could have been, as takeoff was initially hampered by logistical constraints and the very sharp decrease of airline, hospitality, events, and transportation businesses, which are usually a strong component of online-payment transaction volumes.

All in all, even though up to 80 percent of stores were closed, the payments industry has displayed undeniable solidity, particularly for the more diversified players like us, with powerful cushioning mechanisms that have shored up its revenues. This, I think, is an asset that investors have begun to rediscover.

Being an acquirer as well as a processor, Worldline covers the entire value chain. Across all our businesses, the payment industry has shown remarkable resilience, and activity remained strong for most of our teams.

In addition to this solidity, it is clear that we are active in a truly digital real-time industry. We observe and can quantify changes in

consumption as they happen. The processing of card-authorization requests, for example, tells us that online platforms have registered a 30 percent increase and enables us, also, to measure new habits like the rise in click and collect.

And as soon as an economic zone reopens, we see the impact on our business immediately, since we have no supply chain and no physical distribution bottlenecks. In Austria, for example, on the day the lockdown measures were eased, we recorded instantaneously a 50 percent increase in volumes on our platforms. Therefore, we are not planning any major structural measures in response to the crisis; we focus our short-term efforts on demanding but temporary cost-adaptation measures, as we expect business to resume progressively its fundamental growth trajectory after the next quarters.

McKinsey on Payments: Are you already starting to see medium- and long-term trends for the sector?

Gilles Grapinet: As soon as the crisis broke out, we naturally took all the necessary steps to manage the immediate impacts around three key priorities: employees’ health protection, business continuity, cost reductions.

But we also lost no time in setting up a team to prepare for the next “new” normal. There, we expect to see some major changes, in response to which we are already starting to adapt our sales strategies, our product ranges, and the capabilities of our teams.

The first change is an acceleration of the cash-to-plastic migration—the switch to cashless transactions. Despite cashless payments already growing four to five times faster than GDP in Europe before the crisis, 75 to 80 percent of purchases were still not digital, and there were huge pools of cash usage remaining in Europe, with cash being the default means of payment in several countries, such as

Germany, Austria, Italy and Switzerland amongst others. We know that changing payment habits has historically been a very slow and complex process. In this regard, the crisis has been a phenomenal accelerator. The idea has suddenly taken root among consumers and retailers that handling cash could be a factor of risk, so much so that some outlets have sometimes banned cash outright. Cash withdrawals at ATMs have collapsed, while the massive raise of the ceiling for contactless payment up to €50 in 17 countries enables it to cover 85 percent of everyday consumer purchases. The level suddenly reached in cashless usages is, of course, poised to decrease somewhat post lockdown, but the current situation will mark a turning point and bring about a new normal in payments.

The second notable phenomenon is the accelerated digitization of commerce and the future growth in the merchant payments market that it entails. One of the lessons of the crisis is that this is certainly the real birth date of the internet mass-market consumer. But circa 80 percent of small European businesses in retail did not have any online-shopping capabilities; some did not even have a basic informative website. Many were just out of business during the lock-downs. They now need to catch up in terms of technology, prepare for a possible resurgence of the virus, and gear up to process orders end to end, using at least a “buy online, pick up in store” model. Our priority will therefore be to help them equip themselves accordingly and help close the digital divide between large companies and SMEs, especially as the investments required are modest. In order to meet this demand, we have created an ultrasimple offer: a structured digital solution for click, pay, and collect, which can be set up by the merchants literally in less than one business day.

Finally, the changes will also deeply affect the way companies operate. We will certainly have numerous companies starting to rethink their current model, which is based by default on everyone being present in the office and

characterized by a unity of time and place. At the same time, we all know that a company cannot only be a virtual, remotely working organization. As a human organization, we need also to nurture a company culture, a team spirit, our own DNA somehow which results from our formal and informal interactions and ways of working. A new balance can and will certainly be found between remote and office working, and we have already initiated a very serious analysis on this topic, taking into consideration the need to maintain our productivity ratios.

McKinsey on Payments: What prospects do you see for the payments industry in Europe?

Gilles Grapinet: I am convinced that our payment industry is on the right track and has a bright future. Our fundamental mission is to support the long-term transition initiated decades ago towards economies with much less cash-based payments and much more electronic payments.

We may not have the driving force of Silicon Valley or the volumes of China, but we can rely in Europe on one of the world's most innovative regulatory systems and a very competitive market, which helped us cross many thresholds. Through the creation of the euro, our single currency, as a founding act, then the SEPA [Single Euro Payments Area] directive, followed by the Payment Services Directives 1 and 2, national payment platforms were gradually encouraged to provide the necessary support for a more efficient and frictionless circulation of the currency. We have emerged from all these adaptation efforts with a highly competitive regulatory environment, which has driven the payment product to a very low point in terms of price—the interchange rate, for example, has been cut to 0.2 to 0.3 percent—in comparison to the other monetary regions, which helps further market adoption and, at the same time, implies that the providers must be extremely efficient.

The “Europe of payments” is still under construction; the full impact of the transposition into national laws of the Open Banking and PSD2 directives still lies in front of us. But I would say that our industry players are fit for growth, though they need to scale up further in order to draw down the full value of these regulations. All taken into consideration, it explains why the European processors and acquirers must be particularly efficient to meet these demanding market conditions. It also explains why there has been such a huge industrial consolidation taking place in Europe over the last ten years or so, and it obviously must go on.

As a matter of fact, despite this first wave of consolidation, my personal view is that the European payment industry is still too fragmented: the top three players account for less than 50 percent of processing in their own zone, compared with 80 percent for the top three US players. Our industry must develop the capacity to play in the global league, and I hope that the growing awareness of Europe’s level of fragmentation and dependency will act as a spur and will foster the needed consolidation of processing and acquiring platforms.

McKinsey on Payments: It is striking to observe that the major retail payment brands launched in the relatively recent past—for example, PayPal, Alipay, Google Pay, Apple Pay—are all non-European. What do you think about this situation?

Gilles Grapinet: It is somehow a paradox, because as previously mentioned, Europe has been very, very innovative from a regulatory standpoint. And many mobile-payment brands have also been launched locally by the banking communities—Paylib in France, Paydirekt in Germany, TWINT in Switzerland, Payconiq in Benelux, MobilePay in Denmark, and Vipps in Norway, just to name a few. But for payment brands, the game is no longer only local. And unfortunately, Europe hasn’t played its own scale at the payment brand level.

I observe, by the way, that the debate on sovereignty and dependency is now also touching

on this topic. The European Central Bank is very vocal about this situation, and more and more market participants are challenging the fact that, for example, Europe is the only superpower using third parties’ brands for its own cross-border domestic retail payments within the SEPA countries.

The new initiative EPI, which has been launched in Europe by 16 banks with the support of the European Central Bank to explore the potential creation of a new pan-European retail payment brand is interesting and deserves a lot of attention. As long as it would be well designed from a business-model standpoint, allowing a win-win for all market participants and relying on open and inclusive governance, we would be ready to support any quality initiative that would bring the industrialization potential and the scalability of the European platforms to the next level. If it no longer had to juggle with more than 20 local payment schemes operated on too many subscale platforms, Europe would gain greatly in competitiveness for all market participants and, as I understand it, it would certainly meet the objective of the public stakeholders around stronger sovereignty as a political organization.

McKinsey on Payments: How do you see the role of banks in this moving landscape?

Gilles Grapinet: For banks, payment products are valuable assets, since they remain a privileged entry point to create a relationship with the retail world. So I cannot imagine a world in which retail or corporate banks would not distribute payment products and services. But though I believe it is crucial for them to keep complete control on the distribution side, where their brand and capabilities are decisive, I also think they should consider outsourcing much more of the technical production and the back-office tasks of these payment services, at least the ones that are plain vanilla and which are not bringing them distinctiveness—and which carry significant costs, both in capex and opex, which they can’t mutualize

as we do. Within the past two years, we have settled some major outsourcing partnerships of that kind with players such as Commerzbank and Unicredit in Germany and Austria, as part of the major strategic transformation and improvement programs implemented by these large institutions. Beyond immediate cost optimizations, these outsourcing partnerships allow leading banks to reallocate resources and investments today mobilized in operational payment IT platforms on other strategic domains.

In their make-or-buy trade-off, there are also now numerous examples in the past years where large banks or banking communities have considered their payment factory as a non-core, shareable asset, which can be contributed into a larger specialized company like ours for cash or shares. By doing so, based on well-known high-value creative precedents, these banks have at the same time revealed significant capital gains, reinforced their balance sheet and CET1 ratios and, from an operational and business standpoint, fully benefited from our increased scale and reach, and from our technology and skill sets. As SEPA and the euro create a level playing field in more than 20 countries, this reflection is being conducted by more and more players. And this type of shared operations is easier in payments than in other sectors, given payment production systems have tended to standardize massively in order to secure international interoperability at scale.

By so doing, banks would emulate open-architecture models, and can reallocate capital and resources to reinforce their real sources of distinctiveness—customer interface, customer acquisition and knowledge, banking expertise and distribution—and pool remaining non-differentiating activities with specialized third parties. The consolidation which is happening in the securities services industry or in Assets Management is a very strong and relevant example of such strategies in other financial services domain.

The transformation of the merchant acquiring market is a great example of the previous observations. Today, for example, tier-one

international retailers increasingly globalize their sourcing of payment services, both in-store and on the internet, and therefore launch international tenders for payment at the continental level rather than per country. Only a few European banks can provide an answer to such complex tenders, which embed omni-commerce solutions, digital expertise, and cross-country multilingual operations. As a matter of fact, most European retail banks have an exclusive domestic focus and can't even answer such requests. This is where partnership between banks and acquiring specialists can increase their capability to serve their local clients across geographies beyond their home market. Through commercial acquiring alliances or JVs, banks can move away from the complexity of production and rely on a partner to help them keep their existing domestic relationships, bring their customers a wider reach, better services and technologies, and complement their own go-to-market.

The current crisis can only accelerate such a trend and remove remaining barriers. Outsourcing could be crafted as an M&A operation, designed to create value and free up capex while reaching more comprehensive and higher-quality services. Against this evolving backdrop, I believe that European anchoring is an asset and will remain so. Banks on our continent will be in search of a multinational partner—but one that ensures them also decision-makers proximity and offers guarantees in terms of security and a respect of European data-protection laws.

McKinsey on Payments: What gives you the greatest pride as CEO?

Gilles Grapinet: It is not the time for being proud, as it is still only the start of our young history, as a listed company since 2014. In addition, our recently announced merger with Ingenico, which is planned to close in Q3 this year, is a new major milestone still to be delivered in the years to come. This said, I believe we can recognize that Worldline

has developed over years a very strong, open, and inclusive company culture of permanent transformation, which is a very powerful asset for the successful execution of our well-known, long-term consolidation strategy.

Each time we do a large acquisition, we always pursue three parallel objectives of equal importance: cost synergies, organic-growth acceleration, and last but certainly not least: business transformation. Being bigger or leaner is never enough for us. We want each merger to be an opportunity to become genuinely better.

It means that our integration process is as much about technically integrating the target as about challenging our current ways of doing things. Each time, we re-challenge ourselves: How can we redesign a new target operating model where we take the best from both organizations? Are their go-to-market or sales methodologies more efficient than ours? Is their product management better than ours, et cetera.

And beyond organization, tools, and processes, it is the same open and inclusive approach for the staffing of managerial positions. Every manager, whether she or he comes from Worldline or from the acquired company, has an equal opportunity to be a candidate for the newly defined roles in the combined entity through a fair and competitive “best fit for the job” process. Each time, we want to somehow reinvent ourselves and become better.

I believe this is also illustrative of the broader company culture, where our employees truly feel like—and even designate themselves as—“Worldliners,” united around a motivational and integrative project—a project to create a new global leader that speaks to everyone and encourages them to invent a common future.

Having a strong, unifying, and powerful sense of purpose is a real strength for our organization!

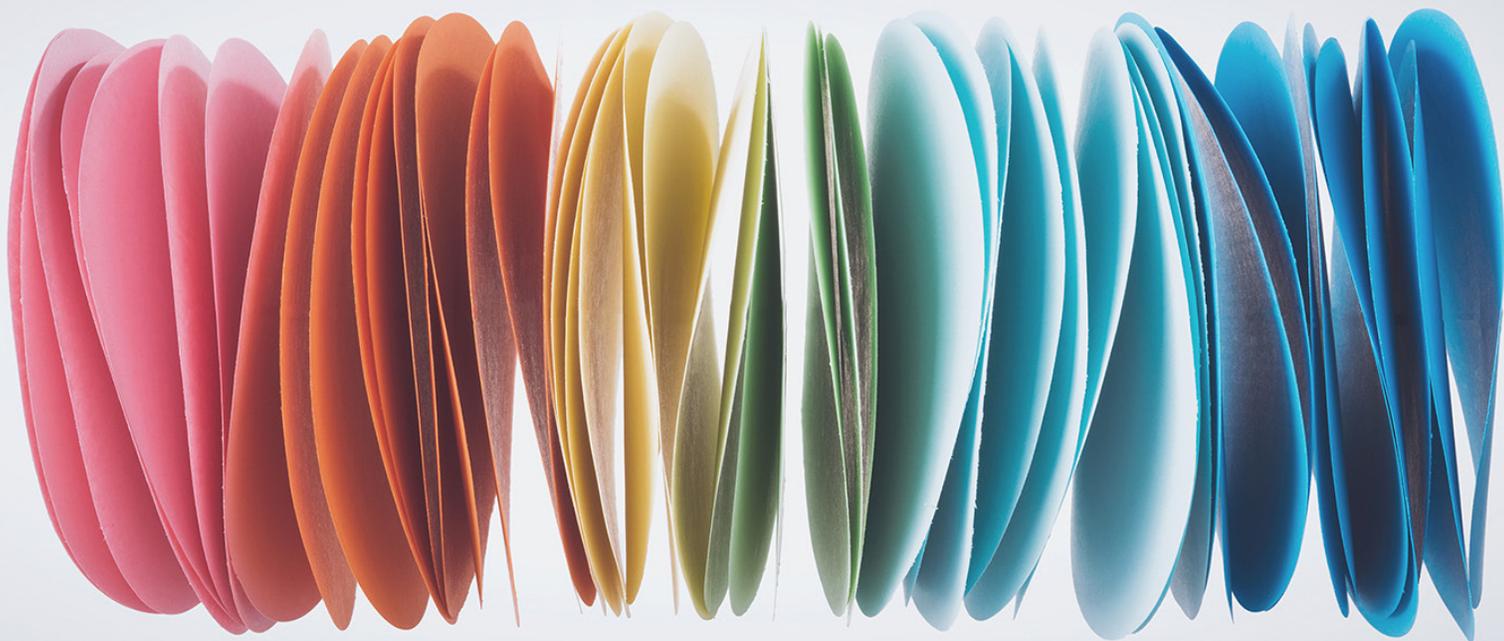
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Banking utilities: Succeeding amidst acceleration

The potential of banking utilities goes far beyond cost reduction: pooling resources, expertise, and capabilities to support the development of banks' offering to clients.

by Olivier Denecker, Vijay D'Silva, Beatrice Incardona, Albion Murativaux, and Elia Sasia



Banking utilities are significant value creators

for banks, whether they are designed to optimize a bank's cost base or provide a new solution unavailable on the market. Utilities tend to develop along a common lifecycle. Creation by a group of banks is the first stage, followed by core business development and establishment on the market, through to business expansion.

Once this third stage is achieved, we have seen an increasing number of utilities change their shareholding structure. Over the past decade, several banks have divested their utilities, moving towards a pure customer role and turning utilities into companies with a more commercial orientation.

We conducted an analysis of 12 real case studies from the payments utility sector and identified four main triggers for divestment: strategic aspiration, regulatory requirements, financial benefits, and governance conflicts. We have also observed banks selling their shares to two types of operator: financial operators (i.e., long-term investors, or the public as IPOs), or industrial players, retaining only partial (or even zero) control within the utility itself. Later in the article, we outline the key requirements for banking utilities to succeed as standalone entities.

Utilities, a value creator for the banking sector

Over recent years, the banking sector has faced continuous margin pressure and challenges from the market (such as competition from fintechs), increasing the need for cost reduction. As also discussed in McKinsey's Global Banking Annual Review 2019, the impact of traditional cost-cutting initiatives is shrinking, calling for effective alternatives. Shifting non-differentiating activities to industry utilities is a powerful way for banks to optimize their cost base, and has been used to create powerful industry-wide players in several core domains in financial services, be it in payments processing, securities handling, or other forms of network management.

Banking industry utilities are companies typically created by competitors who collaborate to form a

jointly owned provider that can supply important commoditized services. They act on behalf of a representative set of industry players, mostly using standardized, modular solutions via a single core technology and operations infrastructure. Industry utilities usually share a number of characteristics:

- Are established by competing firms to perform shared function(s) centrally
- Serve a broad membership base, typically defined along industry lines
- Customers are also "owners"
- Set rules and criteria for membership

Banking utilities form the middle point of a continuum of external sourcing options ranging from full outsourcing to external provider. Today, existing operators address approximately 20 to 25 percent of a bank's operating costs, but their potential extends to 50 to 60 percent of a bank's cost base if taking into account the full set of non-differentiating functions (Exhibit 1).

In the banking sector utilities are often presented as an effective cost-optimization solution. However, their potential goes far beyond cost reduction: utilities generate network effects, that is, multibank interoperability, and favor the pooling of resources, expertise, and capabilities to support the development of banks' offering to clients. This can be seen in the very first utilities, whose origins go back decades. Visa, for example, was born in the seventies from the transfer of BankAmericard from Bank of America to an association of banks with the aim of enhancing the growth of the credit card scheme (launched in 1958). Mastercard was created in the late sixties by an alliance of bank associations to provide an alternative to BankAmericard. SWIFT was founded in the 1970s by a group of roughly 240 banks from 15 different countries for an entirely different purpose: to develop a solution for cross-border payments, which were not available at that time.

Utilities are highly relevant in banking. However, they are organizations with complex governance

Exhibit 1

Utilities can address roughly between 50% and 60% of a banks cost base.

Banks cost base, %	Examples of activities	Share of functions covered by utilities
Total cost base	100	~20–25%
Sales channels	30 Retail and commercial branches; ATM management; contact center; digital channels	~2%
Marketing and product development	10 Retail and commercial marketing and product development	0%
Back-office operations	30 Security trading and servicing; domestic and cross-border payments; loans; mortgage processing; card issuing and acquisition; accounts; corporate collections; market operations	~10%
IT	20 Applications development and maintenance; data center; network; helpdesk	~10%
Support functions	10 Procurement; HR; property; legal; change management; document management; finance; risk	~0–2%

Source: McKinsey analysis

and competitive positioning. There is reasonable justification for their creation when the following conditions are in place:

- Collaboration among market competitors will generate a reduction in risk and/or liquidity needs
- The activity the utility would handle is not a source of competitive advantage
- Provision of the service is a natural monopoly because of the inherent economies of scale and skill involved in delivering the service
- There are no trusted alternative providers

Utilities development along a common lifecycle

The creation of industry utilities has gained speed more recently, fueled by the growing need for

cost optimization. The common utilities lifecycle is characterized by three main stages. The first is the setup of the utility, followed by developing and establishing the core business on the market. The third stage is expansion of the business into additional markets.

Utility setup

The creation of utilities is driven by banks willing to outsource non-differentiating activities for cost optimization or to leverage network effects to develop standardized solutions for the banking sector.

Utility creation is still an ongoing trend, highlighting the relevance and benefits generated for banks . Recent examples include TruSight, a third-party risk assessment company founded in 2017 by American Express, Bank of America, JPMorgan Chase, and Wells Fargo; and PensionsInfo, which offers back-office services in the field of pension funds and

insurance, founded by a group including all Danish banks, and planned to launch this year.

There are three main approaches to creating an industry utility:

- Greenfield: A group of banks creates a new utility from scratch, mostly leveraging internal sources (e.g., MasterCard, Bankgirot, SIA, P27, Nets, TruSight).
- Spinoff from banks: A group of banks founds a utility by transferring an existing platform or solution already in place in one or more banks to the new company, similar to the carve-out of a business unit (e.g., Visa, Nexi and Euroclear).
- Partnership with an industrial company: A technological provider collaborates with a group of banks to enhance an existing solution or develop a new platform (e.g., SIX, IHS KY3P).

Banks are a driving force in utilities setup across all three approaches observed. They represent not just the founders but also the owners and customers of utilities, underlining the utility's significant dependence on the banking system, particularly in the initial development stages.

Core business development

Once created, utilities focus on their core business, developing standard solutions for their banking customers. As utilities are created to respond to a specific common need, they usually specialize in a single activity.

The typical governance model in this phase is unchanged: usually, banks are owners and customers, and influence the development of products directly triggered by their specific needs.

Business expansion

A third stage sees utilities undergo a further expansion, broadening their portfolio offering or entering new geographies. Once this third stage is achieved, an increasing number of utilities reflect on a more standalone future. Indeed, this further step is usually supported by changes in ownership structure, inorganic growth (M&A), or both.

For instance, banks transferred the ownership of Nets to private equity firms to provide the utility with “a new owner with the expertise, commitment, and financial resources to develop the business in a rapidly changing payments industry” (Peter Lybecker, Chairman, 2014). Similarly, Nexi was transferred to private equity firms with goals including consolidating payments providers across Italy and launching M&A activity. A different model has been adopted by Worldline, which became a pan-European leader for payment services mostly through the acquisition of other utilities.

Accelerating change of ownership

When utilities achieve maturity, owners and managers start thinking about the next stage of evolution. In a scenario of increasing competition, market consolidation, and booming digitization, evolution and innovation are key requirements for utilities to succeed.

At this stage, several utilities have experienced a change in the role of banks, shifting from a user-owner role to an (almost) purely customer role, decreasing their presence within utilities' capital and leaving the floor to financial or industrial operators. Indeed, starting with First Data in 1992, then Mastercard in 2006, and accelerating over the past decade, banks have been divesting a substantial subset of their commonly owned utilities globally.

Divestments have been occurring for all types of operator, from national operators such as Nets (100 percent shares sold to a consortium of private equity firms by 186 bank shareholders), Banksys and Equens (sold by banks to the public payments company Worldline), or Prisma (majority stake of Argentina's payments processing system sold to Advent International), to global schemes such as Mastercard and Visa. The latter two were founded by banks and then listed on the public market, with financial institutions retaining minority shares. Other capital markets infrastructures such as the London Stock Exchange (LSE) and Euronext were demutualized and then IPOed. LSE for example, moved from a user-owned model to a new model based on transferable shares to foster a focus on

customer needs and flexibility to respond to market evolution.

Building on our analysis of 12 real cases from the utility payments sector, we have identified four main triggers for utility divestment by banks. We have also investigated who banks sell their shareholdings to and what role they retain after divestment.

Four main triggers for utility divestment

The acceleration of ownership changes suggests that business development, also defined as strategic aspiration, could be just one of the triggers for a shift in the role of banks in industry utilities. Other rationales relate to regulatory, financial, or governance issues:

- Strategic aspiration: The first trigger is the desire to boost utility growth and competitive positioning, commercializing products to non-shareholder customers and/or widening the reference market (in terms of products, customers or geographies), or to invest in new technologies and innovation as an answer to changing market demand. For example, Visa's IPO aimed also at freeing the utility from the constraints of a not-for-profit member-owned association, hence commercializing its network and becoming more competitive on the market; similarly, Nets transition to private equity owners aimed to provide the company with a clear strategic vision to foster its development.
- Regulatory requirements: Another important rationale is the advice or requirement to change the utility's capital structure to limit antitrust risks, such as collusion between banks or foreclosure of third-party providers. The UK Payment Systems Regulator, for instance, required a reduction in banks' shares in Vocalink to limit the risk of negative impact on competition and innovation.
- Financial benefit: The desire to capture substantial financial upside to improve profit margin, or to refund the utility's debt, are further reasons for divestment. The full divestment of RBS' shareholding in Euroclear to Intercontinental Exchange Holdings generated about €275 million for the leaving bank, for

example, reflecting its plans for asset reduction, while the acquisition of Nexi by private equity funds allowed the company to reduce its debt.

- Governance conflicts: Governance-related reasons might include the need to smooth complex decision-making processes ("hung board") or resolve misalignment of interests between banks with differing relevance within the utility, or between owning banks and the utility itself. Also, banking owners may want to shift to alternative providers on the market or smooth their relationship with the utility. For instance, 13 Euroclear's shareholders asked to divest from the utility and benefited from a buy-back program.

Two main types of operator on the buy side

Banks may decide to sell their shares (partially or totally) to different types of operators. The buy side is populated by financial operators attracted by a growing business or by industrial operators aiming at becoming a well-established leader on the market by broadening their offering and customer base as well as entering new countries. The first question is therefore whether to sell to a financial or an industrial operator. In the case of a financial operator, the choice is between private placement with long-term investors or an IPO:

- Financial operator: One approach is sale to a long-term investor. This involves private placement with a financial operator (e.g., private equity and investment funds) dedicated to the development of the company acquired and to the accrual of its market value. This is the case with Nexi's first change of ownership: banks sold 100 percent to a consortium with the aim of improving profitability and fostering growth through innovation and acquisitions. Another option is the public offer of company shares, transforming the company from private to public. An IPO also often comes as a second step after acquisition by long-term investors, who go public to raise capital to finance investment and foster growth.
- Industrial operator: This option involves merger with another utility. Acquirers are utilities seeking to broaden their product, customer, or

geographic coverage, or leverage technological synergies to attain a leading position in the payments industry.

Differing levels of divestment

By divesting, banks shift from ownership and a controlling role to (almost) purely a customer role, with decreasing presence within the utility's capital. However, opening up capital to new entities does not imply complete loss of control. Indeed, banks can opt for partial divestment as a way to retain control over the utility or to achieve a gradual and smoother exit:

- Full divestment: Full divestment involves transfer of 100 percent of shares to a new owner. Full divestment usually implies a loss of control over the utility, with original bank shareholders switching to a "pure customer" role. This is the case with Nets (2014), whose ownership was fully transferred from a membership of Nordics banks to a consortium of private equity firms. This was subsequent to a strategic review indicating that the user-owned model was no longer adequate to grant the necessary investments for further growth in the payments market.
- Partial divestment: Partial divestment entails transfer of a proportion of the shares to a new owner, retaining majority or minority shares. Partial divestment allows banks to retain a certain level of control over the utility. Euroclear is a case in point: despite divestment of all or part of their shares in Euroclear by a number of its owners, banks kept control over the clearing house. In other cases, partial divestment is part of the deal structure that requires original shareholders to retain some of their shares for a fixed period or simply allows for a smoother change.

A new business model: Four requirements to succeed as a standalone entity

Change of ownership brings about a shift in a utility's way of working, which can lead to several benefits if supported by organizational and managerial evolution.

As standalone market players, divested utilities tend to abandon "cost-plus" and "user-owned" logic. Indeed, banks become customers that purchase the utility's products and services at market prices, choosing among different alternatives. Divested utilities that were previously focused on minimizing costs for users move to a profit-making model with the goal of maximizing returns. Divested utilities can also explore opportunities to serve customers beyond their previous ownership, broadening their client base. Demutualization is therefore likely to have a positive impact on utilities' margins. Real cases from MasterCard, Visa, and Nets show that the utility's performance improves after divestment: they generally experience an acceleration in revenue growth and an improvement in EBITDA margin (an increase of 10 to 25 percentage points).

There are four main areas that independent utilities should focus on to capture the divestment upside and beat competition:

- Clear value proposition: Standalone utilities require a sharper unique selling point and value proposition to be compelling and competitive on the market, as customers will no longer be automatically fed through from owner banks.
- Strong change-management plan: A cultural and mindset change towards a more commercial orientation in the way a banking utility functions is also crucial to sustain a customer-focused value proposition. Cultural change must cascade down from top management and embrace the whole organization through the setting of clear and concrete targets and the development of strong performance management.
- Significant capability-building program to sustain innovation: Newly divested utilities need to strengthen their product development and business planning skills together with their ability to understand customer requirements, sustain innovation, and modernize their core offering. Banking utilities also need to develop strong pricing and commercial skills to be competitive on the market and capture a wide set of customers.

- Ambitious plan for further growth: Divested utilities should have an ambitious plan for evolution also supported by inorganic growth. M&A is a powerful way to accelerate capability buildup and tap into consolidation opportunities. After its IPO, Mastercard acquired around 15 companies in 10 years, integrating both new product offerings and capabilities.

The acceleration of payment utilities divestment from banks is being driven by a broad range of rationales. Our research suggests that changing the ownership structure of utilities is often a key

step for mature operators to achieve the next stage of evolution. It is only investment in innovation and strong product development capabilities that allow utilities to be competitive on the market. Financial and industrial operators seem better placed to drive this change thanks to the resources and technical skills they generally have access to, enabling them to flank or replace banks in the governance of utilities. Standalone utilities should focus on the four key areas described to sustain the transition towards a more commercial role and ensure they capture their full potential.

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European consumer finance: Moving to a next normal

For providers of consumer finance, there are crucial near-term moves and those that respond to likely longer-term shifts in customer behavior. Both are equally important.

by Alexandra Gatermann, Jamie McGregor, Gonçalo Niza, Oskar Skau, and Ursula Weigl



The COVID-19 pandemic is foremost a near-term crisis in global public health. The economic effects, however, will also be profound. We now see rising unemployment, corporate failures, asset depreciation (and volatility), and high uncertainty.

In the near-term, we expect that European consumer finance will see massive disruption. Consumer confidence and consumption has been falling sharply and is expected to stay low for an extended period, leading to decreasing demand (Exhibit 1).

Consumer spending is falling as consumers cut back on purchases that can be postponed (discretionary

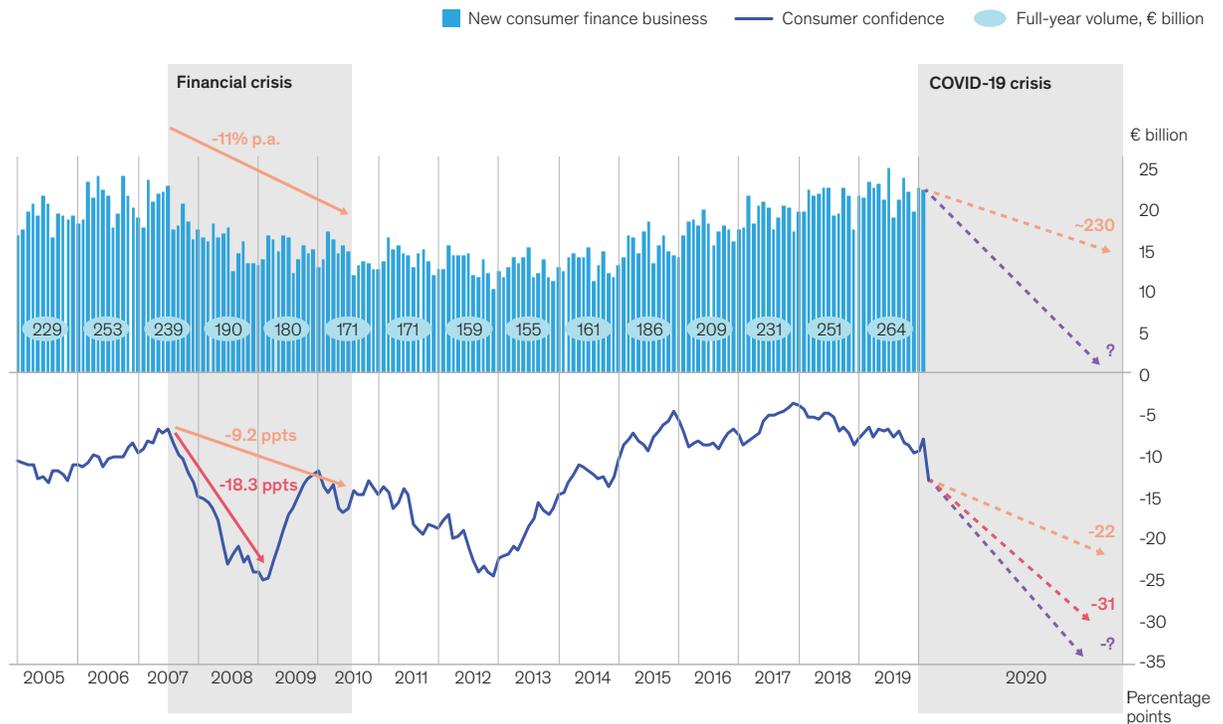
spending such as cars and appliances), and increasing precautionary saving due to the uncertainty of the trajectory of the health crisis. According with McKinsey's Europe Consumer Pulse Survey 2020, consumers expect to reduce spending in almost all retail categories, with the exception of groceries and home entertainment (Exhibit 2).

During their first-quarter 2020 results presentations, some European consumer finance entities reported new lending declines of between 40 and 70 percent year-on-year for the months of March and April. Point-of-sale financing, triggered by the online channel, appears to be declining less than credit cards and unsecured cash loans.

Exhibit 1

Consumer finance volumes and consumer confidence in Europe are both declining

Evolution of new lending for consumption purposes¹ and consumer confidence,² % and € billion



¹ New production of loans to private households for consumption, excluding revolving loans and overdrafts, convenience and extended credit card debt, consolidated sums for Germany, France, Spain and Italy.

² Arithmetic average of the balances (in percentage points) of the answers to the questions on business climate and on recent and expected evolution of demand. Balances are seasonally adjusted. Average of Germany, France, Spain and Italy. Balance; ie, difference between positive and negative answers (in percentage points of total answers).

Source: ECB; Eurostat

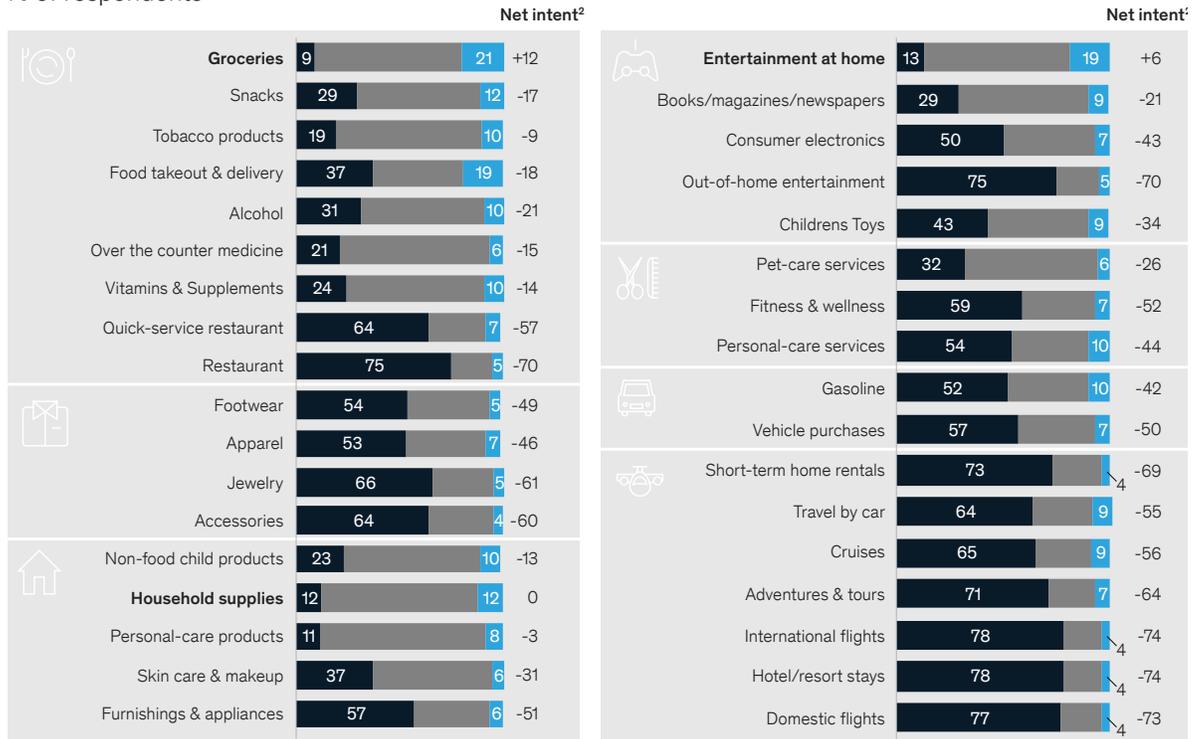
Exhibit 2

Consumers expect to decrease spending across categories, with the exception of groceries, home entertainment, and supplies.

Expected spending per category over the next two weeks compared to usual¹

% of respondents

■ Decrease ■ Stay the same ■ Increase



¹ Q: "Over the next two weeks, do you expect that you will spend more, about the same, or less money on these categories than usual?" Figures may not sum to 100% because of rounding.

² Net intent is calculated by subtracting the % of respondents stating they expect to decrease spending from the % of respondents stating they expect to increase spending.

Source: McKinsey & Company COVID-19 Europe Consumer Pulse Survey 4/30–5/03/2020, n = 5,631, across Italy, France, Germany, Spain, UK and Portugal. Sampled and weighted to match Europe's general population 18+ years.

Moreover, unemployment and short-term work will at least provisionally rise, leading to pressure on customers' ability to afford purchases and on their creditworthiness, while making risk-scoring more difficult. These trends could lead to reduced credit supply or a rise in non-performing loans and default rates, combined with higher pricing.

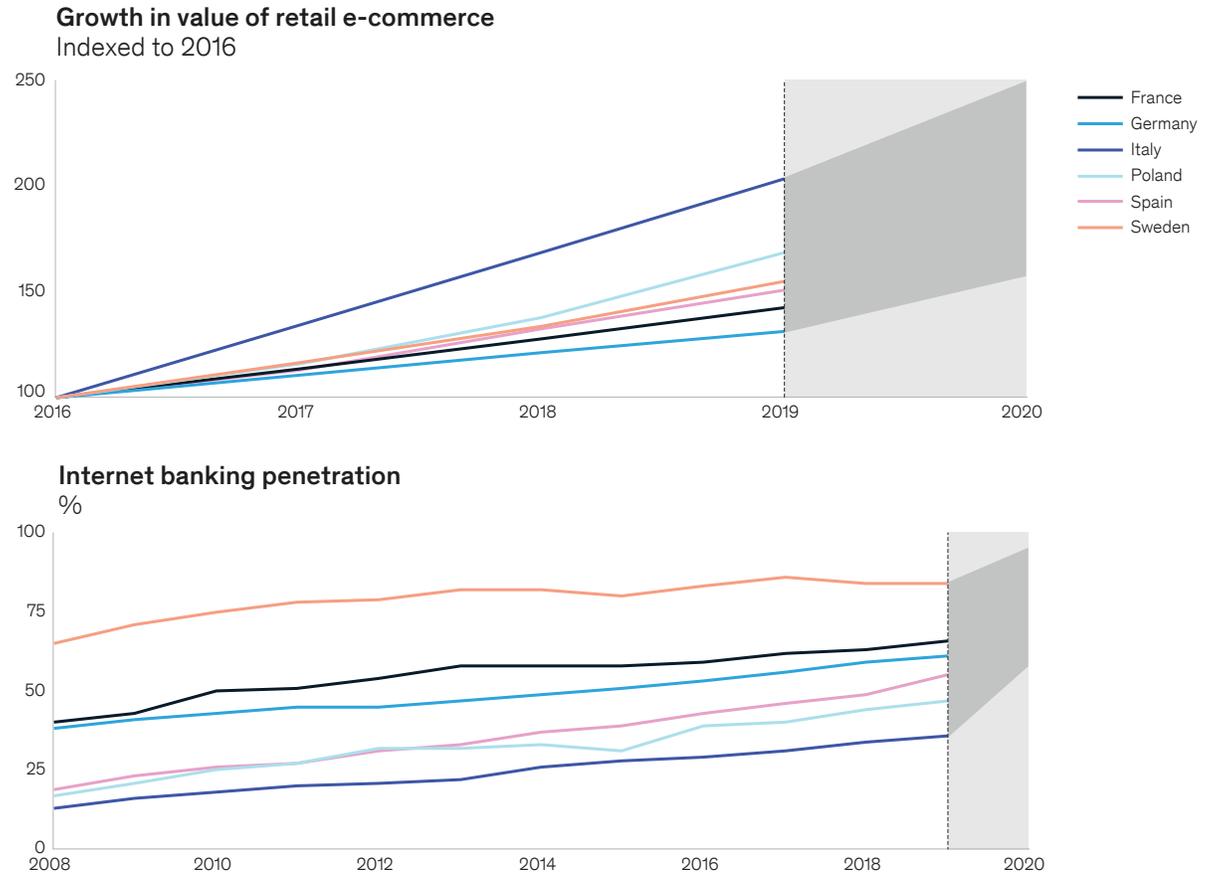
Beyond these various impacts, we expect lasting changes in consumer behavior. As customers turn towards remote and digital channels to avoid close physical proximity, we expect that many will continue their use of digital channels beyond the immediate crisis, and that retail e-commerce to grow significantly

(Exhibit 3). In China, online shopping has increased by 15 to 20 percentage points, and e-commerce in Italy has increased by 81 percent compared with the last week of February. We also expect internet banking penetration to see a steep increase in most European countries.

In contrast to the financial crisis, the reputation and trust in financial institutions are not at high risk. And if the industry successfully transforms itself to meet the needs of customers during a period of uncertainty, it could go a long way toward restoring the confidence of customers and society.

Exhibit 3

Growth in retail e-commerce and internet banking in Europe is expected to grow significantly.



¹ Note: 2021 potential is calculated by applying respective country CAGR to attain performance on current growth and applying a top performer. CAGR for TP growth Source: Eurostat; McKinsey analysis

What consumer finance entities can do now

To begin, consumer finance entities need to ensure they have solid risk management capabilities. Adjusted credit underwriting guidelines combined with solid collections management are key to ensure a firm credit portfolio.

In back-book management, segmenting customers is crucial. Clearly identifying those “without financial problems,” those “(potentially) in need of support,” and those “in trouble.” For those in need of support, adjusting loan conditions will protect customers from imminent insolvency and prevent

a rise in non-performing loans. For customers in trouble, consumer finance firms should take a caring approach, with measures such as the extension of loan maturities, or waiving fees on overdue loans (some European governments have imposed these actions). This is a crisis that is not self-inflicted. Consumer finance entities need to introduce “smart collections” to limit the damage.

Consumer finance entities can focus on a series of frontiers in order to increase their resilience and ensure readiness for the next cycle, when consumer default rates are likely to increase. They must be ready to use segmentation for targeted campaigns,

adjust collection measures and proactively offer restructuring options, or installment breaks, before they become necessary. They also need to ensure high liquidity levels and capital ratios, should credit risk inflows start rising.

Operational excellence will require careful scenarios planning. A range of scenarios on consumer demand should be used to stress-test the top-line structures and develop cost mitigation strategies (e.g., operating expense programs). Likewise, consumer finance entities should seize this momentum to streamline their credit process, shifting from two- to five-day processes to instant decisions, for both existing and new customers, leveraging internal and external data. Credit processes should be designed to maintain stable levels of cost-to-income and cost-to-credit ratios.

Cross-selling of other financial products, like insurance protection, can help lenders spread risk. Likewise, debt consolidation products could also be an attractive and helpful product for customers struggling with debt.

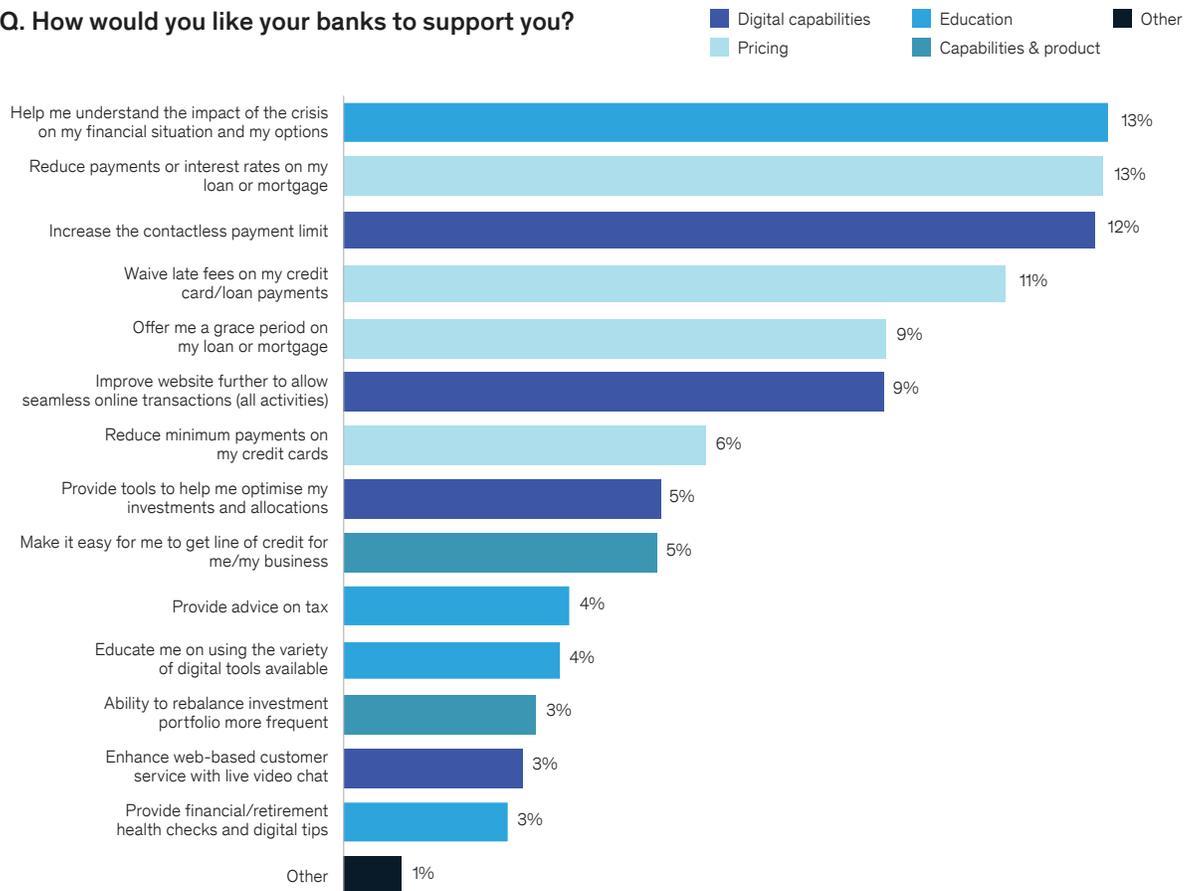
How to adapt to the “next normal”

The COVID-19 crisis may accelerate shifts in consumer finance customer behavior—in areas such as channel usage or financial needs. Consumer finance providers will need to address this shift in a number of ways, including speeding the development digital and other remote channels and increasing customer education on the use of these new channels; developing new products to meet new needs; and offering segmented customer relationship management. Banking customer needs can be grouped into four different areas—each of which require attention (Exhibit 4).

Exhibit 4

European banking customers’ needs are focused primarily in digital capabilities, pricing, and education.

Q. How would you like your banks to support you?



¹ Average for France, Germany, Italy, Spain, Sweden, and the UK. Source: McKinsey Financial Insights Pulse Survey

Notably, we expect migration to digital and remote channels to pick up momentum not only in markets where digital penetration still has plenty of room to grow (e.g., Southern Europe, Germany) but also in those that are more digitally mature (e.g., Sweden). For financial services providers, efficient and smooth digital distribution engine will be an element in the battle to retain and gain market share. As an example, we expect the digital channel to grow as the conduit for the sale of credit cards and personal loans by between nine and almost 40 percentage points compared to the previous year, depending on the region (Exhibit 5).

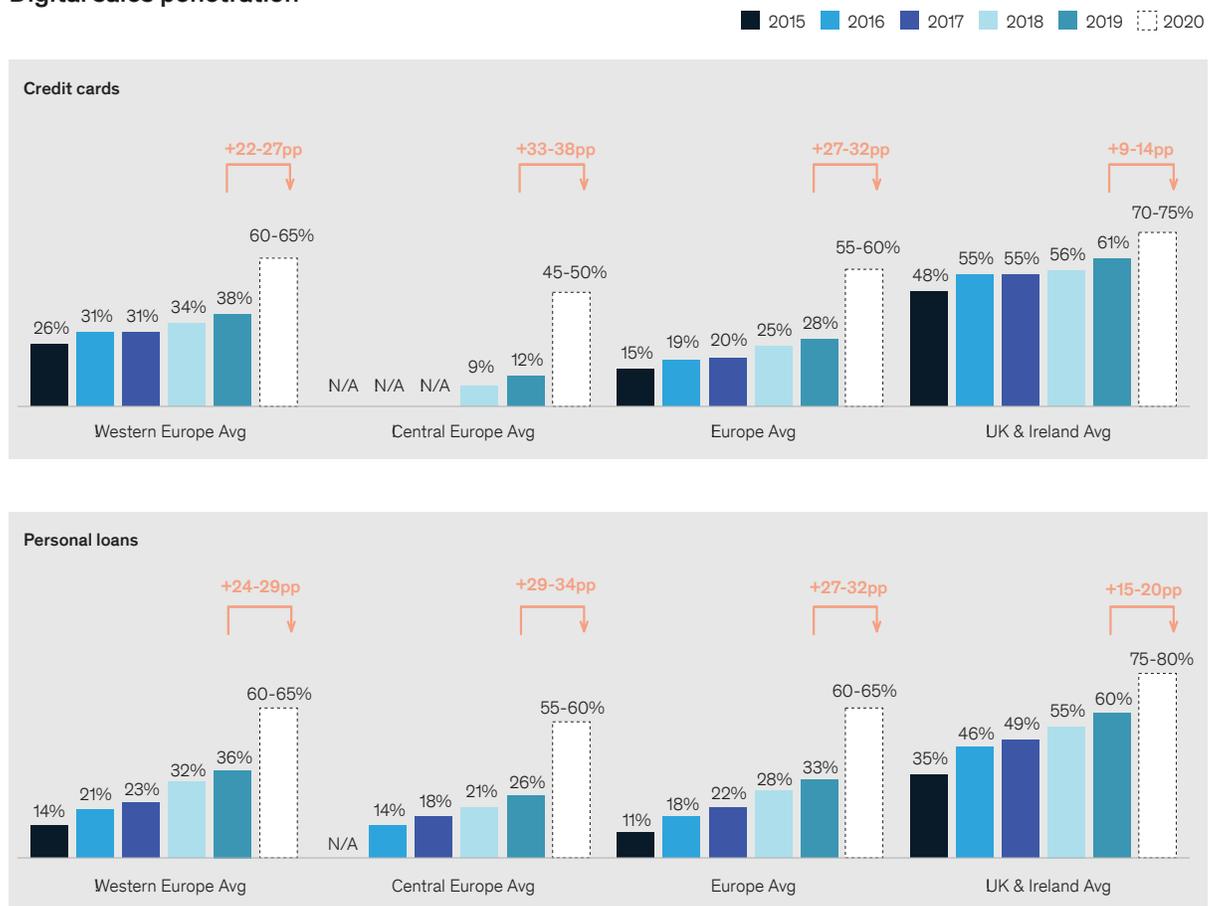
Some consumer finance entities will find hard to create end-to-end instant digital processes at such short notice, due to a lack of digital investment in the past. For these companies, we expect contact centers to gain relevance.

Customer education is another important element, not just for boosting short-term usage of digital channels now, but for helping to make digital part of the new normal. Importantly, consumer finance entities can go beyond, helping their customers get the most out of digital channels—they can also educate their customers on other relevant

Exhibit 5

We expected digital sales of credit cards and personal loans to grow significantly across Europe.

Digital sales penetration



Source: Finalta by McKinsey; McKinsey analysis

implications such as fraud prevention or financial liquidity advisory in the context of COVID-19.

Customers will also need new products that meet their evolving needs. Contactless credit cards, for example, will likely gain prevalence, given that people may be wary of physical proximity to others for some time, as they are also convenient and European regulators may continue to incentivize their use. And given the likely growth of e-commerce, consumer finance entities might

also consider forging partnerships with e-commerce retailers.

For Europe's consumer finance segment, there are crucial near-term moves—such as adjusting credit decision rules and responding to government initiatives—and those that prepare for a post-COVID-19 environment, and longer-term shifts in customer behavior. Both are important as the world looks toward the next normal.

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How the COVID-19 crisis may impact electronic payments in Africa

Beyond securing the health and safety of Africa's people, governments and their partners must find a way back to growth and restore businesses and incomes. Africa's payments industry has a key role.

*by Francois Jurd de Girancourt, Mayowa Kuyoro, Nii Amaah Ofosu-Amaah,
Edem Seshie, and Frederick Twum*



The COVID-19 pandemic is a global health crisis and a global humanitarian blight. In Africa, thousands of lives have been lost, and our initial estimates suggest that one-third of the working population could either lose their jobs or have their salary reduced as lockdowns, curfews, border closures, and shutdowns continue. A level of disruption is likely to continue until a vaccine is developed or a cure is found.

The crisis is also changing the way people live and work, consume, and pay their bills. While consumer spending is down around the world, how and where consumers choose to spend their money has shifted, with people gravitating toward digital channels, products, and services across categories.¹ At the same time, there has been a surge towards digital payments and away from cash—which the World Health Organization flagged as a possible conduit for the spread of the coronavirus.²

In Africa, this means not just safer, cashless payments to facilitate social distancing during the pandemic—but in the longer-term a shift towards financial inclusion that could help get economies back on track faster after the crisis.

In this article we analyze how COVID-19 is reshaping the market outlook for payments in Africa and how African banks and non-bank players are responding. Many are adapting their operating models and products to help lower barriers to mobile banking and payments and bring more people into the cashless economy. We also highlight additional opportunities for governments, development organizations, and the private sector to work together to speed up digital adoption to support public health in the short term and strengthen the African payments landscape for long-term sustainability.

Beyond the immediate concerns of securing the health and safety of Africa's citizens, a key focus for governments and their partners now is to find a way back to growth and restore businesses and incomes in the wake of the crisis. The African payments industry has a key role to play in this effort.

COVID-19's impact on African economies will be significant

The first case of coronavirus was confirmed in Africa on February 14, 2020, and since then the virus has spread to over 53 countries in Africa with approximately 54,000 confirmed cases as of May 8. The effects of this world-changing crisis on the continent are significant. In addition to the human cost, a slowdown in overall economic growth is already being felt. To understand and quantify the potential impact that the pandemic will have on the African economy and payments industry, we have modeled multiple scenarios—each depicting varying degrees of severity—and will be investigating the two most likely scenarios based on a survey of more than 2000+ business leaders (Exhibit 1). It is important to note that these scenarios are not the same as base-case or worst-case scenarios, and that as the virus continues and the effectiveness of public health measures evolve, the likelihood of these scenarios could also evolve. From this analysis, our modelled scenarios show a potential drop of between four and nine percentage points of Africa's 2020 baseline GDP growth to between 0.2 and -5.2 percent from the original 2020 baseline of 3.9 percent GDP growth. The implication is that Africa's economies could experience a loss of between \$90 billion and \$200 billion of GDP growth, with the impacts on countries varying according to each scenario—for example, in the worst-case scenarios, GDP growth could drop three, three, and six percentage points in South Africa, Kenya, and Nigeria respectively.³

The scenarios show the contraction in Africa's economy being driven by the supply-chain disruptions, border closures, and lockdown protocols instituted to stem the outbreak, which are putting pressure on foreign-currency reserves because of a decline in remittances, tourism, and global oil demand, and on small and medium-size enterprises (SMEs) and informal sectors (the backbone of the African economy). Many governments are using different kinds of stimulus packages to support vulnerable populations

1 <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/a-global-view-of-how-consumer-behavior-is-changing-amid-covid-19>

2 <https://www.telegraph.co.uk/news/2020/03/02/exclusive-dirty-banknotes-may-spreading-coronavirus-world-health/>

3 South Africa: decline from 1% to -2%; Kenya: decline from 5% to 2%; Nigeria: decline from 3% to -3%.

and businesses and to counter some of the worst effects of COVID-19 lockdowns on their economies.

At the same time, the pandemic is driving significant changes in consumer behavior that are likely to persist long after COVID-19. Online transactions are growing as many businesses seeking continuity during the lockdown work to increase their presence online and boost sales through digital channels.⁴As the virus proliferates across the continent, lockdowns are mandated,

banks are forced to temporarily close their branches, and hygienic interaction is espoused, the transition from cash to digital or cashless transactions such as contactless payments, card, and wallet-based forms of payment has accelerated.

The changing market outlook could accelerate growth in Africa’s payments industry

The African electronics payments industry generated approximately \$19.3 billion in revenues in 2019, of which approximately \$10 billion was

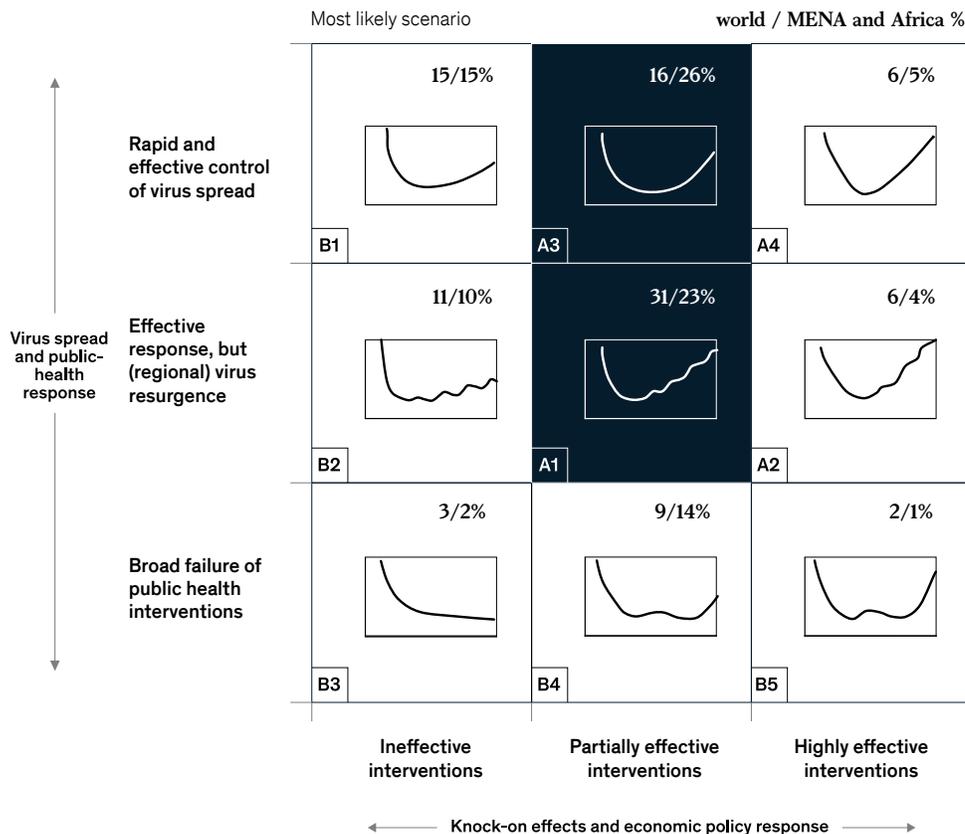
4 <https://www.businesslive.co.za/redzone/news-insights/2020-04-08-the-digital-trends-brands-should-activate-during-the-covid-19-pandemic/>

5 McKinsey Global Payments Analysis.

Exhibit 1

Executive expectations about the shape of coronavirus crisis in the world, MENA and Africa

Survey of 2,079 global executives (199 in MENA and Africa); % of respondents



Source: "In the tunnel: Executive expectations about the shape of the coronavirus crisis"; available online at <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/in-the-tunnel-executive-expectations-about-the-shape-of-the-coronavirus-crisis>; McKinsey survey of global executives, April 2–April 10, 2020, N=2,079

from domestic electronic payments (excluding remittances and cross-border payments). As we define it, electronic payments includes card transactions (debit, credit, and ATM withdrawals), e-commerce payments, point-of-sale (POS) transactions, digital-banking payments and transfers, mobile money, as well as remittances and cross-border transactions.⁵ Players in the payment market are primarily payment service providers, payment gateways, and card companies; however, banks are integral to the payment industry.

The payments market is intrinsically linked to the performance of the underlying economy and economic structures. The main drivers for revenue and number and value of transactions in the electronics payments industry are: internet and mobile-phone penetration; the prevalence of account ownership—either at a traditional bank or mobile money; private consumption expenditure; and the degree to which the population is urbanized.

These drivers link the payment industry to broader economic activity. Thus, there is an expectation that the impact of COVID-19 on the payments sector will be lower revenues in the short term, in line with our expectations of GDP contraction. We expect the pandemic to have a dual impact on payments: the pandemic could significantly accelerate the pace of migration of business and consumers to alternative payments methods, setting up the industry for increased growth coming out of the crisis; in the immediate term. However, the significant drop in overall economic activity, job losses, and disruption to household incomes and businesses, points to an overall contraction in payments revenues. We now look closely at each of the main factors:

1. A reduction in economic activity across all major industries (all of which are intrinsically linked to the payments industry) as result of lockdowns (Exhibit 2). The level of impact may be determined by the severity of the lockdown

and the transition to e-commerce, especially for services deemed to be essential. The economic impact across Africa is exacerbated by the fact that a number of African countries are commodity exporters; with commodity markets declining along with lockdowns in a large number of countries including Egypt, Nigeria, South Africa, and Kenya. Retail transactions are expected to decline accordingly.

2. A probable decline in cross-border transactions and remittances with the closure of borders of countries like Nigeria, South Africa, and Ghana disrupting travel and tourism and supply chains, and necessitating consumption of local goods. According to the World Bank, remittance flows to sub-Saharan Africa are expected to fall by 23.1 percent in 2020. Most African countries are also facing a serious shortfall in hard currency, which is putting pressure on local African currencies and further depressing cross-border interactions.

3. A potential migration from cash transactions to cashless or digital transactions influenced by physical distancing.⁶ Although the initial reflex at the beginning of the crisis was to withdraw cash⁷, the McKinsey Banking Consumer Sentiment Survey finds that customers want to execute more electronic payments during the crisis. Kenya and Ghana may have further increases in mobile money, mobile wallet, and bank-to-wallet transactions. In Nigeria, Egypt, and South Africa, an increase in account-to-account transfer and e-commerce sales is expected as major cities have been on lockdown; though a decrease in card transactions (ATM and POS) is expected. The Egyptian government raised the limit for electronic payments to encourage the exclusive use of digital payments.⁸ One online payment platform in South Africa noted a 35 to 40 percent increase in transactions as

⁶ World Economic Forum <https://www.weforum.org/agenda/2020/04/coronavirus-set-to-spur-mobile-money-growth-in-w-africa> (accessed May 5th 2020)

⁷ Reuters <https://www.reuters.com/article/us-health-coronavirus-egypt-banks/egypts-banks-told-to-limit-withdrawals-and-deposits-idUSKBN21G0UI> (accessed May 18th 2020)

⁸ Egyptian State Information Service website <https://www.sis.gov.eg/Story/144167?lang=en-us> (accessed May 5th 2020)

Exhibit 2

Ripple effects throughout the payment industry are likely

	Demand	Supply chain	Key drivers of disruption	Disruption level		
				Low	Medium	High
Advanced industry and automotive			Acute decline in global demand; existing vulnerabilities and trade tensions amplified; supply chain and production disrupted			
Electronics and consumer durables			Manufacturers facing up to 80% labor shortages; delivery bottlenecks in complex global supply chains			
Hospitality and tourism			Tourism at a standstill as lockdowns and closure of borders across the continent have been implemented			
Luxury retail			Labor-intensive segments of the apparel supply chain have also been affected by worldwide lockdowns, resulting in a shortage in retail stocks across the continent			
Airlines			Travel restrictions, border closures and social distancing have led to flight cancellations. Ticket refunds by major African airlines in February – March 2020 are up by 75% compared to February – March 2019			
Events			Sporting, cultural, and political events canceled or postponed			
Hotels, restaurants, and catering			Online food-delivery spike; dine-in restaurants and cafés adversely affected by lockdowns			
E-commerce (non-travel retail)			Cross-border e-commerce stalled; surge in online shopping			

Impact on payments

- Maximum payment-volume decline in airlines; hospitality and tourism; electronics and consumer durables; luxury retail; hotels, restaurants, and catering; and events
- Refund transactions expected to increase in airlines and in hospitality and tourism
- Growth in non-travel e-commerce, remote ordering, and low-value contactless payments
- Supply-side uncertainty, factory closures, and trade barriers affect B2B cross-border flows

well as an increase in the number of retailers requesting online payment systems to manage the increased demand from customers.⁹

4. An increase in the use of digital-payment platforms by African governments to disseminate stimulus funds to assuage the economic impact of the COVID-19 crisis while deepening financial inclusion outside the traditional bank establishment. For example, the government in Togo launched Novissi, a cash transfer program that disburses social welfare payments through mobile channels.¹⁰

5. A decrease in the fees for payment services driven by payments players and governments suppressing fees due to the COVID-19 crisis, which could drive up volumes of transactions and possibly increase the absolute size of the African payments market. In Nigeria, PAGA waived fees for merchants, allowing merchants to accept payments with no additional costs to customers.

The combined impact of these five factors will be determined by the severity of the COVID-19 crisis, both globally and on the continent, and by the

9 IT Web <https://www.itweb.co.za/content/j5alrMQaya2MpYQk> (accessed May 4th 2020)

10 Novissi Website <https://novissi.gouv.tg/> (accessed May 4th 2020)

effectiveness of public health measures to contain the pandemic.

The scenarios presented here are not projections of the future, but can help inform decision-makers as they navigate the crisis. Our preliminary analysis finds that payments revenue in Africa could decline by 10 to 13 percent in 2020, relative to the 2019 baseline, with a potential revenue loss of between \$1.8 billion and \$2.6 billion.

In the most optimistic scenario (A3 “virus contained”), we assume that the outbreak is contained both globally and in Africa; Asia experiences a continued recovery from the pandemic, and a gradual economic restart. In Africa, most countries experience isolated cases or small cluster outbreaks—but, with carefully managed restrictions and a strong response, no widespread outbreak. Under this scenario, Africa-wide GDP would be nearly flat at 0.2 percent of growth, which we find would result in a decline in electronic payments revenues of approximately \$1.84 billion, approximately 10 percent lower than the 2019 baseline of \$19.3 billion. In the worst case scenario (A1 “muted recovery”), we assume a resurgent global outbreak, and widespread outbreak in Africa, while Europe and the United States continue to face significant outbreaks, and China and East Asian countries face a surge of re-infection. In this scenario, there are significant outbreaks in most major African economies, leading to a serious economic downturn.

Under this scenario, we find that Africa could experience its first recession in more than 20 years and that Africa-wide GDP could contract by 5.2 percent in 2020, which could result in electronic payments revenues declining by approximately 13 to 15 percent, translating to a potential loss of \$2.6 billion.

The drop would likely to be driven by a contraction in household consumption of as much as 40 percent, job losses and disruptions that could impact nearly a third (150 million) of the 450 million jobs in Africa, including 100 million of the

300 million informal sector jobs. This contraction, however, could be slightly tempered by an increase in the number of digital transactions caused by restrictions on movement and migration to cashless transactions for hygiene purposes. Remittances and cross-border payments would see greater declines (11 to 19 percent) than domestic payments (7 to 12 percent), as supply chains and global travel and tourism are disrupted, while domestic interventions may have little effect on remittances.

Innovation in payments should be one component of the industry’s response to the crisis

In response to the COVID-19 crisis and government measures to contain the spread of the virus (lockdowns, for example), banking and non-banking firms across the global payments industry are adapting their operating model and offerings to ensure business continuity and minimize customer disruption. There are four main actions we have observed (Exhibit 3):

Promoting awareness of digital payments

Companies are making use of a range of communication platforms including websites, social media, traditional media, and text messaging, to educate customers about digital payments. For SMEs, Paystack provided information along with mechanisms and tools for businesses to quickly transition online.¹¹ Several payments companies and banks across Africa have reduced or waived transaction fees and are raising awareness about the different options for digital payments. In one example, Ghana’s central bank announced that all mobile phone subscribers could open a mobile wallet and transfer up to 1,000 cedis (\$170) daily without providing additional documentation.¹² Similar education campaigns are taking place across the world—banks DBS and Standard Chartered in Singapore, for example, are sharing the vast array of digital options available with their customers.^{13 14}

¹¹ <https://paystack.com/blog/operations/take-nigeria-ghana-business-online>

¹² <https://www.weforum.org/agenda/2020/04/coronavirus-set-to-spur-mobile-money-growth-in-w-africa/>

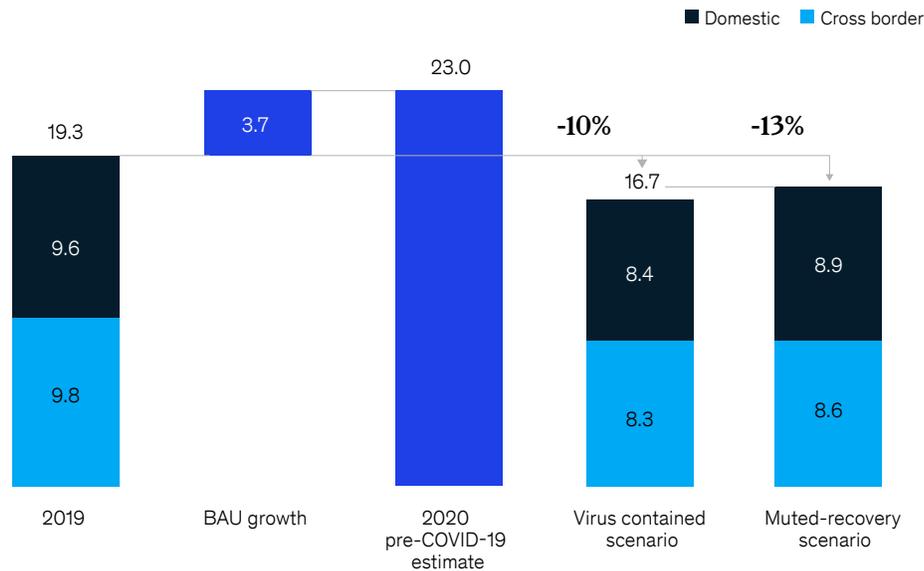
¹³ <https://ibsintelligence.com/ibs-journal/ibs-news/dbs-rolls-out-a-suite-of-digital-relief-package-amid-covid-19/>

¹⁴ <https://av.sc.com/sg/content/docs/sg-standard-chartered-introduces-additional-relief-measures.pdf>

Exhibit 3

Slowdown in economic growth expected to shave \$1.8-2.6bn off revenue from electronic payments, a decline in excess of 10% from 2019 levels

Africa electronic payment revenues
USD Billions



Source: McKinsey Global Payments Maps, Worldometer, McKinsey Global Institute and Oxford economics macroeconomic scenario modeling

Providing relief to customers during the crisis

Across the continent, governments, banks, and non-bank payment companies are taking measures to encourage digital payments and ultimately reduce the burden of the COVID-19 crisis on private individuals and SMEs while promoting safe practices to minimize the spread of the virus. In Egypt, the central bank instructed other banks to cancel fees on transfers and e-payments. In Kenya, banks have waived numerous fees including fees on digital transactions, intrabank transfer fees, bank-to-wallet fees, and transaction fees for payments for utilities, fuel, and shopping. These relief measures are also seen outside the continent. The Bank of Ireland and AIB in Ireland, for example, waived contactless card fees to minimize the use of cash.¹⁵

Partnering with other industries

To expand the use of digital payments and minimize non-essential movement, payment organizations are forming partnerships with other industries to further enable digital payments. For example, Safaricom in Kenya has partnered with the National Social Security Fund to enable customers to make rent and service-charge payments through their M-Pesa accounts.¹⁶ Safaricom is also partnering with public-sector transport players to accept payments through M-Pesa accounts and has been deployed to more than 300 City Star Shuttle buses in Nairobi.¹⁷

Launching new products

To increase the options for payments and provide support during this disruptive time, organizations

¹⁵ Bank of Ireland website <https://www.bankofireland.com/coronavirus-update/#panel6> (accessed May 4th 2020); Electronic Payments International website, <https://www.verdict.co.uk/electronic-payments-international/news/covid-19-irish-bank-aib-contactless-transaction-fee/> (accessed May 4th 2020)

¹⁶ <https://www.nssf.or.ke/nssf-partners-with-safaricom-on-tenant-purchase-scheme-t-p-s-payments>

¹⁷ <https://techtrendske.co.ke/coronavirus-you-can-now-pay-your-matatu-fares-through-m-pesa/>

are expanding their offerings through innovation. For example, Access Bank in Nigeria introduced the Dual Transaction Service (DTS), a debit card service that also provides access to credit¹⁸ Other payments companies across the world are also taking the opportunity to rapidly develop digital functionalities to help ensure continuity of services. The UK's PaymentSense launched a service called BiteBack, which enables restaurants to set up websites for takeaway service amidst physical-distancing protocols.¹⁹

Decisive action from governments and the payments industry can help restore business activity more swiftly

Beyond managing the ongoing health crisis, getting the economy up and running again as we emerge from lockdowns remains a critical focus. Payment operators have an important role to play in helping business activity resume in the short term while they realign their efforts to ensure an

accelerated return to full activity. Essentially, this means supporting merchants and end-consumers. In addition, support from governments, as well as from development partners, will be critical to ensuring that efforts by payment operators have the desired impact.

Actions for governments to consider

Governments across Africa are promoting the use of digital payments through awareness campaigns and other initiatives. Actions seen across the continent that could be replicated include:

- **Collaborate with banks and non-bank payments players to restructure transaction fees and transaction limits to encourage digital payments.** Steps along these lines have recently been taken by the Kenyan, Ghanaian, and Egyptian governments.
- **Promote easier access to digital-payment tools.** For example, the Ghanaian government eased account-opening regulations; similar

¹⁸ Access Bank website <https://www.accessbankplc.com/Ways-To-Bank/Cards/Dual-Transaction-Service.aspx> (accessed May 4th 2020)

¹⁹ Paymentsense website <https://www.paymentsense.com/uk/biteback/> (accessed May 4th 2020)

Exhibit 4

Four ways the payment industry is responding

<ul style="list-style-type: none"> ● Deferring loan repayments and fees ● Reducing or removing fees ● Increasing daily transaction limits ● Offering cash-back rewards for using digital channels ● Introducing incentives to shift to online services (e.g. cash back) 	<p>Providing relief to customers</p> <p>Take measures to reduce the burden of the crisis on customers</p> 	<p>Promoting awareness</p> <p>Use a range of communication platforms to educate customers</p> 	<ul style="list-style-type: none"> ● Creating resources and support channels (FAQs, forums, hotlines, etc.) ● Proactively communicating with customers through emails, social media and websites
<ul style="list-style-type: none"> ● Launching new contactless payment methods ● Offering additional services, such as insurance, on the platform ● Increasing available financing through innovative channels 	<p>New products & innovation</p> <p>Expand product offerings through innovation</p> 	<p>Strategic partnerships</p> <p>Form partnerships, public and private, to expand the scope of digital payments</p> 	<ul style="list-style-type: none"> ● Forming partnerships to enable customers to use mobile money to pay for rent, service charges, bills and public transportation

measures have been taken in Nigeria where Bank Verification Numbers are used for the opening of digital accounts.

- **Explore the use of digital payments for payment of welfare grants.** In Nigeria, for example, Conditional Cash Transfers could be paid to recipients digitally across the country.
- **Consider effectiveness of existing capital and currency controls.** Morocco's broadening of the dirham's fluctuation band to approximately 5 percent from approximately 2.5 percent is a measure that could be explored by other African fixed foreign-exchange regimes.

Actions for digital-payments players to consider

Payments players could support businesses and consumers as they deal with lockdowns and reduced economic activities, and the subsequent threats to their business continuity. Specific activities could include:

- **Expand the customer base by offering sign-on incentives—such as fee waivers and discounts—to SMEs and consumers.** In Asia, companies such as Alipay (China) and DBS (Singapore) are offering incentives such as cash rewards to merchants, free set-up, and marketing assistance to encourage more customers to use their digital-payment platforms.^{20,21}
- **Provide resources to SMEs to support their transition to e-commerce and promote interoperability between social media apps and digital-payment platforms.** For example, CaixaBank (Spain) is running a social commerce initiative that allows retailers to manage online purchases directly from their social media accounts and ensures interoperability between different payment systems. CaixaBank also launched PayGold, which lets retailers receive payments by email or text message.²²
- **Partner with technology companies to provide payment-technology infrastructure to the end user.** This could include repurposing ATMs to enable digital banking and payments, partnering

with cellphone companies to make digital-banking-enabled phones, or partnering with fintechs to offer innovative merchant solutions.

- **Provide seamless, round-the-clock customer service.** Customer experience is likely to be an increasingly important source of competitive distinction for players in the space.
- **Explore further ways to be socially responsible and support customers —e.g. providing platforms for government payouts or providing free marketing services to struggling SMEs.** In the US, Chime tailored its fee-free overdraft service, SpotMe, to provide customers with immediate access to the \$1,200 provided by the US government's \$2 trillion stimulus package. This provides customers with access to these funds two to three weeks sooner than the estimated government payment date.²³

Actions for development organizations to consider

Development partners could support the move to digital payments in an effort to minimize the spread of COVID-19 by leveraging existing resources and networks, and building on their efforts to improve financial inclusion on the continent. Examples of activities development partners could carry include:

- **Leverage relationships and branding with vulnerable populations to promote digital payments,** as a means of minimizing contact through distancing, by promoting the benefits of digital payments in their information, education, and communication campaigns.
- **Use content-specific expertise to develop bespoke solutions that can increase digital payment usage.** For example, the United Nations Capital Development Fund, in partnership with the Better than Cash Alliance,²⁴ is using its experience in digitizing payments during the Ebola crisis to support governments and the private sector in accelerating digital payments in the COVID-19 response.

²⁰ <https://www.finextra.com/newsarticle/35602/alipay-offers-boost-to-covid-19-hit-wuhan-merchants>

²¹ <https://www.dbs.com.sg/sme/covid-19-relief-measures.page>

²² <https://www.caixabank.es/empresa/negocios/socialcommerce.html>

²³ <https://www.chime.com/blog/getting-americans-faster-access-to-covid-19-stimulus-payments/>

²⁴ <https://www.uncdf.org/article/5452/covid-19>

Towards the next normal

The extent and duration of the economic impact of COVID-19 is still largely uncertain. What does seem certain is that life and business as we know it has changed, and will continue to change.

Consumers and merchants, banks and payment operators, as well as governments, are being pushed towards a digital focus that will likely endure beyond the immediate crisis.

In recent years, electronic payments has been one of the fastest areas of growth in financial services. The crisis may lead to an acceleration of this growth: the technology exists, and consumer and merchant understanding and adoption has significantly increased. Financial institutions need to respond to the demand.

It is likely, for example, that the increase in online shopping will persist after the crisis, especially for retailers that make significant investments to retool their business model, and if banks and payment operators continue to build omnichannel payment solutions while building infrastructure and ecosystems to operate actively in the new paradigm.

Demand for digital tools and technology that enable merchants and consumers to connect is also likely to continue to grow. The current crisis is revealing the fact that not everyone has the same level of access to new technologies and digital tools. Moving away from cash affects unbanked citizens disproportionately. Merchants without

access to digital payments are losing out as remote buying increases. People without accounts and online wallets are having to queue to receive welfare payments, putting them at greater risk of exposure to the virus.

For the countries and payments firms that manage to respond effectively, the implications will be significant. For example, businesses that provide viable options for integrated and contactless payments to both customers and merchants are likely to emerge from the crisis stronger. And investing in the conditions for or modifying existing tools such as mobile phones so that all merchants and all consumers, irrespective of finances and education, have access to e-commerce and electronic payments will help boost financial inclusion and lower costs, which will potentially help economies get back on track more quickly as they seek to find a way back to growth and restore businesses and incomes in the wake of the crisis.

The disruption of lives and livelihoods on the continent has already triggered a wave of innovation and collaboration that is reshaping the payments landscape in Africa. This momentum can continue once the pandemic has passed.

As reforms are instituted to tackle the crisis in the short term, it is also important to consider what steps could be taken now to facilitate a favorable emergence for the Africa payments industry for the benefit of providers and customers.

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