



2017 PAYMENTS STRATEGY SURVEY



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Executive Summary

New technologies, changing customer expectations, and new competitors are combining to make consumer and commercial payments one of the most dynamic areas of financial services. The field is one that banks have historically dominated even as threats to the industry's control were visible 20 years ago; however, the threats are even more apparent and real today. The magnitude of change occurring in payments means that payments must be a top strategic priority if banks are to maintain their leadership in this space.

An assessment of the banking industry's preparedness to respond to the transformational changes that are occurring in payments presents a mixed picture. Collectively, the industry has taken some major steps to address these challenges and segments of the industry have also taken important steps to adapt to the new environment. Yet many institutions are insufficiently prepared. The ability of banks to compete successfully in the rapidly evolving world of digital payments is characterized by several shortcomings. These include a lack of formalized strategic plans, complicated governance approaches to payments, failure to adopt new technologies or to establish partnerships with nonbank competitors that offer new payments services that customers desire. These challenges must be addressed if banks are to retain their central roles in the evolving world of digital payments.

Forces of Change

Continued Growth in Electronic Payments

There has been a long-term shift away from traditional payments such as cash and checks toward electronic payments. This trend has continued as evidenced by the most recent payments data from the Federal Reserve System. In terms of the number of transactions, the composition of noncash payments by consumers and businesses is dominated by cards. Automated Clearing House (“ACH”) payments are the predominant form of payment in terms of dollar value. Checks, once the predominant type of noncash payment in the United States, have been surpassed by non-prepaid debit cards, credit cards, and ACH payments. More specifically, the Federal Reserve data show that during the period 2012-2015:

- Card payments, including credit and non-prepaid debit, comprised 60 percent of payment transactions; non-prepaid debit cards accounted for 40 percent of noncash transactions;
- Card payments, both credit and debit, exhibited the fastest growth rate among payment types;
- ACH transfers also grew and represented 80 percent of dollar transactions; and,
- Check payments continued to decline both in the number transactions and the dollar value.

Composition of Payments by Type and Rate of Change 2012–2015

Payment type	Number of Transactions (billions)				Dollar of Transactions (\$ Trillions)			
	2012	2015	Change	CAGR	2012	2015	Change	CAGR
Debit cards (non-prepaid)	47.3	59.6	12.3	8.0%	2.1	2.6	0.5	6.8%
Pre-paid cards	9.3	9.9	0.6	2.1%	0.2	0.3	0.0	5.5%
Total Debit Card	56.5	69.5	13.0	7.1%	4.7	5.7	1.1	7.1%
Credit Cards	26.8	33.8	7.0	8.0%	2.6	3.2	0.6	7.4%
Total Card	83.3	103.3	20.0	15.2%	7.2	8.9	1.7	14.6%
Total ACH	20.4	23.5	3.1	4.8%	129.0	145.3	16.3	4.0%
Check Payments	19.7	17.3	-2.4	-4.2%	27.2	26.8	-0.38	-0.5%
Total All Payment Types	123.4	144.1	20.7	15.8%	163.4	181.0	17.6	18.1%

Source: Federal Reserve Payments Study 2016.

These trends will continue. Debit cards have become the preferred consumer payment type for many smaller, everyday purchases. Credit card payments will continue to increase due to the growth in e-commerce activity and mobile payments because consumers prefer to use credit cards in those channels.¹ The use of ACH will continue to grow, especially in B2B payments, as same day settlement takes hold and initiatives to standardize and enhance electronic remittance information are implemented and adopted. While checks remain among the preferred payment choices of consumers when paying bills and making payments to individuals,² check usage will likely continue to decline further as person-to-person payment capabilities become more widely accepted and other digital payment options become faster and more convenient.

Growth in Consumer Mobile Payments

While consumers still rely primarily on check, cash, and card payments today, the use of mobile payments has exhibited a modest increase, led by younger consumers, ethnic minorities, and well-educated and more affluent consumers. Consumer survey data from the Board of Governors of the Federal Reserve shows that 24 percent of all mobile phone owners reported having made a mobile payment in the 12 months prior to the survey, which is well above the level from four years previously.³

There remains a significant number of consumers who have not adopted mobile payments for a number of reasons, including security concerns, lack of perceived benefit, and ease of use of other payment methods. However, there are forces that will likely spur further growth in mobile payments. For merchants and retailers, payments are no longer merely a means for accepting money and finalizing a transaction. Rather, payments are a critical component in creating new ways for merchants to engage with their customers and are a key driver of consumer loyalty and satisfaction.⁴ Leading retailers have introduced mobile wallets which combine payment functionality with loyalty cards in an effort to improve customer convenience, enhance loyalty, and encourage shoppers to spend. Merchants and retailers continue to invest in more sophisticated point-of-sale technology that will make mobile point-of-sales transactions easier and more reliable. Security is being improved through biometric authentication and tokenization. Also, credit card issuers are launching rewards programs that incent mobile payments in an effort to attain top-of-wallet position for their credit card. According to eMarketer, the transaction value of mobile payments will more than double in 2017 in the U.S., to \$62.5 billion, and such payments will exceed \$314.0 billion by 2020.⁵

1. TSYS, 2016 U.S. Consumer Payments Study.

2. TSYS, 2016 U.S. Consumer Payments Study.

3. Board of Governors of the Federal Reserve System, Consumers and Mobile Financial Services, March 2016.

4. Ovum 2016 Global Payments Insight Survey: Merchants and Retailers.

5. eMarketer Report, US Mobile Payments Outlook: Strong Growth Forecast for Proximity, Peer-to-Peer Payments in 2017 and Beyond, November 14, 2016.

New Expectations in Commercial Payments

New payments capabilities in consumer banking have implications for commercial payments. The emergence of digital-savvy consumers and corporate treasurers has brought new expectations to all aspects of the payments industry. As customers become accustomed to faster and more convenient payments on the retail side, they will demand similar service in commercial transactions. Given the impact of nonbanks and fintechs in consumer payments, bank executives in commercial payments must invest in digital capabilities or risk being left behind.

Importance of Payments-Related Information

Information is integral to the emerging value propositions in consumer and commercial payments. Information underpins important functionality that consumers rely on to control and monitor their accounts and transactions, such as mobile alerts, stopping unauthorized transactions, or instantly viewing transactions made with a debit or credit card. New solutions continue to be developed based on payments information. One fintech startup has designed a voice-activated app that enables consumers to understand their spending-related information and suggests ways to save money. New analytical solutions allow financial institutions to capture and analyze data on buying behaviors to enable merchants to extend instant, customized offers and coupons to consumers.

In the realm of commercial payments, many businesses continue to use checks to make and receive business-to-business (B2B) transactions and rely on manual, paper intensive processes to reconcile associated remittance data. In part this is because electronic remittance information has varied in both detail and format and has been provided separately from the electronic payments. Payments solution providers are adopting software solutions that provide businesses with electronic remittance data that are more structured, standardized, and detailed, and that arrives at the same time as the payment. Among other benefits, this enables businesses to more fully automate their accounts payable and receivable processes and will further spur adoption of e-payments in the B2B space. The integration of information with payments services will be a critical point of competitive differentiation in the digital payments landscape.

New Competitors

Thousands of new nonbank digital competitors have emerged with the goal of applying new technology to capitalize upon — and in some cases shape — the rapidly evolving payments expectations of consumers and businesses. These new competitors have sought to enter the payments arena by leveraging new technology to address inefficiencies in the existing payments process. For instance, cross-border payments are expensive for customers and are typically characterized by a lack of transparency and slow settlement. Blockchain technology is still in its infancy and its large scale commercial application is likely some years away, but it holds the promise for real-time, peer-to-peer transactions without a central counterparty. By employing such technology, non-bank companies can speed settlement, lower costs and threaten to displace banks from an area in which they have long been dominant.

These nonbank competitors are diverse, running the gamut from e-commerce companies to technology giants to start-ups. Their competitive models also vary. Some seek to directly challenge incumbent financial institutions while many others seek to enter into partnerships with banks. Through these partnerships, fintechs aim to accelerate payments and improve convenience, transparency, and other aspects of the customer experience. Their goal is to generally enhance the payments solutions offered by banks. In turn, fintechs gain access to banks' customers. Industry sponsored accelerator programs and the draft rules issued by the Office of the Comptroller of the Currency for a special purpose bank charter for fintech companies are manifestations of an evolving symbiotic relationship between banking and fintechs. Regardless of the model that they pursue, these new competitors are offering new digital payments solutions that banks cannot afford to ignore if they are to remain competitive.

New Technology

Developments in payments technologies are also disrupting the competitive landscape. Open Application Programming Interfaces (APIs) provide a way for software developers to communicate with the provider of a service such as a bank. Through open APIs, companies, including banks, can open their technology and data to partnerships with fintech companies and thereby offer new payments solutions to customers. Open APIs facilitate innovation because they provide access to the actual application which enables approved partners to use the data and information to create new applications and deliver new services.

The European Union has mandated that banks provide open access to regulated third parties.⁶ While there is no such regulatory mandate in the United States, competitive pressure continues to push the industry toward more open banking platforms. Fintech companies and many others are employing open APIs to offer new solutions in various areas of payments and thereby are fundamentally altering the value proposition to end-users by offering faster, easier, and value-added services.

Some third-party core vendors offer solutions that open connectivity between core and complementary solutions and third-party products. A few banks have launched developer portals and open APIs to spur innovation and have thereby signaled movement toward open banking platforms.

In addition to open APIs, the growing ubiquity of smart phones, as well as the growth in cloud services, high-speed data networks and more powerful computers means that information is more accessible and can often be processed in real time. Technological improvements now support the storage and manipulation of much larger data sets. Blockchain technology will allow digital information to be distributed but not copied, and may transform how banks maintain money balances and transfers. Collectively, these innovations are changing the expectations of end-users regarding the speed, convenience, information, and cost of payments services.

6. European Union's Directive on Payment Services (PSD2). Members have until 2018 to comply.

Improved Infrastructure

Progress is also being made to address issues that have impeded digital payments, such as concerns related to fraud and data security. Software and hardware firms are exploring new methods of verifying user identity. One such method is biometric authentication. U.S. smartphone makers are rapidly integrating biometrics-based features, such as fingerprint scanners, into their devices. Tokenization, the process of protecting sensitive data by replacing it with an algorithmically generated number called a token, adds an extra level of security to sensitive credit card data and other stored payment information. This protects consumers and businesses in event of a data breach. Among other benefits, tokenization enables users to store credit card information in mobile wallets, ecommerce solutions and POS terminals. This allows the card to be recharged without exposing the original card information.

Under the aegis of the Federal Reserve and leading industry payments groups modernization of the domestic and international payments infrastructures is underway. Initiatives are being pursued to improve payments infrastructure in the form of real-time or near real-time execution of payments, transparency in cost and payments status, enhanced security and risk management, and the establishment of global standards for payments and related messaging. Collectively, these initiatives are designed to support new digital payments services that are safer, faster and more responsive to the needs of a rapidly evolving market. To capitalize on these improvements, it is incumbent upon banks to build digital payments products and services that meet the expectations of end-users.

Call to Action

Payments have always been the banking industry's primary and most fundamental competitive advantage. However, technological advancements, new digital entrants that are reshaping the customer experience, changing market demographics and increasing demands for faster, easier and value-added payments services threaten to erode banks' historical position.

These challenges are also creating opportunities for banks of all sizes. However, overcoming these challenges is no small task. It will require banks to make significant changes to long-held policies and practices, make major capital investments in new technology platforms, transform payment and distribution channels and networks, and formulate appropriate responses to a seismic generational shift in customer attitudes, behaviors and expectations.

Indeed, there are indications that banks are rising to the challenge. Zelle, an inter-bank payment system, competes with other peer-to-peer payments services offered. R3 is a consortium of large banks that is focused on the development and application of distributed ledger technology in financial services. Still, the challenges are daunting. Many banks are encumbered by complex technology environments that make it difficult to access data and adopt open APIs and third-party solutions. Furthermore, many banks are dependent on their core system vendors to adopt and integrate new solutions.

The situation is often compounded by management structures wherein business and support units operate within organizational silos. To maintain their customer relationships and stay relevant, banks will need to respond to these challenges with new strategies, capabilities, and operating models.

Major Survey Findings

Purpose of the Survey

To assess how the industry is positioned to meet these changes, the American Bankers Association undertook a survey of bankers, fielded in March 2017, which solicited input on various aspects of payments strategies being pursued today by banks, as well as related challenges that banks face in payments.⁷ More specifically, the survey attempted to probe practices at financial institutions in order to:

- Assess the current state of the industry's approach to payments services;
- Identify the degree to which formalized planning processes and strategies are driving payments services decisions and investments;
- Determine the differences between the stated strategic approach of banks and their actual practices;
- Analyze differences between types and sizes of banks in terms of capabilities, direction and priorities;
- Identify who is driving payments decisions at banks; and,
- Overall, assess the industry's preparedness to respond to transformational payments system changes.

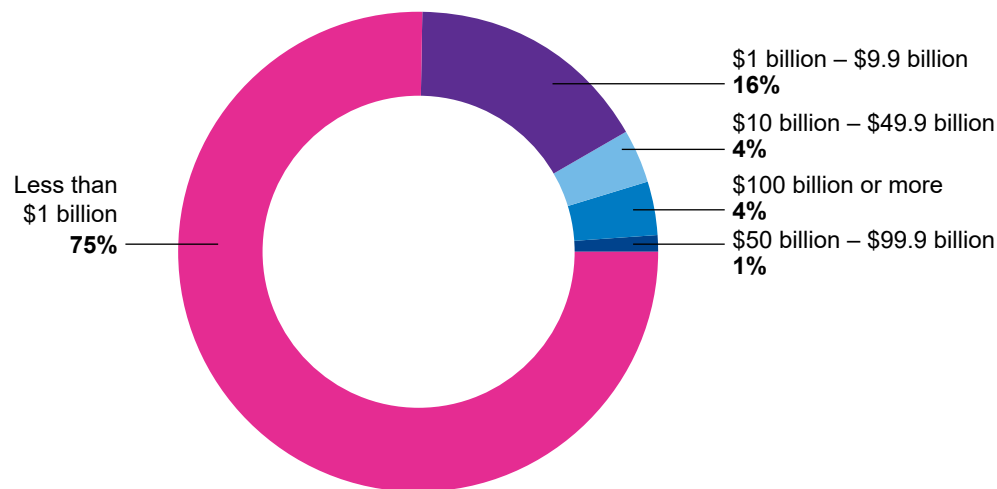
The goal of the survey was to enable bankers to compare practices at their institutions to the practices of others in the industry. It is hoped that these insights will be useful in strategy formulation and to ultimately provide a path that leads to competitive advantage in the new world of payments.

7. For purposes of the survey, payments were defined to include transactions performed via traditional checks, debit cards, prepaid cards, credit cards, electronic credit and debit transfers using networks such as ACH and SWIFT, online payments, mobile payments and cryptocurrencies through instruments such as mobile wallets, digital wallets and contact-less cards.

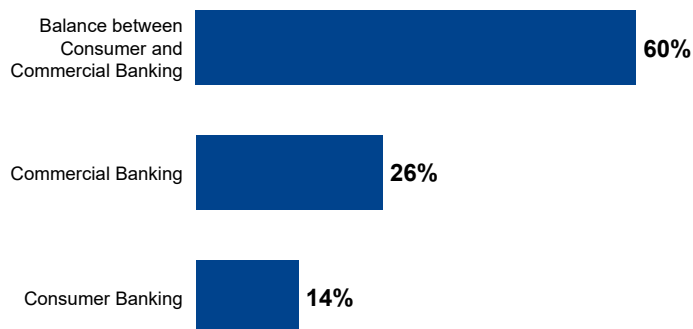
Survey Respondent Profiles

Two hundred nineteen institutions responded to the survey. The majority of respondents were from banks with total assets of less than \$1.0 billion and characterized their geographic scope of operations as community-focused. Larger Banks, defined as institutions with \$10.0 billion or more in total assets, comprised approximately 8 percent of respondents. Approximately 60 percent of respondents characterized their business focus as a mix of consumer and commercial business. Twenty-six percent of respondents characterized the strategic focus of their bank as primarily commercial and 14 percent as primarily consumer.

Distribution of Survey Respondents by Total Consolidated Assets

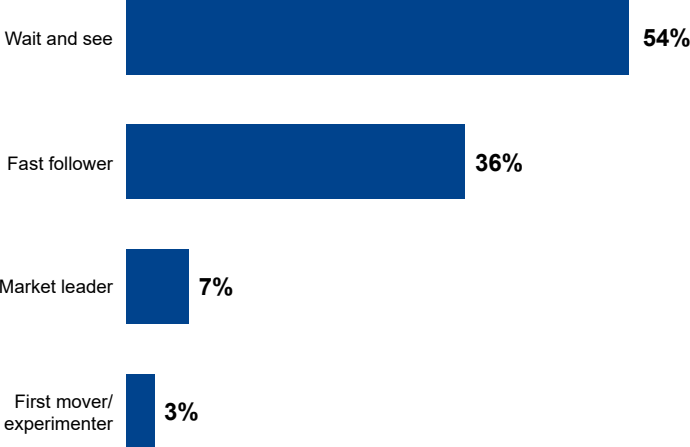


Distribution of Survey Respondents by Strategic Focus



Just under 40 percent of respondents characterize their organization’s approach to evaluating, adopting, executing and managing payments strategies as either a “Fast Follower” or “First Mover/Experimenter”. The majority of respondents characterize their bank’s approach as “Wait and See”. Given the speed with which customer preferences and technology are evolving in payments, the latter approach entails a risk of competitive obsolescence.

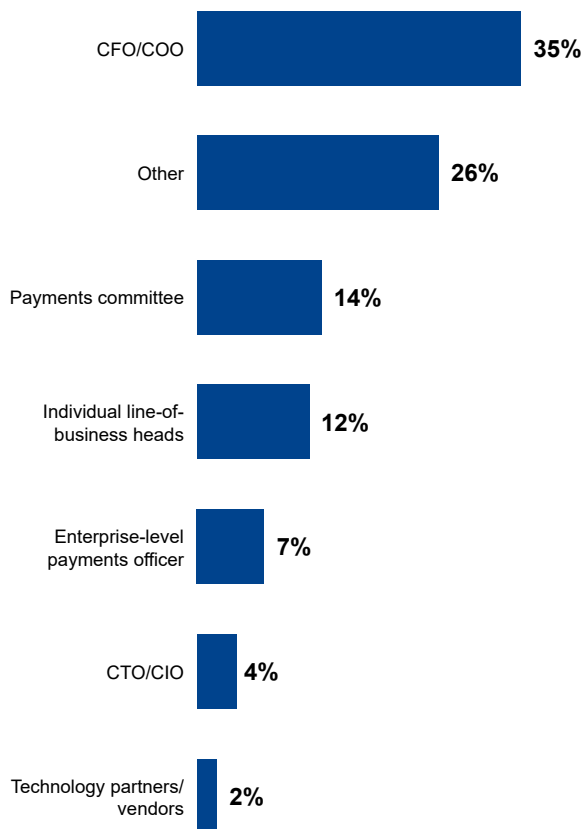
Distribution of Survey Respondents by Strategic Approach



Governance and Management/Major Challenges

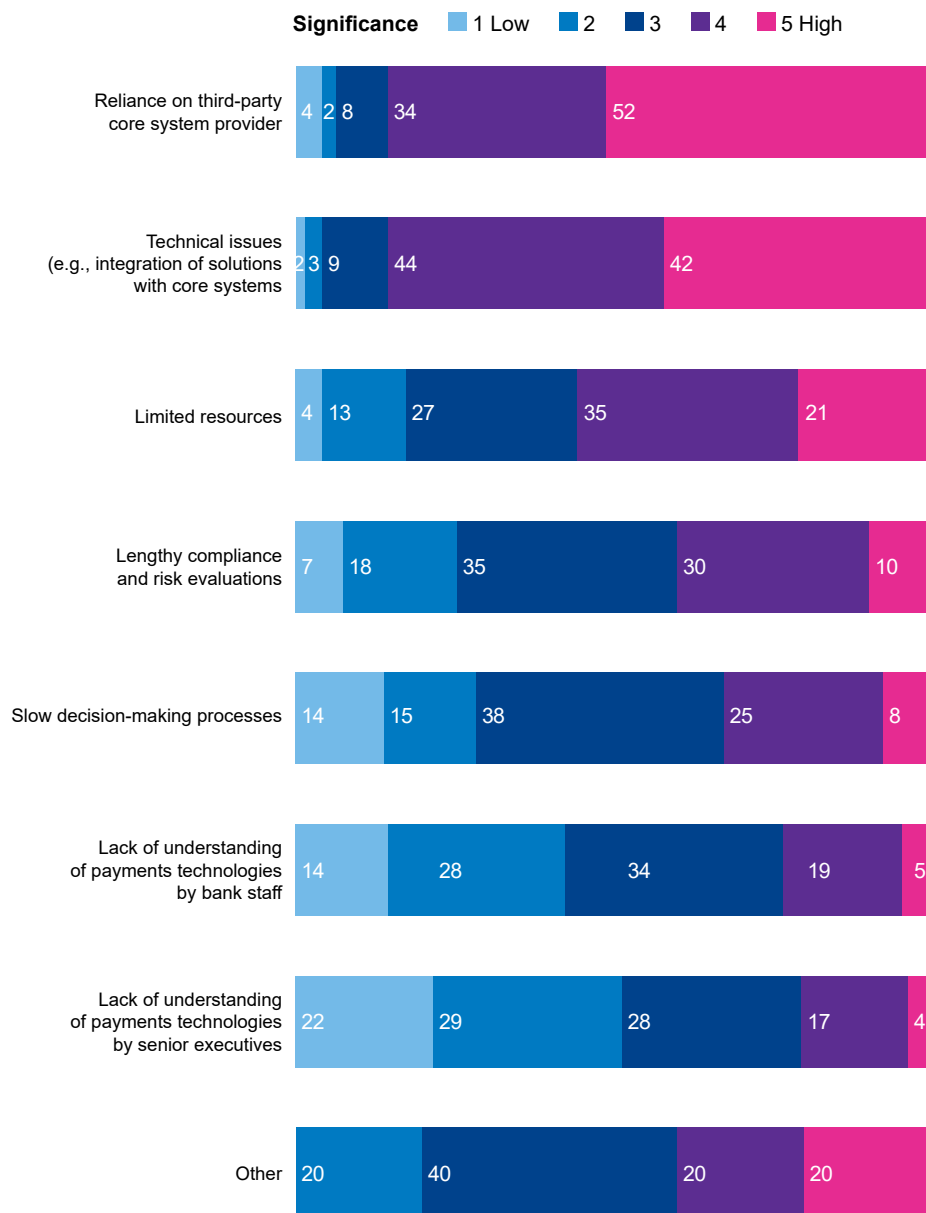
Responsibility for setting payments strategy varies greatly among banks. Only a minority of banks vest responsibility for setting payments strategy in a specialized position or function such as a payments officer or a payments committee. The CFO/COO has responsibility for setting payments strategy at many banks; However, “Other” is the second most common response. Responses in this category encompass a myriad of positions or committees, including CEO, board of directors, and technology committee. A similar diffuse set of responses is found regarding responsibility for overseeing implementation of payments strategy.

Who Sets Payment Strategy at Your Bank



The development and implementation of payments strategy is typically a complex process at banks. Multiple functions are involved including risk management, compliance, operations, and information technology departments. This complexity must be contrasted with more agile nonbank technology companies who can quickly program and test and re-test products before launch or those of large technology companies that have the financial wherewithal and technology expertise to quickly acquire and integrate new payments services into their existing platform.

Impediments to Timely Execution of Payments Strategy (in percentages)



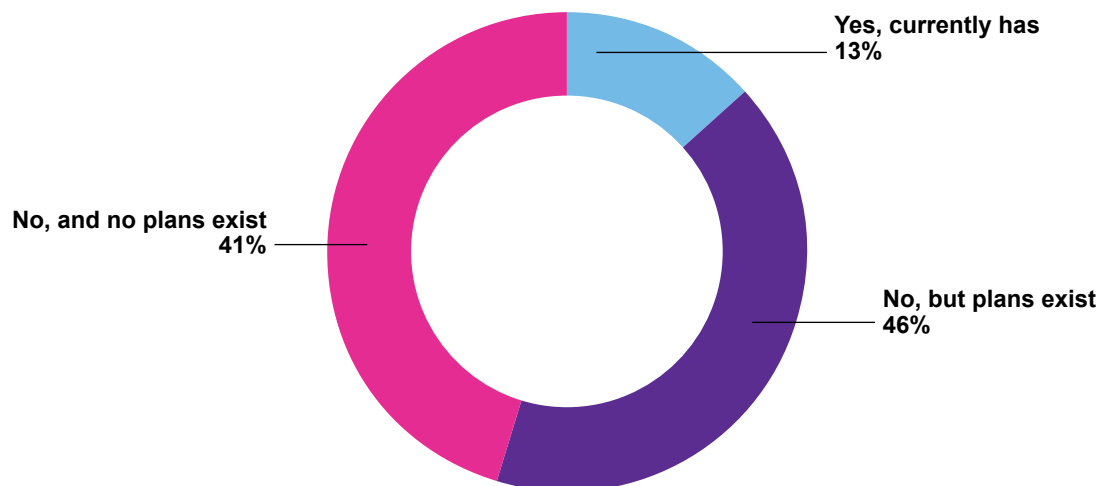
Reliance on third-party system providers, technical integration issues and limited resources are perceived as posing the greatest obstacles to the timely execution of payments strategy. Importantly, the vast majority of respondents reveal that their bank is either largely or completely reliant on their third-party core system provider for its payments related capabilities. This means that the competitiveness of banks in payments is directly tied to the level of innovation of their core providers.

Despite the variety of positions with responsibility for setting payments strategy found among banks, a slow decision making process and lack of understanding of payments technologies among senior executives and bank staff are deemed to be a less significant hindrance to timely execution.

Strategic Process and Approach

Even though the payments landscape is undergoing significant change, the vast majority (87 percent) of respondents admit that their bank does not have a formalized payments strategy. Furthermore, fully 41 percent of respondents reveal that no plans exist to develop such a plan at their bank.

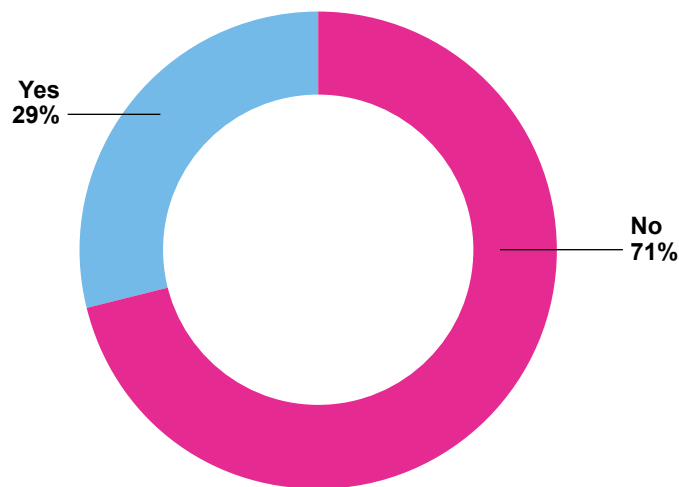
Does Your Bank Have a Formalized Payments Strategy?



Among the few banks that do have a formalized payments strategy, 46 percent of respondents indicate the plan is defined at the enterprise level while the remaining respondents indicate that the plan was developed at the line-of-business level, product level, or some combination. Those formalized plans typically encompass customer/market demand, competitive threats, integration of payments capabilities across delivery channels, and the impact on operational processes. Plans also address specific objectives around customer experience, adoption and usage, and profitability.

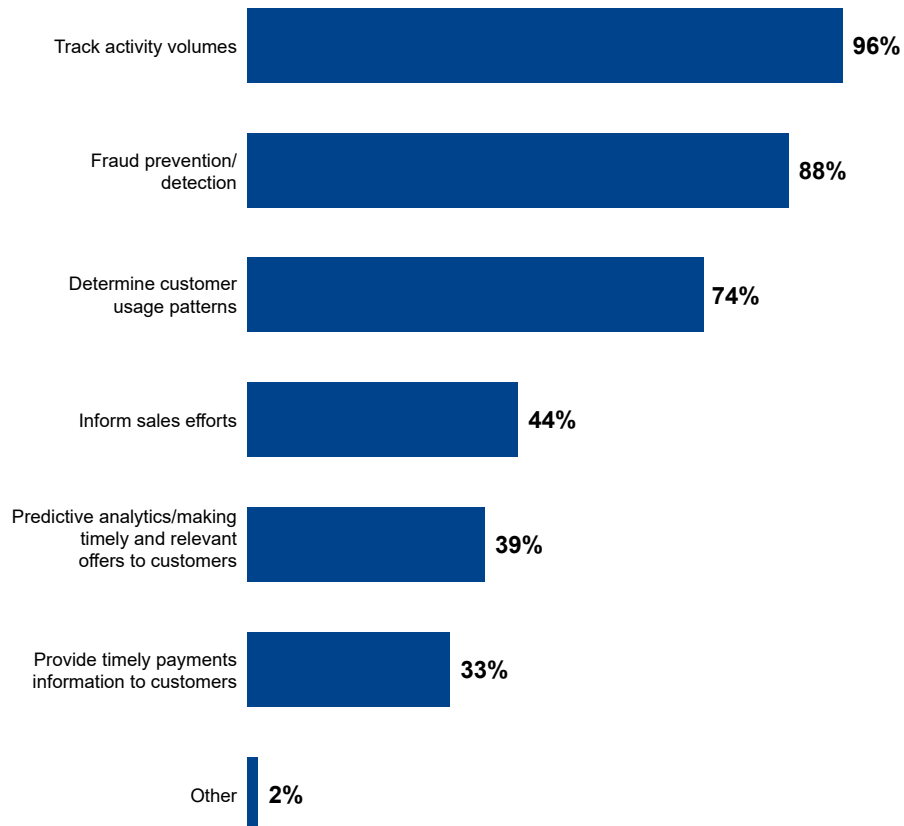
Sixty-seven percent of respondents that have a formalized payments strategy disclose that their bank's plan addresses how payments data and analytics will be captured and used to create value for customers and the bank. However, most banks (71%) do not capture and analyze payments data to gain insights into customer behavior. Among those banks that do capture and analyze payments data, the most common purposes for that undertaking are to track activity volumes, detect and prevent fraud, and to determine customer usage patterns.

Capture and Analysis of Payments Data



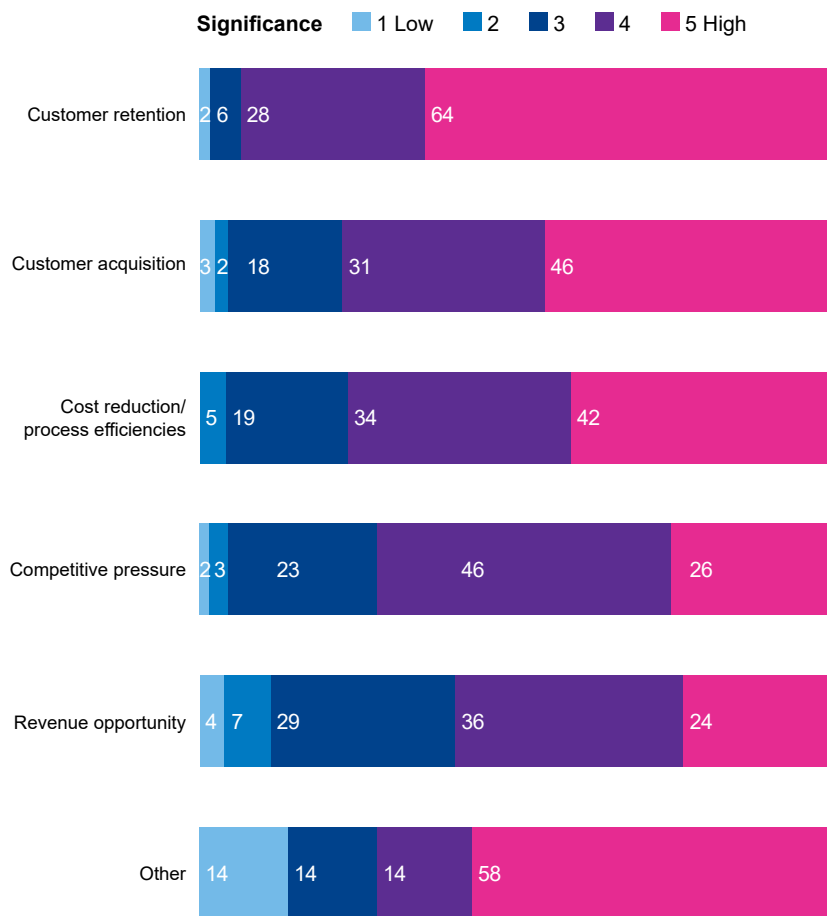
Only a minority of respondents indicate that their institution employs data analytics to inform sales efforts, provide timely information to customers, or guide marketing efforts; therefore, much of the banking industry is neglecting a key area of competitive differentiation in payments.

Purpose of Analytics

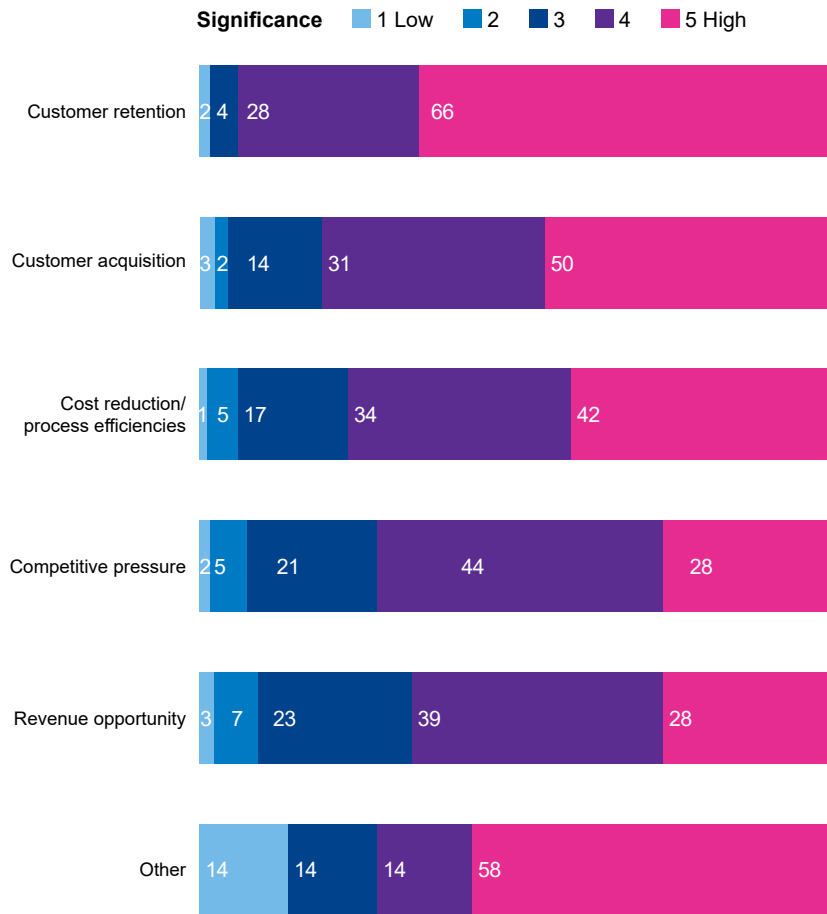


The industry has taken notice of the changes that are occurring in competition and customer preferences. In both consumer and commercial payments, customer retention and acquisition are given the highest consideration when banks prioritize consumer payments initiatives. Cost reductions/process efficiencies are assigned a slightly lower priority and revenue opportunity is assigned a much lower priority. The majority of respondents believe that there is still a moderate-to-high opportunity to improve efficiencies by migrating customers from checks to electronic payments.

Factors When Prioritizing Initiatives in Consumer Payment Initiatives (in percentages)

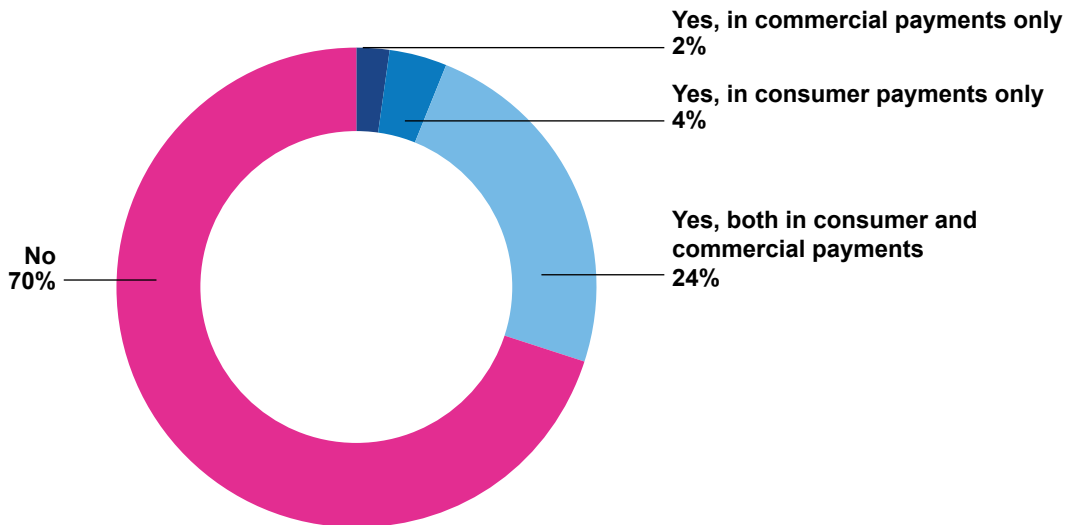


Factors When Prioritizing Initiatives in Commercial Payment Initiatives (in percentages)



Some banks have partnered with fintech firms to improve their capabilities, but most have not availed themselves of the new solutions that fintech's have developed. Approximately 30 percent of respondents indicate that their bank is partnering with a fintech company (i.e., other than a core system provider) to implement its payments solutions. The primary source for banks to learn about potential third-party partners in payments are core system vendors and industry trade associations.

Has Your Bank Partnered With a Fintech Company?



Despite the shift toward electronic payments that is occurring, 65 percent of respondents indicate that their bank is not actively planning for the convergence of operational units that support payments (e.g., consolidated processing, exception management, fraud management).

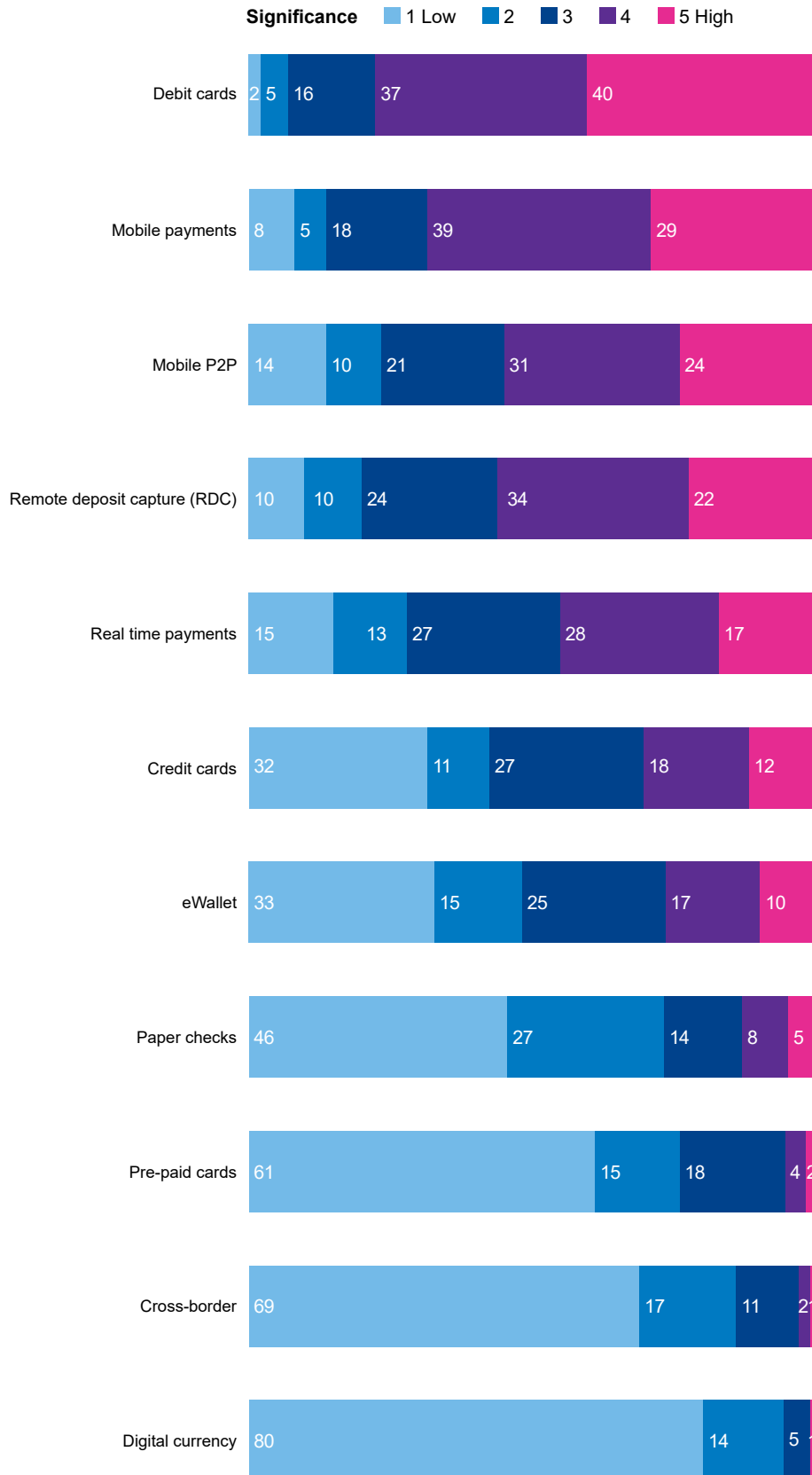
Current Capabilities and Spending/Investment Trends

Not surprisingly, almost all banks offer a set of basic consumer payments products including paper checks, debit cards, wires, and remote deposit capture. Also, a majority of respondents offer credit cards and mobile payments. Many banks have augmented this basic product array with more advanced capabilities including more than 40 percent of banks that offer same day ACH origination and mobile P2P capabilities. A small minority of institutions offer e-wallet capabilities. It is worth noting that 37 percent of banks do not offer a consumer credit card, which may put them at a competitive disadvantage in light of the central role that credit cards play in e-commerce and mobile payments.

In terms of commercial payments capabilities, almost all banks offer paper checks, wires, and debit cards. Sixty-one percent offer web-based cash management solutions and credit cards. More than 54 percent of respondents indicate that their bank offers same day ACH origination. A small minority of institutions offer mobile B2B and B2P payments capabilities.

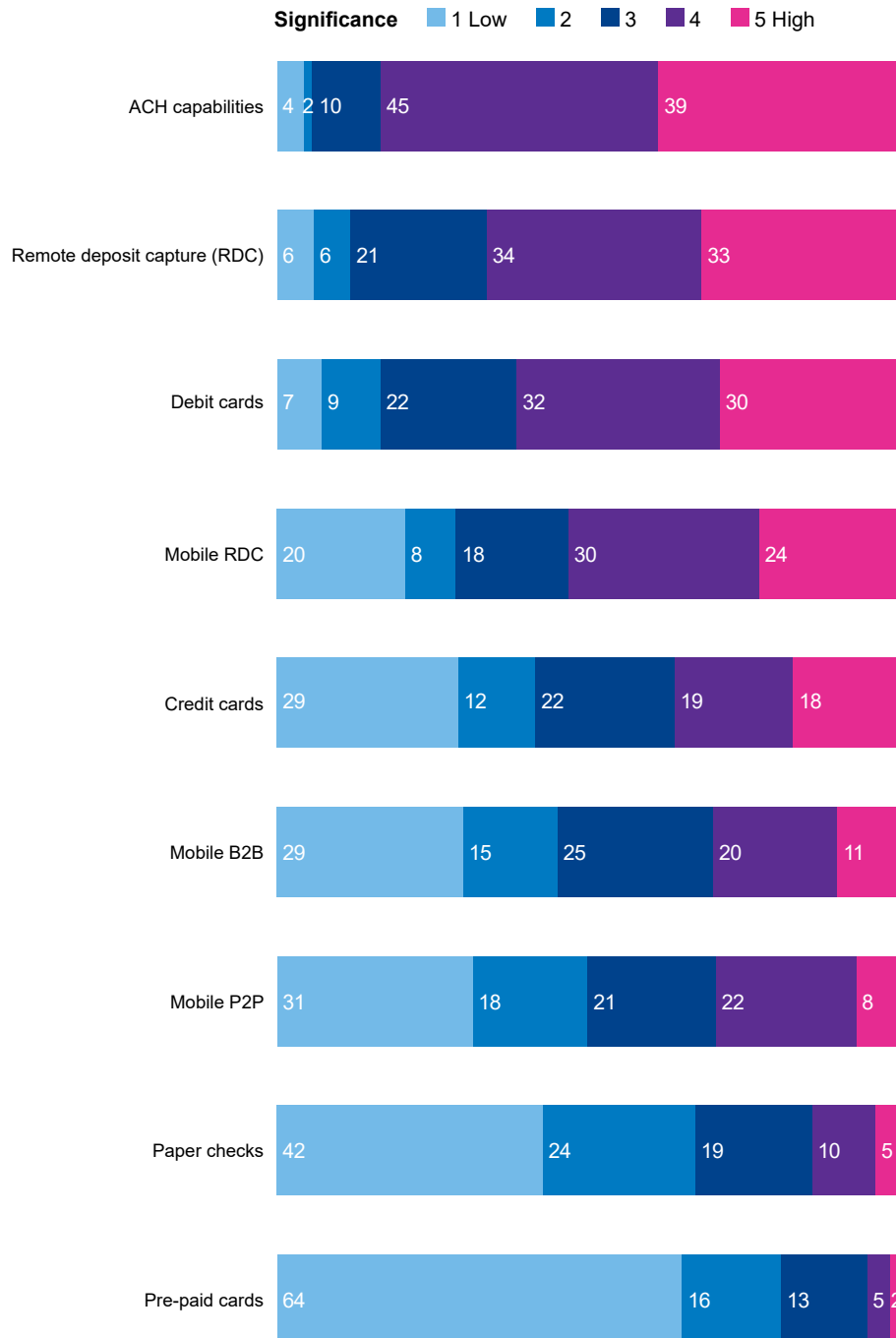
Investment priorities of banks in consumer payments reflect the changes that are underway. Respondents indicated that remote deposit capture, debit cards, mobile payments, and mobile P2P capabilities are high-priorities at their institution. Investments in paper checks are viewed as a low priority, as are investments in digital currency, cross border payments, e-wallets, and credit cards.

Consumer Payments Investment Priorities (in percentages)

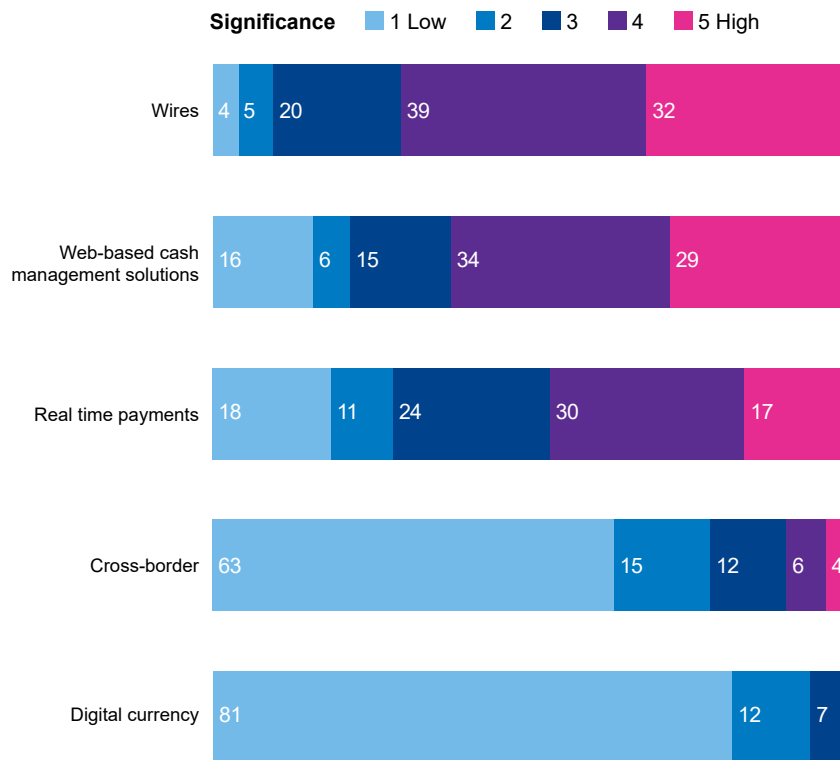


On the commercial side, respondents rate investments in ACH capabilities, wires, debit cards, real-time payments, and web-based cash management solutions as high-priorities. Investments in paper checks are rated as a low priority as are digital currency, cross border payments, and mobile B2B and mobile B2P capabilities.

Commercial Payments Investment Priorities (in percentages)



Commercial Payments Investment Priorities — continued (in percentages)

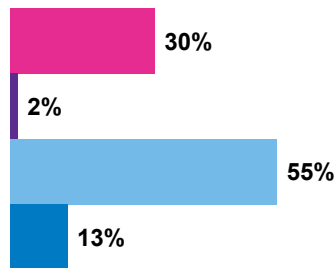


In response to the competitive, customer, and technological changes that are occurring in payments, banks are increasing their level of investment. A significant majority of respondents indicate that their bank's investment spending on consumer and commercial payments will increase in the next twelve months. Fifty-five percent of respondents anticipate that their bank will increase investment spending on consumer payments services between 1-5 percent in the next 12 months and 13 percent of respondents anticipate that their bank will increase investment spending on consumer payments services more than 5 percent. Investment spending on commercial services is slightly higher. Forty-nine percent of respondents anticipate that their bank will increase investment spending on commercial payments services between 1-5 percent in the next 12 months and 23 percent of respondents anticipate that their bank will increase investment spending on commercial payments services more than 5 percent.

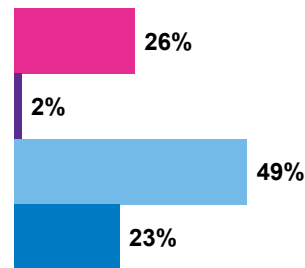
Anticipated Investment Spending

■ No change from 2016 levels ■ Will likely increase between 1-5 percent
■ Will likely decrease ■ Will likely increase more than 5 percent

Consumer payments services



Commercial payments services



Respondents cited limited resources as one of the greatest obstacles to the timely execution of payments strategy, yet only a minority of respondents indicated that their bank has a defined process for developing business cases for payments-related investment decisions and that their bank's measure results of payments-related investment decisions related to business case assumptions.

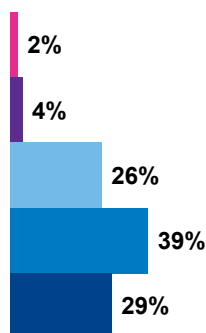
Marketing

The majority of respondents characterize payments services as important or extremely important for their bank's consumer/commercial value propositions. Respondents believe that both consumers and commercial customers most value security and convenience in payments services.

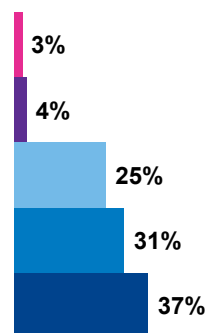
Payments to the Value Proposition

Importance ■ 1 Not at all ■ 2 ■ 3 ■ 4 ■ 5 Extremely

Consumer



Commercial

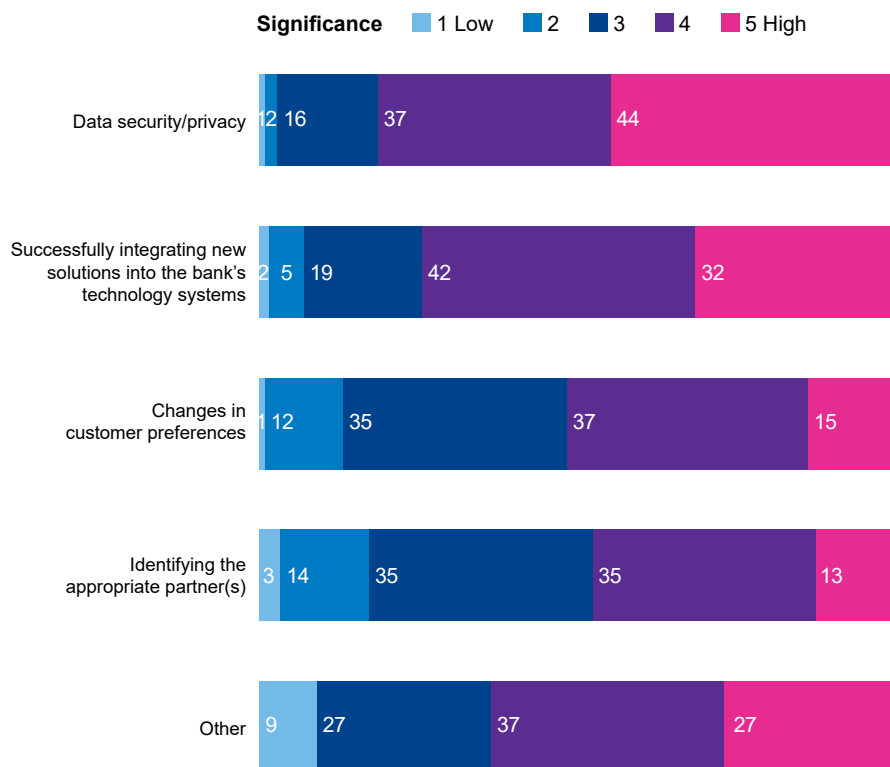


Risk Management

Risk management issues in the payments area are clearly top of mind among respondents.

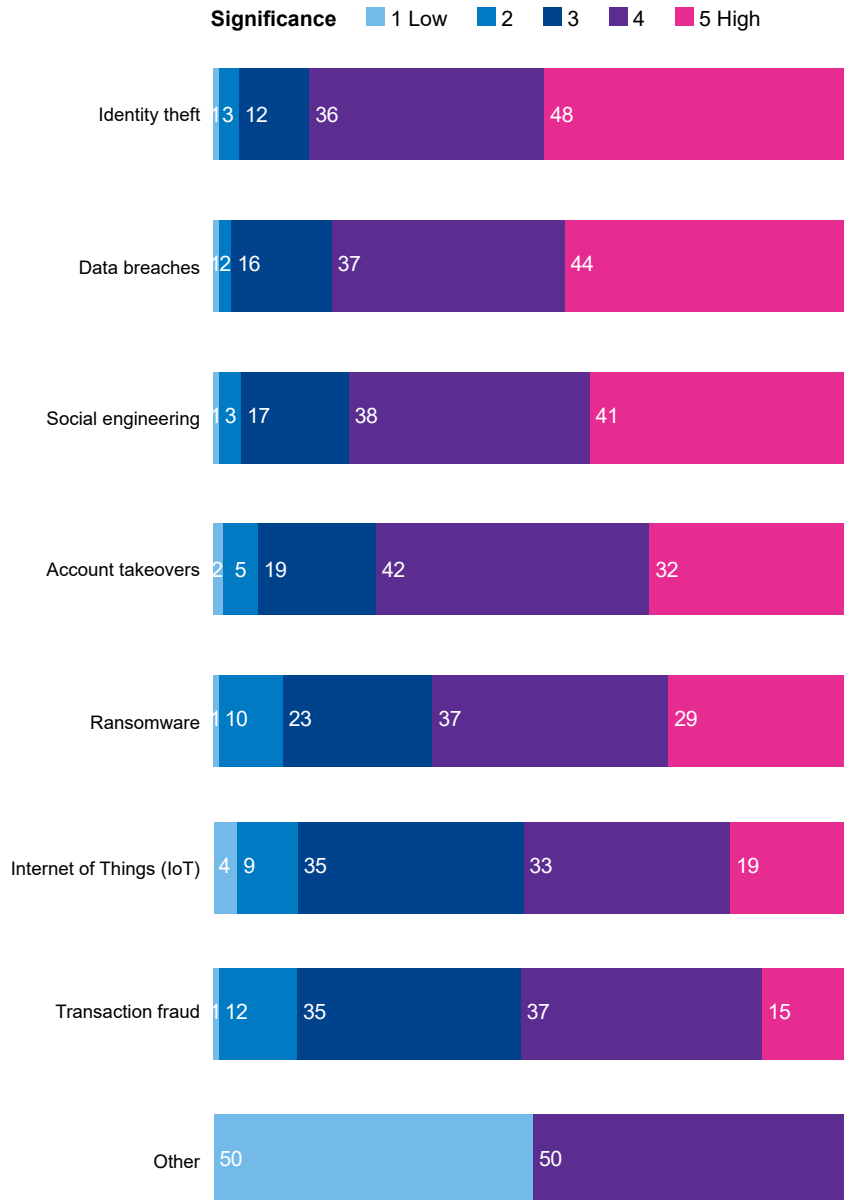
A plurality of them view “Data security/privacy” as among the greatest challenges in competing in payments today (“Successfully integrating new solutions into the bank’s technology systems” also rates high).

Greatest Challenges in Competing in Payments Today (in percentages)



Transaction fraud, data breaches, and identity theft are ranked by respondents as representing the highest threat to payments security. However, a majority of respondents indicate that their bank does not have plans to adopt security safeguards such as biometric authentication.

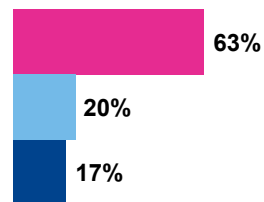
Threats in Terms of Payments Security for the Industry (in percentages)



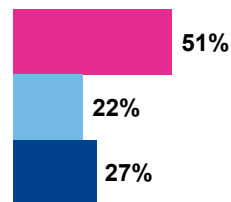
Listed Steps to Address Payments Security Issues

■ No plans exist ■ Plans exist ■ Already doing it

Incorporate biometric authentication such as fingerprint, voice, iris/retinal scan into your payment business



Use artificial intelligence technology (AI) for fraud prevention/detection



Emerging technologies, challenges and opportunities

While lack of awareness of payments technologies is not viewed as a significant obstacle to timely execution, a large majority of respondents admit that their bank has not assessed the potential impact of emerging technologies such as open APIs or distributed ledger technologies (i.e., blockchain) on their bank's strategic plan. Among respondents that have assessed the impact of these emerging technologies, most feel that distributed ledger technologies would have a low impact. Respondents perceive that open APIs pose a more significant impact. The vast majority of respondents admit that their bank either had no plans, or did not know the time frame to offer these products.

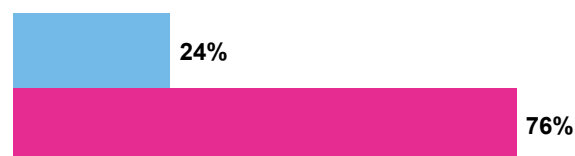
Has Your Bank Assessed the Potential Impact of the Listed Emerging Technologies on Your Bank's Strategic Plan?

■ Yes ■ No

Distributed ledger technologies

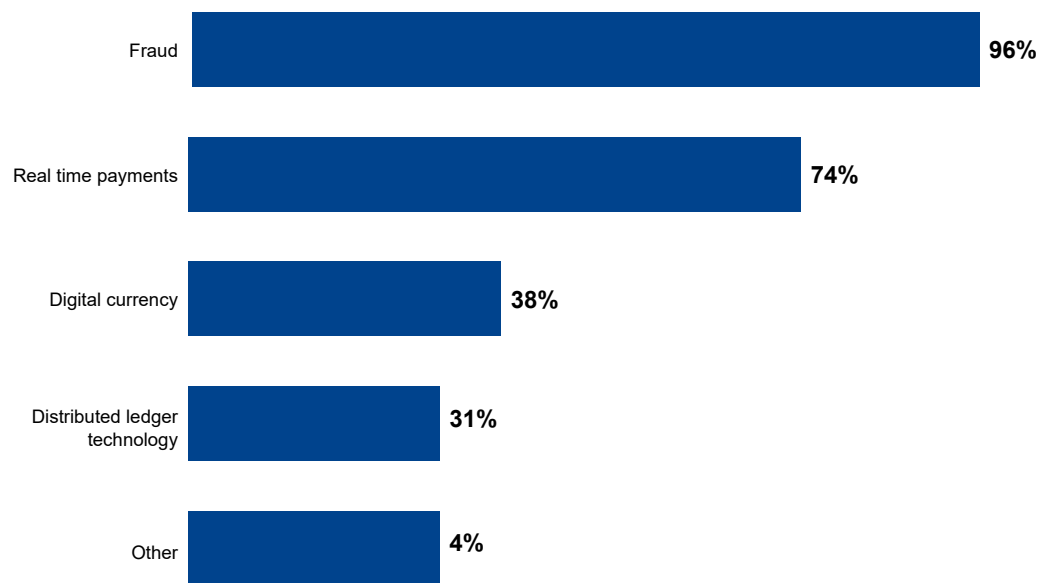


Open application programming interfaces



A plurality of respondents perceive the greatest competitive threats to the banking industry's position in payments are established nonbank payments companies and large e-commerce companies. Despite various challenges, the majority of respondents express confidence that their bank would remain competitive in the consumer and commercial payments arena. Respondents feel that collective action may be required to meet some of these challenges. Fraud and real time payments are the top issues that respondents believe should be addressed collectively by the industry.

Payments Issues That Should be Addressed Collectively by the Banking Industry



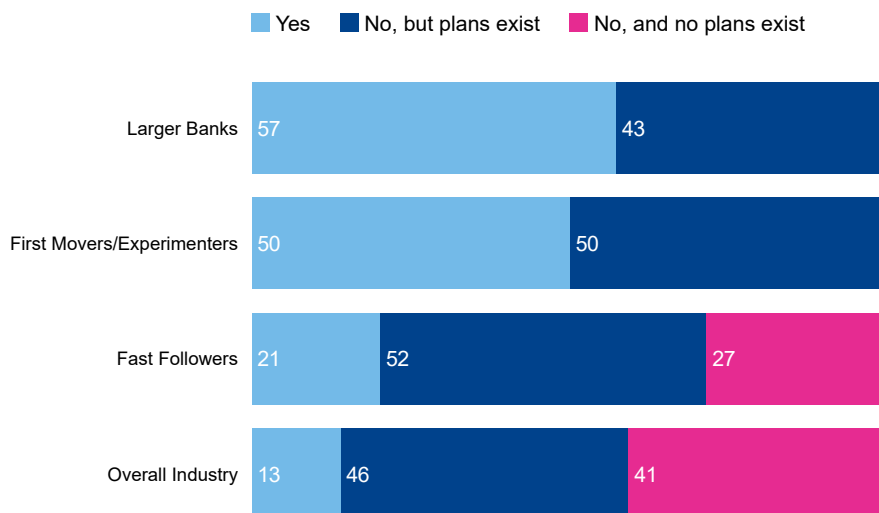
Major Differences Among Institutions

The banking industry is not monolithic in its approach to payments. The majority of respondents characterize their institution's strategic approach to payments as Wait and See (53%). Smaller Banks, those with total assets of less than \$10.0 billion, comprise the vast majority of this segment. A significant percentage of respondents (36%) characterize their bank's strategic approach in payments to be that of Fast Followers. The majority of Larger Banks, those with assets of more than \$10.0 billion, are included in this segment. A small percentage of respondents categorize their institution's strategic approach as Market Leaders (7%). Lastly, only a small percentage of respondents characterize their strategic approach as one of First Movers/Experimenters (3%). Interestingly, the majority of institutions in this segment are Smaller Banks. Responses to the survey differ by strategic approach and asset size in terms of strategic process, governance, current capabilities, investments and other issues.

Strategic Process and Approach

Compared to the overall industry, a greater percentage of First Movers/Experimenters and Larger Banks have formalized planning processes and strategies to inform payments services decisions and investments. Fifty percent of First Movers/Experimenters and 57 percent of Larger Banks have a formalized payments strategy. The remaining institutions in these segments do not currently have a formalized payments strategy, but intend to develop one. While these percentages are much higher than the overall industry — where 87 percent do not have plans and 41 percent do not have plans to develop one — it implies that a significant number of self-described First Movers/Experimenters as well as Larger Banks currently lack a long-term organizational blueprint for competing in payments. Only 21 percent of Fast Followers have a formalized plan. Given that First Movers/Experimenters, Fast Followers and Larger Banks rate payments as very important to their value proposition for both consumers and commercial customers it is surprising that they do not have formalized strategies.

Does Your Bank Have a Formalized Payments Strategy? (in percentages, by bank size or approach)

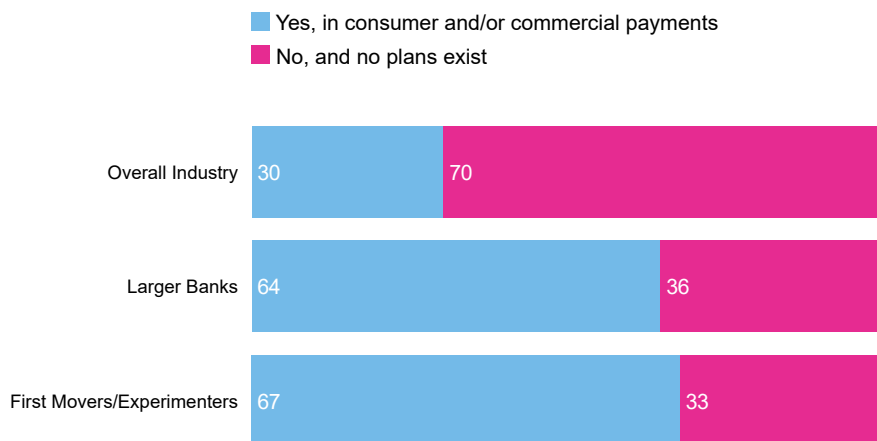


A majority of Larger Banks and First Movers/Experimenters are more likely to develop their payments plans at the enterprise level. A significant plurality of Fast Followers develop their payments plan at the enterprise level as well. In general, however, payments strategy is defined at various organizational levels, such as the enterprise, product, individual line of business, or some combination of these. One concern is that without an enterprise-level plan, decisions may be made within organizational silos that result in duplication of investment, suboptimal resource allocation, or initiatives that do not align with the strategic goals of the organization.

There is a notable difference among institutions that pertains to fintech partnerships. Larger Banks (64%) and First Movers/Experimenters (67%) are more likely to have partnered with a fintech company to implement their payments solutions than the industry overall (30%). This may be because these institutions are more likely to have a formalized payments plan and are more proactive in learning about potential third-party partners. Both Larger Banks and First Movers/Experimenters utilize more sources to learn about third party partners, including via industry research, industry networking, participation in user groups, and through vendors. This broader awareness of developments in the payments industry is also evidenced by the fact that Larger Banks and First Movers/Experimenters are more likely than other industry segments to have assessed the impact that emerging technologies like open APIs and distributive ledger technology will have on their strategic plans.

Has Your Bank Partnered with a Fintech Company to Implement its Payment Solutions? (i.e., other than a core system provider)

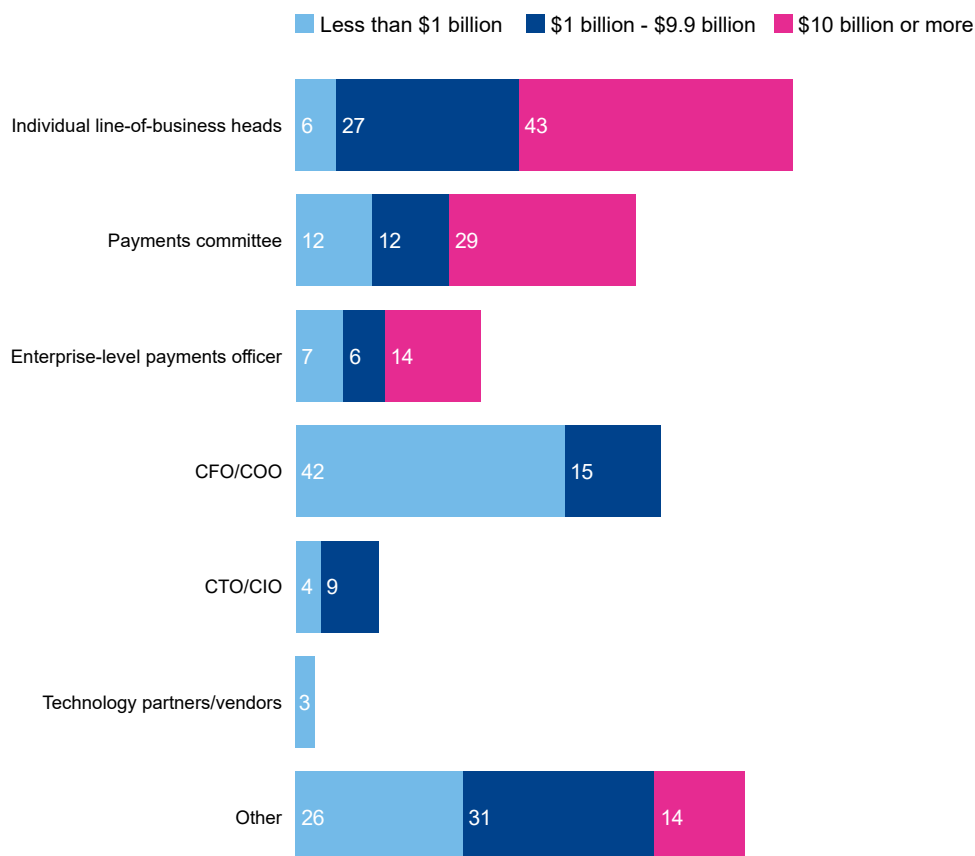
(in percentages, by bank size or approach)



Governance and Management/Major Challenges

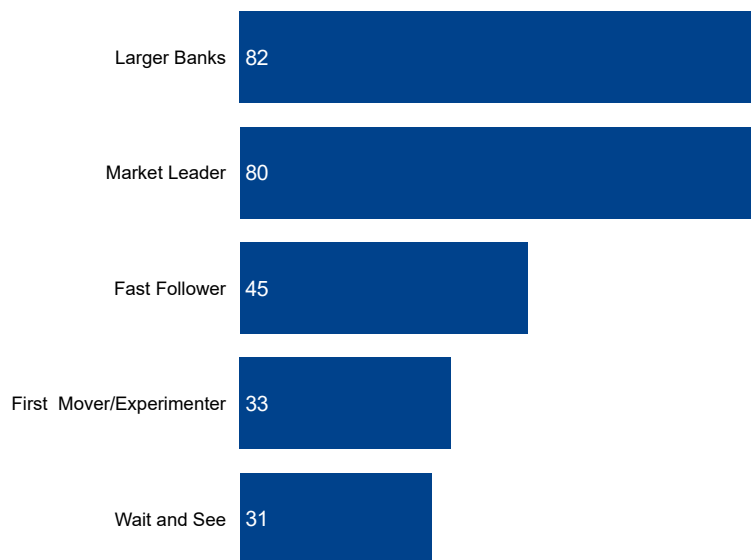
Most institutions do not vest responsibility for setting payments strategy with an enterprise-level payments officer or a payments committee. While Larger Banks are the most likely to have a more centralized governance structure for setting and overseeing payments strategy, organizational responsibility for setting payments strategy is not uniformly situated across the industry. Frequently, responsibility lies with the individual line of business head or the CFO/COO, but many banks place it elsewhere.

Who Sets Payments Strategy at Your Bank Today? (in percentages, by bank size)



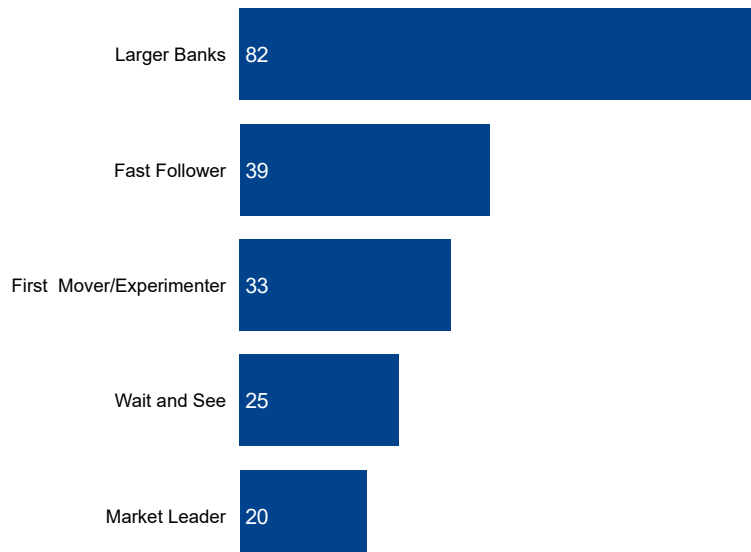
The capture and analysis of payments data is an area where there are stark differences within the industry. Importantly, Larger Banks (78%) and First Movers/Experimenters (50%) are more likely to capture and analyze payments data than the industry overall (29%). Among those banks that do capture and analyze customer data, most do so to track volumes, customer usage patterns, and for fraud monitoring and prevention. However, it is primarily Larger Banks that are conducting more advanced analytics to inform sales efforts and to provide timely information and offers to customers. Payments information is integral to establishing competitive differentiation, yet few First Movers/Experimenters are conducting the more advanced analytics needed to turn payments data into useful information or add information as part of the overall customer value proposition.

Use of Analytics to Inform Sales Efforts (in percentages, by bank size or approach)



Use of Analytics to Provide Timely Payments Information to Customers

(in percentages, by bank size or approach)



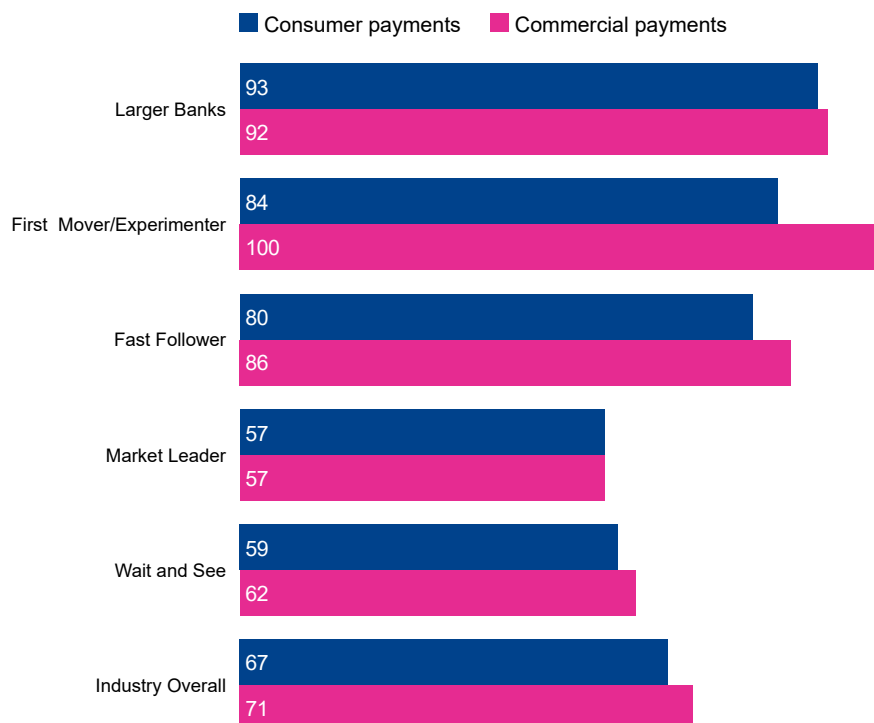
Common challenges confront all institutions, irrespective of asset size or strategic focus. For instance, most institutions are reliant on a third-party core system provider for their payments-related capabilities. While this dependency is most acute among Smaller Banks, it poses a major challenge to all institutions that outsource their core system. Integration of payments solutions with the core systems is cited as a significant impediment by respondents across all asset sizes and strategic approaches.

Current Capabilities and Spending/Investment Trends

First Movers/Experimenters, Larger Banks, and Fast Followers typically offer a broader array of consumer and commercial payments solutions than Wait and See and Smaller Banks. By offering faster and more convenient payments options through products such as e-wallets, mobile payments, mobile P2P, same day ACH origination, web-based cash management tools, and mobile B2B, First Movers/Experimenters, Larger Banks, and Fast Followers are responding to changes in consumer preferences and differentiating themselves from other banks.

This gap in payments capabilities may widen in the future. Banks of all sizes and segments generally anticipate that they will increase their level of investment in payments over the next 12 months. However, on average, Larger Banks, First Movers/Experimenters and Fast Followers will increase investment spending on payments services by more than the industry overall. A portion of this increased investment will undoubtedly be earmarked for development and implementation of additional capabilities such as real time payments. Consequently, Wait and See institutions and Smaller Banks risk losing digital savvy customers to banks that offer better digital payments solutions.

Banks that will increase their investment spending on consumer/commercial payments services in the next 12 months (in percentages, by bank size or approach)



Preparedness Assessment

An assessment of the banking industry's preparedness to respond to the transformational changes that are occurring in payments presents a mixed picture. While most respondents feel that payments are an important part of their bank's value propositions, many institutions, including a significant percentage of banks that characterize their strategic approach to be First Movers/Experimenters and Fast Followers, have not developed formalized payments strategies.

Most respondents anticipate that their bank's level of investment in payments will increase within the next 12 months, yet responsibility for defining and implementing strategy typically resides across a combination of functions or resides in organizational silos. This makes it difficult to prioritize initiatives, complicates the allocation of resources and makes the management of cross-functional initiatives more difficult. Many respondents cite limited resources as a major obstacle to the timely execution of payments initiatives, yet many banks do not have clear guidelines around business cases to justify investments and monitor returns.

The integration of information with payments services will be a critical point of competitive differentiation in the digital payments landscape. Yet survey findings indicate that only a few banks use payment-related information and data to inform sales efforts and to provide timely information and offers to customers.

Credit cards and mobile payments capabilities are playing a more central role in the new consumer payments landscape, yet many Smaller Banks do not offer these products. Given the rapid pace of change underway in both technology and consumer preferences, these institutions may find themselves permanently shut out from competing for these consumers.

Fintech companies bring new digital solutions to the payments arena, yet the majority of banks have neither assessed the impact these nonbank competitors might have on their strategies nor formed partnerships with them. Emerging technologies like open APIs are major forces transforming payments today. Certain segments of the industry are proactive in assessing the impact of emerging technologies like open APIs on their strategies, but most have not done so. Many banks are significantly reliant on core providers to inform them of potential partners and to integrate new payments solutions. This means that the competitiveness in payments for a significant portion of the industry is dependent on the innovation and responsiveness of a few third-party core systems providers.

Finally, a plurality of respondents includes "Data security/privacy" as among the greatest challenges in competing in payments today. Transaction fraud, data breaches, and identity theft are ranked by respondents as representing the highest threat to payments security. However, a significant percentage of respondents indicate that their banks do not have plans to adopt security safeguards such as biometric authentication.

Recommendations

To ensure that they remain competitive in digital payments, banks must undertake important steps to address shortcomings.

Develop a Strategic Payments Plan In the field of payments, there are many choices but resources are limited, so it is imperative that banks have a comprehensive and focused payments strategy. To be truly useful, the plan must establish long-term performance objectives, identify target segments, and identify gaps in operating capabilities. These disciplines will help to prioritize investment decisions as well as create market differentiation. A well formulated payments strategy can also provide guidelines and frameworks to evaluate emerging products, services, and capabilities, create organizational focus and clarity, and reduce suboptimal decisions and low value services.

Establish an Enterprise-Level Governance Structure To successfully compete in the emerging digital payments field, banks must undertake significant changes in a number of areas including technology, resource allocation, partner evaluation, and product development. To properly oversee and execute this degree of change requires a more holistic approach to the governance of payments strategy and implementation.

Evaluate Open Banking Platforms To provide improved payments solutions, the industry should evaluate leveraging third-party technologies to increase the utility of bank systems on behalf of their customers. Exploring open API strategies to integrate these new technologies into bank operations is a significant undertaking, but may be most responsive to customer needs. Banks must measure the potential benefits of offering improved services with the risk of reducing direct contact with customers. It is important to note that banks also have a risk of losing a customer entirely if they can't or won't facilitate a service that the customer wants. Banks should encourage their core service providers to be more innovative in their own product offerings and in integrating other solutions into the core system.

Collaborate with Fintechs Banks must capitalize on the product innovation, programming expertise, and advanced data analytics that fintechs possess. Banks can best accomplish this by actively searching for and evaluating partners and then structuring alliances under terms that allow the banks to maintain control of their customer relationships. By pursuing a path of collaboration with fintechs, banks minimize the risk of being reduced to utilities, whereby they maintain the basic systems on which others reap the profit from new payments solutions.

Invest in Analytics to Support Payments Payments information is being integrated into payments services in order to both meet customer expectations as well as to provide differentiated products and services. Banks must build or acquire analytical capabilities that enable them to access and manipulate payments data in order to provide useful information to their customers.

Conclusion

Consumer and commercial payments are being transformed due to a number of factors including evolving customer expectations, new payments technologies, and new nonbank competitors. Collectively, the industry has taken some major steps to address these challenges including the formation of accelerator programs and initiatives to modernize the payments infrastructure. Segments of the banking industry have also taken steps individually to meet these new challenges. These steps include developing formalized strategic plans for the payments business, adopting new enterprise-level governance approaches to payments, and entering into new partnerships with fintechs in order to offer new payments services that customers desire.