



Alliance or obsolescence: How banks can win with an AI-driven ecosystem



Introduction

As customer expectations grow and evolve at a blistering pace, banks can no longer rely solely on internal capabilities to drive growth. To meet “everything, everywhere, all at once” demands, they must think creatively about how they deliver solutions—including by leaning into partner ecosystems. Strategic collaboration enables banks to offload noncore functions, focus investment where it matters most, and scale from isolated pilots to enterprise-wide execution. Within these ecosystems, artificial intelligence (AI) plays a pivotal role—not as the endgame, but as a powerful enabler—by helping traditional banks match the speed and personalization of fintech firms, while unlocking new levels of efficiency and customer value.

At present, banks are largely advancing their AI agendas in the back office, capitalizing on higher returns and lower risks by using available in-house capabilities. However, driving efficiency in the back office should occur in parallel with AI enablement in the front office, so that banks can reach new customers, enhance core offerings, and deliver hyper personalized experiences.

This shift calls for new skill sets, resilient infrastructure, and seamless integration with legacy systems—needs that can be addressed more quickly and with reduced risk through collaboration with specialized ecosystem partners.

As highlighted in our recent thought leadership piece, [“Accelerate growth and innovation with the right partner ecosystem,”](#) 67 percent of companies across industries are prioritizing innovation and technological advancements in their partner ecosystems.¹ And when it comes to banks, 74 percent of respondents to our [“2025 Banking Technology Survey”](#) say they plan to expand their partner networks in the next one to three years, with more than half exploring new types of alliances to accelerate innovation, market penetration, and customer reach.²

This paper explores how partner ecosystems can help banks safely and securely progress their AI adoption from the back office today to a fully AI-enabled future. We also provide guidance on how to realize maximum value by mitigating the specific risks that accompany partnering on AI enablement in the front office.

Partner ecosystems and the journey to full AI enablement

The AI journey will take banks beyond today's focus on streamlining routine back-office operations to a future that centers on setting new standards for customer engagement.

AI in banking today: Charting the course to transformation

Currently, much of AI's value in banking lies in automating existing processes and serving as a powerful enabler of human productivity. [See Figure 1] For example, simple AI agents are capable of diligently sifting through legacy technologies, aggregating data to execute actions that once demanded significant manual effort. Banks are using AI to streamline back-office tasks such as data entry, fraud detection, compliance monitoring, financial forecasting, and customer service—all with the goal of reducing operational costs and increasing productivity. HSBC, for instance, uses AI to enhance transaction security and fraud detection, thereby protecting millions of customer accounts.³

Yet, these pilots—often adopted simply to show momentum—are just the starting point. Real transformation requires reimagining processes end-to-end, supported by the right

investments and partnerships. And, as banks consider where to invest, leveraging a partner ecosystem can be a powerful differentiator. Larger banks may focus on competitive distinction and rightsizing the organization, while smaller banks can partner with their larger counterparts to tap into capabilities that may be beyond their reach. A flexible partner ecosystem allows banks of all sizes to selectively invest, distribute risk, and scale capabilities that matter most to them. Importantly, AI can help “clean house,” allowing banks to rapidly scale and focus resources on areas that truly drive value for their customers.

Ultimately, the journey toward full AI enablement requires laying the groundwork for a future in which technology and human ingenuity converge to redefine operational excellence and customer engagement in banking.

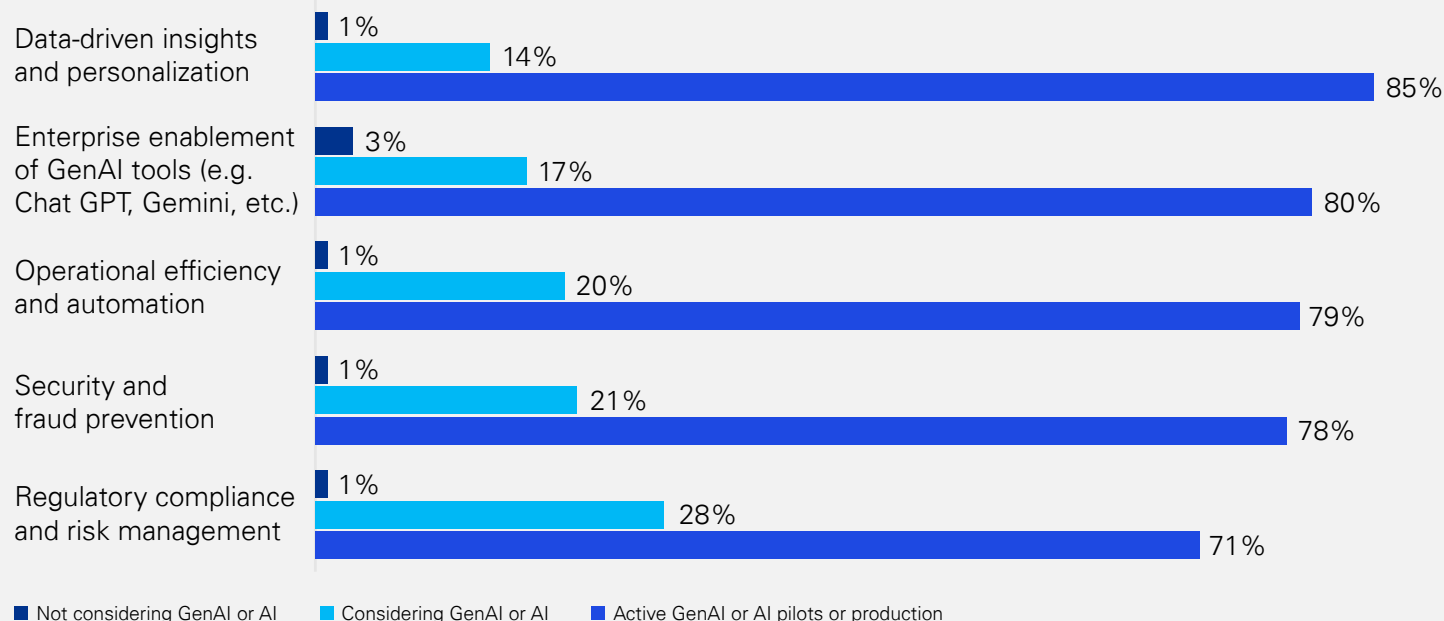


70% of US banking leaders say they have already achieved significant cost savings from AI implementations.

Source: Banking Technology Survey, KPMG LLP, 2025.



Figure 1. Banks' investments in GenAI and AI in 2025 focused on:



Case study: Financial services firm achieves AI-driven application modernization



Situation and problem statement

A prominent government-sponsored enterprise in the financial services sector was experiencing operational inefficiencies and technical debt, which hindered efforts to migrate to the cloud. Further, their investor reporting and mortgage-backed securities processing systems depended on an outdated suite of legacy applications and the platform consisted of a legacy stack of more than 2.5 million lines of code.



Approach

To address these interconnected challenges, the company sought to modernize the platform, reduce risk, and create opportunities for future growth. The core of this strategy involved pairing the existing legacy source code with the envisioned target state architecture and using a generative AI (GenAI) model to extract underlying business logic directly from the current system, generating future state code, and performing automated testing and remediations.



Outcomes

The approach and tooling have yielded a roughly 40 percent reduction in overall effort and 30 percent reduction in time with increased test coverage and code quality metrics. An interactive knowledge base and execution graphs were created from the legacy code, providing valuable insights. The rapid development and alignment of target-state microservices enabled the client to upgrade its technology stack, improve system reliability, and lay a robust foundation for future innovation while maintaining the continuity of existing operations.

AI in banking in the future

Looking ahead, the future of AI in banking hinges on the seamless integration of advanced technologies through strategic partnerships. The most value can be generated by assembling a dynamic network of expertise, capabilities, and assets—some of which may not even be human. In other words, AI itself could be considered an element of the partner ecosystem, which also includes technology providers, platform orchestrators, integration specialists, and even academic institutions.

As customer expectations evolve, partners can assist in extending AI applications from back-office operations to more complex, customer-facing front-office solutions. Technology providers, for example, may not only deliver tailored AI systems but also ensure their compatibility with legacy infrastructures, allowing banks to modernize without sacrificing stability. Security experts, meanwhile, will play a vital role in the continuous refinement of AI models and algorithms, staying ahead of increasingly sophisticated cyber threats.

A pivotal advancement in this journey is the emergence of increasingly sophisticated AI agents, which can be understood in three general categories, classified as follows:

- **Class 1 agents** function much like high-performing RPA tools, which can streamline existing processes and automate repetitive tasks, reducing manual intervention and increasing overall productivity within defined workflows. Example: Automatically processes and pays an invoice.
- **Class 2 agents** represent a step forward, operating within specific capabilities and collaborating as part of an interconnected ecosystem, which will, in many cases, benefit from capabilities provided by strategic partners. Example: Collaborates with a partner's fraud detection API to flag a suspicious invoice before paying it.
- **Class 3 agents** enable banks to orchestrate complex operations across business units by leveraging an adaptive network of AI entities. Engaging a partner ecosystem amplifies these agents' capabilities, driving continuous improvement, compliance, and scalable innovation while maintaining control over critical workflows. Example: Proactively analyzes cash flow, identifies an optimal time to pay the invoice to maximize interest earned, orchestrates payment, and communicates the action to the finance team.



Banks can consider an array of potential AI partners

- **Technology providers:** Deliver cutting-edge AI tools and platforms and build edge-to-edge capabilities.
- **Fintechs:** Offer more holistic and tailored customer experiences, such as real-time financial insights, tailored investment recommendations, and lifestyle perks.
- **Cloud service providers:** Enable scalable and secure AI infrastructure.
- **Consulting firms:** Provide strategic insights that align technology decisions with business priorities.
- **Data suppliers:** Offer rich data sets to fuel AI algorithms.
- **Regulatory experts:** Ensure compliance with evolving financial and AI-related regulations.
- **Integration specialists:** Seamlessly connect AI solutions with existing systems and help coordinate GPT AI tools from day one.
- **Cybersecurity firms:** Protect AI systems from threats and vulnerabilities.
- **Customer experience experts:** Enhance user engagement and satisfaction.
- **Academic institutions:** Perform leading-edge research to inform new AI capabilities.



Don't forget about machine learning

Machine learning, too, is evolving as an indispensable part of the AI ecosystem. By training on historical data, machine learning models provide banks with robust tools for risk assessment, credit scoring, and customer segmentation. Ecosystem partners can offer specialized expertise in developing and refining these models, ensuring that banks address complex business challenges while keeping pace with evolving regulatory demands.

Critical AI banking applications

Partners can be indispensable in AI enablement, particularly in payments, “know your customer (KYC),” and the mortgage application process:

Payments: New entrants with strong consumer followings are moving into the banking sector. Apple, for instance, has extended its brand beyond *Wallet* into lending and credit card services, leveraging its devices for secure, convenient access. Similarly, retailers such as Walmart and tech firms like Google are exploring embedded financial services, using their scale and digital platforms to offer consumers alternatives to traditional banks. These moves highlight how customer experience, security, and convenience are becoming table stakes in an increasingly competitive landscape.^{4,5}

Although technology companies entering financial services rely on banks for critical support (e.g., holding deposits, issuing credit, ensuring regulatory compliance), they still pose a threat to banks in the payments realm. To keep pace, banks will need to offer customers the same convenience and user-friendly experiences as many tech companies do. There is ample opportunity here as AI in payments is still emerging: currently, only six percent of banks utilize AI-based payment solutions, but this figure is projected to climb to 58 percent within a year.

Crucially, to help maximize the effectiveness of AI agents today (and more sophisticated agentic AI in the future), banks must cultivate an ecosystem in which agents are continually learning and refining through ongoing 360-degree feedback. By strategically assembling diverse technology and service partners, banks can build in-house agentic AI solutions that elevate customer experience, maintain control over mission-critical workflows, and deliver scalable innovation.

Tomorrow's AI will act as a peer and partner in delivering outcomes and experiences that are faster, more cost-effective, and genuinely engaging for both customers and employees. Banking operations will be orchestrated end-to-end by intelligent agents, natively within interconnected ecosystems—eliminating the need to repeat outdated workflows and legacy constraints. This future will require engagement with the right partners and resilient, adaptive ecosystems. This collaborative approach will allow banks not only to keep pace with technological change but also to set new standards in security, operational excellence, and customer experience.

KYC: By collaborating with ecosystem partners—including fintechs, technology leaders, and nonfinancial companies—banks can significantly enhance their KYC processes using AI. These partners bring specialized expertise and innovative technologies that, when integrated with existing banking systems, enable more advanced and effective KYC solutions. As a result, banks can improve regulatory compliance, expedite and simplify customer onboarding, and deliver more accurate transaction verifications. While AI-driven KYC applications are already being implemented across the industry, collaboration with ecosystem partners amplifies their impact.

Further, with the right AI-centric partners, banks can upgrade the chatbots and virtual assistants used today to conversational, contextually aware AI agents that genuinely emulate human interactions. AI-powered customer service agents can manage nuanced interactions, resolve disputes, and provide virtual assistance to guide customers seamlessly through complex banking processes. AI-driven personalization engines can be used to analyze customer transaction histories and spending patterns to deliver tailored product recommendations such as credit card offers or savings plans, thus enhancing customer engagement and loyalty.

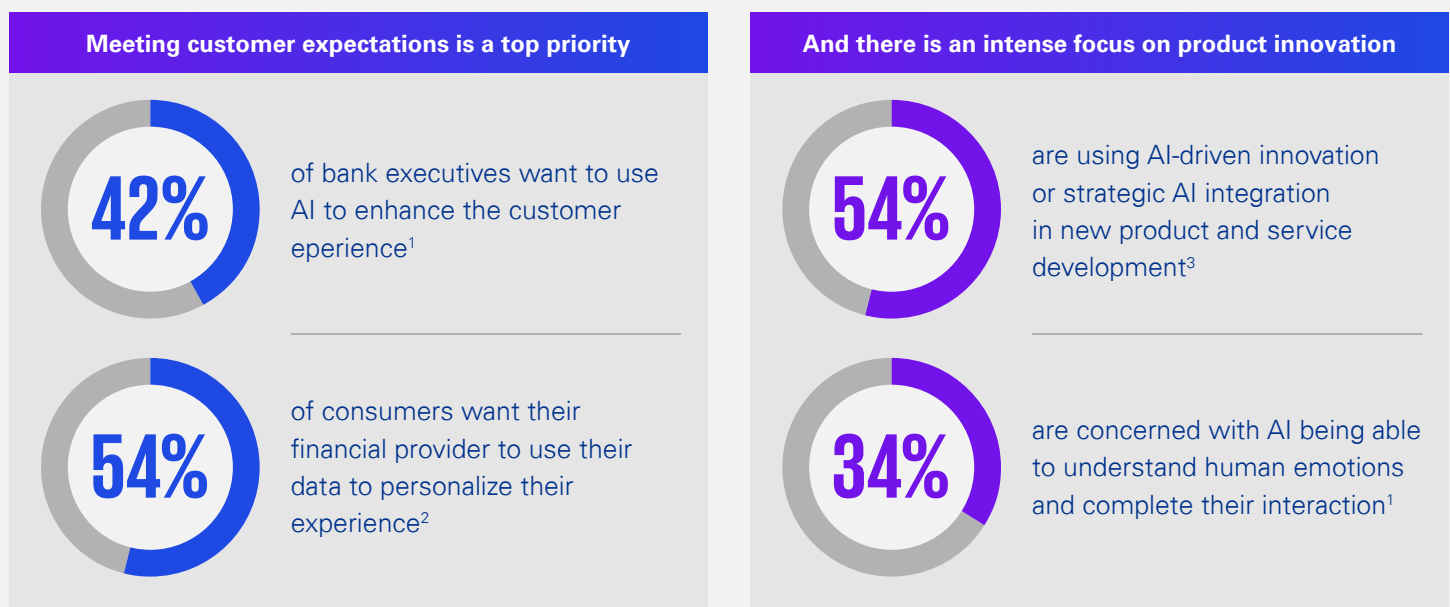
The mortgage application process: Ecosystem partners play a pivotal role in enabling banks to develop sophisticated AI-driven mortgage applications by bridging technological gaps and infusing specialized expertise. While banks possess primary customer data and regulatory insights, partners—ranging from fintechs to data analytics providers—bring advanced algorithmic tools, access to alternative data sets, and experience in deploying AI solutions across industries. Further, banks can build custom front-end sales portals and loan origination systems, where processes are documented and standardized, laying the foundation for agile adaptation as the industry evolves.

Banks already use predictive analytics in mortgage and loan servicing to anticipate potential borrower defaults. These tools provide sophisticated analysis, but stop short of making final decisions, leaving that authority to bankers. This same approach applies to underwriting, where AI can help review and classify creditworthiness, complementing but not replacing human judgment. Through strategic

ecosystem partnerships, banks can automate document management, accelerate risk assessment, and ultimately offer more efficient and responsive mortgage services to their clients.

Building on these operational advancements, banks are now extending AI capabilities into customer-facing applications, signaling a broader transformation across the mortgage experience. For example, 42 percent and 52 percent of banking executives, respectively, plan to use AI to enhance customer experience and to introduce new products and services.⁶ In turn, 54 percent of customers are open to banks using their data to create more personalized experiences, and 34 percent are receptive to the idea that future AI tools will relate to them on a personal level during transactions.⁷ [See Figure 2] Critically, partner ecosystems will be central to helping banks close the gap between how AI is viewed today—by both banking leaders and customers—and the delivery of ideal experiences tomorrow.

Figure 2. Banks are focusing on building innovative products and improving experiences. Operations is critical to enabling both.



Sources:

¹ 2024 KPMG Customer Experience Excellence Report

² MX Research

³ Intelligent banking: A blueprint for creating value through AI-driven transformation, KPMG International, 2025

Five ways to overcome risks to get full value from AI-centric partner ecosystems

As banks enter into AI-centric partnerships, they need to balance opportunities for growth and innovation with inherent risks. This balance can be achieved through robust third-party risk management; alignment on cybersecurity measures; enhanced data privacy programs; strategic navigation of a complex, evolving regulatory environment; and the creation of mutual compliance protocols.

01 Strengthen third-party risk management

Banks working with partners on AI-enabled offerings should implement a comprehensive framework to identify, mitigate, and monitor third-party risks. This entails fostering a culture of transparency, codifying processes to identify risks early, and establishing mechanisms to detect and address emerging and unknown risks.

Effective risk management systems are especially crucial in highly regulated areas such as lending and compliance monitoring. While all partners carry some level of risk, focus should be directed toward high-impact areas—particularly where supplier concentration is high or supply chain disruptions are likely.

02 Align with partners on cybersecurity

AI systems introduce broader attack surfaces, making banks vulnerable to cyberattacks that could jeopardize the integrity and security of their operations. Notably, 80 percent of surveyed banking executives reported their organizations are currently piloting defensive cybersecurity for GenAI, and 70 percent cite cyber criminals using AI for malicious intent as a driver of increased investment in cybersecurity.⁸

Banks must invest heavily in robust cybersecurity measures to safeguard AI systems and customer data, especially when sharing data with their partners or

integrating with partner technology systems. Using a shared foundational infrastructure, such as enterprise-wide cloud or hybrid-cloud platforms, can support more secure collaboration with partners on AI initiatives. Banks should require partners to regularly complete extensive cybersecurity questionnaires and use the responses to identify security gaps. Over time, adding new layers of technology and expanding agentic AI systems to “swarms” of hundreds or even thousands of agents will significantly affect compliance and risk management, making it critical to embed governance and guardrails from the outset in agentic initiatives developed with partners.

Standing up global capability centers

Some banks are exploring global capability centers (GCCs), which can serve as vibrant hubs for innovation and talent, acting as transformation platforms for AI initiatives pursued with strategic partners. Leveraging these centers allows banks to harness lower costs and better access to AI capabilities, making it possible to scale AI across the business quickly and effectively.

GCCs focus on bringing in partners from across the globe that have proven track records in AI implementation, as well as successful partnerships with other financial institutions. In this way, business strategies can be aligned

with partners that can meet development needs and that have security capabilities comparable to the bank.

Particularly when it comes to agentic AI, GCCs allow banks to access a dynamic mix of partners of all sizes and specialties, leading to a holistic approach that can function as a core component of a bank’s operations, touching areas from back-office functions to marketing and product/service development.

A bank can establish a GCC internally or engage a partner to build and operate it for several years before transitioning management back to the bank.

03 Enhance data privacy protocols

As banks increasingly partner with AI-focused and other technology companies, safeguarding customer data becomes a critical starting point. Establishing shared accountability and aligning on robust data privacy protocols ensures that all parties uphold security standards from the outset. A key challenge in the partner ecosystem is maintaining data quality and usability. Ensuring data hygiene, making data readily accessible across systems and teams, and eliminating bias are fundamental to fostering trust and integrity in AI-driven operations. Indeed, an estimated 72 percent of banking leaders responding to our “[Intelligent Banking](#)” survey consider data quality a significant barrier to scaling AI adoption, highlighting the necessity of developing advanced data management practices that apply to all partners in the ecosystem.⁹

By collaborating with partners on rigorous privacy and security measures, banks can protect sensitive information; mitigate algorithmic bias; and ensure fair, explainable AI decision-making. Compliance with third-party standards and regulations such as the General Data Protection Regulation (GDPR) further strengthens these protections. Coordinated efforts in data privacy not only safeguard operations but also bolster consumer confidence and support the sustainable growth of AI-powered banking services.

04 Coordinate with partners on regulatory compliance

As AI technologies continue to evolve, regulatory bodies around the globe are endeavoring to create frameworks that balance innovation with accountability and public trust. Banking leaders face significant challenges navigating a complex regulatory landscape that spans relatively lenient federal guidance and executive orders in the United States to far stricter state laws and international laws.

To address differing policy approaches across jurisdictions such as the US and the European Union (EU), banks must implement flexible compliance frameworks that encompass their own operations and those of their partners. This may involve using AI to monitor regulatory changes and identify policy gaps—a priority cited by 71 percent of respondents to our “[Intelligent Banking](#)” survey.¹⁰



A quick primer on the global regulatory landscape for AI

- **US federal regulations and guidance:** Given the absence of comprehensive federal AI laws, US banks and their ecosystem partners must rely on guidance from federal agencies, including the Federal Reserve, the Office of the Comptroller of the Currency, and the Consumer Financial Protection Bureau.¹¹ At the same time, recent executive orders, such as the 2025 Executive Order 14179, prioritize AI innovation and national security by advocating deregulation and eliminating barriers to technological advancement.
- **US state regulations:** At present, state-level AI regulations are fragmented, with nearly 1,000 AI-related bills introduced in 2025 across all 50 states, comprising a mixture of broad AI protection laws that impact multiple industries and specific AI safety and privacy measures with varying definitions and applications.¹² When it comes to partners, many state bills are seeking to address third-party safety standards, encompassing requirements for testing, reporting, and regular compliance reviews.¹³
- **International regulations:** International regulations, such as the EU AI Act¹⁴ and directives from the Basel Committee on Banking Supervision, European Insurance and Occupational Pensions Authority, and International Organization of Securities Commissions, are more stringent.¹⁵ The EU AI Act establishes a risk-based classification of AI technologies, with high-risk systems subject to rigorous testing, data governance, and reporting obligations.

Establish mutual compliance policies and protocols

Banks and their ecosystem partners must create shared compliance protocols by identifying AI-related risks, setting transparency standards, and automating risk monitoring processes. Regular AI audits ensure that actual practices align with documented procedures. For instance, KYC processes may involve certain tacit procedures, but internal manuals may not reflect directives such as updating date stamps and notarizations. As banks progress from basic AI agent implementations to more advanced applications, they must continually evolve their compliance frameworks to address new risks and meet regulatory expectations.



Partnering for a promising future

Strategic partnerships form the foundation of successful AI-driven transformation in banking. To unlock the full potential of AI, banks must engage a diverse ecosystem of partners—including technology providers, fintechs, cloud service providers, data suppliers, integration specialists, cybersecurity firms, and customer experience experts. By leveraging the depth and breadth of expertise these partners offer, banks can evolve into AI-centric enterprises that meet customers where they are.

The possibilities of AI-enabled partnerships are expansive and transformative. For example, banks can build digital-first operations alongside existing institutions, scaling them

nationally. In these scenarios—already emerging in the market—legacy banks undergo complete transformations, adopting new ways of working, integrating innovative digital platforms, and even rebranding to reflect a modern, customer-centric identity.

To develop AI-centric partner ecosystems, banks must act decisively—prioritizing third-party risk management, shared cybersecurity and data privacy protocols, frameworks for navigating global regulatory compliance, and robust mutual compliance policies and procedures. By following these imperatives, banks can safely and securely accelerate toward a customer-focused, AI-powered future.

How KPMG can help

KPMG combines advanced technology, in-depth experience, and operational excellence to help you continually evolve your organization both through internal efforts and partner ecosystems. Our teams help accelerate and sustain your transformation journey, keeping you ahead of your competitors—all while helping minimize disruption and risk. KPMG LLP can help you:

- Identify partners, alliances, and vendors to fill capability gaps
- Develop a strategy to build and manage a strategic network of partnerships and alliances
- Help to plan and manage partner ecosystems
- Balance innovation with intentional risk management, with embedded governance frameworks and shared cybersecurity and data privacy protocols to ensure resilience, regulatory alignment, and trust across the ecosystem.
- Evaluate the current methods and processes used for sharing data across partnerships
- Determine the anticipated increase in information technology budget allocation towards enhancing the partner ecosystem.

When it comes to AI, we are well positioned to help you uncover opportunities, work through critical business challenges, and unlock new revenue streams. From strategy to implementation, we guide you in taking

small, impactful steps to tackle even the most complex problems—all underpinned by trust. We have invested in an AI-enabled platform for organizational change that brings together the best of our thinking, frameworks, strategies and tools. One of these tools is the **KPMG TACO Framework™** for agent orchestration; comprising Taskers, Automators, Collaborators, and Orchestrators, the tool helps guide banks as they start with a core set of AI agents and then expand into swarms of agents across different domains.

Our **Intelligent Modernization Toolkit** accelerates the modernization of legacy platforms and new builds to create modern and maintainable applications. The platform is highly customizable and supports multiple adjacent use cases related to production support, testing and beyond. We have helped banks address the modernization of data pipelines and databases, risk modeling platforms, legacy applications, and integration capabilities (e.g. APIs). By leveraging this AI-enabled accelerator, we are able to help banks complete the modernization and migration processes in less than half the time while reducing the total delivery cost by 50 percent or more through improved efficiencies across the software development lifecycle. This approach significantly reduces the efforts across your product teams supporting features, user story, and test case definition, putting your technology in business terms that anyone can review.

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