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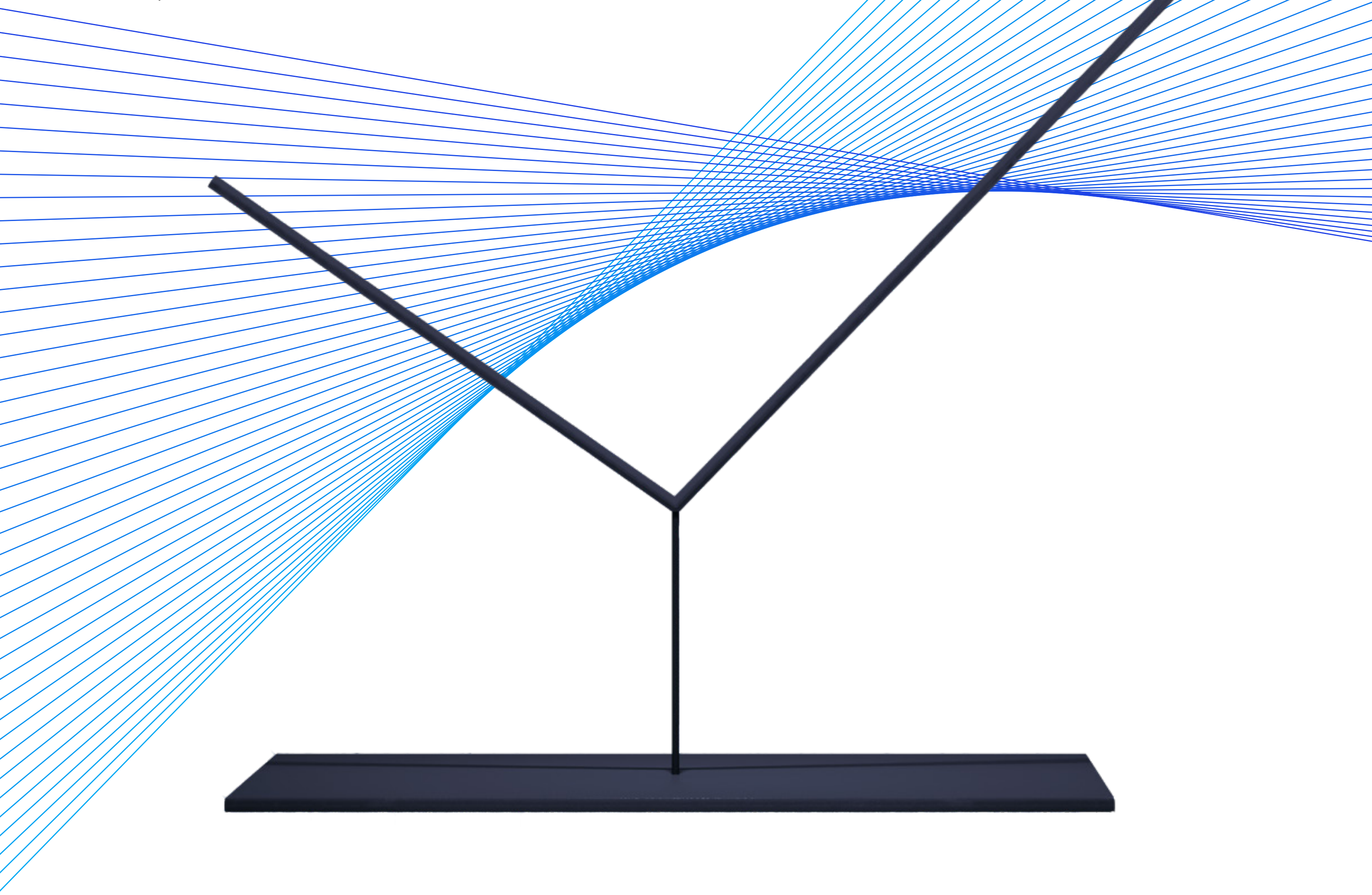
Global Banking Practice

Emerging markets leap forward in digital banking innovation and adoption

2021 Asia–Pacific Personal Financial Services Survey

September 2021



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As consumer use of digital banking accelerates in Asia–Pacific, the region's emerging markets have become the hub of banking innovation for digital business models.

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Introduction

Consumer use of digital banking in Asia–Pacific has entered a stage of acceleration, fueled largely by innovations launched in emerging markets. Therefore, now is the time for the region's banks and nonbank service providers to renew their value propositions and build the capabilities that will enable them to stay relevant and thrive.

According to McKinsey's latest Personal Financial Services (PFS) Survey, adoption of digital banking in emerging markets has caught up with that in developed markets. Nearly nine in ten consumers across the emerging and developed markets of the Asia–Pacific region use digital banking actively, and most of these are open to purchasing more banking services through digital channels.[1] In our view, the broader adoption of digital banking during the COVID-19 pandemic has brought the industry to a new level of maturity, opening new opportunities and challenges for banks and nonbanks alike.

The window for seizing opportunities for growth will narrow quickly, however, as consumers give serious consideration to innovative propositions from digital-only banks, which are emerging as regulators grant licenses to new entrants with the aim—among other objectives—of encouraging innovation and inclusion.[2] Amid the fast evolution of Asia–Pacific banking markets, banks need to understand how their customers perceive them, decide how they will exceed customers' expectations, and chart the best course to secure their position in the market.

To thrive in the era of digital banking, banks in Asia–Pacific must combine current resources with new skills and capabilities to meet challenges and capture growth opportunities. In Section 1, this report lays a foundation for such an effort by describing consumers' shift to digital banking. Section 2 then outlines how banks can reinvent their business and delivery models to get ahead of consumers' fast-changing expectations by focusing on three key areas: the value of branches, customer engagement, and the bank's overall competitive position. For each area, we recommend ways to create value. Finally, Section 3 discusses the capabilities banks will need for success.

The insights in this report are based on McKinsey's proprietary Personal Financial Services Survey (see sidebar "About the Personal Financial Services Survey"). The 2021 survey covers approximately 20,000 urban banked respondents in 15 Asia–Pacific markets.

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[1] In this report, when we refer to "consumers" or "the market," we are referring to the urban banked respondents to our survey.
[2] See, for example: "Policy Document on Licensing Framework for Digital Banks," December 31, 2020, bnm.gov.my; Digital Bank Licence, mas.gov.sg; "Korea's 1st Internet-only Bank Open for Service," April 3, 2017, fsc.go.kr.

About the Personal Financial Services Survey

McKinsey's Personal Financial Services Survey has been conducted every three or four years since 1998. Each new survey is refreshed to address changes in customer behavior and examines themes like digital banking activity, propensity to digital sales, and openness to recent innovation such as direct banks and robo-advisory platforms.

The 2021 edition covers eight markets in emerging Asia–Pacific (Mainland China, India, Indonesia, Malaysia, the Philippines, Sri Lanka, Thailand, and Vietnam)[1] and seven markets in developed Asia–Pacific (Australia, Hong Kong SAR, Japan, New Zealand, Singapore, South Korea, and Taiwan).

McKinsey's survey is independent, reflects our own views, and has not been commissioned by any business, government, or other institution. Unless otherwise specified, all conclusions and insights in this report draw on the findings of the consumer survey independently conducted by McKinsey.

[1] In the 2017 version of this report, we included Myanmar, but not Sri Lanka, in the emerging markets group.

Consumer behavior: Digital banking has accelerated

Digital banking has reached a new level of maturity in Asia–Pacific. With digital-banking penetration approaching 90 percent across the region, the gap between emerging and developed markets has narrowed dramatically. Between 2017 and 2021, the share of consumers in Asia–Pacific emerging markets actively using digital banking increased sharply, rising 33 percentage points from 54 percent in 2017 to 88 percent in 2021. The level of digital adoption among consumers in developed Asia–Pacific markets has remained stable at approximately 90 percent (Exhibit 1).

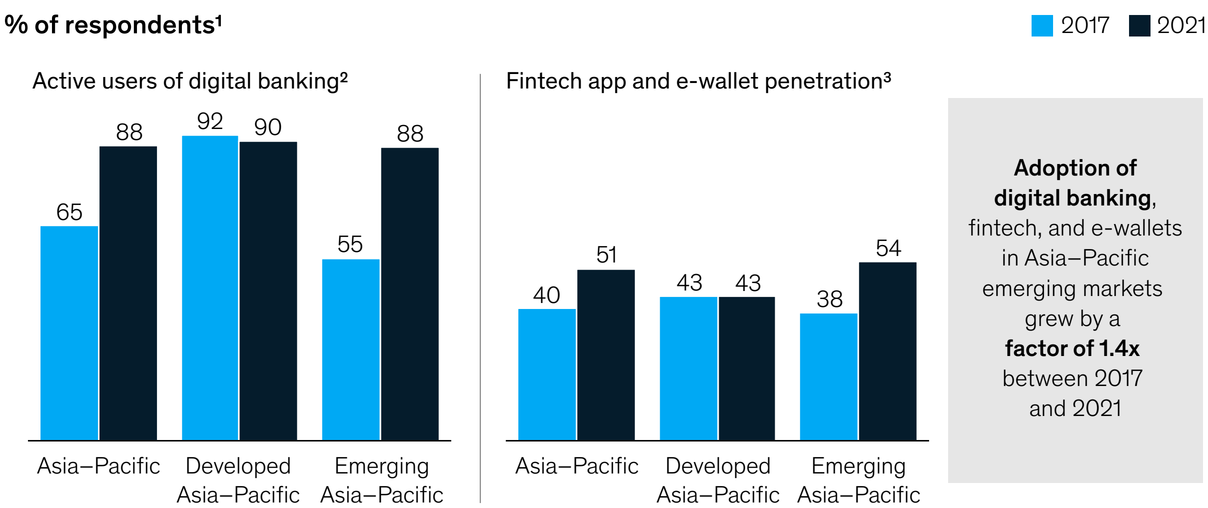
Fintech innovators across the region's emerging markets have launched compelling value propositions, and consumers' enthusiastic use of these new solutions has pushed penetration of fintech tools and e-wallets in emerging markets beyond the level of market adoption in the region's developed markets. In emerging Asia–Pacific, fintech apps and e-wallet penetration reached 54 percent in 2021, compared with 43 percent in developed Asia–Pacific.

As adoption of digital tools increases, consumers typically increase their digital interactions with their bank. This trend is evident in the results of this year's PFS survey, which indicate that the share of touchpoints made through digital channels increased from 41 percent in 2017 to 72 percent in 2021. Despite the higher frequency of customer interactions, our research also shows that banks are not doing enough to convert customer interest in digital products into digital sales. Indeed, while most survey respondents express an openness to using digital channels for services beyond transactions, less than a third report having purchased a product or service through a digital channel. This discrepancy between interest and actual behavior is likely the result of many banks having a limited digital offering and not engaging effectively with digital users to deepen relationships.

The shift to digital banking happened quickly, likely accelerated by existing trends—such as increasing use of digital channels for diverse transactions, including banking, and broader use of teleconferencing/video calls in place of face-to-face meetings—that have intensified during the COVID-19 pandemic. Survey results suggest that the high levels of digital adoption are likely to hold as the pandemic subsides. Roughly 80 percent of consumers say they expect to maintain or increase their use of mobile and online channels post-COVID-19, and 42 percent of respondents indicate that they expect to visit their branch either less often or not at all when the pandemic ends (Exhibit 2).

Exhibit 1

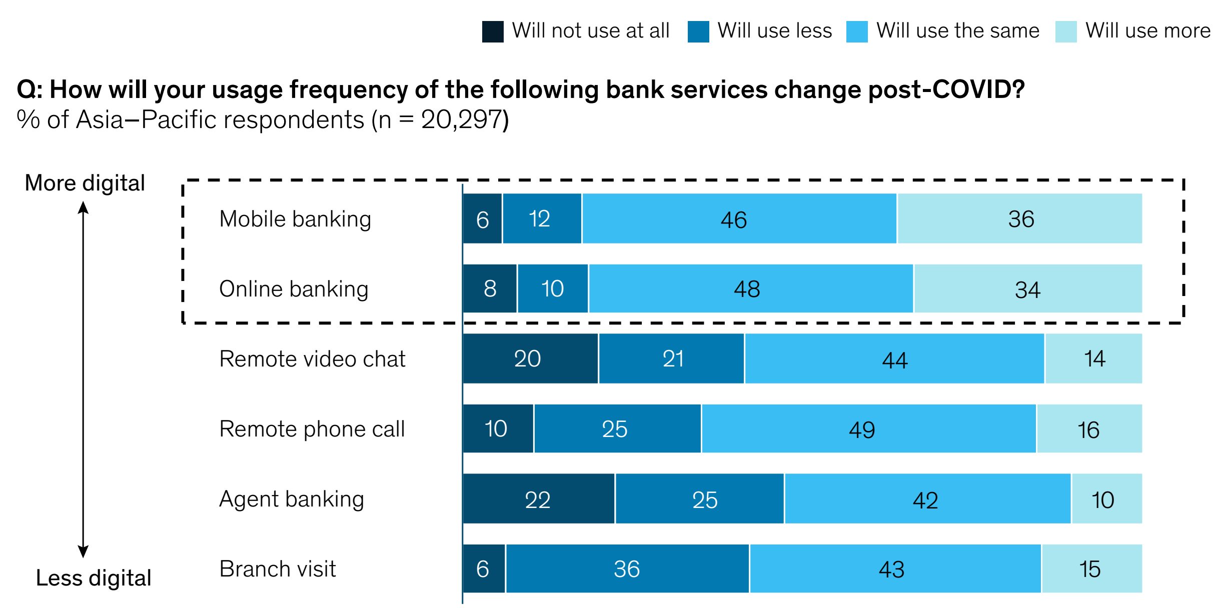
Asia–Pacific emerging markets are at par on digital banking and lead in use of fintech apps and e-wallets.



[1]In 2017, n = 17,072; in 2021, n = 20,297.
[2]Active users are defined as respondents who access internet or mobile banking at least once a month.
[3]Penetration measures those who have used nontraditional financial-service providers' solutions.
Source: McKinsey Asia–Pacific PFS survey 2021

Exhibit 2

Approximately 80 percent of consumers expect to maintain or increase use of digital banking beyond the COVID-19 pandemic.



Note: Figures may not sum to 100%, because of rounding.
Source: McKinsey Asia–Pacific PFS survey 2021

Further, more than half of respondents in most Asia–Pacific markets report that less than 30 percent of their weekly spending is done with cash. At one end of the spectrum, New Zealand and South Korea lead the trend, with approximately 80 percent of consumers in both markets reporting that they are using less cash. At the other end of the spectrum, fewer than two in five consumers (approximately 37 percent) in Vietnam and the Philippines say they have reduced their use of cash to less than 30 percent of weekly expenditures.

One of the points highlighted in the 2017 PFS report was the difference in consumer use of digital banking tools between Asia–Pacific emerging and developed markets. This year's report, however, shows that this difference has narrowed significantly in recent years. At the same time, the region's emerging markets have become the hub of banking innovation for digital business models.

Three strategic questions for the era of digital banking

Asia–Pacific consumers' stated interest in using digital channels for services beyond transactions indicates that banks have an opportunity to leverage existing assets to strengthen and diversify their digital offering. To reinvent their business and delivery models and get ahead of consumers' fast-changing expectations, banks can focus on three key areas: the value of branches, customer engagement, and the bank's overall competitive positioning.

What role will branches serve in this phase of digital evolution?

Bank branches once served as the primary platform for interacting with customers. Today, however, approximately 97 percent of consumers across Asia–Pacific either consider the digital channel the best of several ways to interact with their bank ("digital first") or use it as one of several channels in a multichannel or omnichannel offering. In developed markets, 38 percent of consumers are digital first, and 60 percent are multichannel users (Exhibit 3). In emerging markets, 27 percent of consumers are digital first, and 70 percent are multichannel. A third category, which we call "branch lovers," comprises customers who continue conducting most of their bank business at the branch. Branch lovers are 2 percent of consumers in developed Asia–Pacific and 3 percent in emerging Asia–Pacific.

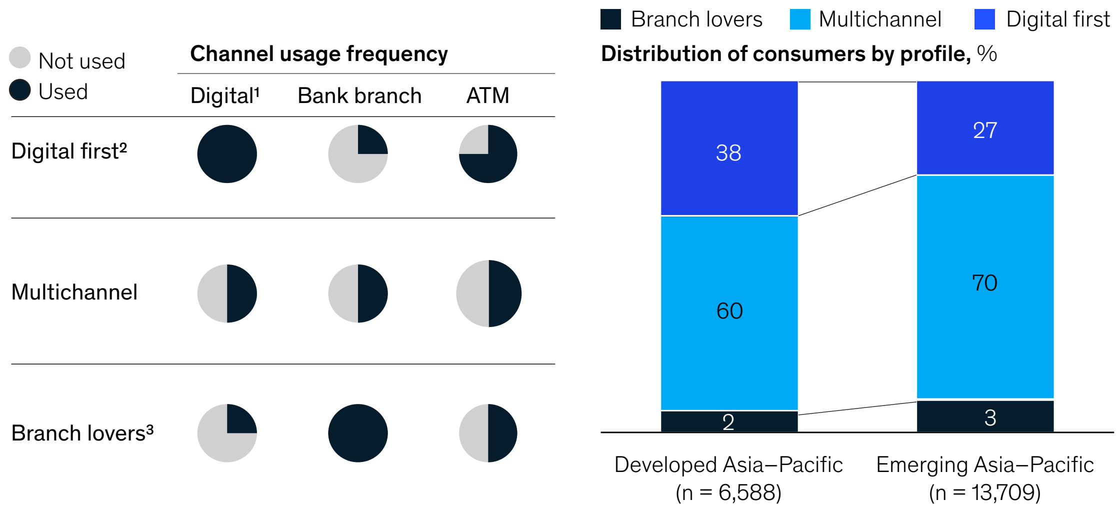
While traditional branch activity is clearly declining, branches still play a crucial role in an omnichannel model for at least two reasons. First, branch lovers and multichannel customers represent highly valuable lifelong relationships. Second, the pace of digitization for certain use cases depends on regulatory changes. In some markets, for example, the law requires paper documentation for mortgage agreements.

The overall trend, however, is toward end-to-end digitization of diverse sales and service transactions. Therefore, banks urgently need to consider how their physical networks can increase value even as branch and contact center volumes decline.

Front-end sales channels have been digitized for a long time, but to manage unit costs as traditional branch transactions fall, banks should adopt a "paperless ops" mindset and extend digitization and automation to all eligible internal processes—from loan approvals to regular reporting, customer communication, and more. Many banks still require customers to visit the branch or contact the call center for various administrative tasks—for example, signing documents, changing the address of record, activating a new card, replacing or blocking a lost card, or changing credit limits. However, these manual processes not only are costly and prone to error, but also place an unnecessary burden on

Exhibit 3

A large majority of consumers are 'digital first' or multichannel users of bank services.



[1]Digital channel use includes usage of internet and mobile banking.
[2]"Digital first" respondents are those who say they use digital banking and an ATM at least once a month and visit a branch less than once a month.
[3]"Branch lovers" are respondents who say they use digital banking less than once a month and visit a branch at least once a month.
Source: McKinsey Asia–Pacific PFS survey 2021

At the same time, branches offer incumbent banks some distinct advantages. Traditionally, branches have reinforced trust in banks as consumers' primary partner in managing their money. Banks can strengthen these relationships by digitizing processes to the maximum extent possible so that branch staff have time to concentrate on higher-value activities like advising on loans, insurance, or investments. Consultations with a generalist might take place in person at the branch. To extend customer access to specialists, the bank can offer remote consultations with experts via digital channels, such as using branch-to-branch, hub-to-branch, or hub-to-home video conferencing. Given the right sales model and an optimized physical footprint, branch-based revenue has the potential to exceed network costs, even as the share of transactions, including new sales handled through digital channels, increases.

Call to action

As bank leaders think about how to use the branch to create a competitive advantage in revenue growth and market share, they should prepare to act on four fronts:

— Digitize the last mile of processes.

— Strengthen and implement the bank's vision for omnichannel delivery, including financial targets and customer satisfaction goals for branch activities. Banks should ensure that branch-based human interactions go beyond functional convenience to outperform on empathy and understanding.

— Assess the optimal number and location of branches and the physical–digital advisory mix.

— Create the tools and capabilities that will enable branch sales teams to excel.

How should banks rethink the ways they engage with customers?

The widespread embrace of digital banking tools across the diverse markets of Asia–Pacific is impressive, but as noted earlier, our research also reveals a mismatch between customer appetite and bank performance. Seventy percent of respondents indicate their willingness to buy banking products through digital channels, but only 20 to 30 percent of respondents report that they have purchased a banking product—for example, a savings account, loan, or credit card—via a mobile app or online (Exhibit 4).

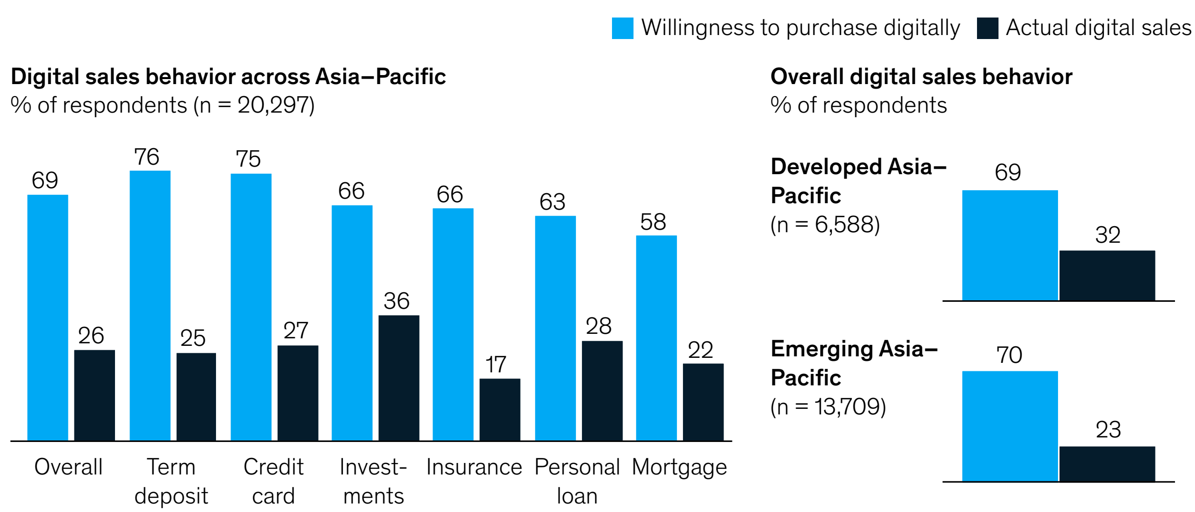
While most banks' digital sales lag customer interest in using digital channels for services beyond transactions, leaders have shown that with the right strategy and the capabilities to turn that vision into reality, the digital channel can contribute significantly to new sales. For example, between 2015 and 2019, top performers doubled their rates of cross-selling via mobile apps and online banking (digital sales per digital user) to 4.2 times those of slow adopters.[3] Getting to this level of performance requires a transformation away from a branch-centric business model—traditionally supported by a fragmented operating model organized around silos—to a digital-first model, or integrated omnichannel engagement centered on agile deployment of artificial-intelligence (AI) and machine-learning (ML) capabilities.

This means, first, that banks must provide the full range of services—including, for example, remote advisory for service requests, product purchases, and more—via digital channels. Second, banks must deliver their value propositions through customer experiences that are intelligent (anticipating and automating key decisions or tasks and recommending actions), personalized (relevant, timely, and based on a detailed understanding of customers' past behavior and current context), and omnichannel (including seamless embedding of digital banking capabilities within partner ecosystems). In digital environments, the model for increasing engagement and sales is essentially the same for customers and prospects: strengthening brand affiliation with superior customer experiences and delivering tailor-made, highly relevant messaging through the right channel at the right time.

[3] Eleanor Bensley, Sergey Khon, David Tan, and Zubin Taraporevala, "Breaking away from the pack in the next normal of retail banking distribution," July 2020, McKinsey.com.

Exhibit 4

Most consumers are open to buying financial products via digital, but far fewer make a purchase, especially in emerging markets.



Source: McKinsey Asia–Pacific PFS survey 2021

Call to action

To execute the digital-first business model successfully, a bank must fulfill the following imperatives:

— Identify the key customer journeys that generate 80 percent of potential value and ensure digital presence across each stage (for example, discovery, information gathering, purchase).

— Tailor the proposition and communication to customers. Build AI/ML use cases to generate personalized offers and messaging to be embedded within these journeys, and establish real-time feedback loops to ensure continuous improvement.

— Expand communication beyond the bank's proprietary channels, embedding a broad range of financial services within nonbank e-ecosystems.

How should banks position themselves?

As banks consider how to increase the value of their physical networks and engage more effectively with customers, they must understand both the diverse needs of the markets served and the threat posed by three main types of competitors: incumbents with an innovative offering, ecosystem companies (some well-established, some new entrants), and the growing field of virtual or digital-only banks. Before undertaking any of the recommendations offered in this report, each bank must have a clear vision of its position in the competitive landscape and the role it aims to fulfill. In many cases, this role will be that of either a digital attacker or an omnichannel incumbent.[4]

The new era in digital banking marks an inflection point for banks

The fundamental lesson of the digital disruption is that long-term benefits—including market share and profitability—accrue to organizations capable of deploying digital services, advanced analytics, and AI technologies to meet individual customers' needs, at scale, with minimal cost to add scale. Despite varying degrees of success in their digital transformations, several banks have so far withstood the disruptive economics of digital production and distribution. Indeed, our analysis shows that top-tier financial institutions have largely held their positions in their primary markets. In approximately 80 percent of the markets examined, the top five banks of 2017 have remained in the top five in 2021 in terms of holding primary banking relationships with retail customers.

How did these leaders protect their positions? Some incumbent banks have digitized their businesses as discussed in this report—creating new customer interfaces, streamlining customer journeys, and modernizing middle and back offices. Some are launching new digital propositions and business models. Two case studies illustrate this point:

— DBS has strengthened its market position largely by digitizing processes across the enterprise. It has reimagined customer journeys, both for customer acquisition (shifting from a branch-centric strategy to a model anchored in digital ecosystems) and for servicing (eliminating paper to achieve straight-through processing). DBS was also one of the first banks globally to measure digital value creation by behavioral segment: digital (60 percent) and traditional (40 percent). In 2019, the bank's digital segment achieved a cost-to-income (C/I) ratio of approximately 34 percent, which was 20 percentage points lower than the 54 percent ratio of the traditional segment.[5] In 2020, the spread between the C/I ratios of the digital and traditional segments widened to 30 percentage points.[6]

— With its launch of SBI Yono in 2017, State Bank of India provides an example of an incumbent

[4] Other possible strategies include assuming the role of a specialist serving a niche segment or that of a "factory" offering low-cost banking as a service to nonbank service providers. For further discussion of these models, see "New rules for an old game: Banks in the changing world of financial intermediation," McKinsey Global Annual Banking Review 2018, November 2018, McKinsey.com.
[5] Joydeep Sengupta and Chng Sok Hui, "Becoming more than a bank: Digital transformation at DBS," January 2020, McKinsey.com; Chng Sok Hui, "Creating shareholder value from digitalisation," DBS Digital Transformation Investor Day 2017, November 17, 2017, dbs.com.
[6] DBS Group annual report, 2020.

successfully assuming the role of digital attacker. By focusing on the digitally savvy segment of SBI's 448 million customers, Yono grew rapidly to become the world's largest digital bank, with 24 million accounts.[7] SBI has also leveraged the digital capabilities of Yono as a digital attacker in other markets such as the United Kingdom.

Ecosystem companies' digital banks have gained market traction and consumer respect
Earlier in the evolution of digital banking, digital banks in Asia–Pacific tended to focus on a specific segment or use case. While some of these ventures succeeded in generating a positive return on investment, many encountered diverse challenges that hampered their efforts to build scale. Successful digital banks achieving large scale include those built by ecosystem companies with a large user base, such as WeBank and Rakuten Bank. Another example is the South Korean messaging service Kakao, which leveraged its platform of 46 million users (out of South Korea's population of 51 million) to promote KakaoBank. Within two years of its 2017 launch, KakaoBank had broken even and had approximately 13 million retail customers. KakaoBank launched an IPO in August 2021, achieving a valuation of $29 billion after the first day of trading.[8]

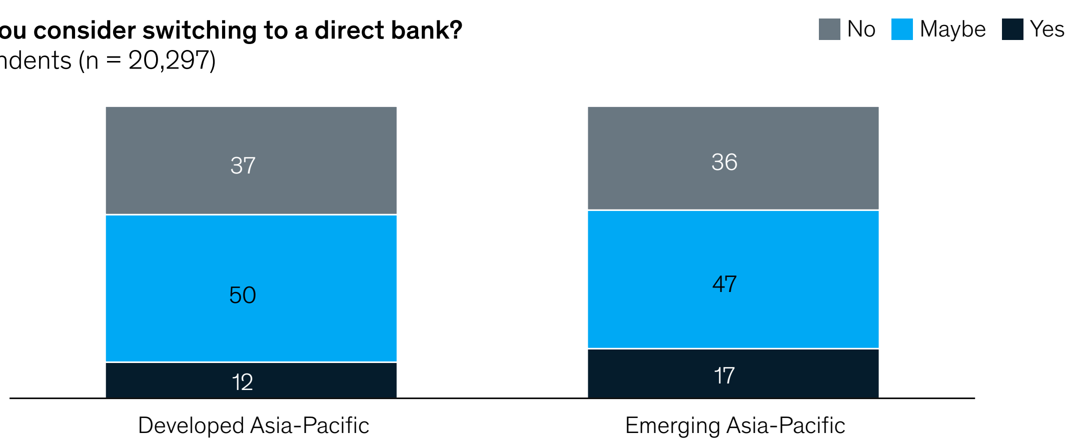
The success of these ecosystem-based digital banks is reflected in consumers' willingness to consider choosing a digital bank as one of their main financial institutions. Approximately 60 percent of consumers across Asia–Pacific say either that they would consider or that they might consider switching to a direct bank (Exhibit 5). Consumers in Mainland China, Singapore, and India are even more inclined to consider shifting to a digital-only bank. Consumers' willingness to embrace a new model for their primary or secondary banking relationship is a source of

[7] Rajnish Kumar, Akash Lal, and Joydeep Sengupta, "How the State Bank of India is learning from the crisis," *McKinsey Quarterly*, July 2020, McKinsey.com.
[8] Joyce Lee and Scott Murdoch, "Kakao Bank becomes S. Korea's biggest lender by market value in blockbuster debut," Reuters, August 6, 2021, reuters.com.

Exhibit 5

More than 60 percent of Asia–Pacific consumers are open to switching to a direct bank.

Q: Would you consider switching to a direct bank?
% of respondents (n = 20,297)



Source: McKinsey Asia–Pacific PFS survey 2021

concern to some and encouragement to others, depending on the organization's position, vision, and capabilities. What is more, survey results indicate that affluent consumers would move as much as 36 percent of their portfolio to a digital bank.[9]

Low-cost digital-only banks and robo-advisors could pose a fierce challenge to incumbent banks

Today, a new generation of digital banks—also anchored in ecosystems—is emerging. In late 2020, Sea Limited, a leading digital-ecosystem company in Singapore, was awarded a digital-banking license by the Monetary Authority of Singapore. For traditional banks seeking to protect their deposit-taking and lending businesses, the combination of consumer interest in direct banks and the opening of new pathways to regulatory approval for digital banks is a signal to prepare for new attacks on their market share. For more on the potential impact of direct banks, see sidebar "New virtual banking licenses could quicken the pace of innovation."

Results of this year's survey also show that affluent consumers are open to using innovative advisory services, including enhanced reporting, financial planning, and wealth-advisory tools. Incumbent banks should consider how to enhance their digital wealth management platform and remain alert to the growth of independent robo-advisors, which have potential to build market share over time. See sidebar "Robo-advisory may create challenges and opportunities for traditional banks."

Organizations weighing alternatives for launching a digital bank at scale should note that most stand-alone digital banks in Asia–Pacific are owned by consortia. For example, Mox Bank, one of eight virtual banks in Hong Kong SAR, was formed by a consortium comprising Standard Chartered, PCCW, HKT, and Ctrip Finance. These partners bring capabilities in banking, media, fintech innovation, and advanced analytics, enabling Mox Bank to provide a single point of access to a suite of retail financial services, as well as unique telecom, entertainment, and travel propositions.

[9] For the purposes of this survey, the minimum portfolio value of the affluent segment ranges from $30,000 to $55,000 in Asia–Pacific emerging markets and from $85,000 to $175,000 in developed markets.

New virtual banking licenses could quicken the pace of innovation

Changes in regulations governing the licensing of digital banks are designed to increase competition and innovation in the banking sector. Governments in Malaysia, Singapore, and several other Asia–Pacific countries have begun issuing digital-banking licenses, opening the door to nonbank digital challengers to take market share and revenue from incumbent banks.[1] Diverse types of organizations with large customer bases, including telecommunication companies, tech firms, messaging platforms, and e-commerce ecosystems, have the potential to build scale rapidly with a distinctive offering, superior customer experiences, and seamless integration with digital partners.

Virtual banking licenses are still in early stages, with signs that momentum is building. By the second quarter of 2021, more than 500,000 customers had signed on to the eight virtual banks of Hong Kong SAR. In time, the granting of virtual banking licenses across Asia–Pacific could have an impact on the structure of the market.

[1] Raphael Bick, Denis Bugrov, Hernán Gerson, Alexander McFaull, and Alexander Pariyskiy, "Joining the next generation of digital banks in Asia," January 2021, McKinsey.com.

Robo-advisory may create challenges and opportunities for traditional banks

Diverse organizations offering artificial-intelligence (AI) and machine-learning (ML)-powered digital platforms for wealth management ("robo-advisory") are gaining momentum and may reach scale over time, particularly in light of their appeal to young savers, who represent potentially valuable lifetime relationships. In Indonesia, for example, digital advisory platform Bibit has attracted primarily millennials and first-time investors with digital tools that help users build a portfolio aligned with their goals and risk tolerance.[1] StashAway, which attracted more than $1 billion in assets under management (AUM) in 3.5 years,[2] offers digital wealth platforms in Singapore and Malaysia and recently announced the launch of its platform in Hong Kong SAR.[3] Endowus, which received funding from SoftBank earlier this year,[4] has grown to US $0.74 billion (AUM) in Singapore in 20 months.[5]

Robo-advisory also has potential to attract mass-affluent and small-business customers, who can be highly profitable for digital-first organizations with the AI/ML capabilities to craft solutions tailored to individual needs. Cost, experience, and breadth of service options and investment opportunities are some of the main areas where robo-advisory poses the biggest challenge to incumbents in private banking and wealth management. At the same time, these fintech innovators are building experience and capabilities that could make them good candidates for cooperation with banks through ecosystem participation, strategic partnership, or acquisition.

[1] Catherine Shu, "Indonesian robo-advisor Bibit raises $30 million led by Sequoia Capital India," *TechCrunch*, January 6, 2021, techcrunch.com.
[2] Natalie Choy, "StashAway crosses US$1b in assets under management," *Business Times*, January 25, 2021, businesstimes.com.sg.
[3] Natalie Choy, "StashAway launches digital wealth advisory platform in Hong Kong," *Business Times*, April 7, 2021, businesstimes.com.
[4] Doris Yu, "Lightspeed, SoftBank invest in $17m round of Singapore fintech startup Endowus," *Tech in Asia*, March 31, 2021, techinasia.com.
[5] Natalie Choy, "Endowus crosses S$1bn in AUM in less than two years of full launch," *Business Times*, July 7, 2021, businesstimes.com.sg.

Call to action

Those planning to launch a stand-alone digital bank either in their home market or in a new market should have a clear vision of what it takes to succeed as a disruptor. To stay relevant and stand apart from the competition with an omnichannel proposition, incumbents must manage the costs of legacy networks and systems aggressively while building new capabilities—that is, modernizing technology and acquiring new skills, as discussed in the next section. The digital-attacker and omnichannel-incumbent strategies both require a bank to meet at least three key challenges:

— *Differentiate the digital value proposition from existing offerings.* Whether the goal is launching a stand-alone digital bank or building the tech infrastructure and organizational capabilities required for end-to-end integration in an omnichannel environment, the investment is significant, and an organization must go beyond convenience, speed, ease of use, and security to introduce innovative features and a compelling value proposition that distinguish the offering from the competition.

— *Position the digital bank to build scale fast at low cost.* Among the main challenges for digital attackers is the mounting cost for marketing and customer acquisition as the digital venture builds scale. Omnichannel incumbents, by contrast, face the challenge of continuously managing the costs of the physical footprint and gradually reducing legacy core technology as volumes shift toward digital channels and systems hosted on cloud infrastructure. In either case, success depends on access to the user base of a large digital ecosystem.

— *Capture transactions and balances as a primary bank.* It is crucial to push the digital proposition beyond "one use case only" (for example, high-yield deposits) or a "wallet-type" relationship (such as a very low balance) to day-to-day banking (transactions and balances).

Capabilities for seizing the opportunities and meeting the challenges

By various measures, Asia–Pacific leads the world in broad consumer adoption of digital commerce, including digital banking services.[11] This leap forward has been powered by innovative products and services launched by a combination of large technology companies, fintech start-ups, and incumbent banks. Coupled with the rise of digital ecosystems (the largest of which are led primarily by nonbank/fintech challengers), the increasing propensity of Asia–Pacific consumers to transact business digitally not only poses challenges but also opens new horizons for traditional banks.

To compete and thrive in this new world, banks need to tailor products and services according to the real-time needs of individual customers and integrate seamlessly with diverse partners, large and small. Achieving both at scale will require significant changes in the way banks work. To begin planning these changes, bank leaders should think about how to build (or acquire) the AI and analytics capabilities required in three crucial areas: (1) sales and service, (2) operations and information technology (IT), and (3) organization and talent.

Sales and service: Customer relationships in a digital-first multichannel market

Banks have come a long way in acquiring new customers through online and mobile banking sites, but much work lies ahead. Research by McKinsey Finalta indicates that across global regions (Asia–Pacific, Europe, and North America) the average rate of digital acquisition by the ten banks with highest digital acquisition is approximately 50 percent. To keep moving forward, banks should think boldly about their customer engagement strategy and plan a road map for making digital the primary channel for acquiring new customers and deepening relationships with existing customers. As they develop their strategy, banks may draw upon one or any combination of three main approaches: AI for creating personalized messages, ecosystem-based customer engagement, and person-to-person consultation.

AI-powered decision engines for personalized messaging

Banks need to leverage advanced analytics to craft messages and offers that anticipate instantaneously the emerging needs of individual customers during journeys via bank-owned and partner-owned channels. The media through which these messages and offers are delivered include, for example, the bank's mobile app, a paid social-media account or other digital marketing platform, and partner-owned ecosystems.

Relying on the data-streaming capabilities of the AI bank of the future, banks should actively

[11] Jacob Dahl, Ervin Ng, and Joydeep Sengupta, "How Asia is reinventing banking for the digital age," February 2020, McKinsey.com.

monitor and test their omnichannel messaging campaigns and make incremental changes to continuously improve customer engagement (the frequency of interaction, conversion rates, and more). A leading European bank was able to boost digital sales by more than 50 percent within a year by redesigning its digital marketing approach and running experimentation at scale. Taking an agile test-and-learn approach, the digital marketing team conducted hundreds of concurrent live experiments with A/B testing—comparing how each of two versions of a message, offer, product configuration, or level of engagement was affecting users' behavior. In this way, they evaluated the effectiveness of a campaign or an end-to-end journey enabling a customer to receive an offer and purchase the product directly, and they could move forward with the most effective version of each.

Ecosystem-based engagement

For purchasing decisions as widespread as travel and entertainment, housing and healthcare, consumers are becoming accustomed to the convenience of planning and executing vertically linked transactions within a single ecosystem.

One example is the housing platform provided by Commonwealth Bank of Australia, which analyzes chosen locations and public data to assist customers with property searches and valuations, as well as with various decisions and transactions along the housing journey—renting, buying, insuring, furnishing, renovating, selling, and relocating. Customers have responded favorably, as the platform provides insights on the price paid for similar houses and affordability. By covering the full housing journey, banks can defend their current mortgage revenues and build new revenue streams in adjacent areas. Beyond increasing revenue, banks can also build a critical mass of customers and provide them with end-to-end solutions. Engaging with consumers throughout their end-to-end journeys within a housing ecosystem, banks can also improve profitability by reducing customer acquisition costs and improving the efficiency of supporting operations (for example, mortgage servicing).[12]

Person-to-person consultation

We define "person-to-person consultation" to include interaction with sales representatives and relationship managers through branches and contact centers. Front-end staff—including branch-based sales officers, relationship managers, call-center-based advisors, and customer-service representatives—should have a 360-degree view of each customer's relationships with the bank, including personalized next-product-to-buy offers based on real-time analytics. Customer-facing staff should also be familiar with search and query tools to support evidence-based strategic planning and periodic adjustment of contact priorities. By designing their own data queries, sales officers and relationship managers can serve mass-affluent/high-net-worth individuals and small-business owners by locating those with a need the bank is well-positioned to meet.

As bank leaders rethink the model for person-to-person consultation, they should anticipate that some customers who became active users of remote advisory services during the COVID-19 pandemic may resume previous patterns of interaction once the pandemic subsides. Banks should develop campaigns emphasizing the benefits of consulting with experts via video conferencing for advice on products of varying complexity.

Operations and IT: Support for compelling experiences and personalized service

As we discussed in relation to the role of branches within an omnichannel business model, banks should go the last mile in digitizing processes across the enterprise. This means implementing straight-through processing to the fullest extent possible—starting with the digitization of use cases (for example, including regular reporting, loan approvals, updates of customer information, and customer communication), extending to robotic process automation (such as automatically

[12] Miklós Dietz, Reka Hamvai, Paul Jenkins, Miklós Radnai, and Michael Yee, "Deep insights, broad solutions: How banks can win in the vast housing ecosystem," June 2018, McKinsey.com.

uploading data from one application to another), and continuing toward maximum automation. This "zero ops" approach[13] also encompasses the use of AI technologies such as voice-to-script conversion and natural-language processing, to reduce manual handling of documents and provide customers with highly relevant and personalized offers.

Along with relevant offers and more efficient document processing, we see additional benefits of end-to-end digitization in banks. It can increase banks' ability to build scale without significant additional capital investment; for instance, there is no need to expand the contact center or operations teams as the customer base grows. Also, it allows the bank to optimize its branch network. Extreme digitization is also crucial to realizing the benefits of a modern core technology and supports the development of an agile operating model.

Modernize the core technology

Delivering the superior experiences and real-time responsiveness that customers expect requires seamless integration across diverse bank and nonbank systems, the capacity to manage massive data sets in diverse formats from various sources, and deployment of AI and advanced analytics to extract actionable insights and deliver personalized messages in a fraction of a second. As discussed in our recent article on modernizing core technology for the AI bank of the future, the technology stack underpinning a digital-first business model requires a level of scale, speed, and flexibility that legacy systems cannot deliver.[14]

The mainframe systems that have powered banks' core systems—payments, lending, general ledger—have for decades proved stable and reliable, but they are costly to maintain, and upgrades require months of planning and development, as well as significant down time for implementation. Further, they are not designed for the rapid innovation cycles and variable workloads of digital-native companies.

To support continuous data gathering, real-time advanced analytics, and highly personalized messaging across bank and nonbank platforms, banks will need to plan and execute a comprehensive modernization of the core technology. The core technology for a digital-first enterprise must be fast, scalable, flexible, reliable, and secure. Three main components enable a bank to meet these requirements:

— *Intelligent cloud.* A hybrid-cloud architecture enables higher scalability, resilience of services and platforms, and faster time to market, all while reducing IT overhead. With the continued expansion of customer engagement across bank and nonbank platforms, financial institutions need to create hyperscalable infrastructure to process high-volume transactions in milliseconds. Hosting processing environments on a distributed network cloud enables a bank to optimize infrastructure costs by balancing prepaid storage and computing capacity and elastic (automated) on-demand surge capacity without disruptions to service.[15]

— *Data management.* A centralized data management hub enables an organization to establish a single source of truth, provide better and faster data access with the proper controls, and enhance decision making with a 360-degree view of customer relationships across the organization. Without a centralized data backbone, it is practically impossible to analyze the relevant data and generate an intelligent recommendation or offer at the right moment.[16]

— *APIs.* APIs promote reusability of assets, reduce complexity, streamline integration with diverse external partners, and accelerate time to market through reduced internal dependencies. They also enable banks to integrate internal and external systems to support seamless

[13] The term *zero ops* describes an extreme form of automation that goes beyond automated file transfer to include monitoring, testing, repair, capacity management, and more.
[14] Sven Blumberg, Rich Isenberg, Dave Kerr, Milan Mitra, and Renny Thomas, "Beyond digital transformations: Modernizing core technology for the AI bank of the future," April 2021, McKinsey.com.
[15] "Beyond digital transformations," April 2021.
[16] Suparna Biswas, Brant Carson, Violet Chung, Shwaitang Singh, and Renny Thomas, "AI-bank of the future: Can banks meet the AI challenge?" September 2020, McKinsey.com.

customer journeys across internal platforms, partner ecosystems, and numerous external interfaces. This requires a robust, scalable, and standardized approach to building and hosting integrations and APIs.[17]

Organization and talent: The right structure and people to conduct business at digital speed

To compete and win in an increasingly crowded digital banking market, incumbent banks will need the right mix of talent and ways of working to optimize the performance of the AI and analytics capabilities just described. This means building an operating model that matches the speed, resilience, and adaptability of the AI-bank capability stack. Most banks have adopted agile methods for managing technology and innovation, and top-performing organizations have leveraged agile ways of working to reduce time to market by 50 to 75 percent.[18] What is more, organizations that have extended agile methods to areas beyond technology have been able to respond promptly to changing market conditions and customer expectations by quickly reorganizing teams and reprioritizing teams.

Becoming agile involves dismantling silos and creating an environment in which small cross-functional teams can collaborate to deliver the best solution with budgeted time and resources. This delayered network of agile teams mirrors the horizontal structure—or "platforms"—of a digital company. By enabling individuals with distinct skills and roles to share knowledge and experiment with a high degree of autonomy, agile teams can launch a minimally viable product within weeks and refine the solution in rapid iterations before scaling up.

A digital-first business model also requires a new mix of talent. For example, the share of the financial services workforce employed in technology is expected to double by 2030.[19] Already at digital-only banks, most jobs are related to technology: 60 percent of staff at CITIC's aiBank work in technology-related roles,[20] and 64 percent at Ant Financial work in the product-and-technology vertical.[21]

Banks will compete to hire technologists—data scientists, data engineers, AI experts, and others—not only with other banks but also with companies in any industry disrupted by AI technologies. This war for talent will intensify as roles continue to evolve and require deeper technological knowledge and skill across each organization. For example, the profile of the chief marketing officer will shift from expertise in traditional methods of marketing toward the use of AI, big data, and advanced analytics in support of customer acquisition and engagement.

To win the war for talent, banks will have to build a flexible, transparent, and collaborative culture. To this end, an agile organizational culture is aligned with the imperatives of the digital-first business model and also suited to attracting and retaining top talent and reskilling existing employees. Banks aiming to attract ambitious and accomplished candidates must establish a track record for successful innovation. Agile organizations have also been able to improve employee engagement by 20 to 30 percentage points, as reflected in employees' willingness to recommend their workplaces and in employee-satisfaction surveys.[22]

As the broad adoption of digital banking across Asia–Pacific indicates, the region's banks have marked important milestones in addressing the needs of digital customers. However, a new

[17] "Beyond digital transformations," April 2021.
[18] "Beyond digital transformations," April 2021.
[19] Jacques Bughin, Eric Hazan, Susan Lund, Peter Dahlström, Anna Wiesinger, and Amresh Subramaniam, "Skill shift: Automation and the future of the workforce," McKinsey Global Institute, May 2018, McKinsey.com.
[20] "CITIC aiBank says over 60% of employees are from tech backgrounds," *China Banking News*, May 31, 2020, chinabankingnews.com, citing CITIC aiBank's latest annual report.
[21] Interviews; Ant Group H Share IPO, Stock Code 6688, October 27, 2020, hkexnews.hk.
[22] Wouter Aghina, Christopher Handscomb, Jesper Ludolph, Dániel Róna, and Dave West, "Enterprise agility: Buzz or business impact?", March 2020, McKinsey.com.

generation of challengers has entered the market, including ecosystem-based digital banks and fintech innovators targeting a specific niche or use case. No aspect of the banking business is insulated from the radical changes in market structure brought by the advance of digital technology and analytical prediction engines based on artificial intelligence and machine learning. To deliver on this report's calls to action, banks need to make fundamental changes in how they operate. They also need to build the capabilities required for an AI-powered digital-first business model, including a new sales and service model, modern operations and technology, and an agile operating model. Any bank that intends to remain relevant and thrive must become an innovation leader.

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