For Banks, the AI Reckoning Is Here

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By Saurabh Tripathi, Stiene Riemer, Matteo Coppola, Kirsten Rulf, Jürgen Rogg, Christian Schmid, Michael Strauß

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Introduction

AI is moving fast—but most banks aren't keeping up where it matters.

Predictive AI has been reshaping financial services for years, pushing banks to fend off digital competitors and rethink their own operations. But the arrival of **GenAI is an inflection point**—accelerating AI's impact, raising new strategic questions, and amplifying both opportunities and risks. **Agentic AI**—systems that can act autonomously within set parameters—propels this shift even further by moving AI from analysis into execution.

Together, predictive, generative, and agentic AI are redefining the banking business—and eroding pillars that have long underpinned banks' advantage. The next several years will usher in new and differentiating capabilities for organizations that seize and scale them.

Yet BCG analysis finds that only a quarter of financial institutions are using AI to reinforce their competitive position. The rest are experimenting at the margins—understandable, but insufficient. Winning in the coming era will require far more than isolated pilots or cautious upgrades. It means anchoring AI strategy in business strategy, systematically prioritizing high-ROI use cases, embedding clear performance metrics, and mobilizing capital and CEO leadership decisively toward scalable impact—with tight alignment between investment and results.

AI presents a strategic fault line. The banking leaders that are acting now—defining where they will compete and how they will win—have already begun to shape the industry's future. The rest will be shaped by it.

Predictive, generative, and agentic AI are eroding pillars that have long underpinned banks' advantage.

The Next Five Years Will Define the Next 30

Most banks expect AI and GenAI to lower costs. But the real disruption runs deeper.

AI is reshaping the very foundations of financial competition—from how trust is built, to how value is delivered, to who controls the customer relationship.

Traditional moats are being dismantled. Historically, banks benefited from complexity. Customers stayed put, pricing structures weren't always clear, and financial products were tied to proprietary distribution channels. AI is eroding these advantages in a number of ways:

- AI-powered agents will optimize financial decisions in real time, making it easier for customers to switch providers and find better deals. Banks that once relied on stickiness will need new ways to earn loyalty.

- AI-driven transparency will expose rate structures, fees, and lending terms in real time, eroding pricing power based on opacity. Banks will increasingly need to compete on financial value—offering transparent pricing—as well as intangible value: the timeliness and quality of their advice and how well they understand and anticipate customer needs.

- AI-led financial decision making is shifting control from banks to digital platforms that act as financial gatekeepers. GenAI is a hyper-accelerant in this evolution—enabling more autonomous, seamless, and personalized experiences that pull activity away from traditional banking channels. Agentic AI will amplify these changes, making it even harder for banks to own the customer relationship.

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Current profit models could also come under strain. As AI-driven underwriting and real-time credit risk assessment increase pricing transparency, they will reduce the margins banks can charge on loans.

Traditional advisory models will be disrupted as AI streamlines many aspects of portfolio management and financial planning. Wealth management and commercial bankers will need to offer value that goes beyond what AI can deliver and turn advisory into a differentiator.

Fee-based transactional services will also face pressure. AI-powered payment networks and embedded finance players will pull more volume into ecosystems outside the traditional banking framework, forcing banks to rethink their role in the value chain.
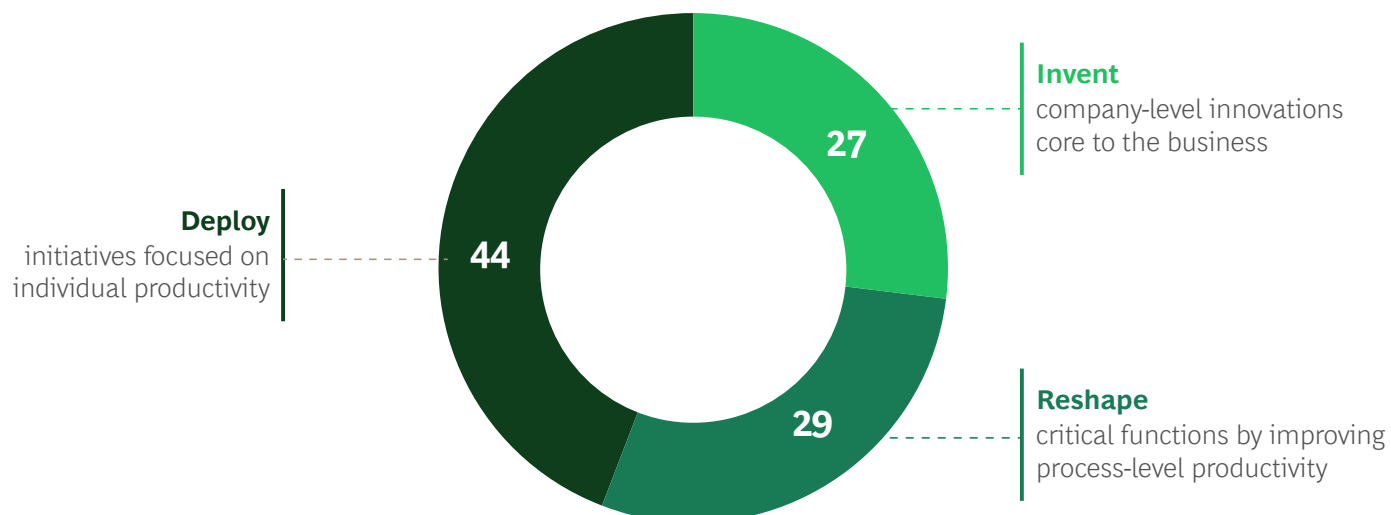
Caution is costing time. Despite broad enthusiasm, many banks remain wary of AI, particularly GenAI, and its current limitations, including its ethical and responsible use. Large language models (LLMs) can "fantasize"—that is, generate non-factual output—when not tightly controlled. They can also struggle with real-time data feeds, a critical gap in some financial applications. These concerns have encouraged some banks to tread cautiously.

Investment levels reflect this hesitation. BCG's AI Radar found that one in three companies plans to spend over $25 million on AI in 2025, and some will spend in the range of 0.5% to 1% of revenues. But too much of this funding is going toward isolated productivity improvements rather than broader transformation. **(See Exhibit 1.)** Such investments suggest that many banks are still playing it safe rather than positioning AI as a competitive differentiator. In addition, while they are enthusiastic about AI's potential, 60% of banks haven't defined financial performance indicators to track impact. Without clear metrics to ensure ongoing strategic alignment, they won't generate the ROI they need.

EXHIBIT 1

Most Players Are Not Yet Prioritizing Transformative Investments

Share of AI investments (%)

Invent
company-level innovations
core to the business — 27

Deploy
initiatives focused on
individual productivity — 44

Reshape
critical functions by improving
process-level productivity — 29

Source: BCG analysis.

Too much funding is going toward isolated productivity improvements rather than broader transformation.

GenAI has moved past niche applications and is expanding rapidly into core financial workflows, especially at the interface between institutions and customers. AI-powered tools now support autonomous chat agents that go beyond predefined scripts, real-time loan approvals, and automated processing of submitted documentation.

The window to get ready for these changes is closing. Within the next few years, and certainly by the end of the decade, the banking landscape will look fundamentally different. Leaders need to be modeling what this shift means for their institutions—and defining the role they intend to play in it.

Rethink, Retool, and Reclaim Advantage

As AI reshapes banking, leaders face a critical mandate: rethink strategy, retool technology and data, upgrade governance, and prepare the organization.

Meeting the moment will take more than pilots and point solutions. It demands foundational changes—strengthening core pillars and, in some cases, rebuilding them—to secure advantage for the decade ahead.

Upgrade your strategy. Banks need to consider their AI vision and use it to chart their strategic positioning. Not all will win in the same way. They need to identify where AI can unlock durable advantage for themselves, then build the infrastructure, talent, and partnerships to realize it.

Equipped with those insights, banks can then consider their strategic positioning and ask themselves, "Where can we secure defendable advantage in the medium term?" Three general models are emerging: the utility provider focused on operational efficiency, the open-architecture bank curating personalized financial products, and the financial marketplace connecting customers with diverse financial services. **(See Exhibit 2.)**

Each model leverages AI differently, whether it is to optimize operations, recommend tailored products, or create seamless, trust-based ecosystems. But all share a common thread of moving beyond traditional lending. Leading banks will create intelligent, customer-centric platforms that generate value through data, personalization, and strategic partnerships.

EXHIBIT 2

AI Will Play a Significant Role in Determining Where Banks Can Win

Core components of future business models		AI vision (illustrative)		HR strategy (illustrative)
Utility provider Focusing on scale and efficiency, provide core financial services while third-party platforms handle customer interactions. Profitability depends on volume, not direct customer ownership.	→	**Heavily agentic** Go all-in on wide-ranging automation, leveraging AI agents to monitor and execute services.	→	**Delivery efficiency** Higher volumes with fewer roles/FTE and cost savings from productivity gain.
Open-architecture bank Retain customer relationships while distributing third-party financial products. Revenue shifts from net interest income to commission- and fee-based earnings. Winning requires using AI-driven customer insights to curate and recommend the right financial products.	→	**Heavily insight-driven** Invest in broad mix of predictive AI, GenAI, and customer-facing agents to drive deep insight and empower bankers and customers.	→	**Sales effectiveness** Sales roles augmented by (Gen)AI, with automation of basic services.
Non-tied agent Evolve into financial marketplace, offering seamless access to providers (including non-banking). Business model relies on transaction fees and partnerships rather than lending margins. Success depends on trust, engagement, and AI-powered curation and personalization.	→	**Balanced AI toolkit** Balance investments in platform automation with investment into customer analytics and banker AI empowerment.	→	**Platform organization** Flattening of the organization, cross-functional teams, largely transversal setup.

Source: BCG analysis.
Note: FTE = full-time equivalent.

Put AI at the center of tech and data. Making AI work at scale requires rethinking the architecture itself. This demands changes across tech, data, and infrastructure:
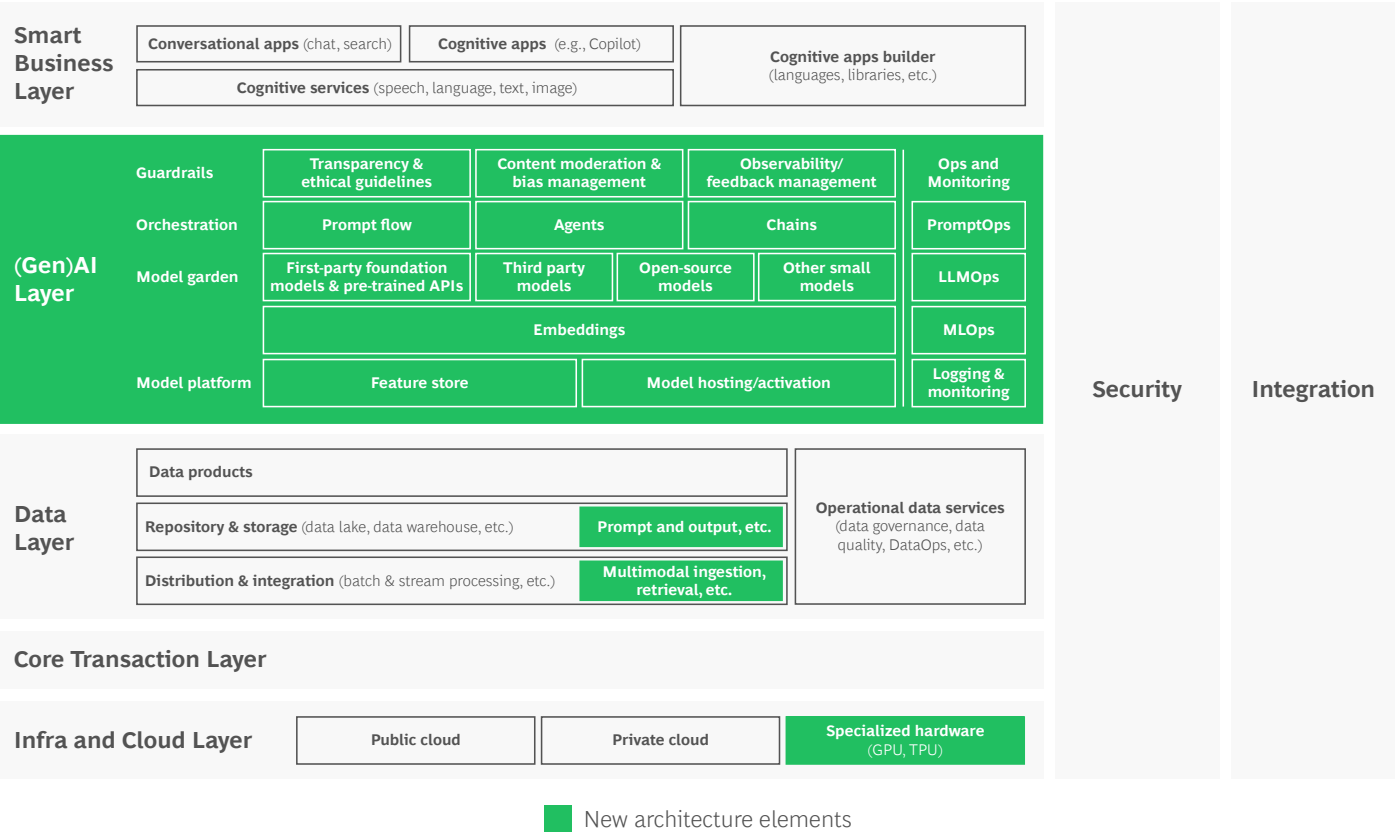
- **Workflow integration requires deep orchestration.** As banks evolve their AI capabilities, the challenge has shifted from developing specialized models to integrating them intelligently. Orchestration matters, and GenAI makes this nonnegotiable. **(See Exhibit 3.)** Banks must design routing mechanisms that direct specific information to the best-fit model while also integrating proprietary data through techniques like retrieval-augmented generation (RAG) and domain-specific small language models (SLMs). Orchestration will become even more critical as agentic AI use expands so that banks can coordinate decision execution as well as information flows. Responsible AI governance must also become integrated. Today, AI models are typically reviewed individually by internal watchdogs. But as financial institutions develop increasingly complex ecosystems— with dozens or even hundreds of interconnected and potentially autonomous models—banks will need holistic oversight. This includes robust frameworks to stress-test model interactions, identify emergent risks, and manage intricate system interdependencies.

- **Data availability, not just accuracy, defines AI performance.** Most AI failures in banking aren't about the models—they're about slow, incomplete, or fragmented data. Unlocking AI's full potential requires addressing outdated systems and IT shortcuts (often referred to as technical debt), setting up strong governance, and enabling efficient data integration across cloud and on-premise environments. LLMs will take a central role in banking AI, but they won't be sufficient. Many financial tasks are simply too specialized to rely on broad, general-purpose models, even when these are customized for particular domains. The use of purpose-built SLMs trained on specific data for targeted GenAI applications will be key. Platforms and orchestration systems that can optimize the use of LLMs and SLMs across AI-driven functions—bridging current data silos—will also be needed.

EXHIBIT 3
(Gen)AI Tech Architecture Requires New Capabilities

Smart Business Layer	Conversational apps (chat, search)	Cognitive apps (e.g., Copilot)		Cognitive apps builder (languages, libraries, etc.)		
	Cognitive services (speech, language, text, image)					

(Gen)AI Layer	Guardrails	Transparency & ethical guidelines	Content moderation & bias management	Observability/ feedback management	Ops and Monitoring	Security	Integration
	Orchestration	Prompt flow	Agents	Chains	PromptOps		
	Model garden	First-party foundation models & pre-trained APIs	Third party models / Open-source models / Other small models		LLMOps		
		Embeddings			MLOps		
	Model platform	Feature store	Model hosting/activation		Logging & monitoring		

Data Layer	Data products		Operational data services (data governance, data quality, DataOps, etc.)
	Repository & storage (data lake, data warehouse, etc.)	Prompt and output, etc.	
	Distribution & integration (batch & stream processing, etc.)	Multimodal ingestion, retrieval, etc.	

Core Transaction Layer

Infra and Cloud Layer	Public cloud	Private cloud	Specialized hardware (GPU, TPU)

■ New architecture elements

Source: BCG analysis.
Note: LLMOps = large language model operations; MLOps = machine learning operations.

- **Core layers must modernize.** Most banking systems are a technological patchwork that obstructs the dynamic, real-time, and unstructured capabilities essential for innovative AI applications. Simply adding AI components to existing infrastructure won't work. Leading institutions are demonstrating a new approach. Commonwealth Bank of Australia, for example, has implemented an event-driven architecture and an AI-powered transaction core. These allow for real-time fraud detection and response, contributing to a 50% drop in scam losses and a 30% decrease in customer-reported fraud.

- **Hybrid infrastructure is essential.** Today, AI systems can flag risks, surface insights, and suggest pricing changes—but most don't trigger real-time adjustments. This must change. There are many opportunities where predictive and agentic AI can work together to propose an action and then implement it without exposing the bank to risk. Fully personalized marketing interactions are one example. For these opportunities to expand, infrastructure needs to be hybrid. It must cut across on-premise, cloud, and edge environments to enable high degrees of modularity and the widespread use of application programming interfaces and micro-services.

Own the AI governance agenda. With regulation still catching up to AI's rapid evolution, banks are being asked to govern in real time, without a clear playbook. The EU AI Act is setting the most comprehensive standards to date, applying across the entire AI value chain. Banks must now ensure oversight not only for their own models but also for any third-party systems they rely on. While the act isn't finance-specific, its breadth makes AI governance a business-wide responsibility, not just a compliance task.

In the US and UK, regulators are incorporating AI oversight into existing financial rules rather than building separate frameworks. Still, varying state laws in the US are likely to cause significant fragmentation in how those policies are applied. US agencies, including the Federal Reserve, are focused on AI model risk, bias detection, and explainability, particularly in lending and credit. The UK's Financial Conduct Authority and Prudential Regulation Authority are integrating AI risk frameworks into broader financial governance. These approaches give banks more flexibility but also shift greater responsibility onto them to ensure that AI models are reliable, fair, and auditable.

Other changes are also brewing. The Bank of England, for example, is exploring how to incorporate AI into its stress-testing regime—assessing whether trading models and risk algorithms could amplify financial instability. If adopted, banks could eventually be asked to demonstrate both balance sheet resilience and how AI behaves under extreme conditions. This secondary requirement would necessitate completely new technical capabilities.

Early engagement with regulators will be key to managing the direction of this journey. For now, however, uncertainty remains the biggest drag on AI adoption in finance. In our research, 61% of institutions cite regulation as a top concern. But waiting for clarity isn't a strategy. Indeed, most supervisory authorities are looking for banks to engage with them and uncover areas where effective AI regulation can remove barriers to growth.

Banks also need to be thinking one step ahead and integrate AI governance into their business strategy. Most need to develop risk management frameworks that go beyond checklists so they can better address explainability, accountability, and bias detection—as well as prepare for an uptick in AI-driven financial crime. Standard Chartered, for instance, is already investing in an AI platform that can identify compliance failings and potential fraudulent behavior. This initiative is part of the bank's efforts to develop responsible AI risk management frameworks, particularly for bias detection in lending and credit decisions, in response to evolving regulations.

Ready the organization. Today, a typical bank might have 15% of staff in the front office, 10% in control, 10% in operations, 20% in corporate, 20% in the middle office, and 25% in technology. How might this composition change with GenAI and agentic AI? The answer will lie in accordance with each bank's AI vision and business strategy. Those focused on utility services may maintain a larger operations workforce, while others may prioritize advisory and technology.

Few employees are being prepared for these shifts. BCG research found that two-thirds of financial institutions have difficulties hiring AI talent, and fewer than a third have upskilled even a quarter of their workforce. The issue isn't just hiring AI specialists—it's ensuring that decision makers and oversight teams have the skills to assess, challenge, and apply AI outputs effectively. Many frontline and control teams still struggle to interpret AI-driven decisions, let alone justify them to regulators.

Some banks are exploring solutions. JPMorgan Chase has implemented a GenAI tool called LLM Suite, accessible to 200,000 employees, including CEO Jamie Dimon. The bank offers training programs and leverages superusers to assist colleagues in integrating AI tools into their workflows. BBVA has partnered with the University of Navarra to launch a training initiative targeting over 150 top managers. This program focuses on the use of GenAI to improve executives' productivity by optimizing their strategic decision making and daily operations.

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Act Now

The choices banks make now will define the next generation of leaders. Success will depend on a disciplined approach: focusing AI on measurable returns, embedding it into decision making, and adapting quickly as new opportunities emerge.

Get started with no-regrets moves. Leaders should prioritize depth over breadth and move fast where the upside is clear. Here are three steps they should take this year:

- **Systematically evaluate where AI can drive ROI.** High-value use cases exist across every bank function from operations to wealth management. Assessments should drill into the numbers, denoting expected value and cost as well as the underlying assumptions. Include qualitative benefits as well, such as faster processes, better insights, and a better user experience.

- **Connect use cases to processes.** Use case selection should inform a wider workflow analysis to drive process redesign and integration across the relevant function or organization. This mindset is the key to scaling—and allows organizations to see impact faster and build it more sustainably.

- **Set clear outcomes and accountabilities.** Momentum is everything. Clear goals aligned to business outcomes sustain momentum. Aim for quick wins and decisive impact within a three-year horizon to unlock faster ROI.

Drive alignment through visibility and intent. AI will reshape core workflows, decision rights, and value streams across the bank. Change at this scale demands tight alignment. Here's how to achieve it:

- **Track what matters.** Many banks lack meaningful AI performance indicators. Shift from counting pilots to measuring adoption, time-to-impact, and risk-adjusted ROI. Build enterprise dashboards that surface business-relevant insights—not just model technical metrics.

- **Clarify what's working and where to go next.** AI-driven change is moving faster than most banks are planning for and in ways that are not predictable. CEOs must condition their organization to keep their eye on emerging developments and model the implications—and their response to them. In our experience advising institutions, we've seen that progress often stalls as a result of limited visibility. CEOs must make sure that senior leaders across the organization are brought into the overall AI transformation. And they should employ formal and informal channels to prioritize ongoing communication so that managers from the top levels on down understand what's working, what's ready to scale, and what to fund.

- **Move capital like you mean it.** Shifting from pilots to transformation requires reallocation of real budget and talent. Building the tech and foundations to scale eats up to 60% of AI investment in the first two to three years. But the longer banks wait, the larger this gap gets—to the point where it cannot be closed. Banks must end low-potential pilots, double down on proven use cases, and ensure that foundational AI capabilities are funded as core infrastructure.

Lead from the top. In many banks, AI is still viewed as the exclusive domain of the CTO or innovation lab. That mindset is now the primary blocker to scale. This is how leaders can drive the organizational, financial, and talent decisions that AI maturity demands:

- **Leverage the full power of the CEO.** The CEO should define the AI strategy, set KPIs, and ensure that execution is disciplined. Banks with many independent divisions or front-to-back opportunities may opt for a divisional or centrally coordinated approach, but without clear top-down leadership, AI adoption will remain fragmented.

- **Get serious about data governance.** Banks know that data governance is critical. Few are actually fixing it. CEOs must push past surface-level coordination and mandate the standards, ownership, and funding required to make trusted data usable at scale.

- **Own the talent question.** Competing in an AI-first world requires internal fluency, not just external partnerships. CEOs must back the development of in-house expertise across product, tech, and operations and create the space for new roles and ways of working to take hold.

AI is already reshaping banking. The real challenge now is ensuring that institutions harness its potential thoughtfully and strategically.

The age of incrementalism is over. In banking, as in every industry AI touches, the institutions that thrive will be those that rethink not just tools and workflows—but value, control, and differentiation from the ground up. That means anchoring AI strategy in business strategy, investing in the technical and human foundations to support it, and embedding clear lines of accountability. Leadership matters. So does urgency.

The opportunity is enormous—and fleeting. Banks that move decisively will define the future of financial services. The rest will compete for what's left.

About the Authors

Saurabh Tripathi is a managing director and senior partner in Boston Consulting Group's Mumbai office and global leader of the Financial Institutions practice. He can be reached at **tripathi.saurabh@bcg.com**.

Matteo Coppola is a managing director and senior partner in the firm's Milan office and global practice leader for Risk and Compliance. You can reach him at **coppola.matteo@bcg.com**.

Jürgen Rogg is a managing director and senior partner in BCG's Zurich office and global leader of the Digital and Technology in Financial Institutions topic. You can reach him at **rogg.juergen@bcg.com**.

Michael Strauß is a managing director and senior partner in the firm's Cologne office and leads BCG's Financial Institutions practice in Central Europe and GenAI in Europe. You can reach him at **strauss.michael@bcg.com**.

Stiene Riemer is a managing director and partner in BCG's Munich office and the global lead for AI developments in financial institutions. You can reach her at **riemer.stiene@bcg.com**.

Kirsten Rulf is an associate director and partner in the firm's Berlin office and a core member of the Technology and Digital Advantage practice. You can reach her at **rulf.kirsten@bcg.com**.

Christian Schmid is a managing director and senior partner in BCG's Zurich office and a core member of BCG's Public Sector, Financial Institutions, and Technology Advantage practices. You may contact him by email at **schmid.christian@bcg.com**.

For Further Contact

If you would like to discuss this report, please contact the authors.

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