Fortune Favors the Bold

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Key Highlights

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Revenue growth will halve by 2028. Global payments growth will slow significantly over the next five years, with CAGR dropping from 9% to 5% by 2028. This will take revenues from \$1.8 trillion to \$2.3 trillion. Despite the overall decline in rate of increase, transaction-related revenues will continue to see healthy growth, especially in Latin America, the Middle East, and Africa.

33%

Profitability is center stage as the industry's investor base shifts. With 33% of the payments industry's investor base now value-focused (up from 26% in 2021), expectations for returns have sharpened. Buybacks and dividends now drive more than one-third of TSR growth, as cash returns become a critical focus.



Tech modernization is nonnegotiable. Payments companies must upgrade outdated systems to remain profitable. A modular, scalable, cloud-ready architecture is essential for improved unit economics and will help companies adapt more efficiently and cost effectively to evolving requirements.

~70%

GenAl is paying off for early adopters. Leaders are deploying GenAl in key areas across their business—from customer service to software development and coding—and seeing improved customer and business performance, in some instances reducing cost-to-serve by up to 70%.

50%

Banks are losing ground. Fintechs are rapidly outpacing banks in the payments space, forcing banks to pivot. To stay competitive, banks must aim to achieve at least 50% of their new growth in payments from offerings outside their core business.

>60

Organizations must become "instant payments ready." Instant payments systems are now live in over 60 countries. In response, payments companies must go beyond transaction processing to adapt their operating models for deeper engagement.

>90%

Digital currency adoption requires collective action. More than 90% of central banks are developing central bank digital currencies, some of which are already live. But widespread adoption of these and other digital currencies will require improved architecture, use cases, and regulation to unlock their potential for innovation.



Sustained profitability requires a renewed focus on risk and compliance. Regulatory authorities are introducing new regulations for payments companies and are imposing severe penalties for risk and compliance failures. To safeguard value, companies must strengthen their risk and compliance operating models.



Overview

The payments industry has reached a pivotal moment.

Once driven by growth, it now faces more discerning investors that focus on profitable and sustainable business models. This shift reflects not only tighter global macroeconomic conditions, but also the maturing nature of the industry. At the same time, customer expectations for value and seamless experiences are rising, new technologies are reshaping payment execution, and regulators are intensifying their scrutiny with new policies and oversight. To thrive, the industry must adapt to these evolving dynamics.

BCG's 22nd annual Global Payments Report shares our perspectives on these challenges. Our market outlook provides specific analyses of each major payments segment—acknowledging the difficulty of managing pressure to achieve near-term earnings, but stressing the need for decisive action to enhance long-term shareholder value.

We then delve into a series of topics that will play key roles in shaping the next frontier of value. These include technology modernization, generative AI, instant payments, and digital currencies, as well as risk and compliance. We also explore how banks can—and must—reinvent payments and transaction banking. Each chapter identifies actions that industry leaders need to take to win in the altered payments landscape.

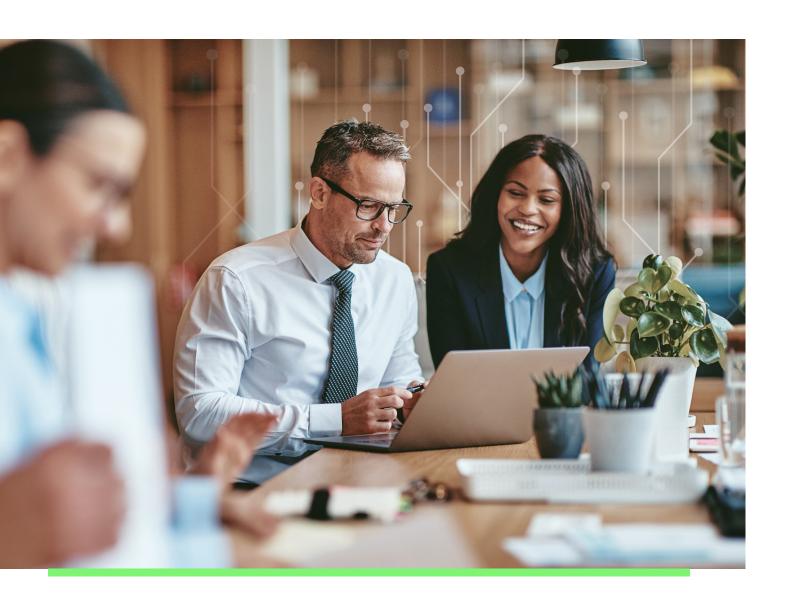
We believe that the payments industry has significant growth potential. Leaders who act decisively now can create significant long-term value for their customers, shareholders, and society. We hope that this report provides a useful roadmap, and we look forward to continuing the discussion with you.

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Profitable Growth Is the Imperative

By Max Zevin, Albane de Vauplane, Inderpreet Batra, and Nikhil Dangayach

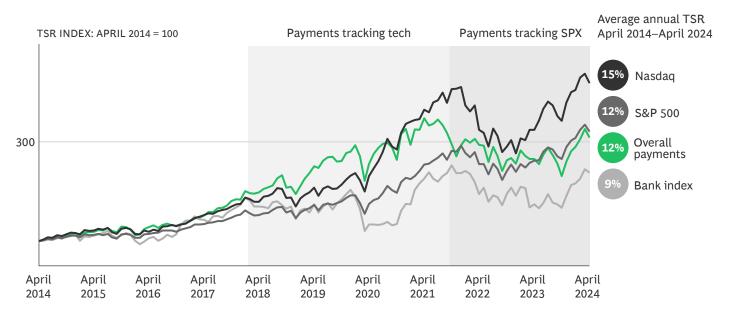
Payments companies once enjoyed total shareholder returns (TSR) that grew on a par with the tech industry's.

In recent years, however, TSR percentages—measured as the change in share price plus dividends—for the payments industry have aligned more closely with the slower-growing S&P 500. (See Exhibit 1.) Investor expectations have adjusted accordingly. Backers are closely examining unit economics to distinguish between companies that generate stable revenue the way software-as-a-service (SaaS) investments do and those with more volatile, banklike net interest income.

BCG's proprietary global payments model suggests that earnings pressures will persist in the near term, but leaders can usher in a new and more sustainable wave of growth if they make key investments and decisions now. Our analysis draws from central bank statistics on payments volume and value, macroeconomic projections, and expert judgement across more than 65 markets.

Here's what we foresee over the next five years.

Exhibit 1 Total Shareholder Returns in Payments Now Track Closer to the Market Average



Sources: S&P Capital IQ; BCG ValueScience Center; BCG analysis.

Note: TSR, share prices, and market capitalization are as of April 2024. SPX = S&P 500 Index; TSR = total shareholder returns.

The Days of Easy Growth Are Over

Globally, payments revenues reached \$1.8 trillion at the end of 2023.¹ We expect these revenues to rise at a compound annual rate of 5% through 2028 to create a revenue pool worth \$2.3 trillion. This rate of growth is significantly lower than the nearly 9% growth that the industry experienced over the period from 2018 to 2023. Europe and North America will see the most significant slowdowns. Revenue in Europe and North America will grow by a tepid 3%. Only Asia-Pacific is likely to see payments revenues expand at a rate exceeding the prior five-year average. In relative terms, two regions—Latin America and the Middle East and Africa—will see the largest jump in growth, with revenues projected to increase by 9% and 7%, respectively. (See Exhibit 2.)

Global Trends

The widespread deceleration is due to several factors. Structurally, the shift from cash to digital payments is reaching its peak. In large markets such as the US, the UK, and the Nordics, less than 10% of consumer transactions by value are made in cash. In Germany, traditionally a cashloyal country, the share of cash has decreased by more than 50% in the 2010s, to approximately 25% in 2023.²

Macroeconomically, the initial boost that the industry received from rising interest rates and inflation is reversing. (See "How Our Methodology Addresses Deposit Net Interest Revenues" on page 29.) Expected declines will reduce deposit margins globally, with Europe feeling the impact most acutely. This is due to the region's higher margin exposure and to a shift by consumers from current account deposits to higher-yielding products such as time deposits and bonds. In 2023, Europe saw a significant spike in interest rates aimed at curbing inflation, which led to higher deposit revenues and strong growth. With the anticipated drop in interest rates and changing consumer preferences, however, deposit revenue growth in Europe is likely to flatten.

Depressed credit card revenues will continue as lenders maintain tight underwriting standards in response to rising charge-offs and difficult funding conditions. Interchange fees will remain flat or decline in response to continued global regulatory actions.

Operationally, payments companies also face intensifying cost pressures. Regulatory costs are higher, and many infrastructure initiatives—such as faster payments, central bank digital currencies, and open banking frameworks—require significant investment. Some of these infrastructure initiatives could create revenue headwinds because they aim to lower the cost of payments acceptance.

- 1. The revenue projection from BCG's Global Payments Model includes transaction-related fees (such as processing fees and interchange fees), non-transaction-related fees (such as monthly or annual fees for current accounts or debit/credit cards), and net interest income from deposits on the current account.
- 2. A German Central Bank (Bundesbank) study on the payment behavior of German consumers found that roughly 50% of in-store transactions were conducted in cash in 2023, accounting for about 25% of the value of all point-of-sale transactions.

Exhibit 2 Revenue Growth Is Likely to Fall Sharply over the Next Five Years

Transaction revenue will create the most uplift through 2028, as interest rates decline



Source: BCG Global Payments Model 2024.

Note: Transaction-related revenues include revenues from transactions made with cards or with non-card payment instruments. Non-transaction-related revenues include revenues from interest income related to deposits, overdrafts, and revolving credit cards, as well as fee income from card and current account maintenance and value-added services. Deposit revenues include revenues from checking and sight deposits. Term and savings deposits are not included in the model. Bar heights are proportional within each row of the chart but not across different rows. Because of rounding, not all bar chart totals equal the sum of their parts. CAGR = compound annual growth rate.

Regional Trends

North America will see revenues impacted by lower inflation rates and by the ceiling in noncash conversions. Western Europe will feel the pinch from a combination of account-to-account (A2A) payments growth, declining interest rates, heightened fee pressure, and lower cash-to-card displacement. Eastern Europe, however, still has potential for further card penetration, and double-digit revenue growth.

In Latin America, digital payments adoption and resultant debit and credit card use will underpin revenue growth in the near term, although instant payment solutions (such as PIX and SPI in Brazil) may supersede card payments longer term.

In the Middle East and Africa, card adoption and government investment in payment acceptance underlie most of the region's expected revenue growth. And in Asia-Pacific, instant payments and non-card solutions such as Unified Payments Interface (UPI) continue to gain traction, although there is still considerable room for cards growth across the region, given the growth of the middle class.

The payments industry now attracts fewer growth investors than it did in 2021, and it also lags behind the overall market.

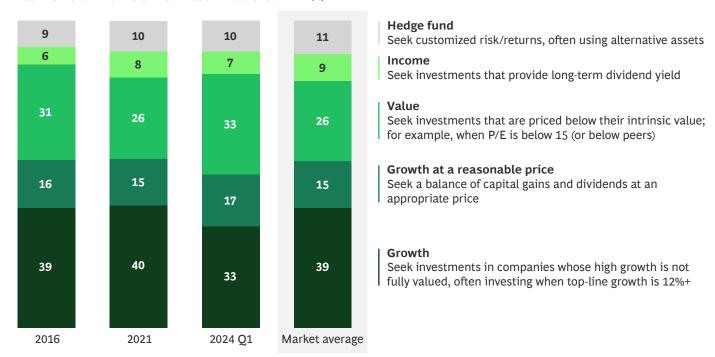
Investor Trends

From 2016 to 2021, revenue growth contributed 55% of TSR, with the rest coming from increased valuation multiples.³ Between 2021 and mid-2024, however, this weighting shifted. Revenue growth, profit growth, and multiple expansion grew to play a roughly equal role in TSR. During this period, buybacks, dividends and other capital return strategies gained significance, now accounting for about 36% of TSR.

Investor profiles have evolved as well. Payments now attracts fewer growth investors (by 7 percentage points) than it did in 2021, and it also lags behind the overall market. (See Exhibit 3.)

Exhibit 3 Payments Industry Investors Are Focusing More on Value



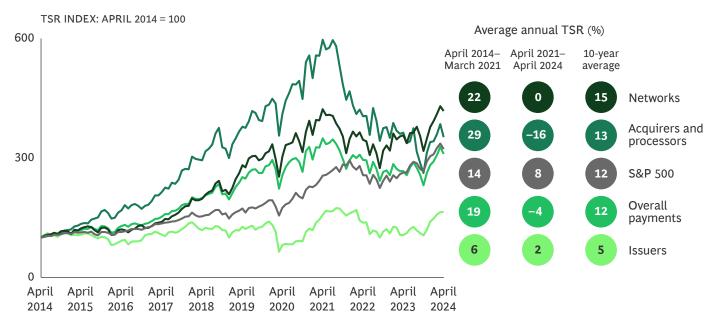


 $\textbf{Sources:} \ Thomson Reuters/Refinitiv; \ BCG \ Value Science \ Center.$

Note: Market average for S&P 500 as of December 31, 2023. Categorization is at the fund level. Chart shows only aggregate holdings of funds and institutions. Retail and individual investors are not included. Because of rounding, not all bar chart percentages add up to 100%. P/E = price per share divided by earnings per share.

^{3.} Our analysis of TSR disaggregates the historical drivers of TSR into revenue growth, margin growth, multiple growth, and cash flow returned to shareholders through buybacks or dividends. A multiple is the price investors are willing to pay for a single share of a company relative to its total sales, EBITDA, earnings, or even book value. A price-to-EBITDA ratio of 15x, for example, means that investors are willing to pay 15 times the current or forecast EBITDA for a single share of a company.

Exhibit 4 TSR Performance Varies Greatly by Segment, with Networks Delivering the Strongest Returns



Sources: S&P Capital IQ; BCG ValueScience Center; BCG analysis.

Note: TSR, share prices, and market capitalization are tracked from April 2014 to April 2024. TSR = total shareholder returns.

Segment Trends Present a Mixed Picture

The payments industry is diverse, and near-term challenges and opportunities vary widely across sectors. Historical TSR reflects this. (See Exhibit 4.)

Networks

With an average TSR of 15% from 2014 to 2024, networks have been the strongest and most stable performers in the payments industry—a trend that we expect will continue. Beyond their advantages of scale, many network players have successfully diversified, and value-added services now account for roughly 40% of revenues for Visa and Mastercard. Acquisitions have played a key role in this diversification. Visa acquired Tink to strengthen its open banking capabilities and Pismo to advance into banking, while Mastercard acquired Finicity for open banking and Nets and VocaLink to penetrate the A2A and faster-payments infrastructure markets. Looking ahead, geographic expansion can continue to drive value, albeit at lower growth rates and margins. This situation reflects the peaking of cash-to-card conversion, which had previously been responsible for more than 30% of network transaction value growth in Organization for Economic Cooperation and Development (OECD) countries. BCG's most recent fintech report warns networks to brace for heightened competition in consumer-to-business flows as digital payments infrastructure solutions such as UPI, Pix, and PromptPay gain traction.

Acquirers

Acquirers were once shareholder favorites, posting annual TSR gains of 29% from 2014 to 2021 on the strength of geographic expansion, value-chain growth, and increased business e-commerce adoption. Their direct access to merchants provided a ready market. But since 2021, acquirers' TSR has declined at an average rate of 16% per year as software companies that enjoy a stronger primary relationship with merchants have disintermediated them. Growth in the segment is expected to stabilize at a compound annual growth rate (CAGR) of around 6% through 2028. Even so, vertical solutions providers such as integrated software vendors (ISVs) and payment facilitators (payfacs) will lead in volume growth and maintain pricing leverage. Incumbent acquirers must choose now between maximizing volume as a flexible backend or securing pricing premiums through industry-specific vertical differentiation.

Though once shareholder favorites, acquirers have seen their TSR fall sharply, declining at an average rate of 16% per year since 2021.

Issuers

Issuers have trailed the broader payments industry over the past decade, with annual TSR growth of just 5% compared to the overall payments market's 12%. This underperformance is largely due to macroeconomic sensitivities and regulatory pressures. After solid revenue growth of 8% to 9% from 2018 to 2023, growth is projected to slow to around 6% through 2028, driven by higher interest rates, regulatory fee caps, and the rising costs of funding loyalty programs. To enhance valuation growth, many leaders are turning to connected commerce solutions that link merchants with consumers and diversify revenue streams through affiliated marketing or referral fees. Larger issuers, especially in the US, should continue leveraging their merchant and cardholder bases to create value and diversify revenue through more targeted customer offers and experiences. Smaller issuers can compete through emerging third-party solutions.

Wholesale Payments

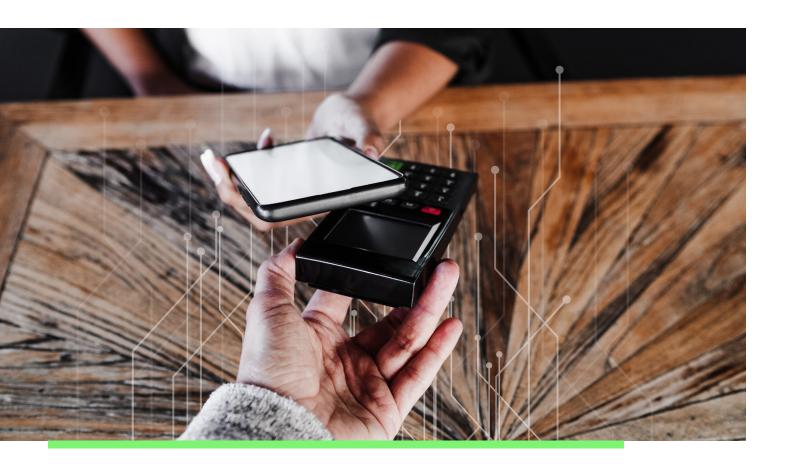
Although the wholesale payments segment plays a crucial role for banks—driving commercial relationships and fee income—investors often undervalue this business. Accounting for 33% of total payments industry revenues, the segment has grown at around 8% CAGR since 2018, with expected growth of around 4% annually through 2028. But TSR is difficult to isolate because wholesale payments and transaction banking is usually embedded as a business unit within larger banking organizations. Large banks retain an edge with their multinational payments networks and complex treasury management products, but nonbanks have made significant inroads by digitizing the user experience, integrating application programming interfaces, and offering white-glove service to small and medium-size corporates. For example, Wise, Convera, and Corpay have created cross-border payments solutions that target the small to medium-size segment. Large enterprise resource planning providers have developed treasury management solutions as add-on modules. And Kyriba or Serrala have introduced solutions that enable multibank aggregation, payment execution, and liquidity and risk management. Software providers such as Bill.com, Coupa, and Blackline pose a competitive challenge as well. Their offerings automate and digitize accounts payable and accounts receivable processes and include integrated payments solutions for CFOs and corporate treasurers. Whether these offerings can challenge banks' value proposition in a sustainable way, however, remains uncertain, especially as banks strive to close the digitization gap.

Success Requires Boldness

Despite the challenges, market leaders in each segment continue to earn investor confidence. This presents an opportunity for companies to act decisively to refine their capital allocation and portfolio strategies to deliver long-term value and meet shifting investor expectations.

To remain competitive, leaders must modernize their core technology, improving cost efficiency and reducing time to market. They also need to overhaul their risk and compliance functions, as these are now critical to dealing successfully with a maturing regulatory environment within payments. Although many infrastructure advances, such as faster payments and digital currencies, are still in their early stages, forward-thinking companies understand that actively shaping these developments and testing new use cases can secure a strong advantage.

Payments leaders face a crucial decision: adapt boldly to ensure strong future growth or be left behind. Their companies' long-term viability demands that they make strategic adjustments to help them win in an evolving landscape.



Modernize Tech the Smart Way

By Marc Papritz, Markus Ampenberger, Mireia Granzer, Adham Koura, and Jean Clavel

Payments leaders must modernize their technology now, regardless of whether they are established incumbents or digital natives.

Why? Because a rationalized, modular, and scalable cloud-based architecture is essential for driving better unit economics, faster product innovation, and deeper customer value.

Say "No" to the Status Quo

Delivering profitable growth is an increasingly challenging task across the payments landscape. Acquirers, for instance, face continued commoditization as ISVs embed payments capabilities into industry-specific solutions, and as payfacs manage key functions and achieve higher margins through robust as-a-service models. Meanwhile, orchestration tech companies such as Gr4vy are disintermediating the traditional role of merchant acquirers.

Transaction banks are grappling with their own sets of issues. Applications that process A2A payments rely on legacy technologies that are nearing the end of their life cycle, and IT staff who are skilled in these systems are aging out of the workforce. Outdated systems also struggle to integrate with new, large-scale payments infrastructure, such as instant payments, ISO 20022 data formats, and digital currencies.

Across the industry, suboptimal architectures are saddling companies with unnecessary costs, technical debt, and risk. Years of mergers and acquisitions (M&A) have burdened many merchant acquirers with redundant gateways, channels, and applications. Younger companies, despite starting with streamlined tech, now face the challenge of scaling their capabilities. To grow profitably, every business must modernize its technology.

Modernization Isn't More Tech, It's the Right Tech

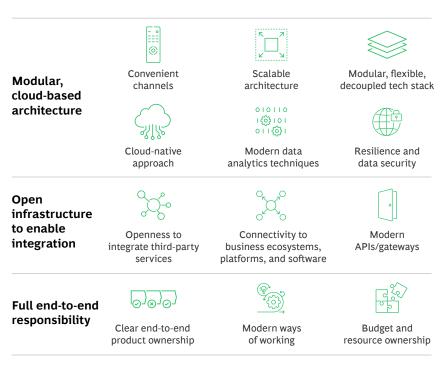
The top-performing payments companies over the next few years will have a modern payments architecture that is modular, cloud-based, and open. (See Exhibit 5.)

Having a flexible, scalable core helps payments companies to accelerate innovation and time to market, opening access to a broad array of features and solutions. It simplifies integrating the solutions into a wider ecosystem, expanding market reach. And it reduces cost and complexity by eliminating redundancy and inefficiency. For example, Adyen operates on one modern, global platform for payments acceptance and merchant acquiring, which has helped it become a partner of choice for global e-commerce platforms and international merchants. The modern core enabled Adyen to continuously expand its product offering by adding such services as offline point-of-sale payments acceptance and a business card offering for merchants.

Companies that move to a modern core can shift from quarterly releases to continuous deployment. That capability lets them adapt more efficiently and cost effectively to evolving requirements from card schemes, payment infrastructure providers, and others. JP Morgan's investments in upgrading its payments transaction engine have allowed the company to more quickly implement real-time payments and other requirements across markets.

The result of such modernization is continuous innovation and efficient, resilient performance—precisely what payments companies require to succeed.

Exhibit 5 A Modern Payments Infrastructure Has Three Core Elements



Benefits

Lower IT run and change costs

Scalability and pay-per-use benefits offered by cloud providers

Increased interoperability across channels and external third parties

Capability to provide value-added services to customers

Full reliability and operational resilience of payments processing

High flexibility and minimized dependencies for update cycles

Source: BCG analysis.

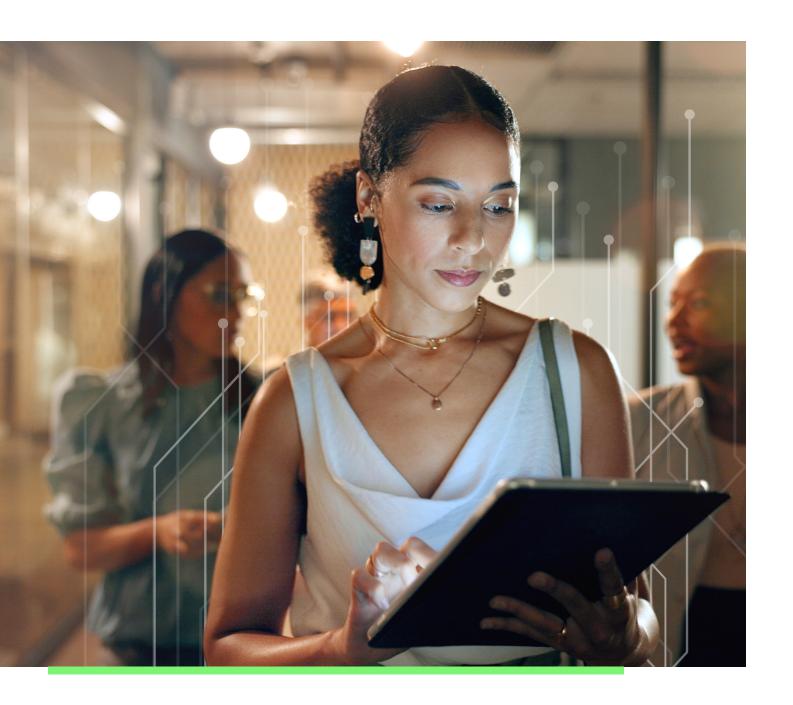
Note: API = application programming interface.

There Is No Time to Waste

Here's how leaders can move—quickly, sensibly, and with as little pain as possible—to the modern tech stack they need:

- **Design a clear target state.** Organizations must thoughtfully consider whether to consolidate multiple payments processing platforms into one existing solution, build a new solution from scratch, or migrate to a customized external vendor platform. This assessment entails mapping out critical capabilities and determining the optimal path to acquire them.
- Go long and deep with planning. Modernization requires a granular, multiyear roadmap, not the 6-to-12-month plans that many companies typically use. Well-defined modules with clear milestones are key. Leaders must note internal and external dependencies and take into account pending regulatory, M&A, and insourcing decisions. They should view this process as an iterative exercise and hold it at regular intervals to adapt to evolving market, company, and customer contexts.
- Enable rapid adaptation. Winning businesses will prioritize fast and flexible release cycles, advanced code management capabilities, and test automation to meet the demands of a dynamic commercial and regulatory environment. Working in partnership with external providers, clearing partners, and infrastructure players across the payments ecosystem is essential, as is testing solutions end-to-end. Agile teaming and DevOps methods can help engrain these practices.
- Let ROI drive decision making. Some layers of the tech stack have higher return-on-investment (ROI) potential than others. Comprehensive business case analysis can help leaders identify returns (within a maximum payback period of three to four years) so they can prioritize accordingly. Payment hubs and outsourcing can serve as alternatives in situations where owning the tech modernization program internally delivers insufficient ROI.
- Build tomorrow's talent today. Companies cannot get to where they need to go with today's skill sets. They must invest in forward-looking training and development to acquire critical expertise, and they must identify workforce bottlenecks to ensure that skilled and experienced resources aren't too scarce or spread too thinly across multiple projects.
- **Keep customers in the loop.** Modernization is an opportunity to get rid of non-value-accretive features and to streamline the product catalog. But leaders need to make related tradeoff decisions, proactively manage customer expectations, communicate changes clearly, and demonstrate the (nonfinancial) benefits of the new approach in meaningful ways.

Comprehensive business case analysis can help leaders identify which layers of the tech stack have the strongest returns within a maximum payback period of 3 to 4 years.



The Longer You Wait for GenAI, the More You Stand to Lose

By Stanislas Nowicki and Tom Dye

It's rare to find a potential gold mine and say, "No thanks, I'll wait."

Yet this is precisely what many payments companies are doing with generative artificial intelligence (GenAI).

Studies show that GenAI stands to confer millions (even billions) of dollars in top-line and bottom-line benefits. Why, then, are so few companies beyond a handful of scale-ups working to ramp up this technology? The prevailing belief is that they have time. The reality is, they do not.

GenAl stands to confer millions (even billions) of dollars in top-line and bottom-line benefits, but few companies are scaling this technology.

Uncertainty Holds Many Legacy Players Back

Three main sources of hesitation about GenAl constrain established companies:

- Waiting for the Business Case to Be More Certain. According to a BCG survey of 68 financial services companies globally, 85% expect GenAI to be transformational, but 74% say that they are having a hard time assessing the Rol.
- Worry About Investment Exposure. Only 26% of financial services companies currently commit a significant portion of their innovation budget to GenAl. Many believe that communicating the long-term benefits story to investors is too difficult and complex, and they worry about sacrificing short-term growth.
- Doubt That Current Tools and Resources Are **Adequate.** Most legacy businesses recognize that they have work to do to improve their data and IT readiness. Until that work is done, they don't see any point in getting started. Just 18% of companies have a welldefined GenAI strategy, and only 7% have implemented GenAI delivery teams with a clear operational structure and key performance indicators. (See Exhibit 6.)

Exhibit 6 GenAI Is Likely to Be Transformational, but Institutions Face a Significant Readiness Gap

Organizational readiness

Believe GenAI will be highly disruptive or transformational to the industry

GenAl

readiness

Have a well-defined GenAI strategy with implementation underway



Implemented GenAI delivery teams with clear structure and KPIs

Challenges that organizations face

Find assessing the potential ROI of GenAl use cases moderately or very challenging

85%

Say that defining relevant and actionable KPIs to measure GenAI progress is a moderate or high-magnitude challenge



26%

Are investing a significant part of their innovation budget to adopt GenAl

Have a detailed list of prioritized use cases and a clear view on sequencing

Source: BCG GenAl in FI Benchmarking Survey 2024; n = 62.

Note: Cited figures represent percentages of all survey respondents. GenAI = generative artificial intelligence; KPI = key performance indicator; ROI = return on investment.

Payments companies face a major GenAI readiness gap: 85% believe the technology is transformational, but only 18% have a well-defined strategy and implementation underway.

The Leaders Aren't Waiting

A few payments businesses are already moving forward aggressively and generating sizable near-term returns.

- **Klarna** uses GenAI to handle two-thirds of customer service chats on its own—the equivalent of 700 employees—and the company expects a bottom-line improvement of \$40 million in 2024 alone. Since implementation, average resolution time has dropped from 11 minutes to 2 minutes.
- **Stripe** has put GenAl at the heart of its developer portal, becoming the number one choice for developers in the acquiring business. A multifunctional search bar allows developers to ask questions, and the GenAl solution can summarize documents and sources within seconds.
- MasterCard and Visa are using GenAI to detect fraudulent behavior, significantly enhancing their fraud prevention capabilities.

<u>Use cases exist across the payments space</u>, and some of the biggest opportunities fall into four specific operational areas:

- Improved Customer Services and Operations.

 Automated support can promote faster and more effective issue resolution, reducing cost to serve by as much as 70%.
- Enhanced Sales and Marketing. GenAI can enable companies to hyperpersonalize in ways that would have been prohibitively expensive in the past, allowing them to individualize messaging to markets of one. GenAI tools can also augment sales, enrich customer interactions, and act as a sales coach.
- Increased Compliance Effectiveness. GenAl can serve as a real-time know-your-customer assistant and help risk and compliance teams create necessary documentation.
- **Assisted Coding.** GenAl can also help code, prototype, test, and document software. Many existing tools already provide strong benefits.

GenAI applications are emerging in the product space as well. Examples include chat portal interfaces for consumers and merchants, risk and compliance applications such as for transaction monitoring, and tools to support the reconciliation of payments flows.

The Time Is Now

Engaging in GenAI requires a leap of faith. Taking one is never easy, but these steps can help ensure a secure landing:

- **Don't wait for great.** The longer businesses put off acting as they wait for a perfect use case to appear, the higher the investment hurdle becomes. Continuous improvement boosts institutional learning and development, and is faster and more effective at driving margin improvement and business model differentiation than holding out for perfection.
- Relentlessly prioritize the basics. In order to fully commit to GenAI, most businesses will need to strengthen their data infrastructure, acquire foundational AI applications, integrate core processes, and develop the necessary skill set within the workforce. These improvements require sustained investment but can pay off in multiple ways, giving businesses a foundation for creating sustainable and scalable solutions.
- Champion responsibility, and reap the risk and compliance benefits. To mitigate the risks of intellectual property infringement, bias, errors, and "hallucinations," companies must embrace the principles of responsible AI. That starts with implementing a holistic GenAI policy framework. This is a "no regrets" action, but so far only 13% of companies in our survey have taken it.



It's Time for Banks to Reinvent Payments

By Alex Paddington, Markus Ampenberger, Tijsbert Creemers-Chaturvedi, and Jean Dobbeni

For banks, payments should be a CEO priority.

But leaders must change how they approach this business. Current models are not competitively sustainable, and banks can't afford further loss of market share.

Losing Ground in a Must-Win Market

Cash management and payments are anchor products that generate customer engagement, cross-selling opportunities, and valuable transaction data for banks. But most banks lag market leaders. For instance, JPMorgan and Citi have been investing heavily in new technology for years and are now reaping significant growth in fee revenues. According to BCG's FinTech Control Tower, more than 6,500 active payments-focused fintechs exist globally, and all are competing for share. These businesses have attracted more than \$125 billion in equity funding over the past 25 years, accounting for nearly a quarter of all fintech funding to date. Companies such as Stripe and Adyen now rival the largest bank-owned merchant acquirers in transaction volume. Many fintechs have gained prominence by focusing on areas where banks have underinvested or withdrawn, such as acquiring—abandoned by many banks—and cross-border payments, which, despite high regulatory costs, offer attractive revenue pools. Companies such as Wise, Ebury, and Remitly have capitalized on this by offering alternative cross-border payments solutions, achieving double-digit revenue growth in recent years.

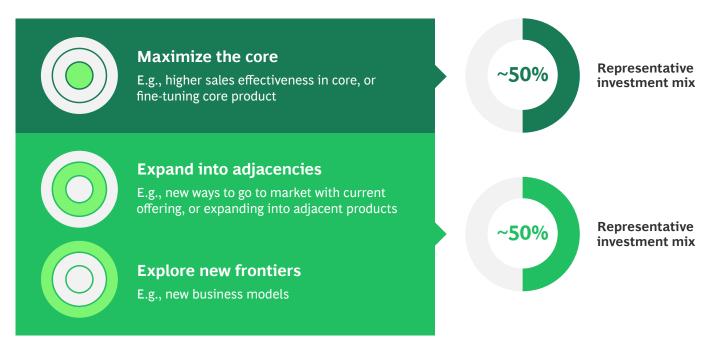
Out with the Old, in with the Bold

Winning payments companies propel growth in three ways. (See Exhibit 7.) First, they concentrate on maximizing value from their core business. They progress from broad segments to microsegments and identify distinct value propositions for each. They also plug service gaps to create a complete offering, particularly in critical areas such as digital treasury. And they invest in sales force effectiveness, especially in wholesale payments.

Second, after maximizing their core, fast-growing businesses expand into adjacent markets, targeting areas where their expertise in cashflow forecasting, account validation, and other key services can deliver substantial value to customers. In each of these areas, they seek to achieve a leadership position.

Third, leaders explore new business models within high-potential areas. For example, HSBC launched Zing, an international payments app designed to compete with fintechs such as Wise and Revolut in the cross-border payments space. Built on the Monese fintech platform and leveraging HSBC's global banking network and foreign exchange expertise, Zing exemplifies how banks can break away from legacy business models.

Exhibit 7 Banks Should Use Three Levers to Drive Payments Revenue Growth



Source: BCG analysis.

Seize the Moment

Reinventing payments requires serious tech investment. Banks must upgrade their infrastructure to excel and scale effectively. Not all banks can afford major tech overhauls, but even those with limited resources can leverage strategic steps for competitive advantage. Here's how:

- Put data to work. First-party transaction data is enormously valuable. In wholesale, it can mitigate churn, improve cross-selling, and create monetizable assets such as cashflow forecasting. In retail, by enabling connected commerce, it can provide a triple play for banks, creating new revenue streams, increasing customer loyalty, and enabling banks to offer a marketing channel to business customers. JPMorgan Chase is leveraging its transactional data to venture into the digital media space, offering brands the opportunity to connect directly with Chase customers through targeted advertising.
- Lean into embedded payments. Software platforms have gained significant customer adoption by embedding payments in their offerings. Banks can do something similar by developing solutions for specific industry verticals and making them available on their own platforms as well as on those managed by software vendors. Fifth Third acquired Rize Money in 2023 to augment its embedded payments capabilities, a key business line that is experiencing double-digit growth.

- Unify the payments organization. By harmonizing their payments infrastructure across business lines, banks can become more efficient in offering payments as a utility and can manage their strategic direction with networks and issuers more effectively. For instance, JPMorgan has brought its cash management, merchant acquiring, trade, and commercial cards under one roof to create a unified payments business to serve its small-to-medium-size business, corporate, and financial institution clients.
- Partner to advance strategic priorities. With many payments companies trading at lower valuations than they had a few years ago, this could be a smart time for banks to identify promising targets. Joint ventures and M&A can propel banks' reinvention agenda, giving them faster access to needed capabilities and markets. For example, Capital One has partnered with Stripe and Adyen to offer a solution aimed at fraud reduction. Credit Agricole has partnered with Worldline to create the joint venture CAWL, which can deliver omnichannel payments acceptance to large merchants and provide industry-specific payment solutions to small and medium-size businesses.



Make Way for Instant Payments

By Kunal Jhanji, Bryan Comis, Ricardo Tiezzi, Yashraj Erande, and Ankit Mathur

Instant payments capabilities have moved from a peripheral concern to a top agenda item for industry leaders.

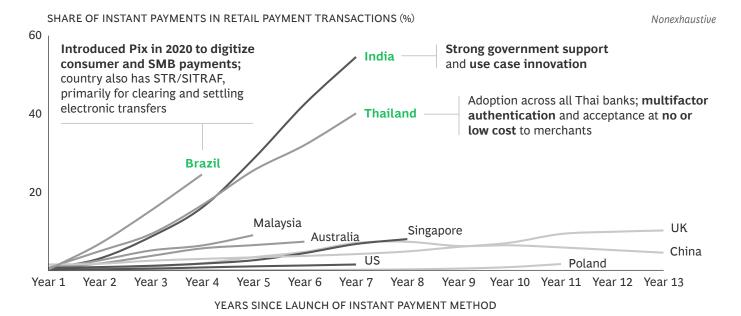
Networks, banks, and payment service providers are rolling out instant payments solutions that push real-time payments (RTP), integrated A2A transactions, and other innovations to the forefront. Industry leaders are creating new use cases, enhancing value-added services, and influencing the future of card transactions. Taken together, these developments could reshape the payments landscape.

Instant Payments Finally Gain Steam

Instant payments are now live in over 60 countries, and more schemes are on the way. Initiatives designed to facilitate cross-border payments by directly linking two or more domestic instant payment schemes—such as Immediate Cross-Border Payments (IXB), Nexus, and Asian Payment Network (APN)—are also gaining traction. However, adoption rates vary by market. (See Exhibit 8.)

High-adoption markets share several common traits: regulatory mandates, a compelling value proposition for both senders and receivers, attractive pricing, strong security, and features that support use case acceptance in the wider payments ecosystem. Government incentives that enable merchant onboarding—such as through QR codes and, in extreme cases, demonetization—have also played an important role.

Exhibit 8 Some Markets Have Adopted Instant Payments Faster Than Others Have



Sources: Central Bank disclosures; BCG analysis; Global Payments Model 2024. Note: SMB = small or medium-size business.

Brazil's Pix system and India's UPI infrastructure are notable examples of successful initiatives. Regions where adoption of instant payments has been limited aim to catch up. In Europe, a regulation recently issued by the European Commission requires all payments services providers in the region to participate in the Single Euro Payments Area instant payments scheme, and it caps fees to the level of batch payments to ensure fair competition. The US is beginning to roll out RTP and the instant payments infrastructure system FedNow.

Growing customer demand for instant payments capabilities has prompted various players to introduce similar features on alternative rails, such as cards. However, true instant payment systems, which are now gaining traction across markets, must compete by offering card-like functionality, including dispute resolution, liability management, and fraud protection—key features for consumers and merchants alike. To meet these needs, companies are developing scheme- and network-style rulebooks for managing instant payments rails. Pilots are already underway in the UK, with similar efforts evolving in Latin America.

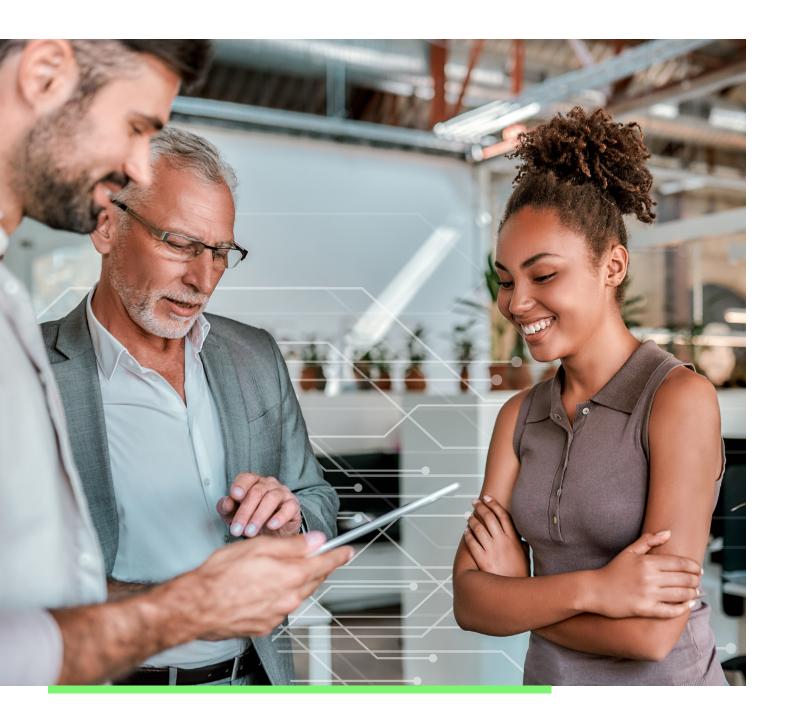
Don't Let the Revolution Pass You By

Customers are eager for instant payments, and companies that supply that need will build clear advantage. Here's how to stay ahead:

• Don't wait for others to define the future. Especially in markets where adoption is high, leaders must move aggressively to shape solutions. For markets that are still developing instant payments capabilities, companies

should actively shape the overlay services and use cases that can maximize the relevance of instant payments for end customers. They can also take the lead on providing services to address risk management, fraud, and disputes—areas that are especially important given the irrevocable nature of real-time transactions.

- Recognize that instant payments are more than just instant. Real-time transactions offer additional avenues for value creation beyond the payments themselves. Leaders should explore use cases that take advantage of expanded metadata, instant confirmation, and instant interbank clearing and settlement. Ideas include 24-7 availability; irrevocability, so that funds are truly instantly accessible and cannot be recalled; and request-to-pay services to improve e-invoicing.
- Start small, and build rapidly. Payments companies can speed their learning curve by focusing on one or two use cases and isolating a particular pain point and audience. This approach allows businesses to concentrate resources and show value more quickly. Leaders can then expand their use case portfolio from there.
- Prepare the back office to be 100% instantpayments ready. Instant payments will have implications for real-time liquidity management, fraud and sanctions screening, 24-7 payments operations, and related processes. Payments companies need to adapt accordingly and ensure that their back office can move as swiftly as their front office. Having mastered these upgraded operational capabilities, they can then offer the solutions to their customers.



Shape Digital Currencies or Be Ruled by Them

By Kunal Jhanji, Tjun Tang, Christian N. Schmid, and Markus Ampenberger

Digital currencies could transform the future of money.

Activity in this space has heated up in the past 12 months. But payments leaders need to understand which currencies to watch and how to engage with them now.

Different Currencies Have Different Potential

Although other currency options are in development, there are three main classes of digital currencies today:

- **Cryptocurrencies.** Cryptocurrencies are tokenized currencies issued by private institutions. Examples include Bitcoin and Ethereum. Volatility remains a significant barrier to wider adoption despite advances such as Lightning Network that increase the speed and lower the cost of transactions. Because the value of these instruments depends on speculation, rather than on their utility in everyday transactions, we expect that investors will continue to view them as risky assets rather than as a mainstream payments method.
- **Stablecoins.** Issued by private institutions at a value pegged to fiat currencies or commodities, stablecoins offer a more promising avenue for mainstream payments. They can facilitate faster and cheaper cross-border transactions by circumventing traditional banking channels and exchange rate discrepancies. On the other hand, their value potential depends heavily on regulatory clarity, especially after the collapse of Terra's stablecoin UST. Strict compliance standards for security, privacy, and antimoney laundering are pivotal to further adoption.
- Central Bank Digital Currencies (CBDCs). Of all digital currencies, regulated CBDCs are most likely to gain trust and acceptance. More than 90% of central banks globally are developing them now.4 (See Exhibit 9.) Some are already live. Others are in the pilot stage, and a few are still in research and design. A CBDC could herald a new era of innovation in programmable payments. Benefits include lower transaction costs, better traceability, and nearreal-time settlement. (See "The Power of Programmable Payments in CBDCs.") Some countries could see a significant uplift in economic activity as a result of CBDC use cases and increased financial inclusion. But total value depends to a very large extent on country and context.

Ultimately, only stablecoins and CBDCs are likely to have an immediate business impact and ultimately become widely adopted payment methods.

Exhibit 9 Digital Currencies Take Several Forms

Asset class	CBDCs	Stablecoins	Cryptocurrencies
Definition	New format to represent central bank money with two forms (retail or wholesale)	New format to represent money, aiming to maintain a stable value relative to a reference asset	New asset issued as medium of exchange on a DLT network, with free-floating value
Traditional proxy	· Retail: banknotes · Wholesale: reserves	E-money (issued by nonbanks)	None
Relative market interest	High	Very high	Very high
	Most central banks researching CBDCs CENTRAL BANKS RESEARCHING CBDCS (%)	Boomed in 2021 and less volatile than crypto GLOBAL MARKET CAP (\$BILLIONS)	Significant adoption but highly volatile GLOBAL MARKET CAP (\$BILLIONS)
	90 93 94 2021 2022 2023	162 148 135 2021 2022 2023	2,300 828 2021 2022 2023
Relevance to banks	High (e.g., digital euro)	Low (requires 1:1 backing)	Low (unclear regulation)

Sources: Atlantic Council CBDC tracker; company websites and press releases; The Block; BCG, "Relevance of On-Chain Asset Tokenization in Crypto Winter," 2022; Galaxy Research; BCG analysis.

Note: BCA = benefit-cost analysis; CBDC = central bank digital currency; DLT = distributed ledger technology; PCA = principal component analysis.

4. See the results of the 2023 BIS survey on central bank digital currencies.

The Power of Programmable Payments in CBDCs



CBDCs offer a unique advantage: the ability to program payments directly into various systems, such as Internet of Things networks and smart contracts. This capability can streamline operations, reduce inefficiencies, and foster innovation in ways that traditional money cannot.

One of the most promising applications is in combating fraud, especially in government-to-consumer payments. Currently, issues such as false claims and wrongful use of funds are significant problems. Programmable CBDCs could help mitigate these risks by embedding specific conditions or triggers into transactions, ensuring that funds go to the intended recipient for the intended purpose.

In the gig economy, where workers often require immediate or same-day payments, traditional payments systems fall short. Programmable payments can facilitate these rapid transactions, offering greater flexibility and security for both businesses and workers.

For small and medium-size businesses, delayed payments are a common challenge, leading to cash flow issues and increased administrative overhead. With programmable payments, businesses can automate payments on the basis of specific parameters, such as the completion of a service or the delivery of goods. This reduces the need to chase late payments and ensures a smoother, more predictable cash flow.

In these ways, programmable payments could redefine efficiency in financial transactions.

Payments leaders from banks, payment service providers, and fintechs have a role to play in shaping how the future of digital currencies unfolds.

Mass Adoption Requires Advances on a Number of Issues

To gain broad acceptance, Stablecoins and CBDCs must provide clear value to consumers and merchants, potentially going beyond pure payment services to enable use cases that rely on programmable money. Achieving this will require work on several fronts.

Architecture is one issue. Robust technological infrastructure to support digital currencies is still in development. That infrastructure must integrate into the wider payments ecosystem to ensure scalability, security, and efficiency.

User experience is another critical factor. Digital currencies must be as easy and intuitive to use as traditional currencies. Facilitating usability will require seamless interfaces, robust customer support, and ongoing education to foster trust and confidence.

Interoperability is essential, too. Different digital currencies and payments systems need to work together in an integrated fashion. This, in turn, requires standardized protocols and collaborative frameworks to ensure compatibility across platforms and jurisdictions.

Regulation is vital and necessitates a collaborative and productive interplay between legislative bodies, governments, and central banks. Important design questions include the role of commercial banks in managing and distributing CBDCs, quantitative holding limits to prevent material deposit outflow or even the risk of a bank run, and anti-money-laundering and compliance risk management. CBDCs can also increase financial inclusion. Finding the right balance between data security and privacy for consumers and businesses is key to achieving this.

Finally, it is essential to define the right use cases to enable the full benefits of a digital currency. Adoption in developed countries could come from a CBDC's ability to enable programmable money (for example, as an enabler within industry 4.0) or microtransactions. Such innovations are not feasible with traditional fiat currencies. Guidance must be strategic enough to anticipate emerging use cases and to foster sustained interest and investment.

Payments Leaders Must Be Part of the Conversation

Payments leaders from banks, payment service providers, and fintechs have a role to play in shaping how the future of digital currencies unfolds. Four aspects of this role are especially significant:

- Participate actively in design. Leaders should become engaged participants in the evolving technological infrastructure, working with stakeholders across business, tech, and regulatory environments to design structures that can support mass adoption without compromising performance, security, or day-to-day business operations.
- Partner with regulators. Regulatory frameworks must evolve. Authorities will need help in crafting rules that safeguard users without bogging down the customer experience. Payments leaders can provide vital expertise to ensure that transactions remain simple and cost effective and to help innovative use cases advance by testing and refining them in controlled settings.
- **Promote adoption.** Payments companies must ensure that use cases offer undeniable benefits to consumers and merchants, and those benefits must go beyond the ones that existing instruments offer. Ensuring that CBDCs can integrate into the wider payment ecosystem is also essential.
- **Foster collaboration.** Leaders should engage with tech companies, financial institutions, and regulatory bodies to develop and promote best practices and standards for digital currency implementation and use. Policies and guidance must rapidly mature to protect users without stifling innovation.



Don't Make Risk and Compliance an Afterthought

By Bryan Comis and Max Teichert

Leaders understand that proactive risk management is crucial, yet many organizations remain reactive, which leaves them vulnerable to threats that they might otherwise have prepared for.

By adopting a holistic approach to risk and compliance—with the right operating model and infrastructure—businesses will be able to satisfy regulatory requirements, avoid operational risk, more effectively seize new product and business opportunities, and meet stakeholder demands.

The Costs of Inaction Are Mounting

Regulatory bodies are tightening their grip on the payments industry. In the EU, the Digital Operational Resilience Act (DORA) has introduced stringent requirements on financial entities, and the upcoming AI Act will impose further obligations. In the US, the practices of middleware platforms in the banking-as-a-service space have come under significant scrutiny. This has led many payments companies and fintechs to reassess their third-party partnerships and go-to-market strategies. Emerging markets in Asia-Pacific and Africa are experiencing increased regulatory activity, too. These new demands are straining already stretched risk and compliance teams around the world. And the consequences of noncompliance are severe, ranging from financial penalties to mandated, multiyear monitorships.

Fraud is also on the rise, as cybercriminals continually up their game and less visible types of fraud, such as insider trading, inflict severe harm. These incidents often go underreported, masking the true extent of the threat.

Meanwhile, investors are pushing back. Keen to avoid further loss in valuations, many are pressing management for assurance that companies possess the necessary risk preparedness. Can they detect emerging cyberattack vectors early enough? Are they evaluating a wide enough set of risk types? What business continuity measures are they adjusting in the current climate?

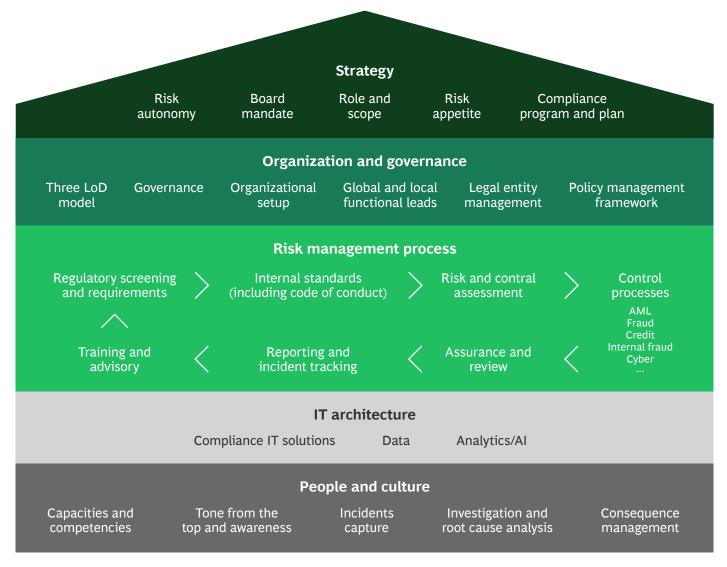
At present, payments companies significantly trail banks in risk management maturity, with oversight often limited to three to five big risks. The maturity of risk controls and methodologies varies widely as well. And although companies have added capacity and skills, most have not added nearly enough to keep pace with accelerating demand. Compliance cannot stand still amid current marketplace changes. Leaders must adapt their approach.

To Be Proactive, Go Holistic

Companies with the best defenses manage risk and compliance holistically—top-down and end-to-end. A best-in-class operating model consists of five layers, from strategy to people and culture, and each layer is carefully constructed to give leaders the oversight they need. (See Exhibit 10.) Strategy for risk and compliance, for instance, calls for more than a clear vision. It requires a detailed risk taxonomy, backed by a strong board mandate and supported by tightly aligned roles, risk appetite, and compliance.

Likewise, the risk management process layer goes well beyond a static set of controls. It consists of an end-to-end system in which requirements, standards, assessment methods, and other elements communicate with each other and undergo continual refinement. The IT architecture layer takes its cue from these elements. Leaders can assess which compliance solutions will best meet their needs and whether the data they use is structured adequately for incorporation into these systems. The organization and governance and people and culture layers are similarly comprehensive. Companies should adopt an active three-lines-of-defense model. They also need employees with strong risk management and compliance skills across all risk types, and a supportive culture implemented with the right tone from the top.

Exhibit 10 Payments Leaders Should Adopt a Target Operating Model for Risk and Compliance



Source: BCG analysis.

Note: AML = anti-money laundering; LoD = lines of defense.

Here's What to Do Now

To improve their risk posture, established and younger players should take these steps now:

- Expand the company's risk lens. Many companies focus on the same narrow set of risks, often driven by recent headlines. This approach is too limited and reactive. To be proactive, leaders need to build a comprehensive, detailed risk taxonomy to guide their strategy. Doing so is crucial as CEOs expect risk functions to monitor and address a wide variety of strategic and operational risks, from tracking new competition to minimizing IT downtime. (See Exhibit 11.)
- **Engage the board.** Payments companies have advanced in appointing risk leaders at the C-level. But too few of them involve the board, and that participatory shortcoming invites trouble. Effective risk management

- demands the board's broader perspective on how to incorporate risk management and compliance into key business decisions. The board's engagement is essential to assure investors of robust oversight.
- **Meet monthly.** Risk and regulatory changes don't conform to neat calendar cycles, and governance must adjust accordingly. Chief risk and compliance officers should meet with the board risk committee every month to review performance and reprioritize initiatives, as needed.
- Invest as though the company's equity depended on it. Whatever amount companies pay today to fund their risk and compliance function is a pittance compared to the cost of a major failure in risk and compliance. Yet despite advances in recent years, too many payments companies still underfund their risk and compliance operations. To build the operating model they need, leaders must increase their investment substantially.

Exhibit 11 A Well-Defined Risk Taxonomy Helps Organizations Stay Proactive

Financial risks

Credit risk

- · Obligor risk
- · Counterparty risk
- · Issuer risk
- · Country risk
- · Foreign exchange lending risk
- · Specialized lending risk
- · Securitization risk
- · Concentration risk

Liquidity risk

- · Intraday liquidity settlement risk
- · Short-term liquidity risk
- · Stressed liquidity and funding risk

Market risk (including foreign exchange and interest rate risk)

- · Interest rate risk
- · Credit spread and credit valuation adjustment risk
- · Equity risk
- · Foreign exchange risk
- · Commodity risk
- · Nonlinear risk
- · Market liquidity risk
- · Pension fund market risk
- · Structural interest rate risk
- · Structural foreign exchange risk

Strategic risks

Reputational risk

Sustainability risk

- · Climate change risk
- · Human rights risk

Business risk

- · Forecasting risk
- · Inorganic growth risk
- · New business risk
- · Investor relations risk

Operational risks

Financial crime risk

- · Anti-money laundering/combating terrorism financing risk
- · Sanctions and embargoes
- · Bribery and corruption
- · Facilitation of client tax evasion

Conduct risk

- · Market conduct risk
- · Client conduct risk

Regulation and compliance risk

ICT and cyber risk

- · Data confidentiality risk
- · Data availability risk
- · Data integrity risk
- · Information security risk

Resilience risk

Outsourcing and vendor risk

- · Intragroup outsourcing risk
- · External outsourcing risk
- · Vendor risk

Fraud risk

- · Account-opening fraud risk
- · Debit and credit card fraud risk
- · Fraudulent payment transaction risk
- · Online banking fraud risk
- · Credit fraud risk
- · Theft risk
- · Embezzlement and breach of trust risk
- · Antutrust violation risk
- · Balance sheet manipulation

Data privacy and secrecy risk

- · Data privacy risk
- · Bank secrecy risk

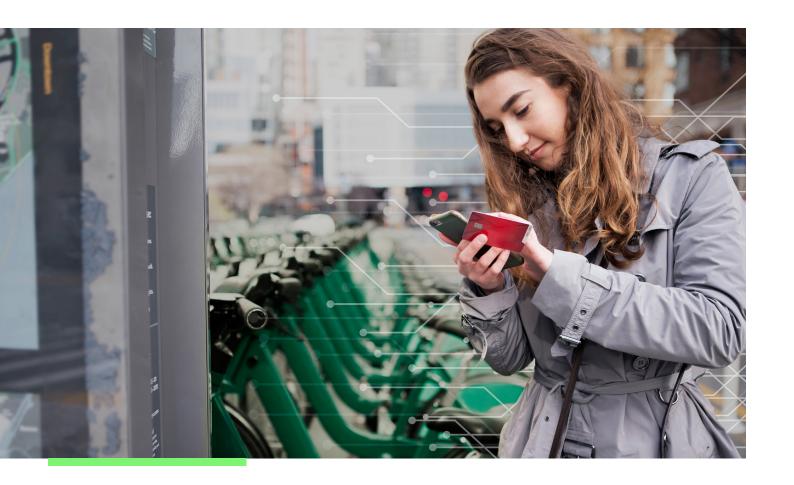
Tax reporting risk

Other operational risk

- · Human resources risk
- · Legal risk
- · Physical damage risk
- · Execution, delivery, and process risk
- · Reporting risk
- · Accounting risk
- · Project risk
- · Competition law risk
- $\cdot \ \mathsf{Model} \ \mathsf{risk}$

Source: BCG analysis.

Note: ICT = information and communication technology.



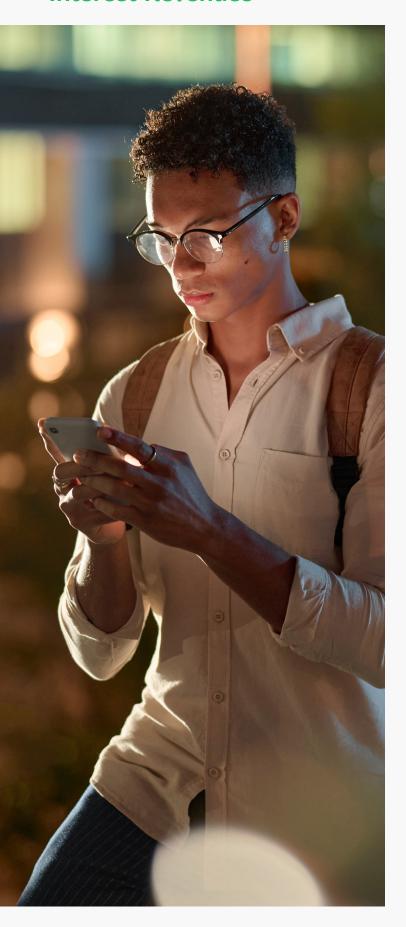
Conclusion

As the US business philosopher Jim Rohn noted, "If you are not willing to risk the unusual, you will have to settle for the ordinary."

Investors, regulators, and customers in the payments space continue to demand improved business models, stronger infrastructure, and more tailored products and services. A business-as-usual mindset won't deliver the profitable growth that today's payments investors expect.

Although pressure to deliver short-term earnings can increase the challenges associated with making bold strategic choices, leaders must take that leap. Adjusting capital allocation and the portfolio mix is a crucial first step, but it's not enough. Payments leaders must also apply the same RoI mindset to their infrastructure and technology decisions. By taking decisive action now, companies can build flexible, high-margin businesses and usher in a new wave of growth.

How Our Methodology Addresses Deposit Net Interest Revenues



Current account deposit net interest revenue, the largest component of nontransaction revenue, is influenced by both volume and margin. Historical volumes come from central bank reports, and future projections are derived from sophisticated regression models that incorporate key macroeconomic indicators such as GDP, interest rates, and the Consumer Price Index. Local market experts validate these forecasts, and we continually refine our models by analyzing recent consumer and business trends through industry and bank reports. For example, in Europe, we factor in the shift of customer assets into higher-yielding products to optimize returns amid declining interest rates.

We calculate margins by evaluating the refinancing rate and client interest rates in each country. This process uses forward yield curves for each currency, and it accounts for risk premiums, interest rate sensitivity, and more. Our analysis shows that revenues are highly sensitive to margin variations. In Europe, for instance, a change in interest rates of 10 to 30 basis points can lead to a variation in revenue of 2 to 5 percentage points.

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