



Financial services in a connected ecosystem

The future of fintech



Foreword

In a relatively short time, fintechs have become an established part of the financial services environment

The fast pace of innovation within the fintech sector, coupled with the ability of fintechs to understand customers' wants and needs through data analytics, has resonated with consumers and businesses eager for customer-friendly products that speed up transactions and widen choice.

Fintechs have helped blur the boundaries between financial institutions and companies from other industries. The swift growth of fintech has intensified competition and poses questions over the future roles of traditional financial services companies—and possibly their very existence—with the increased risk that they may be relegated to back-office providers, and/or lose market share to rivals more in touch with customers.

As services such as payments, savings, and investments go fully digital, businesses—both fintechs and established financial services players—that can use data to understand customer preferences, embed data privacy and cybersecurity, and balance speed of product development with an understanding of risk and regulatory exposure should be in a strong position to thrive.

The future of fintech belongs to those organizations that can master data from across the enterprise—front to back office—to drive their decision-making. To do this, we believe companies will need to become “connected enterprises.” These are organizations that use data and digital technology to function more smoothly, develop innovative products, connect with customers and suppliers, and give employees the tools to succeed. A clear focus on what they do best can help ensure that technology investment is not spread too thinly, with a growing use of strategic partnerships to access new capabilities, accelerate expansion and reduce costs.

Regulation has also become a major consideration, with increasing legislation to address current and emerging risks around licensing, consumer protection, and financial crimes

activities. Building resilience into product development can help fintechs balance speed to market with regulatory compliance and consumer trust.

In this paper we consider the key signals of change in the market, and the types of business models likely to emerge, as financial services companies—particularly banks—ponder whether to “own” the customer interface or to act as providers to other companies that offer a wide range of products in addition to financial services. Indeed, fintechs may well choose to brand themselves as data organizations that happen to provide payments and other financial services rather than vice versa.

In closing, we discuss how fintechs can apply eight essential “connected capabilities” to become truly connected enterprises. It's an incredibly exciting time to be working in fintech, and we hope that the questions—and possible solutions—presented in this paper can stimulate further progress of this vital industry.



There is tremendous demand for companies to offer their customers digitally-enabled financial services solutions—this appetite has fueled the convergence of technology businesses and traditional financial services companies. The winners in this market will be the companies that can deliver an enhanced customer experience in a connected, secure, and reliable way.”

James Brannan,
Principal, Advisory
KPMG in the U.S.

Contents

04
Signals of change



22
The eight capabilities of the KPMG Connected Enterprise



14
Strategic imperatives



23
Connected capabilities can enable a winning operating model



18
Future business models



25
Case studies



Signals of change

Strategic imperatives

Future business models

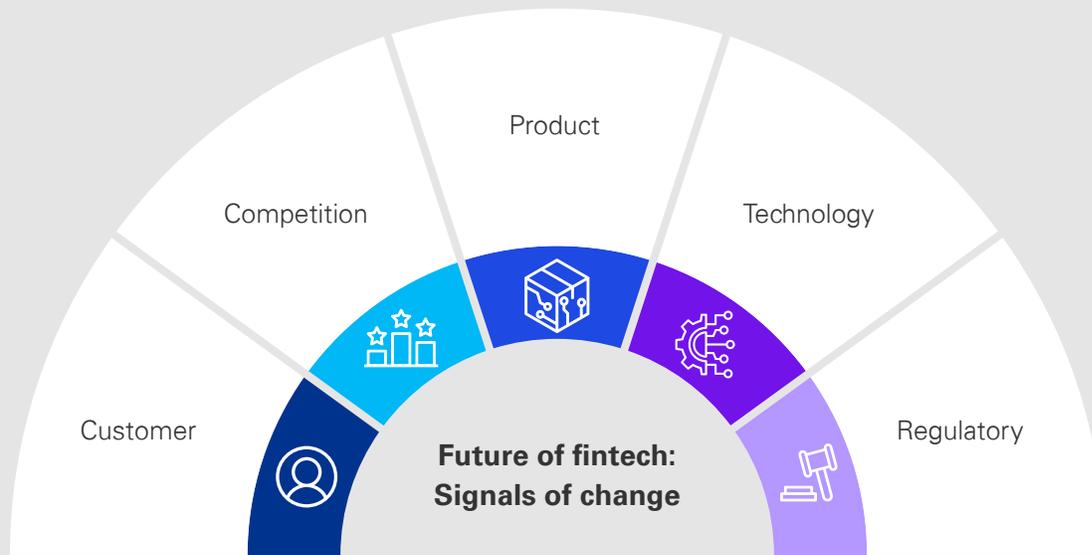
Case studies

Signals of change

The forces driving the future of fintech will likely continue to be defined by customer demand for speed, convenience, and choice

With apps increasingly serving as the entry point for services, the market for financial services has opened to non-traditional competitors. This paradigm shift signals a potential threat to the dominance of banks and other financial services companies, some of whom risk becoming back-office providers to major consumer/technology brands. These conditions have framed the rise of the modern fintech.

However, rising demand for data protection and privacy—from both customers and regulators—means that fintechs must manage the rapid development of new offerings while maintaining robust cyber security at all stages of product development. To do this, fintechs should become increasingly data-driven to gain competitive insights and operational efficiencies, and enter strategic partnerships to access non-core capabilities, while also being sufficiently focused on their key brand strengths. In this section, we look at these and other key signals of change across the fintech sector, and the underlying forces behind these signals.



1. Customer

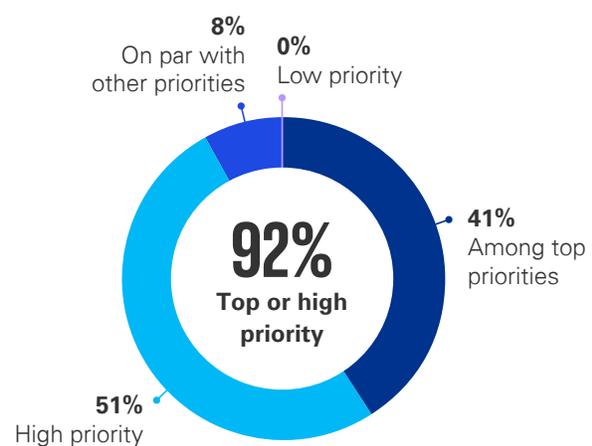


Rising demand for wider, more personalized choices and a connected experience

Today’s consumers want speed, personalized products, and an intuitive user experience without having to engage with a human—unless absolutely necessary.¹ The increasing variety of products offered by financial institutions, fintechs, and technology companies—and the growing sophistication of mobile apps—is upping the ante for a tailored customer experience, where data-driven financial information and insights are instantly available, and companies are continually adapting to changing customer preferences.

Fintech leaders largely agree—43 percent of respondents who took part in the KPMG global survey ranked “enhancing customer experience” as their organizations’ top strategic goal, making this the single most widely-cited strategy objective among fintech firms. A related survey question yielded 92 percent of fintech leaders citing their customer centric strategy is a top or high priority.²

Exhibit 1: More than nine out of 10 fintech decision makers list their customer centric strategy as a high or top priority



¹ “Gen Z’s Top Priorities When Selecting a Financial Services Provider,” The Financial Brand, January 2022

² A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

Trust and security are at the front of consumers' minds

In addition to a superlative experience, customers expect money, investments, and personal data to be secure, with strong anti-fraud processes. One data breach can potentially expose all of an individual's personal information resulting in financial loss to the customer and significant reputational damage to the fintech.

In a recent KPMG survey of U.S. consumers, 86 percent say they feel a growing concern about data privacy, 78 percent are worried about the amount of data being collected, and 40 percent don't trust companies to use their data ethically.³ Fintech leaders responding to our global survey rank financial product safety, privacy, and data security as the top three priorities.⁴

Customers want to own their data to maximize control and privacy

In the wake of increased data and security breaches, customers are seeking greater control of their personal data. In response, fintechs are providing the option for universal IDs—such as eID and blockchain wallets—to enable customers to share private information with service providers while maintaining full ownership and control over how their data is used.

Similarly, central banks around the world are developing digital identity infrastructure that supports and accelerates the development of financial services applications and the opening up of data for digital innovation. Blockchain also supports digital identity use cases to create secure and decentralized identity verification systems, allows businesses and consumers to safeguard data, and helps reduce fraud and identity threats. This ultimately reduces the obligation of financial services companies to store and secure customer information, can replace two-factor authentication to offer greater security and convenience, and streamlines know-your-customer (KYC) and customer due diligence checks.

According to our global survey of fintech leaders, 96 percent of fintechs plan to invest in universal user identities in the next five years, while universal IDs are considered the technology with the greatest potential to change the fintech landscape.⁵

Wholesale and institutional financial institutions turn to fintech products to transform their enterprises

Wholesale and institutional financial institutions are increasingly facing pressure from fundamental geopolitical shifts, global supply chain disruptions, a high inflation environment, multiple global rate hikes, and energy and commodity insecurity. In a bid to prevent loss of market share, incumbents are increasingly embarking on their long-pending digitalization journey and exploring fintech—and its patterns of disruption—to transform their businesses. Fintechs should seek to understand the needs of these institutional customers and seek out product-market fit to deliver top priority solutions for them. Currently ~3,500 fintechs have sizeable collaborations with incumbent banks globally covering domains such as payments, lending, commercial finance, bank infrastructure, regulation, and finance.⁶



³ "Corporate data responsibility: Bridging the consumer trust gap," KPMG, 2021

⁴ A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

⁵ A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

⁶ "Forging the future: How financial institutions are embracing fintech to evolve and grow," KPMG, October 2017

2. Competition



Fintechs may need to embrace “co-opetition”-style strategic partnerships

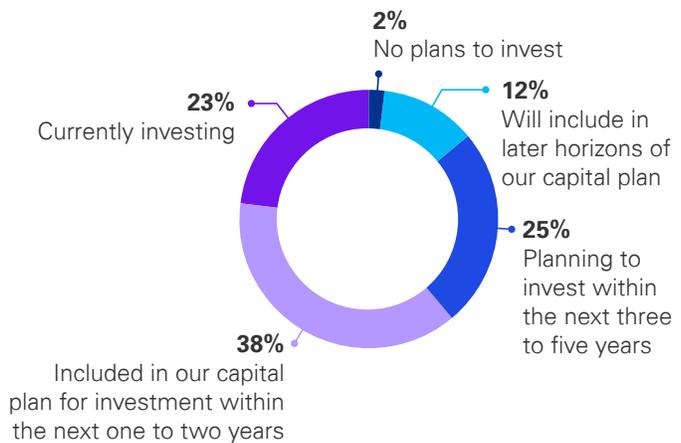
With digital financial services brands going mainstream, traditional banks risk being relegated to commoditized, back-end providers, losing market share to disruptive fintech startups addressing underserved customers, offering greater efficiency and new features. Petal, the U.S.-based credit card startup, targets customers with little or no credit history, using alternative creditworthiness measures based on income, savings, and spending history.^{7,8}

Incumbent fintechs can compete with startups by embracing commoditization and growing scale through channel partners and embedded solutions—introducing exciting potential for new revenue from existing infrastructure.

The incursions into the financial services space appear relentless, with financial products being integrated into more and more technology and consumer brands. In the face of such pressure, some fintechs are opting for “co-opetition” (“cooperative competition”) in the form of strategic partnerships. Three-quarters of survey respondents say their organizations are investing in or plan to invest in partnerships with large, mainstream technology companies, and 38 percent say strategic partnerships are a major focus—in both cases often bypassing traditional financial institutions

through technology like API integrations. Some fintechs prefer to focus on their core business identity as commodity providers: “embedding of financial services products into consumer platforms” is seen as having the greatest potential to change the fintech landscape.⁹

Exhibit 2: One-third of fintech leaders surveyed say their companies are investing in product delivery via partnerships with big tech businesses



Government involvement in financial services presents a new layer of competition... and opportunity

Governments are becoming major financial services players, which increases competition but also opens opportunities for new products. Government agencies in countries such as the UK, EU, and Singapore are not only driving innovation in fintech, but are also encouraging cooperation between themselves and fintech. For example, the UK’s Faster Payments Service allows non-banks such as fintechs to directly participate through a settlement account at the Bank

of England.¹⁰ Other examples include the U.S. Department of the Treasury, which has recommended creation of a federal payment framework for nonbank payment providers that would complement existing federal requirements, including consumer protection and anti-money laundering/combating finance of terrorism (AML/CFT), providing a potential pathway for these providers to participate directly in instant payment systems.

⁷ Mary Ann Azevedo, “These startups want to make credit scores a thing of the past,” TechCrunch, July 24, 2022

⁸ Petal website, October 2022

⁹ A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

¹⁰ Faster Payment System, Pay.UK website, February 2023

Other examples include the UK's Faster Payments Service, which allows non-banks such as fintechs to directly participate through a settlement account at the Bank of England.¹⁰

In the future, central bank digital currencies (CBDCs) are likely to become the next area of government investment in financial products. According to the Bank for International Settlements, 86 percent of the world's central banks are either studying or piloting CBDCs, which may ease cross-border payments and potentially enable transactions in multiple currencies.¹¹ The use of open-source software in the context of piloting CBDCs is crucial for working together, testing, and putting ideas into practice. Along with promoting collaboration, financial systems can also benefit from the transparency and accountability that open source provides. Such infrastructures enable fintechs to build partnerships with government entities to launch new products, and CBDCs are set to accelerate mainstream digital currency adoption and create openings for new business services and products.

A KPMG survey suggests that fintechs are eager to align their systems with CBDC infrastructures: 23 percent are investing today and a further 38 percent expect to do so in the next 1–2 years. And when it comes to CBDCs, respondents believe new financial market infrastructure, policy, and interoperable environments have the greatest potential to disrupt the fintech landscape.¹²

Thought leadership: KPMG regulatory insights



Payments and Crypto: 2023 Regulatory Challenges



"Open Banking" 1033 Personal Financial Data Rights: CFPB Proposal



Focus on Tech: Cloud, AI, Personal Data

Opportunities for public-private partnership

To successfully roll out CBDCs on a large scale, central banks may need to collaborate with private entities and find ways to attract users, possibly via incentives. The People's Bank of China has partnered with leading domestic tech giants to promote its digital currency. Other central banks are partnering with banks, credit unions, and payment service providers in Cambodia, Bahamas and Nigeria to pursue CBDCs. Singapore's ambitious Project Ubin focuses on payments and interoperability, bringing together businesses including domestic financial institutions and international banks.

Sources: "China to Make Digital Yuan and Payment Apps More Connected," Bloomberg, November 2021
 "Project Ubin: Exploring Singapore's Digital Currency Project," Fintechnews, June 2021

¹¹ BIS Innovation Hub work on central bank digital currency (CBDC), Bank for International Settlement website, October 2022

¹² "The Federal Reserve Bank of Boston and Massachusetts Institute of Technology release technological research on a central bank digital currency," Federal Reserve Bank of Boston, February 2022

¹² A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

3. Product



Fintechs innovate to stay connected to changing customer demands and disruptive new technologies

Fintechs are finding new ways to create value for customers, overcome distribution barriers, and earn revenue—while focusing on their core capabilities. Embedded finance is an emerging delivery channel that helps fintechs deliver innovative products through non-banks that offer financial products and services, including loans, payments, and insurance. The embedded finance industry in the U.S. is expected to grow rapidly to more than \$230 billion in revenue by 2025, reflecting consumers’ openness to new fintechs.¹³ This “banking-as-a-service” model involves bundled, often white-labeled¹⁴ or co-branded services, offered by nonbanks via APIs, to give customers multiple, integrated offerings. Respondents to our global survey believe embedding financial services products into consumer platforms has “significant potential” to change the fintech landscape.¹⁵

Embedded finance in the marketplace

Five main use case domains have emerged for embedded finance. The ubiquitous digital wallet, e-commerce distribution, supply chain digital finance, employee services and end to end data-as-a-service. Fintech has become the intelligent data and connecting players between the corporates and regulated banking providers.



Speeding up innovation through resilient design to deliver secure, transparent, and safe experiences

As consumers grow accustomed to a stream of convenient new products, fintechs must balance speed-to-market and innovation with meeting consumer financial protection laws and regulations, including the protection of customer data privacy and maintenance of regulator confidence. A lack of product transparency, fair treatment, data privacy, and cyber security can damage consumer trust. For example, in 2022, Hello Digit, a consumer budget management fintech, received a US\$2.7 million fine from U.S. regulators for alleged deceptive product promises,^{16, 17} demonstrating that regulators will hold fintechs accountable when the delicate equilibrium is not upheld. Since the start of 2021, the U.S. regulators have now issued 35 enforcement actions totaling \$1.8 billion in penalties, signaling the need for fintechs to operate within the letter and spirit of consumer financial protection laws and regulations, as well as provide safe and secure fintech products and services.¹⁸

Over the next couple of years, two-thirds of fintech leaders surveyed say they will invest in “secure by design” principles, embedding risk management, compliance, and operational excellence as part of product design, rather than retrofitting after development, to create products that customers can trust.¹⁹ To do this, they are starting to integrate product development teams with stakeholders from operations, risk, and compliance, to improve risk management through processes such as stage gates, with stronger oversight to spot cyber/privacy vulnerabilities. Their aim is to develop a more structured approach to software development without losing the “fail fast” ethos that has been a driving force behind much of their success.

¹³ “Uber’s Departure From Financial Services: A Speed Bump On The Path To Embedded Finance,” Forbes, August 2020

¹⁴ An unbranded product or service

¹⁵ A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

¹⁶ “CFPB Announces \$2.7 Million Fine Against Consumer Budget-Management Fintech Company,” JDSUPRA, August 2022

¹⁷ “Hello Digit, LLC,” Consumer Financial Protection Bureau, August 2022

¹⁸ “Enforcement by the Numbers,” Consumer Financial Protection Bureau, July 2022

¹⁹ A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

4. Technology



The rise of decentralized financial ecosystems

Fintech startups are introducing decentralized products and ecosystems built on top of blockchain technologies and harnessing Web 3.0 design principles. The result is a decentralized web in which no single entity controls data and applications, giving users greater control over their data. Decentralized finance (DeFi) offers financial instruments without intermediaries by allowing people, merchants, and businesses to transact directly on a blockchain.

Interest in decentralized products continues to grow. The fintech executives responding to the KPMG global survey rated increased consumer investment in digital assets as having the greatest potential to disrupt the fintech landscape.²⁰ And in a 2022 survey of 4,000 U.S. adults, cryptocurrency and stocks were the most popular assets held by Gen Z, millennial, and Gen X investors.²¹

However, significant decline in digital asset value, along with bankruptcies of some funds and cryptocurrency companies, increases pressure on fintechs to build more transparency, security, and control into their products and technology.

At this stage, DeFi represents a comparatively small part (US\$5 billion) of the financial services ecosystem, with

significant, ongoing debate about which future DeFi models will win out and whether it will come from central banks, legacy financial services, or crypto native segments.²²

Rethinking data strategies

As consumers increase the use of non-custodial blockchain wallets, their data will increasingly be located on a blockchain. Users will have greater ownership over their data, and in turn, fintechs will have more limited ability to access customer data. This forces fintechs to rethink how to build user profiles and insights, such as through including cooperative partnerships (i.e., co-petition through consortiums to share data) to gather customer data. Indeed, the entire fintech value proposition must be sufficiently compelling to convince customers that they will benefit from sharing data.

When asked how they could best address the changing fintech landscape over the next 5–10 years, survey respondents say the top priority is transitioning their operating model to work with new technology (e.g., blockchain, AI, etc.).



²⁰ A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

²¹ "Top Financial Literacy Education Gaps Across Generations," Investopedia, April 2022

²² "DeFi can be 100 times larger than today in 5 years," Cointelegraph, November 2021

Cloud as a catalyst for innovative business models

Cloud has emerged as a powerful driver for digital transformation and innovation across the financial services landscape. More business leaders increasingly recognize that cloud is more than just a new database technology and is rather an enabler for innovative business models. Capitalizing on the benefits of unparalleled scalability, agility, and cost effectiveness that cloud offers, many cloud providers, fintech companies and startups have been quick at spinning “as-a-Service” business models to allow customers to purchase products on demand, with the flexibility of self-service, multiple channel access, and payment options. Yet, according to IBM, 80 percent of financial institutions are still at the foundational stages of their cloud journeys, so a huge migration and transformation opportunity lies ahead.²³

Fintech companies such as Mambu and many others are already reconfiguring the banking value chain with Banking-as-a-Service (BaaS), enabling banks with legacy systems to run their core technology in the cloud as well as non-banks to integrate banking services in their products.

Key principles for designing cloud based fintech business models

Interoperability – Cloud providers now cover most of the world’s economic activity and trade corridors. Fintechs that partner in cloud ecosystems now can access significant new markets for data sourcing, with estimates for the amount of global data available to triple between 2022 and 2025.

Institutional data – Large financial institutions operate legacy systems that require widespread modernization. Fintechs have capitalized on modernization of legacy systems as a major market opportunity, as well as to glean valuable product and strategic insights from institutional data. Investors continue to value fintechs building products in the institutional space much more highly than fintechs targeting the direct to consumer market.

Source for Interoperability: “Fintech Focus,” KPMG, July 2020

Leveraging generative AI to accelerate decisioning and connect the enterprise

While artificial intelligence has driven key technology capabilities across fintechs, the recent development in generative AI has the potential to change the way that Fintech decision makers approach solutions for key business challenges. A majority of US executives (77 percent) expect generative AI to have the largest impact on their businesses out of all emerging technologies.²⁴ Fintechs are applying generative AI tools to create on-demand insights from structured and unstructured data that is disseminated across the enterprise.

Generative AI is creating a near-limitless potential for product innovation by providing data driven insights to strengthen responsiveness to customer needs. For example, fintech lending products can leverage AI to make sense of unstructured data and create a more informed lending profile and decision process. Similarly, consumer wealth management platforms can create a more informed understanding of user’s financial profile for better targeted recommendations.

Generative AI has immense potential to increase efficiencies and connect internal business processes within and across areas such as the product, engineering, finance, and legal departments. Generative AI will be applied to integrate data from numerous source systems across departments—decisionmakers will be able to make informed decisions with real-time data from across the enterprise, improving connectivity between teams.

Customer facing business functions, such as relationship management and sales, are expected to benefit from the early adoption of generative AI tools. For example, a value driven use case is a sales tool that helps lending companies communicate complex policies by describing the details of the term sheet, answering questions specific to the custom terms for each customer, and comparing multiple offerings with data visualizations.

All eyes on generative AI

Many executive leaders (64 percent) believe generative AI will help their business gain a competitive advantage over competitors. To do this, they are creating forward-looking data strategies and integrating AI tools to enterprise databases to ensure that AI can be deployed effectively for clients.

²³ “Nearly 80% of Banks Globally Remain in Nascent Stages of Their Hybrid Cloud Adoption,” IBM, October 2022

²⁴ “Generative AI: From buzz to business value,” KPMG, June 2023

5. Regulatory



Growing regulatory scrutiny necessitates investment in regulatory and compliance resources

To manage risk, global regulators and regulated third parties are beginning to hold fintechs to higher levels of scrutiny. Regulators are using existing regulatory and supervisory authority to address current and emerging risks even as they seek additional authority through legislation. Key areas of attention include registration/licensing, consumer protection (e.g., fraud, privacy, access, disclosure, disputes/complaints), financial crimes (e.g., AML/CFT, sanctions), and payments activities (e.g., instant payments, liquidity, digital assets). Some regulators in the U.S. have established offices to promote responsible innovation, especially through digital and AI applications. In the UK, activities such as accepting deposits, investments, lending and insurance, payment services, and electronic money all require a license.²⁵ And the Monetary Authority of Singapore aims to support fintech investment and innovation as well as fostering safety and security, with new offerings monitored and evaluated, to determine whether they should be subject to regulation.²⁶

Regulators are also focusing on effective management of technology and operational risk and resiliency, including risks

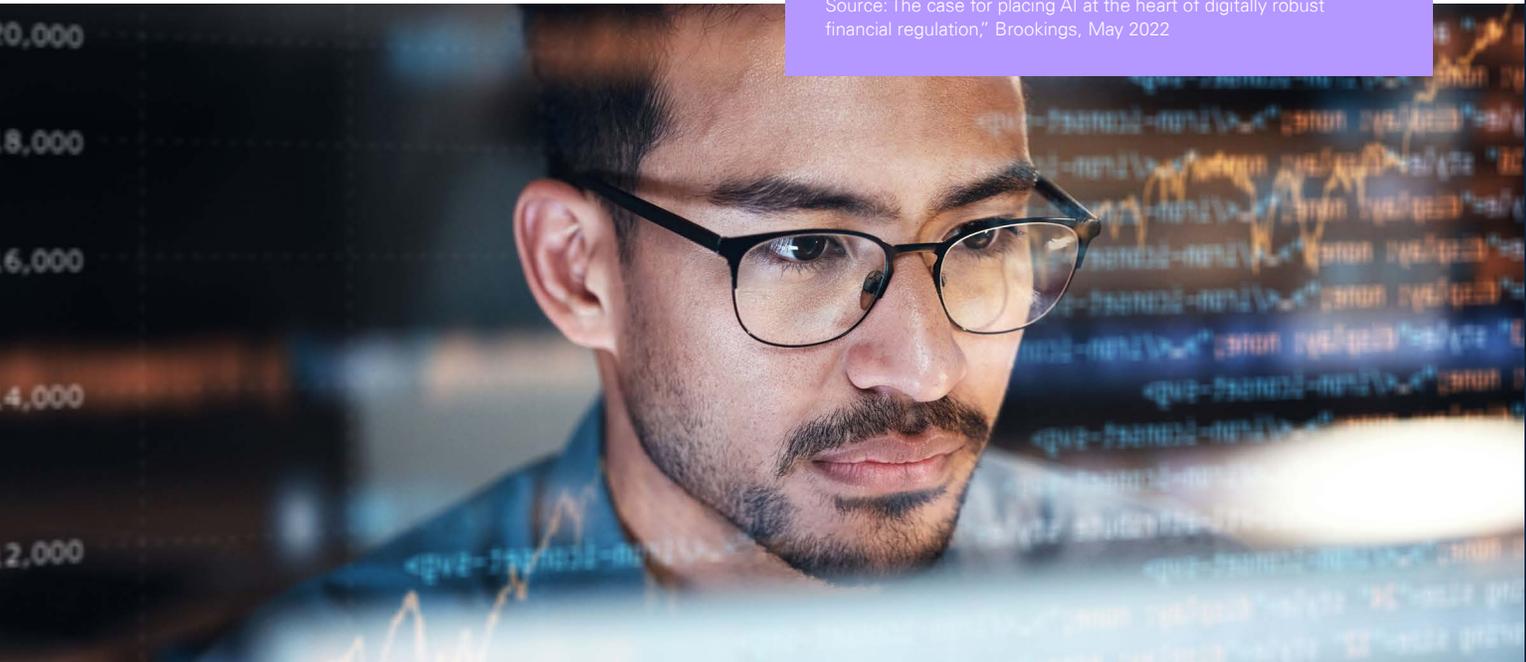
related to third parties, data security, privacy, fraud, AML, ransomware, and service outages. Non-compliance can lead to hefty fines and reputational damage, and fintechs' governance should include risk management processes, board oversight, monitoring and controls testing for threats and vulnerabilities, and continuity planning (and identification of critical operations) as well as investment in compliance (people, processes, and technology), to keep up with the rapid pace of product development and engineering teams.

Privacy and data security are considered top risks by fintech executives. Two-thirds of those surveyed say their companies are investing in embedding risk management, compliance, and operational excellence into products to build customer trust.²⁷

Regulators are increasing the use of regtech

Fintech regulators in the UK have been pioneering regulatory innovation, including the launch of a regtech unit and holding hackathons with regulatory, industry, issue experts and software engineers and designers to address regulatory challenges.

Source: The case for placing AI at the heart of digitally robust financial regulation," Brookings, May 2022



²⁵ Fintech Regulation Around the World 2021-2022, IDEASOFT, December 2021

²⁶ Ravi Menon, "Singapore's FinTech Journey – Where We Are, What Is Next," Monetary Authority of Singapore, November 16, 2016

²⁷ A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

With emerging artificial intelligence (AI) and machine learning adoption, regulators globally are looking to regulate the use of AI to ensure safe practices and application. In the United States, the Biden administration released a Blueprint for an AI Bill of Rights in the fall of 2022, introducing five principles for the sustainable design, use, and deployment of artificial intelligence.²⁸ Meanwhile, lawmakers with the European Commission, European Parliament, and Council of the EU are rewriting the draft Artificial Intelligence Act following recent advancements in AI. The regulation, proposed in 2021, was originally proposed to ban some instances of AI applications like social scoring and “designate some specific uses of AI as “high-risk,” binding developers to stricter requirements of transparency, safety, and human oversight.”²⁹

As apps allow customers to pay from anywhere in the world without a connecting party, regulators grapple with the risks of cross-border transactions. Further dialogue is needed between policymakers, investors, and financial services companies—and between countries—to facilitate more standardized regulatory principles. The Financial Stability Board (FSB) is actively working on cross-border payments issues, focusing on payment system interoperability; legal, regulatory, and supervisory frameworks; and cross-border data exchange standards. G20 member countries can adopt and modify the FSB recommendations.³⁰

KPMG Regulatory Insights Thought Leadership



Payments and Crypto: 2023 Regulatory Challenges



Technology and Resiliency: 2023 Regulatory Challenges (kpmg.us)



Focus on Tech: Cloud, AI, Personal Data



Regulatory Scrutiny of Technology and Data



²⁸ “Blueprint for an AI Bill of Rights,” The White House, October 2022

²⁹ “ChatGPT broke the EU plan to regulate AI,” Politico, March 3, 2023

³⁰ “G20 Roadmap for Enhancing Cross-border Payments: Priority actions for achieving the G20 targets,” FSB, February 2023

Strategic imperatives

Key actions to respond to signals of change and build a more connected, customer-centric organization

The transformation of the fintech landscape is being strongly influenced by consumers' expectations for improved speed, security, and trust, and by regulatory demands that require more transparency, cybersecurity, and data protection. As big tech, startups, and traditional banks seek to gain market share, a highly competitive ecosystem is emerging. We have identified five strategic imperatives that are needed to address both customer and compliance challenges—all require connected capabilities to develop, build, and deliver seamless customer experiences.

1 Focus on core business identity

Enhance core competencies to stay ahead of the pack in a competitive fintech arena

The fintech market is incredibly competitive, with a stream of new entrants from sectors like social media and telecommunications offering payments and financing products. The KPMG whitepaper, Pulse of Fintech H1'23, states that while global Fintech funding fell from \$63.2 billion across 2,885 deals in H2'22 to \$52.4 billion across 2,153 deals in H1'23, fintech funding rose in the Americas from \$28.9 billion across 1,323 deals in H2'22 to \$36 billion across 1,011 deals in H1'23. Funding in the EMEA region dropped from \$27.3 billion in H2'22 to \$11.2 billion in H1'23, while in the ASPAC region it dropped from \$6.7 billion to \$5.1 billion.³¹

To maintain an edge, fintechs may seek new opportunities like adjacent products and services. It is especially important that new products are aligned with the brand and core competencies, and do not stretch resources to the extent that the customer experience is compromised. When launching new products, operational functions like finance, customer support, and compliance should be connected to product management and engineering to maintain consumer protection, data security, and regulatory compliance. An alternative route is to form strategic partnerships or acquisitions to accelerate speed to market.

2 Carve a path to profitability

Nail fundamental unit economics while amplifying profitability

Fintech companies often face a unique set of financial challenges as they navigate through growth phases and proceed through rounds of funding. In the early stages, fintechs typically experience high customer acquisition costs fueled by concerted marketing efforts that support brand building and customer growth.

Technology investments and regulatory compliance are two other significant categories where expenses end up higher than anticipated because the extent of capability required to serve businesses or customers in compliance with the regulatory framework can initially be ambiguous. Balancing for these somewhat unexpected costs against revenue generation becomes even more crucial for sustainable growth.

Fintechs must understand their unit economics, ensuring that the cost of acquiring, serving, and retaining customers is aligned with revenue generated per customer. Scaling too quickly and at high customer acquisition costs hinders future growth. Recent high profile market failures show that some great disruptive opportunities—such as Open Banking platforms, Exchange and Marketplace models, and digital wallet-based neo banks—require either significant scale

or a broad set of products to be successful. The core unit economics were never properly assessed.

Beyond understanding the structural profitability of the business model, and its inherent unit economics, old school business management is key. As the frequency of the funding round moves out from eight months in 2020 to more than 24 months now in 2023, understanding the cash runway is critical. Three cost levers need to be pulled:

- Fintech should streamline operational efficiencies, automate processes, and optimize resource allocation. This entails leveraging technology and data driven insights to boost productivity and minimize costs upfront.
- Fintechs should quickly prove out product market fit, secure a strong business model, and prioritize efficient customer acquisition.
- Fintech should also focus on customer relationships and maximize customer lifetime value while minimizing customer churn.

Ultimately, a strong discipline across company financials and the adaptation of key KPIs across different phases of the business will sustainable profitability in the long term.

³¹ "Pulse of Fintech H1'23," KPMG International, July 2023

3 Maintain technology relevance and avoid technical debt

Keep pace with emerging technologies to avoid technical debt

To thrive in a highly dynamic and relentless industry, it is essential for fintechs to maintain technological relevance—it gives them a competitive advantage, helps attract top talent, fosters a culture of innovation, and forges strategic partnerships with other technology-driven companies. The result is a collaborative ecosystem that fuels further growth and success:

- They must proactively invest in research and development—to stay at the forefront of emerging technologies and trends, they should continuously assess market demands, monitor industry developments, and adapt their technology strategies accordingly. To maintain agility, scalability, and long-term success, fintechs must also avoid technical debt (the accumulated costs and

inefficiencies that arise from taking shortcuts or making suboptimal technology choices during development.) As they grow, fintechs can be tempted to prioritize speed-to-market over architectural robustness or scalability, but such short-term decisions can hinder future progress and impede their adaptability to evolving market needs.

- Fintech must prioritize engineering excellence, scalability, and flexibility in their technology infrastructure. By building scalable systems, adopting modular and flexible architectures, and implementing robust software development practices, fintech can ensure an adaptable and easily maintained technology stack that remains capable of supporting future growth with minimal risk of system failures or performance bottlenecks.

4 Create strategic partnerships

Accelerate expansion of customer reach through large-scale delivery of new products and services

As fintechs continue to grow in size, scope, and complexity, they need to support large-scale delivery of products, with appropriate databases, billing and invoicing systems, customer support, and supply chain, increasingly powered by AI/ML. In many cases, the way forward is via partnerships—working with and managing a diverse partner ecosystem that is connected with customers, employees, and business partners rather than building capabilities in-house.

Seamlessly integrated partner services can help ensure a smoother, frictionless customer experience, resolving customer support issues swiftly, typically without the need for manual touchpoints. As an example, software-as-a-service (SaaS) cloud banking platform Mambu and engagement banking platform Backbase have partnered to “offer a complete end-to-end digital banking solution that accelerates innovation, reduces market risk, and continuously enhances the customer experience.”^{32, 33}

Banks are also collaborating with fintechs to take advantage of their innovative, digital technologies, including bank-branded services provided by fintechs, and investing in fintech startups.

Partnership models

Distribution partnerships—affinities, alliances and joint ventures. These range from partnerships with upstream providers like consultants and outsourcers, through to white labelling, embedded finance and joint ventures

Enterprise deals – Increasingly the speed of deployment is becoming critical as the “pilot to scale” cycle can burn huge swathes of cash without revenues. The quality of skilled sales talent is also a key barrier to success, hence many enterprise fintech look to consultants to handle the conversion and integration of large deals.

Capability partnerships – the Cloud and Bigtech providers have been quick to embrace the fintech ecosystem to ensure that their platforms are rich with relevant use cases. Most large technology firms have developed marketplaces to support their fintech partners (independent service providers) selling through their platform. This requires strong partner management capabilities from the fintech to be successful.

³² “Backbase and Mambu partner on SaaS banking platform,” Finextra, May 28, 2020

³³ Mambu website, December 2022

5 Harness the power of data to drive strategy

Optimize data insights to develop trusted products and exceed customer expectations

Having pioneered technology-driven, convenient, and easy-to-use financial products, fintechs need to step up to satisfy ever more demanding customer expectations. And they must do so while adapting from being agile startups to larger, increasingly regulated enterprises. Today's users expect carefully tailored products from the moment an app is downloaded, through every stage of their experience.

To meet this challenge, fintechs must rethink their data strategies, and draw insights from all areas of the business

to gain a 360-degree understanding of customers, improve the user experience, and develop secure, trusted financial products. This means connecting data sources from across the enterprise, including engineering, product management, customer support, sales, operations, risk management and compliance. As fintechs create a more connected environment, data security and privacy are top priorities to build customer and regulator trust.



Future business models

Maintain a clear focus on target markets and make the most of core capabilities to become agile, innovative, and connected.

To adapt to the dynamic fintech landscape, and address the three strategic imperatives, companies should consider adopting one of the following three business models: universal (aligned horizontally and vertically); horizontal; or vertical. These models can present a different scope of services and a high level of integration and connectivity throughout the product and value chain, to meet changing customer needs.



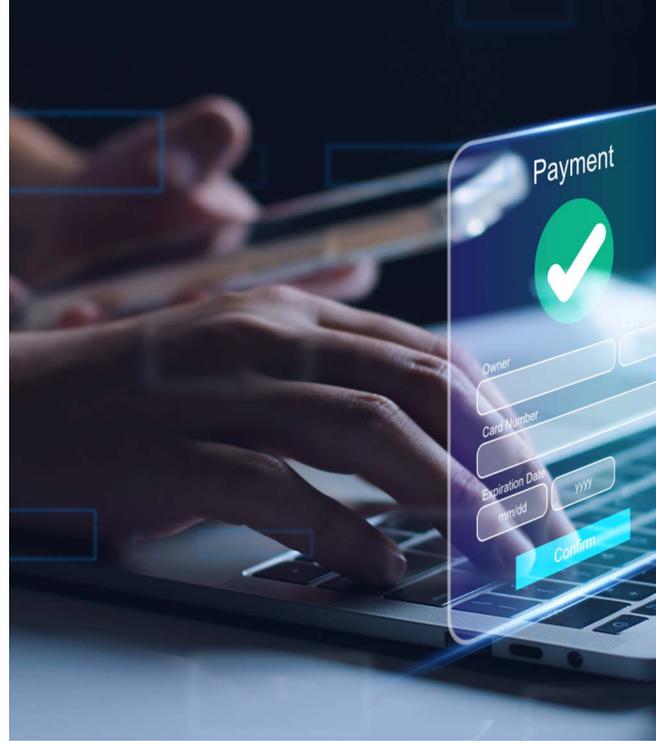
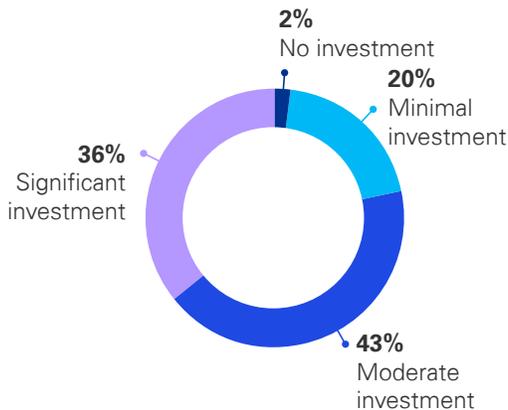
Universal fintechs



Universal fintechs own assets both horizontally and vertically across the value chain, offering a wide range of services to retail, commercial, and wholesale customers. Service delivery is enabled by in-house infrastructure and delivery channels, as well as partnerships with SaaS and banking-as-a-service (BaaS) providers. Infrastructure powers services not only for consumer products such as direct deposit, digital wallets, and credit/debit cards, but also for business products like enterprise payments and small-to-medium size business (SMB) services.

In a bid to become one-stop shops, universal fintechs are launching “super apps” to deliver a seamless customer experience, providing multiple personal and commercial services via a single platform. Consumers are warming to such digital product bundling—a recent survey finds that “67 percent of respondents would like to see at least two of their activities integrated in one place, while around 11 percent would like one app for managing their entire digital lives.”³⁴

Exhibit 3: Fintech firms are putting money on customer experience: over the next 12 months, 79 percent of fintechs will make moderate to significant investments in seamless and intentional customer experiences



However, this innovation and expansion also brings risks, especially in a highly regulated sector like financial services. Whether it's for traditional banking services or in the emerging cryptocurrency space, fintechs will come under greater scrutiny by regulators and consumers alike. As the public becomes increasingly aware of how companies manage and use their personal information to gain competitive advantage, fintechs need to demonstrate responsible data stewardship to maintain public trust. In tandem, as fintechs become embedded in the financial services landscape, grow in complexity, and integrate with existing banking infrastructure, they have become subject to financial services legal and regulatory demands.

According to the KPMG global study of fintech executives, “transitioning the operating model to meet regulatory expectations” was ranked as the least important action over the next 5–10 years.³⁵ However, increased regulator focus will likely put pressure on fintech executives to reevaluate their priorities to avoid fines—and even bans—when providing a full suite of financial services products. Given the growing scrutiny from regulators, consumers, and other stakeholders, fintechs should consider how aligning back and front office as part of a connected enterprise can help build trust across their enterprise.

³⁴ “Tom Auchterlonie, “Study shows strong super-app demand in the US, vindicating providers’ bundling trend,” Insider, December 14, 2021

³⁵ A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

Horizontal fintechs



Horizontal fintechs are focused on delivering specific products for a targeted customer demographic, creating efficiencies by outsourcing core components to banks, Software-as-a-Service (SaaS), Banking-as-a-Service (BaaS), or similar providers. Many horizontal fintechs are built upon a white-labeled technology stack, and others use extensive API integrations to outsource and enable functions such as payments. This model helps them remain agile and adapt products quickly.

Horizontal fintechs also look to embed products into other companies' customer platforms—notably for clients in utilities and telecommunications—to offer a SaaS-like service for payments and other services. Embedded financial products present a major market entry opportunity for consumer brands that can partner with horizontal fintechs. For example, embedded lending at point-of-sale, both for consumers and businesses, allows access to traditional lending products while maintaining a cohesive user experience at checkout.

“The single greatest area of investment for fintechs is in partnerships with technology companies, bypassing traditional financial service providers to deliver embedded financial services products via platforms.”



of fintech leaders say their company has a capital plan for such investments over the next 1-2 years.

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, September 2022

Vertical fintechs



Vertically integrated fintechs own and build their own platforms that provide specific back-end infrastructure and/or functions to banks, fintechs and corporates. Banks, fintechs, and corporates benefit significantly from outsourcing, accelerating speed to market and avoiding the complexity and cost of developing the infrastructure themselves.

Vertically integrated fintechs provide infrastructure services that enable companies to build products via an as-a-service model. Key examples include corporate treasury providers,

enterprise payments platforms, and data governance-as-a-service (DGaaS). These fintechs simplify operations for companies across a variety of industries including utilities, healthcare, and retail.

Opportunities to offer DGaaS—within and beyond the financial sector—are significant. A recent survey of UK businesses found that nearly half (46 percent) feel they don't have the skills or expertise to properly utilize their data governance tools, and 38 percent say they have

difficulty justifying the business case for investment in data governance. As vertical providers build capabilities like data governance and compliance, they can capitalize on their expertise by licensing their DGaaS to startups and smaller firms, which brings in new revenue streams.

As vertical fintechs own and develop entire solutions, data security, systems quality, and reliability are critical, to provide seamless integrated solutions for banks, fintechs, and corporates. A connected enterprise addresses this challenge by aligning data engineering teams with operations and strategy—it embeds trust into the entire product development process and wins the confidence of customers.

Case study: SoFi pushing boundaries

One early example of a vertical fintech is online bank SoFi, which includes consumer products like loan refinancing, mortgages, credit cards, and investing services. The 2020 acquisition of Galileo Financial Technologies¹ added a financial services API and payments platform into the mix, capturing value that would otherwise have been lost to outsourced providers. Since then, it has acquired cloud banking platform Technisys, which gives it the capability to offer multiple banking products, payment processing and card issuing. SoFi claims that this vertical integration will help it innovate faster and cut costs by as much as \$70 million annually.²

Sources: (1) "SoFi To Acquire Galileo Financial Technologies," SoFi press release, April 2020 (2) "SoFi Completes Acquisition of Technisys," SoFi press release, March 2022



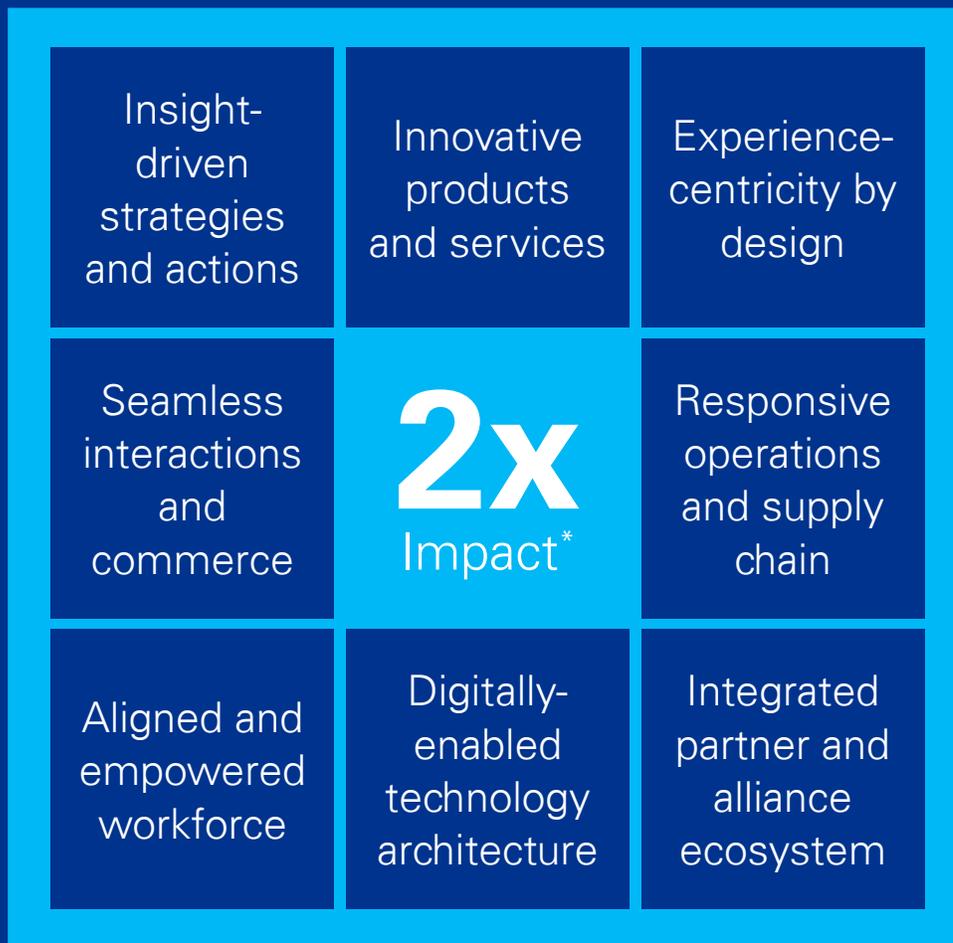
Business models and the connected enterprise

Whichever of these business models a fintech chooses to adopt, they can function more effectively as a connected enterprise, where front, middle and back-office functions

are aligned around the customer to help deliver a seamless experience. In the following section we discuss the capabilities required to deliver connectivity.

The eight capabilities of KPMG Connected Enterprise

For fintechs to take full advantage of the changes in the industry—and tackle the challenges—they need to operate in new ways. They must become more agile and flexible. Like their products, they need to be more connected, both internally and with partners and customers. The KPMG Connected Enterprise model can help fintechs build the capabilities they will likely need in the future—to consistently deliver innovative new products offering secure, seamless user experiences. Data-driven decision making can help leaders adapt to the changes in the competition, customer preferences, and technology that will keep coming.



Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, 2018. The research was conducted on a sector-specific basis.

Connected capabilities can enable a winning operating model

By acquiring these key capabilities, fintechs can take a giant step toward to address the three strategic imperatives within their chosen business model:



Universal



Horizontal



Vertical

01 Insight-driven strategies and actions

Leverage rich proprietary data from the full-service offering and broad customer base to help generate a competitive advantage through an in-depth understanding of your customers.

Pull in user insights from across embedded delivery channels and third-party datasets to help make informed decisions about strategy and product.

Use datasets from integrated infrastructure sources to help predict customer purchase behavior and credit needs.

02 Innovative products and services

Explore new, sustainable revenue streams and limit the product management overheads. Use new services to securely manage personal data, consent, and entitlements.

Use product and service innovation to become an attractive partner to existing ecosystems, which consist of companies from technology and other sectors involved in the fintech space, typically interfacing with customers via apps.

Continue to acquire capabilities from across the value chain to enable cost efficiencies and new capabilities and expand features and offerings.

03 Experience-centricity by design

Deliver leading experiences for platform users—customers as well as businesses/enterprises—on the platform. Use data from products and participants to recommend and tailor products to the appropriate audience.

Deliver simple, low-effort and customer-friendly user interfaces designed to embed seamlessly into third-party platforms.

Create cost savings by reducing reliance on any outsourced services, like payment processing. Invest in leading infrastructure to help create future cost savings and reduce tech debt.



Universal



Horizontal



Vertical

04 Seamless interactions and commerce

Strive to ensure simple and transparent—yet engaging—interactions that add value across a broad spectrum of customer touchpoints.

Acquire data from diverse sources to create a more informed customer profile that enables the delivery of tailored financial offerings.

Integrate with partners via APIs, enable delivery of fintech infrastructure-as-a-service.

05 Responsive operations and supply chain

Deliver products and services through a flexible and resilient network of proprietary systems and API-driven third-party integrations.

Create efficient and reliable operational processes so that fulfilment without interruption within the embedded environment.

Drive safe and secure operations with handoffs to front-end partners through a vertically integrated supply chain.

06 Aligned and empowered workforce

To attract top talent, companies must uphold a positive reputation in the market and align their values with those of workers.

Companies must empower flexible and remote employee resources to deliver a variety of embedded products.

Primarily back-end workforce, requiring teams skilled in agile delivery, DevOps, and integration.

07 Digitally-enabled technology architecture

Enhance service fulfillment between outsourced software/cloud providers, and create in-house capabilities, to continue to scale product offerings.

Compete in the maximum number of possible ecosystems and optimize technology architecture to handle high transaction volumes.

Build wide-ranging infrastructure to create a vertically integrated product offering that creates cost savings and scale efficiencies.

08 Integrated partner and alliance ecosystem

Enhance value from existing partnerships. Seek to build capabilities in-house wherever possible, keeping in step with incoming regulations to ensure future viability.

Create vendor partnerships that bring partner compliance, resiliency, and security, to help ensure long-term relationship viability and reduce third-party risk.

Create strategic partnerships, when necessary, to enhance in-house infrastructure and delivery channels.

Case studies

Capability: **Innovative products and services**

Case study:

Clarifying financial services product strategy

A top global technology company had launched a financial services product group but needed to define its products and create an execution roadmap.

KPMG in the US led domestic product development activities by analyzing payments data to identify key product, customer, and geographic opportunities. By facilitating sessions with cross-functional teams (such as legal, risk, etc.), the team helped the client define its target markets and understand customer needs to drive future new products.

With clear, achievable strategic goals, the client successfully launched payment experiences across its many platforms.

Capability: **Connecting data from across the organization**

Case study:

Developing AML transaction monitoring for both fiat and cryptocurrency transactions

A large crypto product provider required a solution to perform transaction monitoring for both crypto and fiat transactions. Transactional and customer data was held on disparate systems without consistent attribute availability.

KPMG in the US performed a risk assessment over the clients' businesses that considered multiple jurisdictions of operation. We aggregated data into a single trustworthy source with consistent formatting and attributes, and developed and tested a customer segmentation model to support efficient and effective alerting and case management. Finally, KPMG assisted in the identification of transaction monitoring typologies for the client's business and developed thresholds for escalation.

With a clear data solution and a multi-jurisdictional risk assessment, the client was able to ensure sustainable and resilient monitoring of crypto and fiat transactions.



Capability: **Insight-driven strategies and actions**

Case study:

Strategic advice to a fintech unicorn payment service provider

A large, fast-growing payment service provider (PSP) active in the online, mobile, in-app, and point-of-sale (POS) payments market needed a new strategic direction, to maintain year-on year double-digit growth numbers, and create more mature enterprise risk management (ERM) programs.

KPMG in the Netherlands helped determine the future strategic direction, including a new business plan. Additionally, the team performed an organization-wide impact analysis of business, operations, IT, compliance, and risk. Further assistance included preparations to acquire a banking license, such as preparing the organization to meet the necessary license requirements.

The client was able to create new propositions to increase customer value and accelerated the banking license application process for fast approval of the first submission.

Capability: **Digitally-enabled technology architecture**

Case study:

Expanding a compliance-as-a-service fintech

A payment service provider (PSP) sought to launch a new payment service to expand its product portfolio.

KPMG in the Netherlands assisted with the end-to-end launch of the product, which included drafting the go-to-market strategy, designing solutions for technical and architectural implementation, and establishing policies and procedures for internal risk controls. The approach was applied across the organization, with operating model design performed across strategy, governance, capabilities, IT, people, and sourcing.

The client prepared for the launch of the new payment service product with a sound operating model design, as well as robust administration and internal controls.



How KPMG can help

In the experience of KPMG professionals, there are a number of key considerations that can help fintechs make faster progress on the connected journey:

Keep close to what your consumers want.

The ability to think “outside-in” is key to building a customer-centric business. Ensure you know and act on what your consumers want, need, and value; continually look outside of the organization and industry to help ensure alignment with the best consumer experiences in day-to-day life.

Do things in an agile way.

Break changes down into specific steps and sequences, and then implement them. Keep standing back to assess whether the change has been successful in a “test and learn” approach. It’s about a series of small changes that together add up to a significant and impactful transformation.

Build in resilience.

Take on today’s challenges with resilience and determination, be prepared to expect the unexpected, and fail fast and learn along the way. By developing a connected enterprise architecture, you can find your ability to change course at speed can be significantly enhanced.

Keep it human.

While embedding new technologies, such as artificial intelligence and automation, is likely to be critical in developing more seamless interactions for consumers, remember that you also need to keep the experience “real.” Great organizations remain defined by the quality and passion of the people and their sense of purpose.

Make use of new technologies.

Continually look at what new technologies are becoming available that could help you serve consumers better or connect your business more seamlessly. Experiment with the opportunities available through cloud, machine, learning, and advances in data science.

Contacts



Christine Chan

*Managing Director
Digital Payments Non-Banking Leader
KPMG in the U.S.*
christinechan@kpmg.com



Bob Ruark

*Principal
U.S. Fintech Leader
KPMG in the U.S.*
rruark@kpmg.com



Antony Ruddenklau

*Partner
Global Head of Fintech and Innovation
KPMG in Singapore*
antonyruddenklau@kpmg.com.sg



Martijn Berghuijs

*Partner
EMEA Fintech Leader
KPMG in the Netherlands*
berghuijs.martijn@kpmg.nl



James Brannan

*Principal, Advisory
KPMG in the U.S.*
jbrannan@kpmg.com



Erich Braun

*Partner, Audit
U.S. Audit Fintech Leader
KPMG in the U.S.*
etbraun@kpmg.com



Richard Hanley

*Principal, Advisory
US Advisory Industry Leader for TMT
KPMG in the U.S.*
rhanley@kpmg.com



Frank Kaiser

*Principal, Advisory
KPMG in the U.S.*
frankkaiser@kpmg.com

We would like to thank our contributors:

Dane Dominguez, Jan Blomme, Erich Braun, Greg Chierchie, Sandra Cusato, Devika Deshpande, Michael Gelfand, Aman Ghuman, Sean Gomerdinger, Sarah Gross, Max Hanson, June Kang, John Kemler, Jan Klimes, Sreekar Krishna, Alex Ladda, Geoffrey Lewis, Shruti Mantri, Amy Matsuo, Rick Merson, Mitchell Mills, Susan Morad, Matthew Nanno, Jeff Potter, Barry Raghunathan, Urvashi Roe, Aaron Smith, Karen Staines, Kent Turk, Peter Valentin, Darren Yong

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

kpmg.com/socialmedia



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

KPMG refers to the global organization or to one or more of the member firms of KPMG International Limited ("KPMG International"), each of which is a separate legal entity. KPMG International Limited is a private English company limited by guarantee and does not provide services to clients. For more detail about our structure please visit home.kpmg/governance.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.

Throughout this document, "we," "KPMG," "us" and "our" refers to the global organization or to one or more of the member firms of KPMG International Limited ("KPMG International"), each of which is a separate legal entity.

Designed by DAS Design. DASD-2023-13502

Publication name: Financial services in a connected ecosystem

Publication date: October 2023