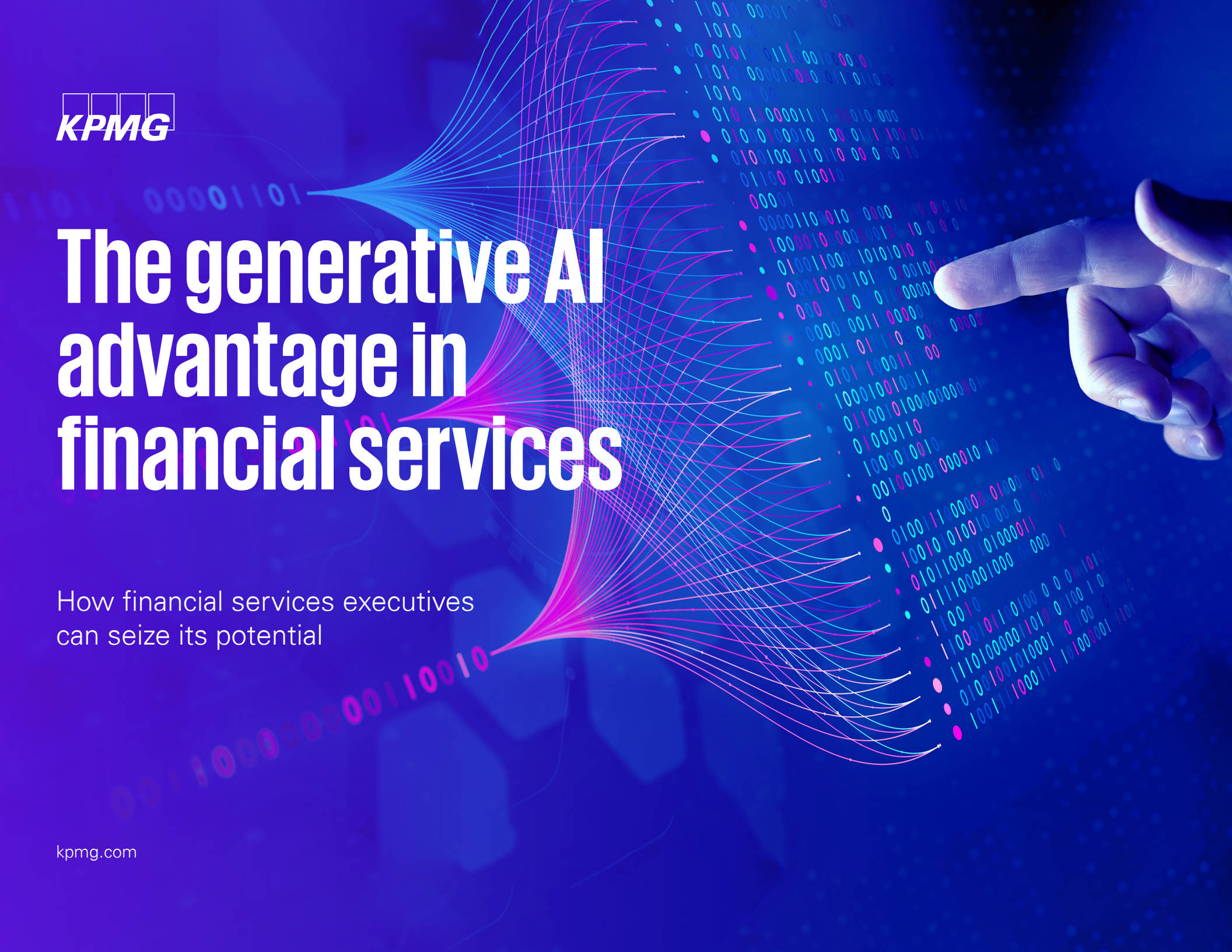




# The generative AI advantage in financial services

How financial services executives can seize its potential



# Introduction

Across industries, business leaders are racing to determine how generative artificial intelligence (AI) can be used. For financial services companies—banks, asset managers, wealth managers, and insurers—generative AI offers great promise in everything from compliance to robo-advisory services. But many financial services companies also face significant obstacles: regulation, legacy IT systems, siloed data sets, and limited cloud deployment.

In this paper we look at what financial services executives are expecting from generative AI, and their concerns about using the technology, based on findings from an exclusive KPMG survey conducted in March 2023 of 300 global executives across a wide range of industries.<sup>1</sup> (Where relevant, we compare the results with findings from our follow-up survey of 200 US executives three months later.) We also share our insights about emerging use cases and the challenges to adoption for leading institutions, which may be at a disadvantage against “AI-native” fintechs that are already charging ahead. Finally, we offer practical tips about how to get started with generative AI.



<sup>1</sup> See "[Generative AI: From buzz to business value](#)," KPMG LLP, 2023



# Executives are ramping up investments in generative AI amid data privacy concerns

## Use of generative AI solutions

The June survey showed significant rise in the use of generative AI solutions, and financial services executives are seeing positive impact:



## Type of generative AI solutions

Financial services executives have been quicker to deploy customized off-the-shelf solutions:



## Generative AI investment

Financial services leaders are already investing in generative AI technology and expect to see that investment grow:



## Generative AI privacy concerns

Concerns related to personal data have become an even higher priority for financial services executives:



## Generative AI and regulatory action

Financial services respondents strongly agree that the following areas require regulatory action:

	High priority risk mitigation areas	Require immediate regulatory action
Security	51%	49%
Data privacy	56%	47%
Information transparency	39%	46%

Note: Findings are based on KPMG surveys on generative AI from March and June 2023; the comparative March survey data points are based on 225 US respondents.

March survey June survey

# How financial services leaders expect to deploy generative AI



Overall, financial services companies appear eager to adopt generative AI. Thirty-eight percent of financial services leaders say their executive leadership team has appropriately prioritized the technology, versus 26 percent of all survey respondents. Twenty-six percent say their organization has already implemented at least one AI solution or plans to do so within the next six months, versus 21 percent of all executives. (In our June survey, these figures had jumped to 49 percent and 35 percent, respectively.) Financial services executives also are more likely than others to believe that they have the right people in place to bring generative AI into their business. And 64 percent say their organization is prepared to allocate budget to the technology over the next six to 12 months, versus 50 percent of all organizations.

Still, expectations for generative AI in the financial services sector are tempered. Only 22 percent of financial services executives say the technology will provide a significant competitive advantage (versus 32 percent of all executives surveyed). We believe this disconnect may reflect concerns about how quickly financial services companies can put generative AI to work, as well as the specific regulatory risks in their industry, such as protecting financial data.

## Will fintechs steal the march on generative AI adoption?

Established financial services firms have been watching fintech companies elbow their way into their markets for years, often transforming consumer expectations for how they bank, invest, and purchase insurance. Fintechs have been building AI-driven solutions, giving them a running start on implementing generative AI. Here are some examples:

<b>Upstart</b>	Lending platform that uses non-traditional borrower data
<b>Lemonade</b>	Insuretech has built bots for custom policy creation and claims processing
<b>Wealthfront</b>	Robo advisor automatically creates asset allocation, rebalances portfolios
<b>Quantexa</b>	AI-based crime prevention and detection solution

# Emerging use cases

While some players may move faster, we expect that in the next 12 months, many financial services companies will be experimenting with generative AI, using off-the-shelf large language models (LLMs) in applications such as customer service and marketing (46 percent of those surveyed in June said they are doing so). We see potential uses for generative AI in these areas:

## Fraud

Fraud detection and prevention is viewed as the No. 1 application for generative AI in financial services. Seventy-six percent of financial services executives say this is an area where the new technology is likely to be applied at their organization. With its ability to analyze large volumes of financial data, generative AI can be used to identify patterns and anomalies indicative of fraudulent activity.

## Customer service and sales

Financial services companies have already adopted AI to help improve customer-facing processes, such as help desks and robo-advisor services. Sixty-six percent of financial services executives surveyed say their organization is likely to use generative AI to enable more sophisticated chat bots and virtual assistants, and 62 percent predict it will be used for customer service and personalization.

## Compliance and risk

Sixty-eight percent of survey respondents said compliance and risk is the top priority area for generative AI in their companies. It can be used to automate labor-intensive compliance tasks, such as SEC filings. In risk management, generative AI could be used to analyze historical data to better simulate different risk scenarios and stress test investment strategies and portfolios.

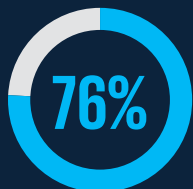
## Cybersecurity

Generative AI can detect and prevent cybersecurity threats by analyzing network traffic for signs of malicious activity.

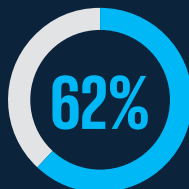
## IT systems and software

In software development, generative AI shows promise in building new product requirements and roadmaps and generating code. It could also be used for source-to-target mapping—creating the data transformation instructions needed to move data from a source system to a target system. Generative AI solutions could improve operational data quality, resulting in overall improvement.

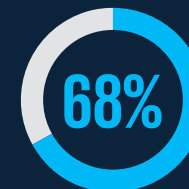
## How financial services executives plan to use generative AI



Fraud detection and prevention



Customer service and personalization



Compliance and risk

Note: KPMG survey on generative AI, March 2023

In addition to applications across the financial services sector, we see many attractive uses cases for generative AI specific to individual industries:

### Insurance

Insurers can use the technology to streamline claims processing, such as analyzing past claims data and other relevant factors to generate automated claim recommendations, estimate claim amounts, and generate claim settlement documents. Insurers also could use generative AI in new product development, using synthetic datasets and simulated market conditions to test the viability of new products.

### Asset management

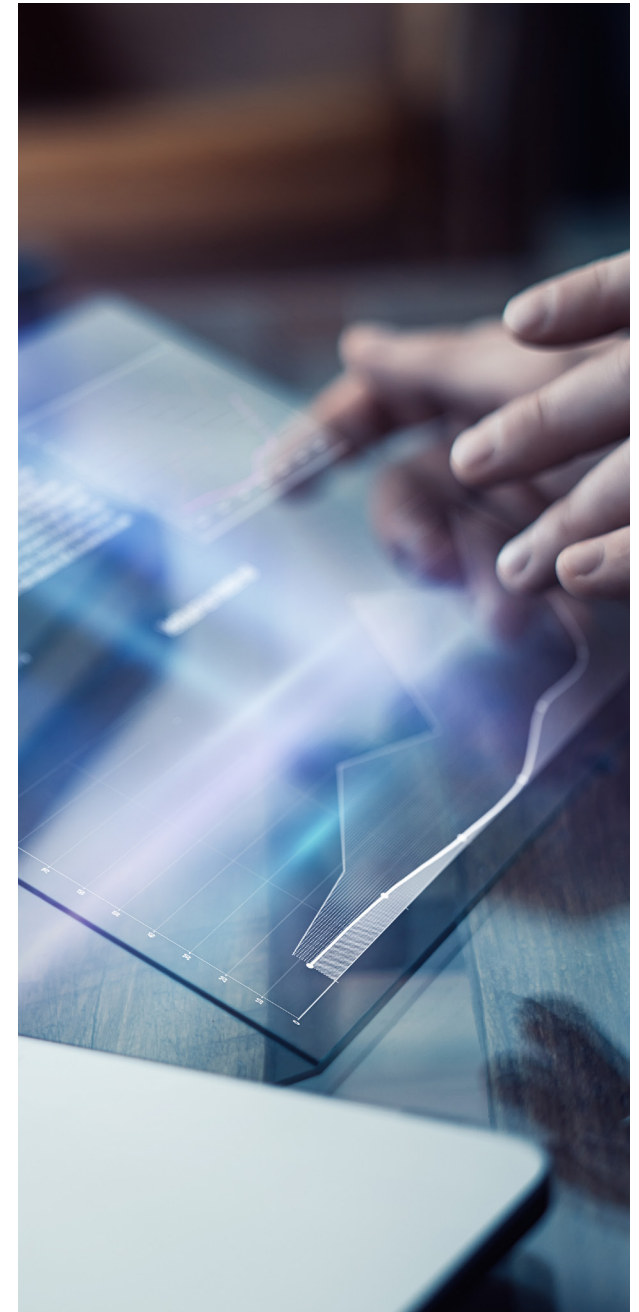
We expect generative AI will be used for routine activities like trade processing and settlement. It will be helpful in simulating future market scenarios and identifying potential investment opportunities and can help develop and test trading strategies. Generative AI could also be a tool for gauging market sentiment, using non-traditional data sources such as social media posts, news articles, and satellite imagery.

### Banking

Generative AI can assist in loan underwriting by analyzing a customer's financial data and helping to reduce the risk of default. With a better understanding of their customers' needs and wants, generative AI can help create personalized product recommendations, such as credit card offers, and cross-sell new products to existing customers.

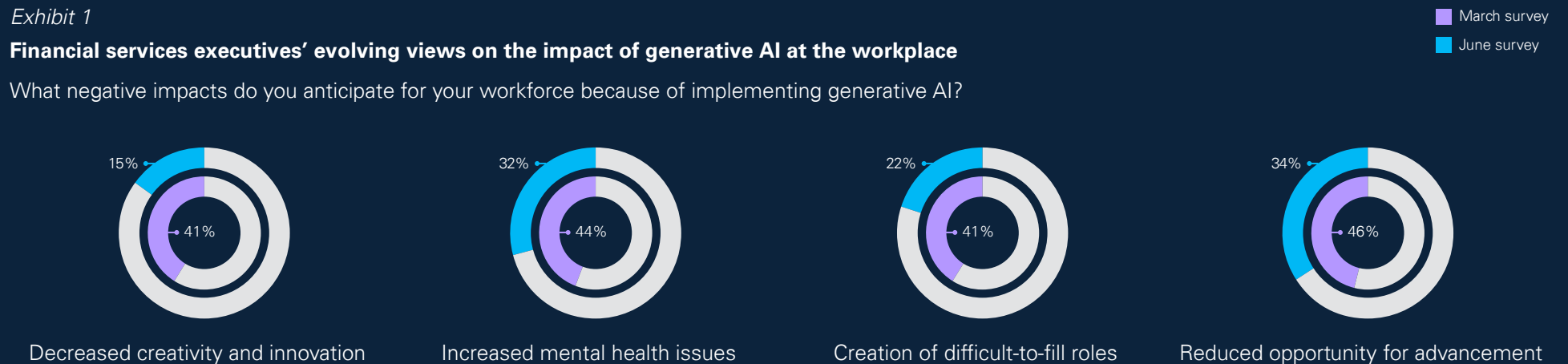
### Wealth management

Wealth managers will be able to use generative AI to create personalized financial plans and investment portfolios for individual clients based on analysis of client data and objectives as well as historical market data.



# Barriers to adoption

The financial services executives surveyed by KPMG share the same concerns around generative AI as other business leaders, such as worries over reliability, privacy, and intellectual property protection. Overall, financial services executives were relatively more concerned about people issues than their peers in other sectors. But since our March survey, their worries about possible loss of creativity and innovation, potential mental health issues, reduced opportunities for advancement, and creating difficult-to-fill new positions have diminished significantly (Exhibit 1).



Source: KPMG Generative AI surveys, March and June 2023

One of the biggest concerns among financial services leaders is the state of their current technology and data systems. Nearly 40 percent of financial services executives say their organization's IT/digital infrastructure is at a low or medium level of development. Only one other sector, energy, natural resources, and chemicals (35 percent) is less sure about its technology prowess.

Banks, in particular, struggle with the technical debt of outdated systems, processes, and technologies. These legacy systems limit the ability to innovate and adapt to changing market conditions but also are costly to maintain and operate—leaving less money to pursue new technologies such as generative AI. Banks are moving more work to cloud environments, where they would have more flexibility and agility in adding new capabilities such as LLM models, but the process is slow.

Banks can also face organizational barriers that limit their agility versus fintech startups. As a result, they may struggle to keep pace with the rapid innovation and product development cycles of cloud-native and AI-native startups, losing market share to these more agile competitors. Legacy asset managers face some of these same challenges.

# Getting started

KPMG has identified six key actions financial services companies can begin taking right now to jumpstart their generative AI agendas:

1

## Assess data and systems.

Generative AI requires high-quality and relevant data. Address any shortcomings in data availability, data quality, and data integration, ensuring that data is clean and comprehensive. Consider accelerating movement of IT systems to the cloud for easier generative AI implementation.

2

## Develop a framework for responsible generative AI.

Provide clear guidance and policies around ethics, trust, and proper use. Establish robust validation and testing processes for generative AI models, and create a responsible AI framework that takes into consideration the impact they will have on customers, employees, and other stakeholders.

3

## Partner to move fast.

Banks and other financial institutions have a mixed history in acquiring fintech's to move quickly into new technology.<sup>2</sup> A smarter move may be to partner or form a strategic alliance with a fintech to get the benefits of generative AI quickly.

4

## Prepare the workforce.

Your organization will likely need additional data scientists, machine learning engineers, and domain experts. Equally important is providing training for existing employees. Many roles may be affected, both by empowering employees with generative AI tools and by automating some tasks.

5

## Start with a pilot.

Develop a small-scale trial to test generative AI under controlled conditions. Fraud, customer service, and risk and compliance may be ideal places to start. Use the trial period to further assess the technology.

6

## Establish performance metrics.

To drive ongoing implementation of generative AI, it will be important to demonstrate how early generative AI applications are contributing to efficiency, cost avoidance, innovation, and growth.

<sup>2</sup> See "How banks can maximize the value of fintech acquisitions," KPMG LLP, 2022



# How KPMG can help

An early and enthusiastic advocate for the power of artificial intelligence, KPMG is uniquely positioned to help your organization leverage generative AI. Our technical expertise in AI and our deep knowledge of risk, compliance, cybersecurity, and other financial services applications can help guide your organization through strategy, use case development, vendor selection, pilot implementations, and provide ongoing support to help you scale and optimize your investment. We understand both the promise of generative AI and the process and cultural changes that will be required to realize its full potential.

KPMG also recognizes that users of generative AI have a responsibility to learn about the technology's risks and how to control those risks to prevent harm to customers, businesses, and society. Those risks will grow and evolve as AI technology advances and becomes more pervasive, and as public pressure from regulators increases. The KPMG Responsible AI offering features frameworks, controls, processes, and tools that can help ensure AI systems are designed and deployed in a trustworthy and ethical manner, which in turn can help your organization accelerate time to value when using those systems.

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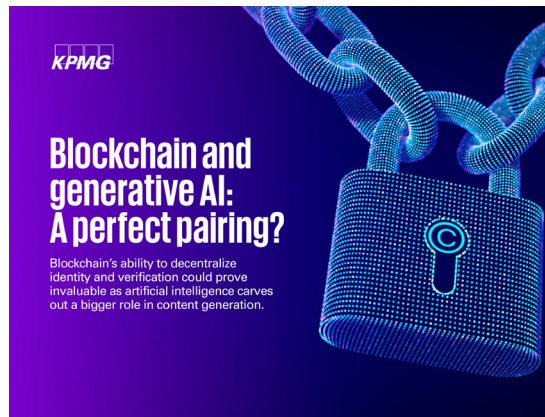
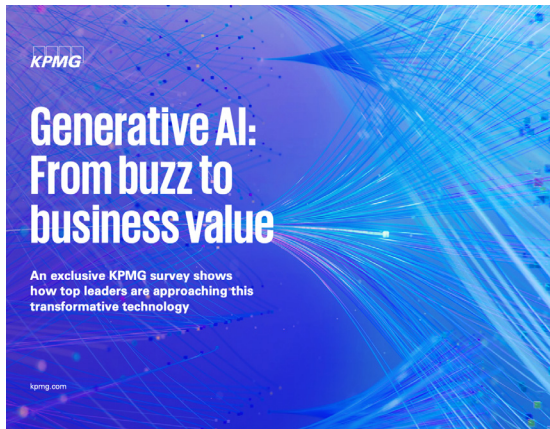


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Learn how KPMG can help make your [generative AI implementation](#) successful, and explore how we can help you [adopt AI](#) in a safe, trustworthy, and ethical manner.

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