

McKinsey
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Global Banking Practice

The future of payments in Asia



Introduction

Payments have never been as important to Asia's financial services ecosystem as they are today. Asia has outpaced all other regions in terms of payments-revenue growth over the past several years. The region is also the largest contributor to global payments revenue, generating over \$900 billion in 2019, nearly half the global total. The role of payments in Asia's overall banking landscape has expanded as well, now representing 44 percent of aggregate banking revenues, compared with a third as recently as 2007.

The dollars involved tell only a fraction of the story, however. Payments remain the bedrock of the customer relationship for both consumers and businesses, representing the most natural opportunity for ongoing engagement, keeping the institution's brand top of mind, and creating a practical reason to keep a healthy level of funds on account. Payments have never been more important for traditional banks, longstanding service providers, and fintech innovators aiming to disrupt the status quo.

The global effects of COVID-19 prompted a reset in the payments ecosystem. In most cases, the result was an acceleration of trends—such as increased digitization—that were already underway. Although we forecast a decline of 1 to 8 percent in Asia's 2020 payments revenue, the industry's solid foundation is poised to foster a relatively rapid return to mid-to-high single-digit growth rates. Asia's payments sector remains well positioned to exceed \$1 trillion in annual revenue by 2022 or 2023. The first chapter of this report explores these dynamics in greater detail.

Our perspectives are informed by ongoing dialogue with industry leaders and McKinsey's global network of payments experts, and by our work with payments providers in the region. McKinsey's Global Payments Map also provides a quantitative foundation of longitudinal revenue and volume data. Additionally, our recently launched Asia Payments Practitioner Survey (APPS) polled payments business leaders in 13 Asian markets to document their strategic perspectives and illuminate key themes and areas of consensus.

Asia's future payments landscape will look quite different from the ecosystem currently in place. We have distilled the fundamental themes governing this future vision into a list we call the Five Cs: connected commerce, contactless consumers, a cashless economy, cross-border activity, and consolidation. Our goal is to identify a comprehensive set of trends that will reshape the payments industry, and to initiate a dialogue on how Asia's payments ecosystem of 2025 will differ from the current state.

The second chapter of this report considers the likely scenarios for the Five Cs, based on our analysis of the APPS findings. The third chapter outlines a series of potential actions for various sets of players across the ecosystem: banks, acquirers, card networks/schemes, nonbanks and tech firms focused both on financial services and other areas, and governments and regulatory bodies. Naturally, significant interdependencies exist across these constituencies; notably, there are very few areas in which these groups' objectives are in direct conflict.

We hope you find these perspectives illuminating. As always, we appreciate your comments and welcome the opportunity to engage in further dialogue.

Reet Chaudhuri
Jacob Dahl
Bharath Sattanathan
Joydeep Sengupta

Shaken, not stirred: The next frontier in Asia payments

Heading into 2020, numerous trends (selectively captured below) had set a clear path for continued payments growth across Asia. Chief among these was the rapidly expanding number of connected and digitally active consumers, with booming e-commerce markets reinforcing the need for digital solutions. The competitive landscape was simultaneously heating up, with the entry of formidable new players—including telecommunications firms, fintechs, “big techs,” and other conglomerates—spurring incumbents to step up their own innovation efforts. Meanwhile, regulators sought to standardize infrastructure while encouraging competition, fostering the introduction of real-time payments, digital know your customer (KYC), and various local payment schemes.

COVID-19 has permanently reset payments trajectory

COVID-19 then upended expectations with a generational economic shock affecting both supply and demand, resulting in an unprecedented drop in discretionary spending, shifts in spending patterns for remaining outlays, lower trade volumes, the loss of foreign-exchange revenues, and a suppressed interest-rate environment. For example, India recorded no car sales in the month of April, Thailand’s foreign tourism declined by 78 percent from the prior year in March and fell to zero the next month, and Singapore’s construction industry contracted by 45 percent in 2Q2020 while its overall economy declined by 13.3 percent.

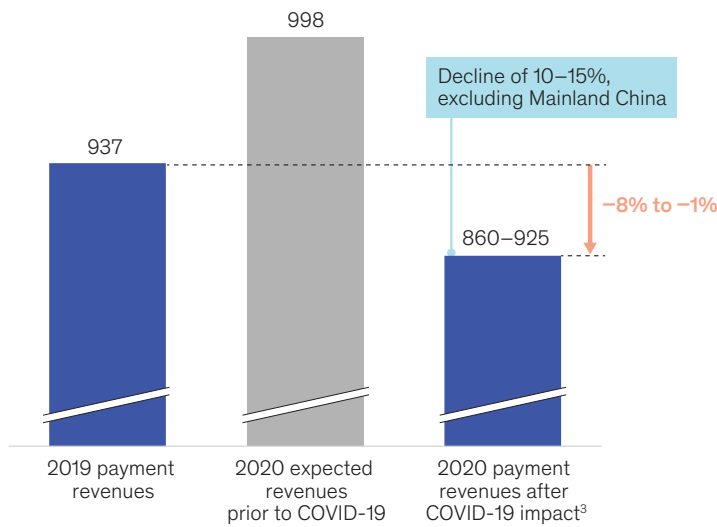
The payments industry was quick to respond to these challenges, offering immediate economic relief in the form of faster settlement times, customer-fee waivers, and short-term funding

support. Players stepped up with educational resources on managing disruption and public-service activities such as fund-raising support. Banks forged partnerships with specialized fintech providers to launch new platforms to help merchants establish an essential online presence (e.g., Shopify’s alliance with OCBC in Singapore) and created incentive programs to foster online shifts. Governments also played a vital role, waiving or reducing some charges related to electronic payments (e.g., UPI payments in India), increasing digital-transaction limits, and providing funding to small and medium-size enterprises (SMEs) to support digital commerce.

Despite these efforts, we anticipate that in the near term, COVID-19’s impacts will cause a decline in 2020 payments revenue of up to 8 percent across Asia (Exhibit 1). Excluding Mainland China, which recovered from the depths of the crisis more rapidly,

The impact of COVID-19 is expected to lead to a decline in near-term revenues of up to 8%.

Asia payments revenues,¹ \$ billion



Underlying movements that will contribute to the slowdown²

- Asia GDP growth expected at -4% to -8% in 2020
- 10–30% expected decline in global trade in 2020
- 50–70% decline in Q2 2020 discretionary consumer spending
- 10–50 basis-point cuts in rates across Asia, depressing liquidity revenues

¹ Asia includes Mainland China, Hong Kong SAR China, India, Indonesia, Japan, South Korea, Malaysia, Singapore, Taiwan, Thailand, Philippines, Vietnam. Revenues include domestic revenues from credit/charge cards, debit cards, prepaid cards, bank transfers, direct debit, current account, and overdraft, plus cross-border revenues from trade and nontrade, international travel, e-commerce, remittances, and B2C.
² COVID-19 impact assessed using macroeconomic scenarios and econometric regressions, incorporating government actions, sector-specifics, and views from local and global experts.
 Source: McKinsey Global Payments Map; World Trade Organization

the contraction is projected to be as steep as 14 percent. The extent of the contraction is projected to be the worst in 40 years—exceeding the severity of the 1998 Asian financial crisis and the 2008 global financial crisis.

Paradoxically, we anticipate that COVID-19’s impacts will ultimately serve to accelerate several established payments trends. For instance, at the height of the crisis, the proportion of consumer items purchased online nearly doubled, representing a 30 to 40 percent growth rate in online spending, compared with a 22 percent pre-COVID-19 projection. Across emerging Asia, a 60 percent increase in contactless-payments usage during the crisis was double the expected levels, and paperless B2B payment flows grew eightfold. Although it’s reasonable to expect some reversion to past practices as the most severe measures are lifted, the in-process digital shift has clearly received a permanent forward jolt.

Persistent structural changes require concerted actions

Our intent for this report is not to detail COVID-19’s impacts, however. The past several months’ events have exposed structural challenges impeding a truly transformative end state. Despite progress

both before and after the pandemic, payments players seeking to engineer a sustained accelerated response to COVID-19’s irreversible shifts and position the ecosystem to realize its considerable potential must overcome several barriers facing Asia’s payments industry:

- *Limited digitization.* Despite meaningful progress in moving transactions to card and digital forms, cash remains quite popular in most Asian markets. Cash utilization has fallen from 97 percent of transactions in 2010 to 71 percent in 2019. Habit, security concerns, and perceived complexity remain roadblocks to speedier consumer migration. Meanwhile, many small merchants remain dependent on paper-based systems and wary of the fees and tax implications that accompany digital transactions.
- *Fragmentation.* In many markets, consumers face a preponderance of choices at the expense of an integrated solution. Competition is certainly desirable, but in an ecosystem that requires universal access for efficient operation, an excessive number of below-scale alternatives can create consumer indecision and impede convergence toward a market standard.

- *Unsettled industry economics.* Not surprisingly, the rapid transition away from an all-cash economy over the past decade has prompted some turmoil. Merchants, many of which do not recognize the hidden costs of cash handling, have resisted the more visible acceptance fees that accompany card-based and digital transactions. SMEs, lacking the scale benefits of larger enterprises, tend to face the highest fees as a share of revenue. At the same time, incumbent financial-services firms and new entrants alike are in the investment stage of establishing next-generation payments infrastructure and must support these business cases in an increasingly turbulent environment.
- *Uneven regulatory interventions.* Countries have chosen differing and not always compatible paths to fostering and/or governing emerging utilities such as real-time payments and national payment schemes. Given the importance of cross-border activity in the region (Asia accounts for over a third of global trade in goods, up from less than a quarter circa 2000), any barriers to efficient funds flow, whether intentional or incidental, can be problematic.
- *Varied levels of innovation across markets.* A reasonable degree of interoperability between country payment schemes is essential to efficient operations. While one would not expect all markets to progress at the same pace, marked disparities—particularly if paired with restrictions on outside players—could impede regional growth overall.

The megatrends accelerating Asia's payments revolution

In May, McKinsey launched its proprietary Asia Payments Practitioner Survey (APPS), aggregating the views of 56 payments-business executives spanning 13 Asian markets, to gather informed perspectives on the key shifts expected to affect Asia's payments landscape over the coming five years. The resulting feedback revealed a fascinating mix of consensus and sharply divergent views, the latter often segmented by one's role in the ecosystem or operation in a developed or emerging country.

We see several key trends shaping Asia's future payments landscape, with COVID-19 having fueled an 80/20 rise in digital payments: a 20 percent increase in the digital user base, with 80 percent of

the gains that occurred during the height of COVID's impact expected to remain for the long term (Exhibit 2). We address the impact of these trends in greater detail in the next chapter.

Digital wallets and QR codes will become the next normal

Despite recent migration to digital payment methods, Asia remains the world's most cash-reliant region, with cash representing 71 percent of transactions in 2019. The recent momentum achieved by e-wallet providers and QR-enabled solutions is likely to accelerate moves away from cash, particularly in emerging markets, with contactless cards serving as a driver in developed Asia. Account-to-account transfers also are expected to play an increasing role. In the future, it is likely that current payment methods (e.g., credit cards) will be reformatted to optimize their utility within digital-wallet front ends.

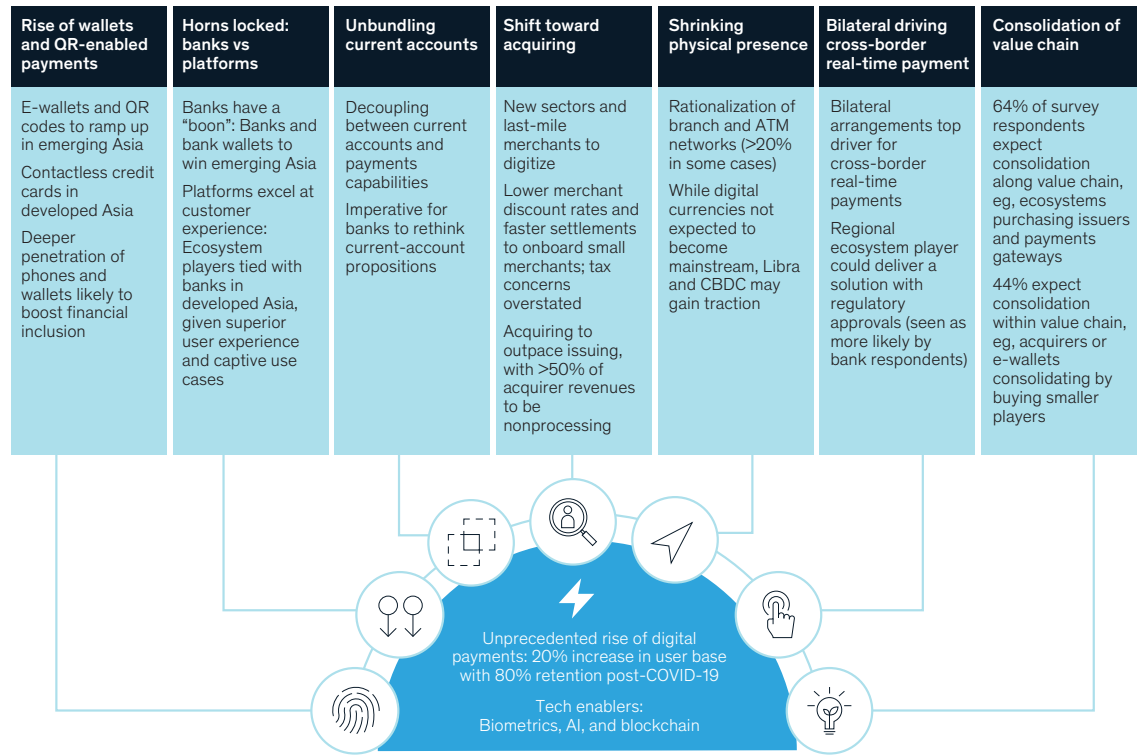
The battle between banks and platforms will intensify

Banks, leveraging their incumbent position and established customer-trust advantage, are seen as the most logical payment providers in emerging markets. As real-time payments become the norm, banks will have an added advantage over nonbank providers. In developed markets, experts view digital ecosystems (e.g., Kakao in South Korea) and big tech players (e.g. Google, Facebook) as better positioned to prevail, given the superior user experience and ubiquitous reach of "super apps" (which address the full array of consumers' digital needs) offered by these players and increasingly connected to funding sources like bank accounts and credit cards.

Current-account relationships will unbundle

Historically, Asian customers have maintained sufficient current-account liquidity to enable timely transactions. This has led to many banks investing in payments despite pressures from declining fee revenues. A majority of bank respondents (57 percent) anticipate a decoupling of current accounts and payments. As real-time payments and digital wallets reduce friction and time to transfer, account holders may embrace a wallet for payments while cherry-picking a bank for current accounts. This will force banks in the region to rethink current-account propositions else risk hurting current account/savings account ratios. For example, banks in other regions have already begun the rebundling process, augmenting current accounts with value-added

Our research highlights seven emerging payments trends across emerging and developed Asia.



Source: McKinsey analysis

features not necessarily associated with financial services (e.g., football-score updates and video highlights).

Acquiring will see a resurgence, with new business models

Merchant acquiring is expected to undergo a significant shift as new lifestyles and business models emerge. Acquirers will need to contend with a decline in merchant discount rates (MDRs), especially in offline settings; 87 percent of our respondents estimate MDR declines of 20 percent or more. This will induce a scale-up from mere payments processing to monetize adjacent value-added services, such as reconciliation, loyalty, lending, and deposits. Such adjacent services could account for over 50 percent of acquirer revenues. Lower MDRs and faster settlements will drive adoption by smaller merchants, while competition between global specialist acquirers and local legacy champions will likely intensify at medium and large enterprises as well as in online acquiring. Although banks possess the core processing related product set and often the large merchant relationships

through everyday banking services like deposits and lending, the specialists have expertise in building out what is increasingly becoming a software business.

Reliance on physical infrastructure will shrink

Just as the current environment gives Asia an unprecedented opportunity to reduce its reliance on cash, increased digitization will also spur a shakeout in physical infrastructure, with expected reductions of more than 20 percent in branch and ATM networks. As demand for cash declines, banks can consider a utility model, outsourcing or sharing ATMs. In parallel, banks could play a service-provider role for digital currencies by providing local clearing and settlements.

Bilateral cross-border partnerships will accelerate

Cross-border payments in Asia have been plagued by the twin challenges of long settlement times and high costs. While over 70 percent of experts believe a regional infrastructure like the single euro payments area (SEPA) would be beneficial in the Association of Southeast Asian Nations (ASEAN),

they are skeptical of execution. The more likely scenario is a series of bilateral agreements (e.g., NETS with NPCI). In addition, regional ecosystem players could disrupt this space by providing comprehensive cross-border services. For instance, we could soon see a Singapore-issued wallet used to scan and pay for a meal in Jakarta or Bangkok.

Consolidation could drive value-chain “horizontalization”

Rationalization among a fragmented payments market is likely. Nearly two-thirds of experts expect further consolidation, whether across the value chain (e.g., networks combining with merchant acquirers) or within a specific category (e.g., e-wallets). Given reductions in venture-capital funding of fintech players, we expect to see larger banks and tech firms make acquisitions to build out their product portfolios.

Payments products will look quite different within a decade

Taken together, these trends carry numerous implications across constituencies (consumers, merchants, and businesses), payment instruments (e.g., cash and debit, credit, or prepaid cards) and

even for countries in developed as opposed to emerging Asia. For instance, whereas cash and prepaid-card usage is likely to decline across the board, traditional offline commerce will continue to grow in emerging Asia even as it is displaced in developed Asia.

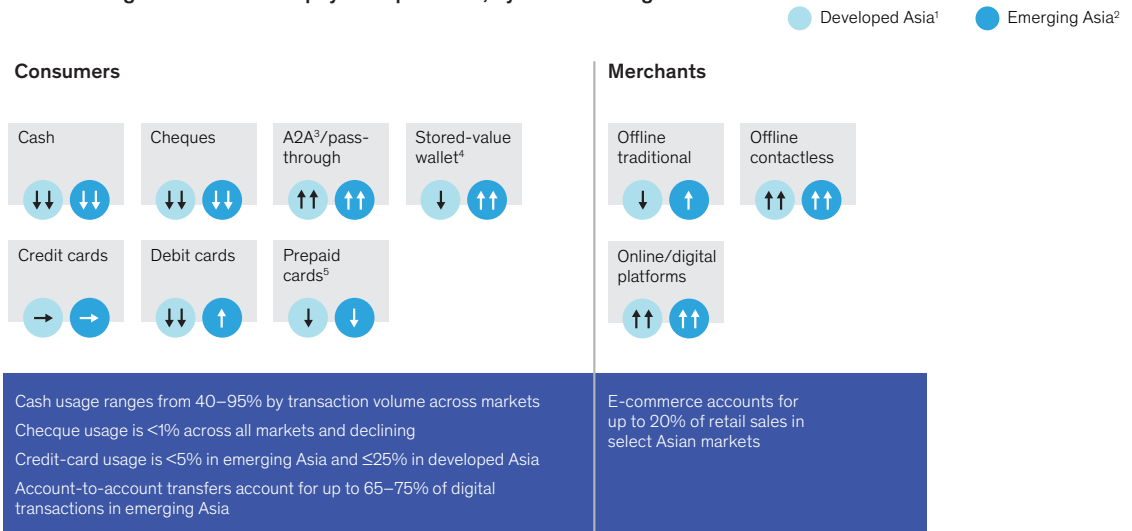
We believe this paradigm shift will alter usage patterns for several payment instruments (Exhibit 3). As would be expected, given digitization trends, cash and (already quite limited) check usage is poised to decline, while account-to-account transfers and stored-value wallet activity will accelerate. Other patterns are more complex. For instance, we foresee debit-card usage declining sharply in developed Asia yet continuing to grow in emerging markets, given continued banking penetration in markets such as Indonesia, the Philippines, and Vietnam. Likewise, traditional swipe-based card payment volumes are poised to contract somewhat in developed Asia while still expanding in emerging Asia.

As the industry addresses these challenges and responds to these trends, we foresee a significant and permanent reshaping of Asia's payments industry, built around “five Cs”: the contactless

Exhibit 3

Payments in Asia are likely to go through a paradigm shift in the medium to long term.

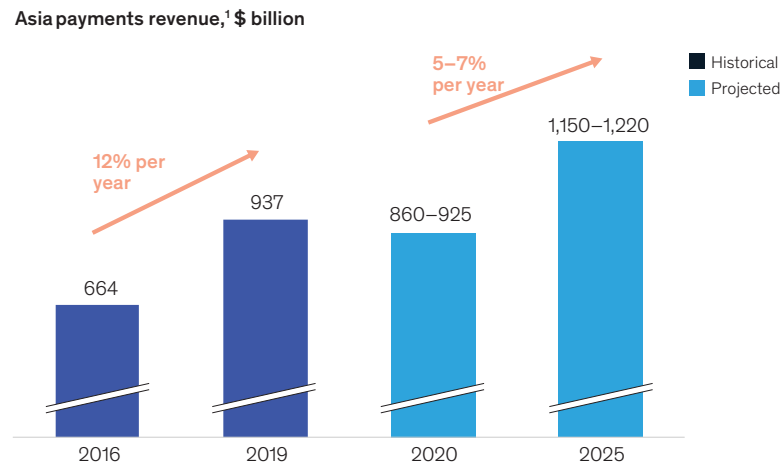
Current usage and outlook for payment products, by customer segment



¹ Singapore, Japan, Korea, Hong Kong, Taiwan.
² Mainland China, India, Indonesia, Thailand, Malaysia.
³ Account-to-account transfers.
⁴ Estimated based on expert input.
⁵ Includes closed-loop prepaid cards (eg, Hong Kong Octopus card).
 Source: McKinsey Global Payments Map; World Trade Organization

Given the trends, we expect a gradual recovery in Asia payments revenues.

Growth rates ~400 bps below pre-COVID-19 levels, due to margin and current-account net interest margin compression



¹ Includes Mainland China, Hong Kong SAR China, India, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand, Vietnam. Assumptions for post-COVID-19 impact for Mainland China, Japan, Singapore, Indonesia, Malaysia; bottom-up projections on liquidity and transaction revenue impact post-COVID were used; figures for remaining markets (India, Hong Kong SAR China, South Korea, Taiwan, Thailand, Philippines, and Vietnam) based on expected GDP growth rate post-COVID and projected multiplier of payments revenue to GDP.
Source: McKinsey Global Payments Map; World Trade Organization

consumer, connected commerce, cross-border linkages, consolidation of the industry, and an increasingly cashless economy. The Asian payments industry—with an estimated compound annual growth rate (CAGR) of 10 percent (excluding Mainland China) and nearly \$300 billion of additional revenue at stake by 2025—deserves strategic focus for players of all stripes, including banks, nonbank financial institutions, and regulatory authorities. Although these themes have existed at a high level for the better part of the past decade, a new set of underlying dynamics will greatly accelerate the pace of change.

At the pan-Asian level, economists expect a gradual payments-sector recovery over the next few years (Exhibit 4). Although hard to predict with certainty, this assumes a gradual pickup in travel towards the second half of 2021—leading to a rebound in cross-border spending and foreign-exchange opportunities—as well as government actions to curb some excess liquidity and reverse a portion of 2020's decline in interest rates. The longer-term outlook remains quite robust, particularly given the accelerated shift away from cash in favor

of electronic payments across both consumer and business flows. Various ecosystem players, spanning traditional banks and fintech start-ups, have already adapted operating models and product portfolios to address the increased digital demand and other disruptions brought on by the crisis. And just as the impact of COVID-19 spurred greater contraction in payments revenues outside Mainland China, the broader Asian landscape is expected to return to its established healthy growth curve in the pandemic's aftermath.

COVID-19 has further fueled profound changes already under way in Asia payments. However, it has brightened the long-term outlook and could propel growth in Asia payments via increased cash displacement and digitization. Winning in the new normal will require players to reimagine their value propositions with a digital-first business model, potentially mirroring the traits commonly associated with technology companies.

The five Cs shaping the future of Asia's payment sector

Asia's future payments landscape will look quite different from the ecosystem currently in place. We have distilled the fundamental themes governing this future vision into a list of five Cs (Exhibit 5). It's worth noting that these trends are not new; what is evolving, however, is the extent to which the forces are playing out at a tactical level across Asia's ecosystem. COVID-19's impact over recent months has further reinforced several of these trajectories. The next decade will see the gradual mainstreaming of these trends.

Our perspectives are informed by ongoing dialogue with a wide array of industry leaders, including McKinsey's global network of payments experts and a vast array of client work. McKinsey's proprietary Global Payments Map also provides a solid quantitative foundation of longitudinal revenue and volume data. We recently launched our Asia Payments Practitioner Survey (APPS), for which we polled payments business leaders in 13 Asian markets to document their strategic perspectives and illuminate key themes and areas of consensus.

In this chapter, we will explore the likely scenarios for the five Cs, drawing from our own expert assessment and APPS findings, regarding important developments, including emerging business models, digitization, the monetization of payments data, cross-border cooperation, and industry consolidation.

Contactless consumer

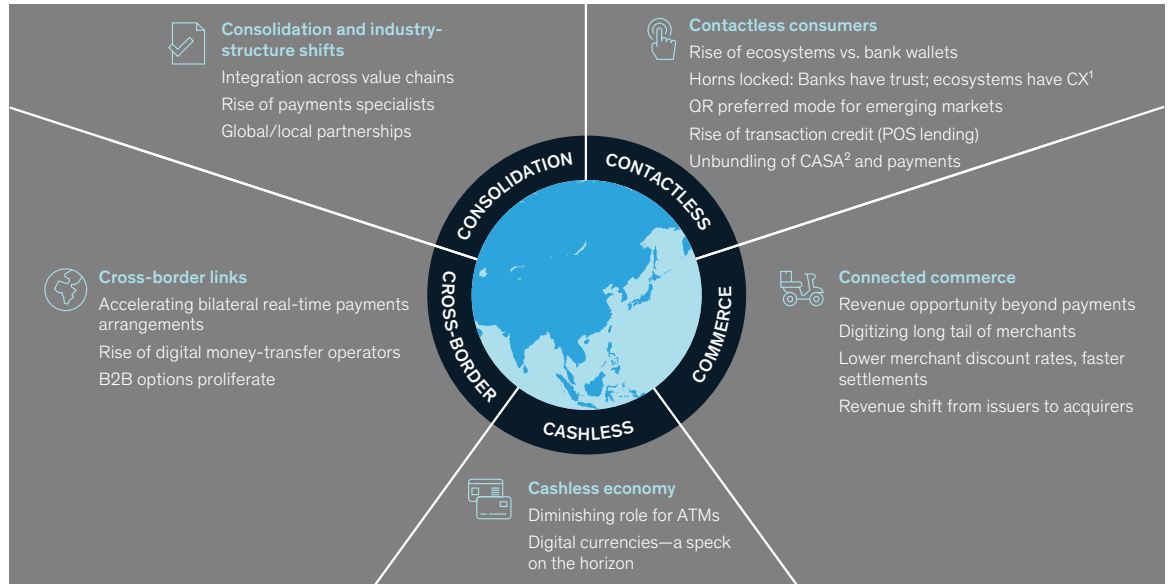
From a payments perspective, arguably the greatest and most lasting impact of COVID-19 will be in the contactless arena. Although the wallet medium

has existed for some time, hygiene concerns have prompted customers to actively seek out touchless alternatives in a variety of daily activities, and payments are no exception. Even as payments volumes declined overall during COVID-prompted quarantines, the contactless user base grew by as much as 20 percentage points for select payment providers in the region. Moreover, we expect 70 to 80 percent of new adopters to continue long-term use of these new forms.

E-wallets to lead; account-to-account transfers make great strides

Excluding Mainland China, where the use of mobile payments is already well established, McKinsey expects the number of mobile-payments users to more than double by 2025, exceeding two billion. Our APPS reveals interesting nuances regarding industry leaders' views in this area. Industry leaders share our assessment of digital wallets becoming the preferred form of payment by 2025, with credit cards ranking a close second. Looking a level deeper, however, bank-affiliated experts continue to see credit cards as the instrument of choice,

The five Cs reshaping Asia payments.



¹Customer experience.
²Cash account savings account.
 Source: McKinsey analysis

whereas nonbank professionals give e-wallets the nod.

Account-to-account transfers also are seen as gaining in prominence, particularly across developed Asia, where they are forecast to become the third-most-favored instrument, particularly for small-ticket items. The advent of real-time payments will help fuel this transition, and lead to a gradual erosion of stored-value wallet usage, as funds can be pulled directly from a bank account at the time of need—an added boon for banks.

Banks and nonbanks wage a battle for wallet supremacy

A similar dichotomy exists in perceptions of likely winners on the retail-payments battleground. Banks and digital ecosystem players rise to the top of the list; however, bank experts are more bullish on their sector’s solution, pointing to consumer-trust and incumbency factors. Nonbank participants, meanwhile, are evenly split between these options, citing the ubiquitous reach and sleek design of “super apps” as key advantages.

We believe execution and first-mover advantage will be keys to determining the winners in each market. Further evolution of real-time payment capabilities can foster a more seamless customer experience, particularly for cross-border commerce, and may give bank wallets an added differentiator. We

anticipate that within five years, 30 to 40 percent of retail transfers will be executed over real-time rails. Incorporating loyalty programs and a wide array of payment options (including points redemption for a portion of the amount due) also could serve as powerful wallet differentiators.

Payments are increasingly unbundled from current accounts

The twin forces of e-wallets and open banking also increase the likelihood of the further decoupling of checking and savings account (CASA) balances from payment capabilities. Fifty-seven percent of APPS respondents see such decoupling as likely over the coming five years, with the majority of those deeming it “very likely.” Not surprisingly, nonbank experts are most bullish on this view. This dynamic reinforces the imperative for banks to rethink their CASA value proposition, potentially rebundling current accounts with nonbanking features such as football-score updates to drive ongoing engagement, as discussed in Chapter 1. It also serves as a call to action to solidify banks’ digital experience, as the liquidity from retained balances is an important component of payment revenue streams.

Notably, business leaders differ by geography in their expectations for cash. Twenty-one percent of experts in emerging Asia say they expect cash to remain the preferred consumer-payment vehicle,

compared with single-digit response rates in developed Asia. Few experts expect cash to be fully retired; it likely has a long tail, even in developed Asia.

The wallet space remains quite active, with various constituencies—banks, telecommunications providers, big tech, and digital ecosystems—seeking entry points, leveraging supporting capabilities as a means of monetization. This dynamic could leave pure-play e-wallets vulnerable: the APPS revealed little to no expectation of stand-alone players or telcos prevailing in this space. This is likely a reflection of monetization challenges. The discrete payment event remains unprofitable, and regulation typically precludes such players from adjacent revenue streams such as lending. The market is already crowded, with over 150 wallet licenses being issued in Southeast Asia. We expect the number of wallets to decline by two-thirds via industry consolidation, even as new players attempt to gain a foothold.

QR codes drive emerging Asia traction

Emerging markets will be more inclined to adopt solutions based on QR codes, which are viewed as easier and more cost-effective to implement and better suited to mass-market consumers. Developed markets, by contrast, will favor “tap and go” (which is considered faster and more closely aligned with global standards), account-to-account transfers, and card-linked mobile solutions, such as Apple Pay. Banks completing a robust digital transformation will be particularly well positioned to lead in consumer digital payments, leveraging institutional trust and an established infrastructure.

As always, government’s role in market evolution will be pivotal. Regulators must strike a delicate balance across multiple factors: ensuring safety and ubiquity, fostering innovation, and maintaining an environment conducive to healthy competition. These are essential ingredients of initiatives such as real-time payment networks and e-KYC enablement. In addition to these endeavors, APPS respondents voiced strong support for greater adoption of cashless transactions to and from government entities and for granting necessary regulatory approvals to advance open-banking protocols, thereby fostering greater competition.

Connected commerce

The dramatic surge in demand for digital capabilities has driven unprecedented shifts in the acquiring

business, with merchants in prominent categories such as healthcare facing an unexpected immediate need for remote payments acceptance and small offline merchants suddenly seeking solutions beyond cash (Exhibit 6) Fundamental business-model changes will be necessary to meet these requirements, extending beyond the traditional role of the merchant discount rate (MDR) in defining the economic proposition for both providers and merchants.

Merchant expectations of payment service providers are growing beyond traditional payments functions to encompass tools for helping them manage and grow their businesses (Exhibit 7). In response, acquirers are evolving into technology and software companies delivering “one-stop shop” experiences that harmonize channels and are personalized to merchants’ needs and sizes. This value proposition includes more seamlessly embedding payments into the commerce flow and extending offerings to address merchants’ financing and growth needs as well.

The most important factors driving merchants’ digital adoption over the next five years will be lower MDRs, faster funds settlement, and ease of onboarding. We will also see innovations in hardware solutions, such as lower-cost point-of-sale devices. Offerings like static QR stickers, dynamic QR codes, and low-cost scanners make it increasingly feasible for acquirers to service even small merchants with limited payments volumes.

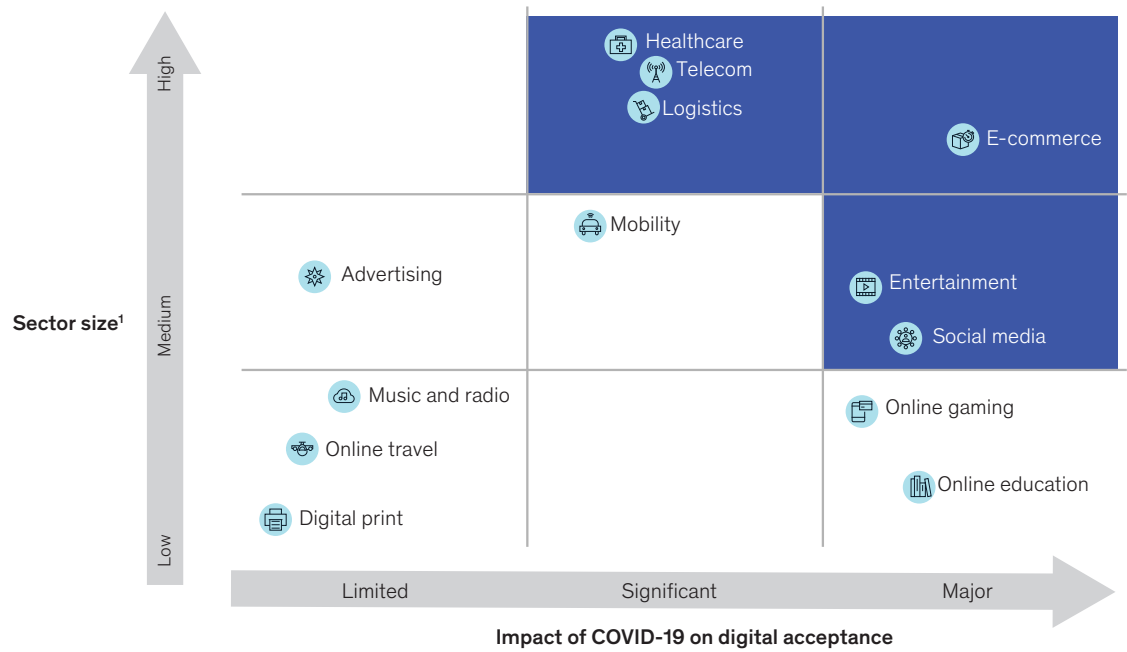
Shift in dynamics from issuers to acquirers

Since card issuers have historically realized the majority of MDR revenue, such pricing pressure is likely to be borne disproportionately by issuers. Compressed revenue margins of as much as 20 percent will be borne largely by issuers. Value-added offerings will become an increasingly essential component of merchant acquirers’ product suites, as unit revenues from payments alone will become insufficient to support an attractive business model. As a result, acquiring will grow to comprise a third of transaction-based payments revenue, up from 23 percent in 2019, with the majority of growth derived from value-added services (particularly for small merchants) beyond core payments processing.

The revenue opportunity stemming from further merchant digitization over the next five years could grow by over \$5 billion annually, based on McKinsey analysis. Although cash displacement is a natural

Exhibit 6

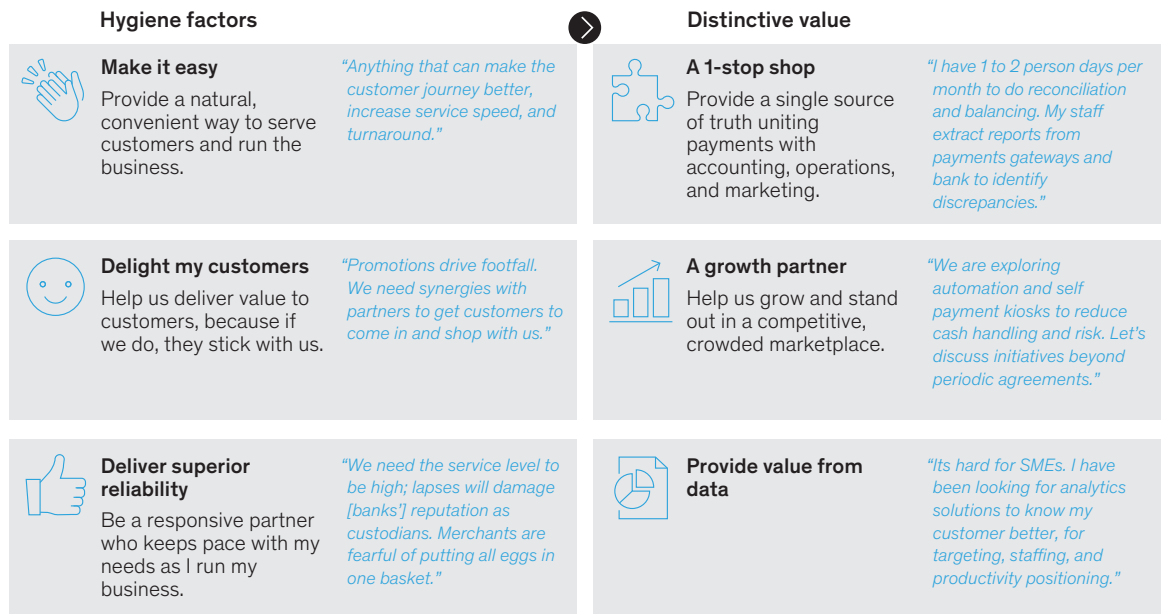
Digital acceptance in some sectors has increased since the emergence of COVID-19, leading to new frontiers for digital payments.



¹ Based on total global 2019 revenue; low = <\$200 billion; medium = \$200 billion to \$1 trillion; high = >\$1 trillion. Source: McKinsey analysis

Exhibit 7

Merchant increasingly want payments service providers to help them manage and grow their business.



Source: Merchant interviews

contributor to this expansion, the key drivers are spending growth and, more importantly, value-added opportunities that go beyond transaction fees to leverage data analysis and other related financial or merchant services.

Accelerated digitization of the long tail of small merchants

The digitization of small and midsize merchants represents a major opportunity, both in building out a suite of additional payments-adjacent services and in fostering financial inclusion. The process of digitization has been rapidly accelerated by COVID-19; we project that digital acceptance across Asia will approach 90 to 95 percent of merchants within five years, driven by both simplified KYC processes and low-cost acceptance methods (e.g., smartphones). As a greater share of commerce inevitably moves online, it becomes increasingly important for all populations to have access to noncash instruments. SME enablement is a step in this direction.

Acquirer growth driven by leveraging adjacent revenue streams

The lasting consumer behavior shifts prompted by COVID-19 illuminate several business sectors in which digitization opportunities exceed what was widely perceived just a few months earlier. E-commerce has long been seen as the natural target, with sales volumes expected to nearly double by 2025 to \$2 trillion, but the sudden surge in downloads and time spent on streaming platforms moves entertainment into a higher-priority category as well. Likewise, the remarkable growth of telehealth and popularity of wellness and fitness apps elevate the healthcare focus for payments providers. Supply-side requirements for faster and seamless delivery of food and other online purchases are upping the ante for optimized logistics processes.

Given the daily working-capital needs of small merchants, more rapid settlement and access to funds—including same-day availability at a minimum—will be critical to the achievement of universal access. Market forces will play a leading role in the evolution of both of these factors, although a role for regulatory authorities cannot be discounted. Another key to adoption will be ease of use and onboarding, including the advent of low-cost point-of-sale solutions and dramatically reduced merchant onboarding costs. Thin terminals with “soft switches” will supplant the need for

multiple POS terminals, a significant merchant pain point. The players best suited to enable the merchants in this process, according to the APPS, are fintech specialists and e-commerce and ecosystem players; banks are not seen as playing a leading role on this front.

An example of how ecosystems are enabling end-to-end digitization of retail supply chains, removing cash from the journey, can be found in JioMart’s initiative to create online grocery shopping/delivery capabilities for a network of mom-and-pop “kirana” shops, connecting them with larger hubs and enabling broader services like access to credit for consumers and volume purchasing discounts for shop owners.

Cashless economy

To be clear, cash is not expected to disappear; however, its use will continue to decline across Asia. Over the past decade, cash usage in mature Western economies has fallen by roughly 30 percentage points from beginning levels of approximately 55 percent of transactions. The target level of payments electrification will differ across Asia, given starting points that vary from less than 3 percent of transactions in Indonesia to as much as 60 percent in Singapore.

Cash will decline more rapidly but not vanish

Countries in both developed Asia and emerging Asia remain in the relatively early stages of cash displacement. Cash usage, as measured by percent of transactions, remains higher than in the European Union and United States. Furthermore, with the exception of Mainland China, the roughly 20-percentage-point rate of decline in usage over the past decade—even in developed Asian countries—has lagged reductions in developed Western countries.

Based on learnings gleaned from other countries’ experience, any expectation of overnight transformation is unrealistic. Prior attempts at doing away with cash completely, such as Singapore’s efforts to eliminate cash from the public transit system, have met with backlash. An extended period of coexistence between cash and electronic instruments is a near certainty. Even as digitization delivers added convenience and new revenue opportunities, existing cash processes will not be fully retired in the foreseeable future. Therefore, more efficient models must be implemented to address these ongoing needs.

The role of ATMs will diminish

Among consumers, COVID-19's acceleration of digital-banking trends has similarly reduced the dependency on branches for routine transactions, such as those involving cash. Despite Asia having lower ATM penetration than other regions, reductions in cash reliance will lead to a likely decline in ATM prevalence (Exhibit 8). Even as cash use declined over the past decade, ATM machines in use grew by 16 percent across Asia, thanks to onboarding of the formerly unbanked population combined with banks' desire to establish brand identity in many regional markets.

An increasing number of machines are failing to generate sufficient activity to attain breakeven status, however. McKinsey projects that the number of ATMs will stagnate and eventually decline slightly by 2025. Two paths are possible in this area. We expect many banks to begin viewing these machines as standard utilities, looking to outsource their operations and/or pool resources across institutions. An alternative approach may be to invest in differentiated ATM offerings to sharpen branches' focus on value-added activities oriented to customer experience.

Utilities will rise in significance

Specific use cases and counterparties warrant special attention. Consumer payments to businesses and/or governments account for more than half of transaction volumes, making them a significant electrification opportunity. Similarly, the business-to-business (B2B) payments last-mile challenge accounts for a large share of potential value generation and is ripe for innovation. The payments infrastructure between small merchants and the wholesalers or distributors serving them can be extended (as noted in the earlier JioMart example), and retail ecosystem providers can bring integrated ordering, invoicing, and payments to market.

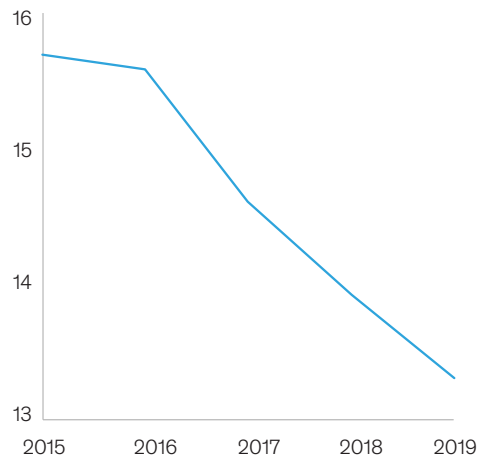
In an effort to buffer their economies from COVID-19's severe impacts, most governments have added significantly to their national deficits. In due time, this will result in quests for additional tax revenues, which can be achieved in part by plugging leakages via payments electrification, particularly in the B2B space. This includes e-invoicing, which delivers the added benefit of lower costs for payables and receivables processing. A McKinsey study across a broad sample of enterprises estimates such

Exhibit 8

ATM networks are expected to shrink as transactions move online.

ATM usage in Asia is already declining as consumers switch to digital channels...

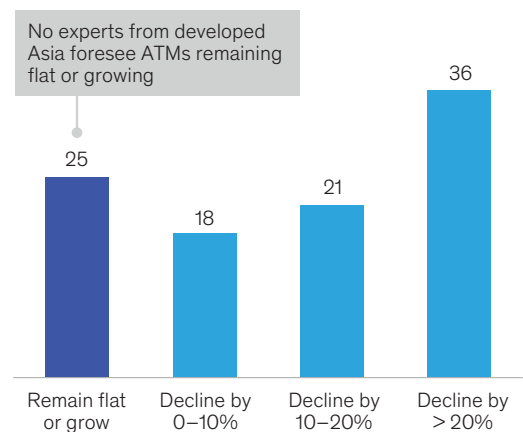
Annual ATM withdrawals per customer, Asia¹



... leading to a likely decline in number of ATMs over the next 5 years

Expected decline in ATMs over next 5 years¹

% of expert respondents,² n = 56



¹ Based on data collected from a sample of 39 banks across Mainland China, Hong Kong SAR China, India, Indonesia, Japan, Malaysia, Singapore, Taiwan, Thailand, Vietnam.
² Q: In the next 5 years in your market, what will be the change in the number of ATMs?
 Source: Finalta; McKinsey Global Payments Map

costs at 1 to 2 percent of the total base, with a savings opportunity of one-half to three-quarters if e-invoicing is fully implemented through digitizing payables and receivables.

Digital currencies remain a long play

While the potential of distributed ledger technology remains on financial institutions' R&D road maps, the current prominence of cryptocurrencies owes more to their role as investment vehicles than their use as mainstream payment methods. Various central banks have begun experimenting with central-bank-issued digital currencies (CBDCs), which would leverage a distributed ledger backbone while addressing KYC and stability concerns. If launched, however, these vehicles will likely strengthen rather than replace the usability of existing digital wallets.

Two-thirds of industry experts responding to the APPS do not expect material adoption of digital currencies over the coming five years. Nonetheless, the latest iteration of Libra v2.2 and the People's Bank of China's blockchain-based digital RMB currency called DCEP (digital-currency electronic payment) have the best potential for traction. Libra—assuming it can resolve KYC and AML concerns posed by US and EU regulators—has the benefit of a large, highly engaged user base from consortium partner Facebook and an array of digital-commerce partners likely to build apps leveraging the currency, once established. DCEP has the early advantage of government and regulatory backing, as well as a target market already accustomed to digital payments. Additional scale and international acceptance could result from a proposed East Asia digital currency, serving as a counter to the dominance of the US dollar. Such a move could lay the groundwork for a compelling proposition.

Cross-border linkages

Cross-border revenues have been a key contributor to Asia's ongoing payments growth, increasing by an average of 6 percent annually between 2011 and 2019. As the economy emerges from COVID-19's near-term shock, consumer-related cross-border payments will again become the largest opportunity for additional penetration and innovation.

Another major opportunity exists in enabling the region's disproportionate SME population for international e-commerce. COVID-19 has helped to propel the already impressive growth of regional players like Lazada and Shopee. One can anticipate adoption trends achieved in China to be replicated

in other Asian markets. Per the APPS, most experts (87 percent) say that such e-commerce platforms are best positioned to migrate SMEs online.

Emergence of bilateral real-time payments arrangements

The heterogeneity of payments systems' maturity and design across countries in the region—including the lack of a common currency—presents hurdles to functional interoperability. Although initial conversations regarding build-out of regional infrastructure have begun and 70 percent of APPS respondents find a SEPA-like structure desirable, most experts assign a horizon beyond five years to such an endeavor, given the challenges of aligning multiple jurisdictions. In the meantime, a series of bilateral real-time payments arrangements are being formed.

Rise of digital money-transmittal operators (MTOs)

With regard to retail cross-border remittances, digital money-transfer operators (MTOs) have proven adept at capturing market share by offering a better user experience at lower cost. Traditional MTOs have responded by launching online versions with similar functionality, while some banks have invested in or partnered with these players. Most small, purely local banks will likely opt to partner with a provider like TransferWise or Instarem, generating revenue through a fee-sharing arrangement. Digital remittances should reach 40 percent market share across Asia by 2025, up from 17 percent today.

Choices on B2B servicing

The B2B arena, a significant driver of Asia's payments revenues, also faces intensified competition. Incumbents are upgrading the correspondent-banking model through initiatives such as SWIFT gpi, while fintech disruptors have altered the value chain by creating alternative payment methods circumventing banks in some country corridors.

On the corporate payments side, banks will face a trade-off. One option is to maintain a traditional correspondent-banking network spread across many markets—a model that is proving increasingly risky and cost-inefficient. An alternative is to limit the longstanding nostro/vostro route to a few large corridors and rely on solutions like Visa B2B Connect or Ripple to service the long tail of markets with limited flows. This option adds operational complexity, however, given the need to plug into alternative payment rails. Players with established

global scale and the willingness to fund ongoing innovation are best positioned for success with this option. While technology breakthroughs like blockchain could still change the game, local regulatory hurdles remain an impediment for regional and global ecosystem schemes.

Another divergence of opinion between banks and nonbanks emerges among APPS experts regarding the cross-border outlook. Nonbank experts most often view the building of bilateral arrangements between countries for real-time settlement—like the approach taken by NETS and Paynet—as the most important driver of real-time cross-border transactions over the next five years (the option selected by 35 percent of nonbank respondents). However, a similar share of bank experts see regional ecosystem players such as Grab and Ant Financial offering cross-border solutions as a likely outcome, subject to regulatory approvals.

Consolidation of disparate players

Asia's payments value chain, whose players vary

markedly by country, is notable for its high degree of fragmentation. For example, more than 150 e-wallet licenses have been issued in Southeast Asia alone. Asia's lengthy economic expansion afforded an unusual amount of runway to a variety of subscale players, thanks to liberal capital availability, and it limited the need to stress-test business models under challenging circumstances. While such an environment benefits early-stage innovation, it can impair the market's ability to coalesce around a limited number of solutions when scale and ubiquity are required.

With venture capital becoming even more difficult to attract during the COVID-19 pandemic, stand-alone firms with negative cash flow face a daunting climb. Deep-pocketed companies, both banks and big tech, should have opportunities to integrate across the value chain and bolt on particularly innovative solutions at valuations that would have seemed unlikely mere months ago.

This shakeout could provide the added benefit of rationalizing excess market capacity—for

Exhibit 9

Potential investment ideas in Asia payments

Observations regarding COVID-19's impact on payments

● Positive impact ● Neutral impact ● Negative impact

⊕ Tailwinds

⊖ Headwinds

	⊕ Tailwinds	⊖ Headwinds
E-commerce/ card not present	Closing of physical locations and increased demand for convenience fueling ~50% growth in online sales	Economic slowdown hitting key spending categories; margin compression generally seen as volume growth in POS/card present (CP)
POS/ card present	Reopening of the economy should bring rebound	Closed locations shrinking volumes ~30–40% in short term
C2C and B2B cross-border	Consumer: Volumes up for P2P remittances and B2C card not present (CNP) B2B: Long-term trend of increased globalization	B2C CNP: Volumes in travel and entertainment are down B2B: Volumes down, timing differences for recovery, reopening



Potential investment ideas

What you would need to believe

Merchant services
such as onboarding and managing subscriptions

Merchants will continue transitioning online and will value digital-specific functionality that helps with migration as a differentiating feature

Integration platforms
to connect merchants to multiple ecosystems (eg, Instacart, DoorDash)

New ecosystems are sticky even after crisis and will be a differentiating feature to the merchant

Payout solutions for online marketplaces

Online marketplace volume will continue to increase as SMEs transition online

Consumer payment enhancers that layer on top of card payments

Analytics will play an increasing role in payments, and value-added services can penetrate existing user base

Source: McKinsey analysis

instance, in the e-wallet space. If Europe is any guide, payment specialists are poised to absorb meaningful portions of the value chain, such as acquiring, that have long been served by banks. Such specialists have emerged in the United States (e.g., Stripe) and Europe (Adyen, Worldpay). No such specialist has yet to separate from the pack in Asia.

Integration across the value chain

We expect players to make moves within and across the payments-industry value chain to bolster their pan-Asian positions. Several archetypes could govern these consolidation scenarios. Banks seeking innovation, talent, and return could bolster their solution sets via fintechs or buy online merchant acquirers to address revenue pool shifts. E-wallets can address the existing need to build critical mass, consolidating stand-alone offers and creating linkages across countries. Acquirers can expand through acquisition into fast-growing Asian markets and/or integrate with fintechs to diversify from a pure-processing revenue model. Meanwhile, ecosystems players can pursue adjacencies on both the acquiring and issuing sides to acquire stronger fintech offerings, and big tech can strategically expand into new markets while making payments inroads by advancing diversification from existing advertising revenue streams.

Asian incumbents have an uncommon opportunity to acquire payments capabilities and talent, extending an existing pattern of strategic global deals, potentially at quite different scale and price points (Exhibit 9). COVID-19's aftermath has created a new set of headwinds and tailwinds that should be considered, depending on the use case being considered. For instance, those who believe newer ecosystems will remain sticky after the crisis and provide differentiating features for merchants could consider investing in platforms (such as Instacart and DoorDash) connecting merchants to multiple ecosystems. Those who see analytics playing an increasing role in payments, with value-added services as a key to deeper merchant relationships,

should explore payment-enhancement solutions to layer on top of card payments. If online marketplace volume is considered a key growth lever as SMEs transition online, payout solutions supporting these marketplaces become a wise play.

An increasing role for partnerships

In addition to outright acquisitions, global players will likely capitalize on the same conditions, navigating regional ownership constraints by striking partnerships with key players (e.g., Facebook and PayPal's stakes in Indonesian ride-hailing firm Gojek). Asian bank incumbents can also pursue partnerships with fintechs built around another valuable commodity at their disposal—customer referrals—in pursuit of new value propositions and adjacent markets.

The rise of payment specialists

The net effect of these dynamics will be a blurring of the lines between global and local acquirers. Local specialists will contribute licenses, access, market knowledge, and bandwidth to complement global players' scale, technology, and domain expertise. The evolving landscape also raises the provocative question of whether national payments players across Asia could explore combining to form a regional powerhouse akin to NETS in Europe. Approaching the opportunity from another lens, regional banks could investigate the potential to unlock greater value from their payments businesses by spinning them out as separate entities, at which point several may be combined to generate scale.

Each of these five Cs will ultimately increase market complexity, forcing payments players from all corners to rethink their strategic objectives and monetization strategies. In Chapter 3, we explore a series of imperatives that each constituency should consider as ways to harness these forces to their advantage.

Thriving in the next normal: Potential actions for key players

Industry participants will need to respond swiftly to the evolutions driven by the five Cs. Different actions will be required, however, from participants in various aspects of the value chain and at varying stages of their own evolution. Naturally, significant interdependencies exist across these constituencies. While most attention is normally afforded to banks and fintech firms, the success of merchant acquirers in profitably building broader acceptance for noncash payment forms will be critical. Regulators and payment networks also have key roles in a region keenly focused on digitization.

Banks: Taking back the turf

As the longstanding leaders in the payments space who have defined the consumer experience for decades, financial institutions also have the most to lose. To defend their incumbent advantage, banks must reinvent themselves: adopting a growth mindset, investing in a compelling value proposition, and building out a portfolio of ecosystem partnerships to defend and deepen current positions. Emerging-market players in particular will face conscious trade-offs, driving speed to market while embracing payments as the key enabler of their consumer or SME franchise. A series of no-regrets moves is likely applicable to the vast majority of the region's institutions:

- *New value proposition for consumer payments.* Given a rapidly changing ecosystem, banks are in the best position to revamp the consumer payments proposition, designing a user-centric, integrated payment experience applicable across a broad array of use cases and enabling flexible form factors, including wallet-like functionality and virtual cards. A

fully digital account-onboarding experience is rapidly becoming a core expectation. In many markets, existing mobile-banking apps can be upgraded to deliver an e-wallet-like experience spanning the desired use cases, including rewards cofunded by merchants and related marketing firms. The increasing power of advanced analytics can serve as a key enabler in this area, given the potential for transactional spend analysis to drive more sophisticated and customized customer offers.

- *Profitability in credit cards.* Card programs are key drivers of most banks' payments P&Ls, so banks should closely examine strategies to find opportunities to reenergize credit-card profitability. Given sea changes in spending behavior, revisiting targeted propositions for distinct client segments may well yield new opportunities. Advances in data analytics can help banks optimize loyalty programs as well as cross-selling and bundling propositions. With account-to-account transfers cannibalizing a portion of traditional debit spending, for

instance, some banks may consider rebalancing their portfolio to rationalize debit costs while focusing on account-to-account transfers and credit schemes.

- *Optimization of legacy distribution.* An accelerated shift toward digital channels necessitates the optimization of legacy distribution networks, including ATMs. Banks should consider rationalizing long-standing structures, exploring innovative, customer-oriented branch formats, and/or establishing a collaborative shared utility model for the declining but still essential provision of ATM services. For business customers, banks should focus on mutually beneficial avenues to help automate invoice processing and remove cash from their workflows wherever possible.
- *Investments in technology.* In the back office, it's a natural juncture to reassess vendor relationships and partnerships, given the need to enhance technology platforms. With a long list of projects on their task lists, banks should closely consider pursuing the next stage of growth through technology investment, partnership, or acquisition. Recent turbulence may provide uncommon opportunities to address portfolio gaps in a depressed valuation environment.
- *Partnerships with fintech.* Similarly, all parties may be receptive to embracing fintech partnerships at scale to drive innovation and reach new customer segments. (e.g., e-wallets, consumer-to-consumer remittances, acquiring capabilities). Financial institutions must invest in newer technologies such as biometrics, AI, and blockchain to test and reset the boundaries of future payment experiences, or they risk being left behind. Technology investments should be concentrated in areas where a given institution is marking a concerted push; otherwise, partnerships and/or tactical outsourcing are likely better avenues.
- *Strategic analysis of the payments journey.* Banks must visibly and actively shape the next generation of the payments journey. This includes determining whether to defend their existing payments turf or aggressively invest for growth. Additional opportunities abound for the latter, often suited to banks targeting specific sectors and niches.
- *Comprehensive value proposition.* Value propositions will vary by institution size and type. Large commercial banks can win over merchants by building a comprehensive value proposition for their business, leveraging a full suite of banking products (e.g., combining payment solutions with financing, and value-added services such as reconciliation, inventory management, inventory programs, and streamlined lending processes). Smaller banks may consider exiting the merchant acquiring market altogether, given its technological complexity and the need to prioritize resources elsewhere.
- *Enhanced cross-border offerings.* Banks can take several steps to enhance cross-border offerings and international payments propositions. These include rationalizing correspondent bank relationships, establishing close alliances with smaller institutions in other countries, upgrading technology standards (e.g., enabling SWIFT GPI and potential alternatives like Ripple), and actively engaging with regulators on bilateral or regional partnerships.
- *Payments as a service.* The payments-as-a-service model is gaining traction and offers intriguing opportunities for banks willing to provide “banking in a box” services to nonbank third-party providers. These may include syndicating in-house expertise, such as e-KYC, ATM distribution, clearing-as-a-service, and white-label digital MTO remittance solutions.
- *Centralized payments organization.* Finally, many banks' operations could benefit from the creation of a central payments organization. By reorganizing traditionally segregated business silos (e.g., retail and wholesale) into a centralized agile organization focused on a shared payments agenda with aligned goals and performance targets across cross-functional teams, banks can better capitalize on subject-matter expertise and scale efficiencies, and they can eliminate some of the channel conflict that inevitably emerges from silos.

Wallets and digital ecosystems: Playing for long-term value

Wallet providers face a do-or-die situation. Although domestic retail payments are the battleground on which players are competing to achieve scale, meaningful monetization opportunities lie beyond the near-term horizon. Successful digital-wallet

providers will not only build scale but also retain customers over time, executing a business plan that instills patience for the eventual payback.

Toward this end, players should focus on campaigns designed to rapidly onboard first-time digital users, with retention strategies to encourage continued usage. Given the need to rationalize marketing spending to align with P&L realities, go-forward models may include partnerships with online merchants and investments in loyalty programs, co-funded by merchants wherever possible.

In addition to creating compelling consumer propositions, wallet providers should strive to enhance merchant-payment capabilities, ensuring a value add for all ecosystem players and fostering greater acceptance. Internal processes can be reconfigured to enable faster merchant settlement workflows created to integrate payment flows across online and offline channels.

As the wallet market matures, many players will face a decision to acquire or be acquired. Most Asian countries are typified by fragmented e-wallet landscapes, leading to excess capacity and a lack of clarity in convergence around a short list

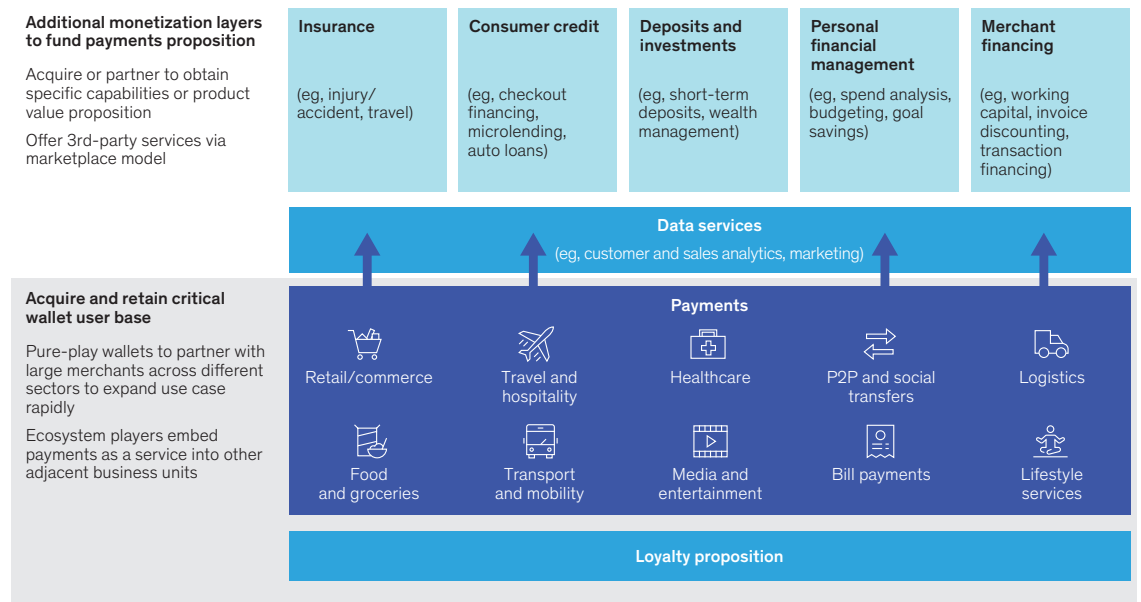
of ubiquitous solutions. Well-funded players can explore M&A opportunities to append specific capabilities in a potentially attractive valuation environment, perhaps including “acqui-hire” arrangements. Pure-play e-wallets with limited funding and/or market share may consider timely consolidation with larger players.

To accelerate the path to return on investment, wallet providers might pursue monetization opportunities beyond pure payments—for instance, across financial services (insurance), merchant services (SME lending), and data services. Ecosystem-oriented wallets can also extend value propositions beyond payments use cases by pursuing the build-out of a “super app” catering to lifestyle offerings, say, encompassing chat and other social functions (Exhibit 10).

Those deciding to double down could smooth the path to critical mass by addressing additional business and government use cases. Possibilities include supplier payments, payroll solutions, and consumer-to-government collections and disbursements. These scenarios will not only drive payment volumes but also help companies acquire customers at scale. Other clear market

Exhibit 10

Wallet providers can build a full financial platform on top of payments by offering their own or third-party services.



Source: McKinsey analysis

needs are cross-border payment capability, which would be an attractive e-wallet differentiator, and assistance in implementing e-invoicing solutions. Overseas partnerships with other payment systems can expand retail use cases, and regional wallets could bolster risk management capabilities such as KYC and AML by engaging with regulators and stakeholders such as foreign-exchange brokers to enable closed-loop cross-border solutions.

Merchant acquirers: Innovating the product

Merchant acquirers are in something of a golden era. Although these firms continue to play a key role in customers' acceptance of digital payments, they will find themselves increasingly reliant on value-added revenue streams as core payment processing becomes more of a utility. As a result, many of the future standout players will likely resemble technology or software companies.

The immediate imperative, however, is to win in innovating the product to broaden digital-payments acceptance, particularly across Asia's SME merchant base. A key to lowering barriers to digital-payments acceptance is to develop simplified, digitized onboarding experiences and demonstrably enhance SME sales capabilities. Acquirers also have an opportunity to build share by investing in the development of omnichannel, technology-led solutions capable of efficiently servicing even small merchants as they start to go online, continuously expanding the breadth of digital-payment methods offered, to ensure reach and relevance. This may also include expanding to new payment rails, enabling faster settlement to satisfy the daily working-capital needs of many small merchants.

Scale also is of critical importance, because it can flatten the cost curve, further ensuring an attractive merchant proposition. The volume necessary to generate such scale efficiencies—two billion to three billion annual transactions per year—may not be viable within most Asian markets. That fact illustrates the need to explore international combinations.

Another key acquirer opportunity is the development of sector- and segment-specific solutions meeting the needs of specific business types. Examples include platform disbursement solutions for gig-economy and e-commerce marketplaces and recurring payments for subscription-based models

Fueled by the wealth of information generated by payment transactions, data analytics can be leveraged to enhance offerings by reducing processing costs (e.g., through fraud detection to reduce chargebacks and analysis of payment-method success rates) and to provide deeper business insights. The resulting value from lower costs and better-informed decisions can justify a new revenue stream incremental to the existing processing run rate.

Additional opportunities for acquirers committed to greater investment and strategic focus include provision of an integrated suite of merchant solutions for merchants extending beyond payments processing to support core business activities such as inventory management, lending, accounting, and tax reporting. Global and local acquirers can benefit by forging cross-border partnerships, involving collaboration or consolidation to combine scale and technology with local licensing and market knowledge to enable more successful international payments. Targeted acquisitions, such as PayPal's addition of iZettle, can deliver specific capabilities to bolster acquiring platform offerings.

Networks and schemes: Enabling at scale

Global payment networks face headwinds, given a recent push to establish local schemes and increasing regulatory fee scrutiny. Given their wealth of existing relationships, however, global players remain in a position to shape the future of the sector by diversifying their infrastructure capabilities (to include real-time payments, for instance) and integrating at scale across the global economy.

With next-generation payments platforms such as e-wallets and digital banks still in their relatively nascent stages, networks can use their domain expertise to assess which are best equipped for long-term success. Then they can embrace the most promising of these platforms to enable broader issuance and expand product reach. An example could be offering virtual card solutions for e-commerce merchants.

In conjunction with governments, local schemes can invest in country-level payments and "beyond payments" solutions, championing digital adoption aimed at extending both consumer penetration and merchant acceptance. These campaigns may include awareness promotions for specific use cases (e.g., transit systems, smart-city solutions), as well as rewards incentives.

On a related note, networks should continue to innovate on form factors, enabling new payment experiences that deliver increased convenience to customers, including consumers and merchants. This can be achieved through technology partnerships within and beyond the payments sphere. Examples might include biometric-based payments and an even simpler peer-to-peer model leveraging mobile-phone networks.

International schemes have an opportunity to work closely with governments in emerging markets to establish real-time payments infrastructure and offer ongoing management services to support this critical go-forward capability. Developed nations are engaged in a similar transition to RTP, where the cut-over is often more complex because of existing volumes and ingrained processes. In this sense, RTP can serve as an equalizer for frontier countries, which may face fewer entrenched barriers that inhibit leapfrogging to next-generation digital models.

In a similar vein, open-banking models have established clear momentum as the de facto go-forward model for core banking infrastructure. In smaller markets, networks and schemes can explore a natural facilitator role in open-banking development, streamlining application-programming-interface (API) platform connections with a focus on secure, trusted connections between open-banking interfaces and third-party service providers. This opportunity also applies to cross-border payments, where schemes can facilitate bilateral and/or multilateral partnerships by integrating infrastructure across domestic and international payment networks, further serving in a key facilitator role by engaging regulators and other commercial players to push for regional real-time infrastructure. A relevant model can be found in the P27 initiative, which aims to create a single pan-Nordic clearing platform.

Regulators and governments: Setting the pace

Governments and their regulatory authorities play an essential role in framing a country's aspirations for a digital economy by creating incentives, improving infrastructure, and fostering competition. This involves a delicate balance among capitalizing on innovation, ensuring consumer protection, and establishing a sustainable economic foundation. Several archetypes are plausible; government

leaders must determine which they choose to pursue.

Although these responsibilities are relatively intuitive, they carry added weight in a region that is experiencing such rapid growth and evolution and that is so dependent on cross-border fluidity for the success of all constituencies. Therefore, we respectfully suggest that the relevant authorities closely consider the following measures.

One key to fostering competition is ensuring a level playing field. Governments are uniquely positioned to accomplish this, whether by creating public payments rails or establishing ground rules providing equitable access to privately owned infrastructure. This role is particularly important, given the likely launch of new payments systems over the medium term.

Regulators can carry out an important convening function by setting an agenda for enabling interoperability, notably while introducing and/or strengthening nascent real-time payments infrastructure in several countries. This opportunity extends to open banking, which promises to accelerate digital adoption by enabling a broad range of use cases for incumbents and new entrants in order to achieve the goal of digital adoption in regional payments systems. This objective has taken on greater resonance because the economic landscape is likely to include budget deficits for the foreseeable future. With support for tax increases increasingly difficult to muster, plugging leakages in existing schemes becomes increasingly appealing. Migrating payments from cash to digital carries the added benefit of shining additional light on the gray economy.

Such digitization programs could encompass inducements to the various customer groups. For consumers, an example is the tax incentives offered to South Korean consumers for the use of "electronically traceable payments," part of a broader effort to reduce the shadow economy. For providers, inducements could include R&D tax credits for new infrastructure. And merchants could be given MDR subsidies to encourage adoption of digital technology and ongoing backbone upgrades. Given the relatively long payback periods faced by providers and reluctance on the part of "long-tail" cash-based merchants, sovereign authorities may have the best chance to fuel a virtuous cycle, seeding the market in order to more quickly reach the desired result.

Maximizing digital adoption also requires removing friction from the process wherever possible. Hurdles in digital account setup remain a primary barrier to less technically savvy consumers' embrace of what is intended to be time-saving proposition. Authorities can foster fully digital onboarding processes for consumers and merchants by revisiting existing regulations and updating them to reflect the new operating environment and available technologies. Please note that this need not—and should not—equate to relaxing critical safeguards but rather should involve harnessing new models to ensure security.

For instance, KYC is as important as ever and poses distinct challenges in a digital environment. Regulators could build or facilitate an e-KYC utility, accessible to all players either directly or through a third party, to address this pain point. Within reason, regulators could also relax restrictions such as daily or monthly e-wallet transaction limits, after implementing appropriate safeguards, including KYC/AML.

Engagement with regional counterparts also is essential, given the importance of cross-border capabilities. Government entities should evaluate regional partnerships (e.g., creation of a SEPA-like infrastructure and/or governing body) to facilitate streamlined real-time cross-border payments. Even

when national interests are not fully aligned, the removal of friction typically benefits all parties.

Finally, regulators must rethink their own organizational structures, given the dramatic evolution of the payments industry it is tasked with overseeing. Standard banking supervisory structures alone are no longer sufficient. They have been tweaked to address the growing role of fintechs, but as the lines blur between payment services and other big tech offers, such distinctions are unlikely to remain sufficient. In some cases, it may also make sense to create an independent unit tasked with digital-payments oversight, to focus expertly trained resources on the landscape and track digitization efforts.

These calls to action can, of course, be applied differently based on each individual player's strategic objectives and competitive position. And while it would be naive to expect members of the five constituencies to proceed in lockstep, fortunately there are very few areas in which these groups' objectives clearly conflict. The greatest challenge will likely arise in cross-border coordination; a solid track record of country-level successes may facilitate that process as well.

Conclusion

The events of 2020 caused a reset in the payments ecosystem, in Asia and across the globe. Still, the sector's solid foundation points to a relatively rapid recovery—with a return to mid-to-high single-digit growth rates and, by 2022 or 2023, more than \$1 trillion in annual revenue in Asia's payments industry.


The Five Cs described in this report will shape the future of Asia's payments sector. A number of actions will be required of players across the ecosystem, including traditional banks and financial services firms, newer fintech challengers, and established companies in adjacent sectors like big tech and telecommunications pursuing avenues for expansion.

A fundamental shift in the market's approach to commerce is undeniably in flight. While aspects of this evolution will proceed organically, there is plenty of room for various players to influence the outcome. The cashless revolution has clear implications

for unbanked populations, for instance, creating potential societal issues as well as avenues for innovative players to deliver valuable solutions.

It's no exaggeration to suggest that a trillion-dollar opportunity is at stake. The question is how these revenues will be divided.

Reet Chaudhuri is an expert associate partner, **Bharath Sattanathan** is a partner, and **Joydeep Sengupta** is a senior partner, all in McKinsey's Singapore office. **Jacob Dahl** is a senior partner in the Hong Kong office.

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