Accelerating the Path from GenAI Potential to Profit in Banking

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Introduction

Artificial Intelligence (AI) has reshaped financial services over the past two decades. Today, the pace of change is accelerating once again.

Predictive AI helped financial institutions defend against digital disruptors and streamline their operations. The arrival of generative AI (GenAI) amplified both opportunity and risk—raising new questions about value creation, trust, and responsible adoption.

Agentic AI stretches the frontier further. By enabling systems to act autonomously, agentic AI moves beyond analysis into action, turning insight into execution.

Leaders across the industry recognize that AI will drive a fundamental shift in how financial institutions operate, compete, and create value. In Boston Consulting Group's (BCG) 2025 global survey of 1,250 executives, 75% ranked AI and GenAI among their top three strategic priorities for the year ahead. Within financial institutions, 65% see substantial value potential in GenAI. Companies are doubling down on their GenAI investments, which are expected to increase by 60% in the next 3 years.

Despite this remarkable pace and promise, we find significant gaps still remaining in turning promise into realized value. While AI is transforming businesses faster than ever, only 51% of financial institutions report having realized any value thus far from their AI initiatives.

Of this 51%, just 3% of financial institutions have achieved value from AI at scale. These 'future-built' leaders have developed the right foundations—robust data architecture, governance, and talent—and are now pulling ahead of their peers.

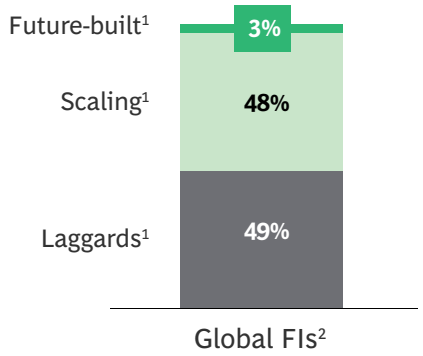
A further 48% of banks are beginning to see early results, but have yet to scale their initiatives or demonstrate consistent outcomes. Meanwhile, the remaining 49% still struggle to capture tangible returns, reporting minimal revenue gains or cost efficiencies despite significant spending.

In the last three years, future-built financial institutions have grown faster and delivered stronger shareholder returns compared to 'laggards'—the bottom 49%.

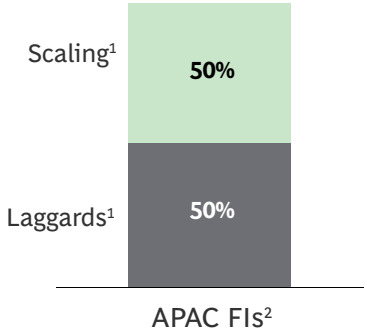
EXHIBIT 1

The AI value gap for Financial Institutions

Globally, 3% of financial institutions are achieving AI value at scale



In APAC, financial institutions are unlocking value, but not yet at scale



Future-built FIs[2] are growing faster, delivering greater returns

3.5x | **Faster revenue growth[3]**

2.2x | **Total shareholder returns[3]**

Source: BGG Build for the Future 2025 Global Study (n=147 for global financial institutions, n=38 for APAC financial institutions).
[1]Future-built: Build for the Future Maturity Score 75-100, Scaling: 50-74, Laggards: 0-49.
[2]Financial Institutions.
[3]3-year revenue growth, 3-year total shareholder return, comparing Future-built vs Laggards among global financial institutions

These institutions have achieved 3.5x faster revenue growth and delivered 2.2x higher total shareholder returns over the last three years. This performance gap is further exacerbated by GenAI and agentic AI which are transforming how financial institutions create and capture value.

GenAI is expanding the scope of what financial institutions can achieve. By leveraging large language models (LLM) and multimodal architectures, banks can now generate content with prompts, extract insights from unstructured data, and create conversational interfaces that transform customer interactions.

Leading global banking institutions have already deployed GenAI for personalized product recommendations in private banking and AI-powered customer assistance in retail banking, enhancing productivity and elevating customer experiences.

Agentic AI pushes this progression further by acting autonomously and proactively. AI agents can help banks observe, plan, and execute actions through application programming interfaces (APIs) that are continuously learning and optimizing outputs based on feedback in real time. Today, AI agents make up 17% of the total AI value in banking—with its share expected to almost double to reach 29% by 2028.

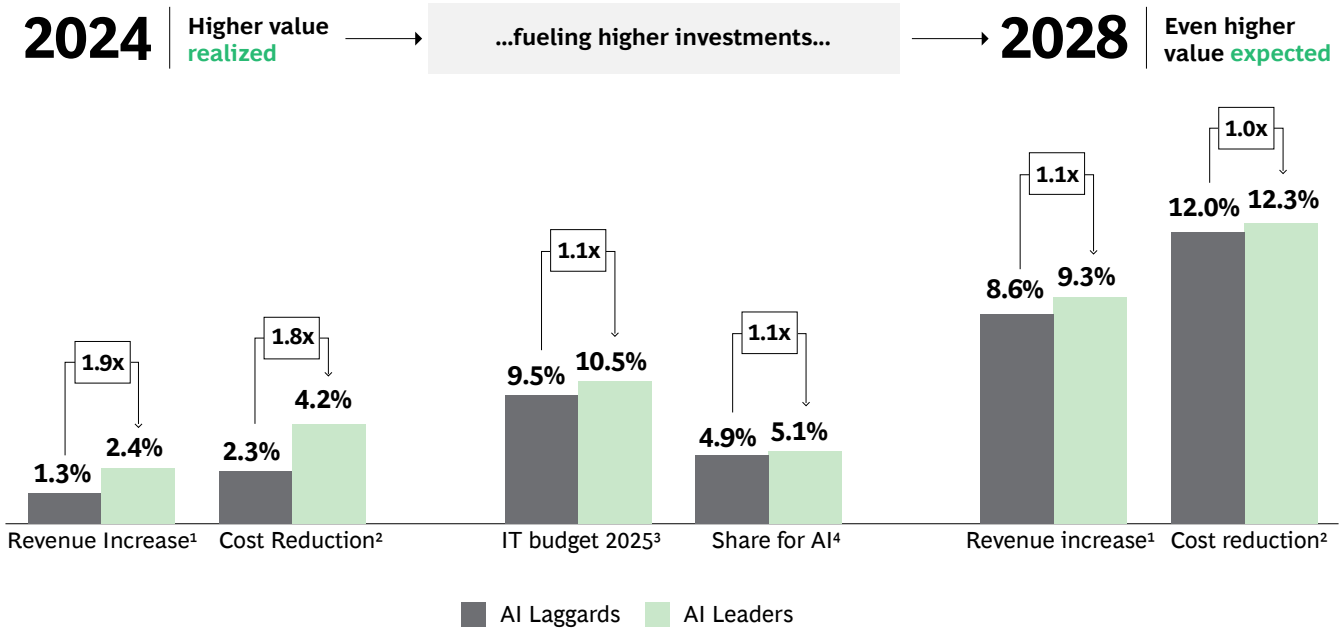
Leading financial institutions are already seeing returns. On average, these banks have realized a 2.4% increase in revenue and 4.2% reduction in cost—nearly double that achieved by laggards.

Leaders are reinvesting these returns in new AI capabilities. These leaders are spending more on IT as a share of revenue, and allocating a greater share of the IT budget to AI. By 2028, future-built banks expect a 9.3% revenue increase and 12.3% cost reduction, both significantly higher than the projections of less AI mature institutions.

Financial institutions that act early will strengthen their position within this virtuous cycle, while those that hesitate risk falling further behind as the value gap widens.

EXHIBIT 2

Leaders experience a virtuous cycle of AI value creation by reinvesting funds



Source: BCG Build for the Future 2025 Global Study (n=147 Financial Institutions).
[1]What % of revenue growth did you achieve/project in 2024, 2025 & 2028 (in % of annual revenue) through AI efficiency gains?.
[2]What % of cost reduction did you achieve/project in 2024, 2025 & 2028 (in % of total op. expenses) through AI efficiency gains?.
[3]What is your company's approximate IT budget (% annual revenue) in 2025.
[4]What % of your company's overall IT budget in 2025 is dedicated to AI?

To understand how AI is reshaping financial institutions, we drew on our global research and experience from over 200 AI and digital transformation programs worldwide. Our analysis builds on the insights of 1,250 C-suite executives and senior leaders surveyed in 2025 across industries and regions.

We also engaged 10+ Indonesian leaders and experts on digital and AI in banking to better understand local nuances and perspectives on AI adoption, challenges, and opportunities. This blended approach gave us a holistic view of how AI is driving measurable value for financial institutions, and where Indonesia stands in this journey.

Our findings draw on global research grounded in local perspectives

1,000+	Companies' CXOs and digital leaders surveyed annually over 10 years
200+	AI and digital transformations delivered globally
50+	APAC Banks and Financial Institutions surveyed
10+	Indonesian AI and digital leaders in Banking interviewed

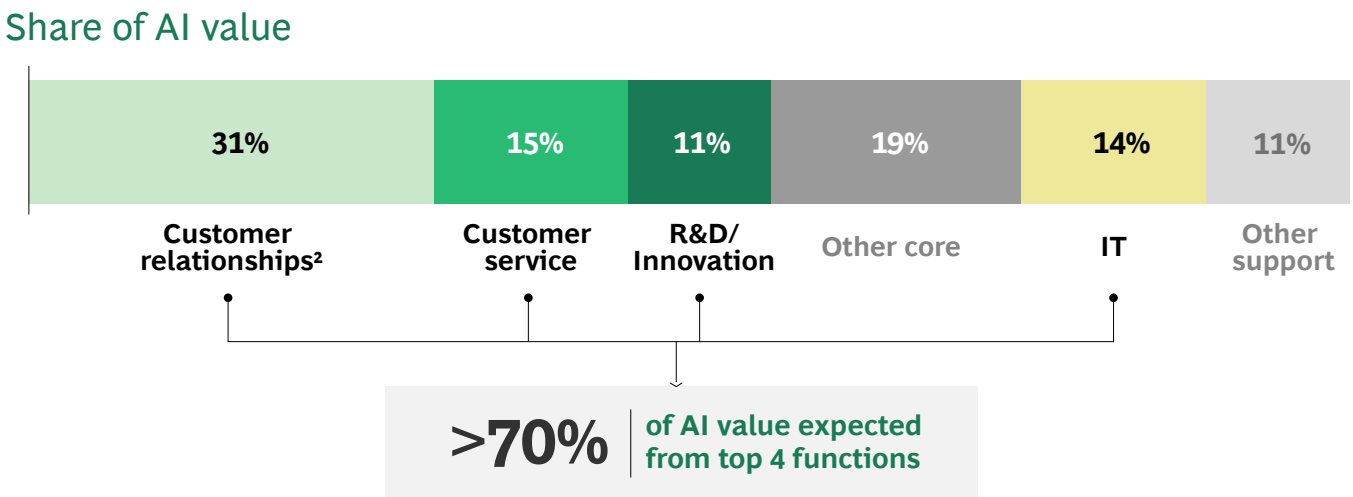
The true opportunity of (Gen)AI for Banks

AI has long since moved from experimentation to execution, and we are already seeing its tangible impact in 'future-built' banks. In 2025, leading financial institutions in APAC expect to realize an average 5.8% revenue increase and 8.6% cost reduction attributable to AI.

AI-driven initiatives have helped these banks achieve higher revenue and greater cost savings, with more than 70% of that value coming from applications in customer relationships, customer service, R&D/innovation and IT operations.

EXHIBIT 3

In Banking, majority of AI value will come from customer relationships, customer service, innovation, and IT



Source: BGG Build for the Future 2025 Global Study (n=59 for global Banking).
[1]Please distribute 100% across the following functions regarding value (value comprises topline growth and cost reduction).
[2]Includes customer journey, sales, digital marketing, and pricing.

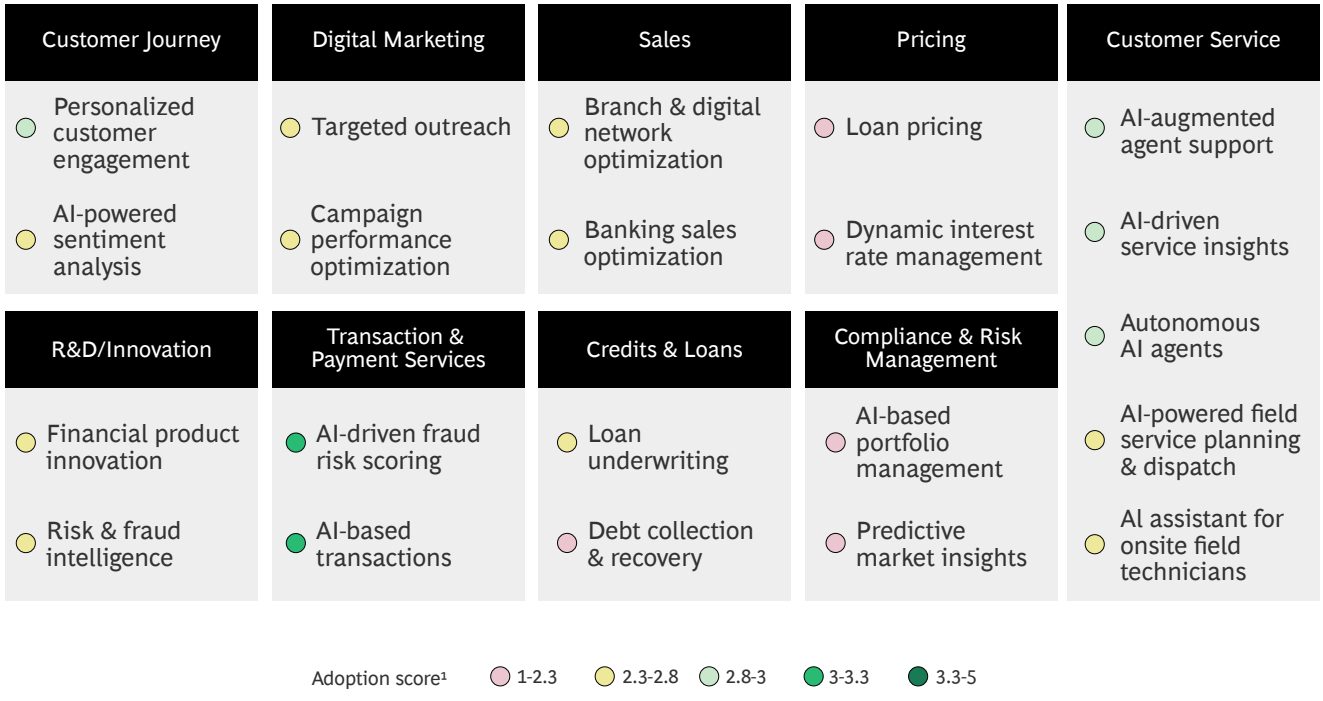
GenAI provides financial institutions with new ways to personalize experiences, automate workflows, and enhance decision-making. By focusing on high-value use cases, banks stand to benefit from stronger operational efficiency and greater customer satisfaction, with benefits already seen across multiple industries:

- **Private banking.** GenAI is driving personalization and improving productivity by up to 25% in private banking. GenAI has the capability to synthesize data such as client histories, product information, and the latest industry research. This empowers relationship managers to accelerate the creation of personalized outreach materials and offers. Automated report generation and AI copilots further streamline follow-up communication and documentation, improving client relationships through deeper engagement and freeing capacity to pursue new leads.
- **Customer service.** AI is reducing call handling time by 15%-20% and lowering operational costs by approximately 30% in customer service. AI-augmented triage and self-service recommendations have reduced the volume of queries routed to human representatives. Customer service agents can now prioritize those with more complex questions or needs. Each case is enriched with AI-generated summaries and suggested solutions, allowing for faster resolution and improved customer experience.
- **Marketing.** GenAI is accelerating content creation, unlocking 25%-35% process efficiencies in marketing. GenAI tools are supporting marketers in the production of ad copy, emails, and social media content, speeding up processes without compromising on quality. With AI-driven analytics, marketers can conduct more precise segmentation and targeting to deliver better campaign results and more relevant messaging to customers.

These use cases are just the tip of the iceberg, capturing only a fraction of what is possible with AI. Even future-built institutions have not fully tapped into the potential of AI. As GenAI and agentic AI capabilities mature, applications will extend far beyond just automation and content creation—pushing banks to rethink how they approach their operations and sustain value.

EXHIBIT 4

Most banks have yet to unlock potential from full range of use cases



Source: BGG Build for the Future 2025 Global Study (n~=100 for Financial Institutions).
[1]"What is your current level of adoption of AI in this workflow?" Answers range from 1-Not adopted to 5-Fully deployed

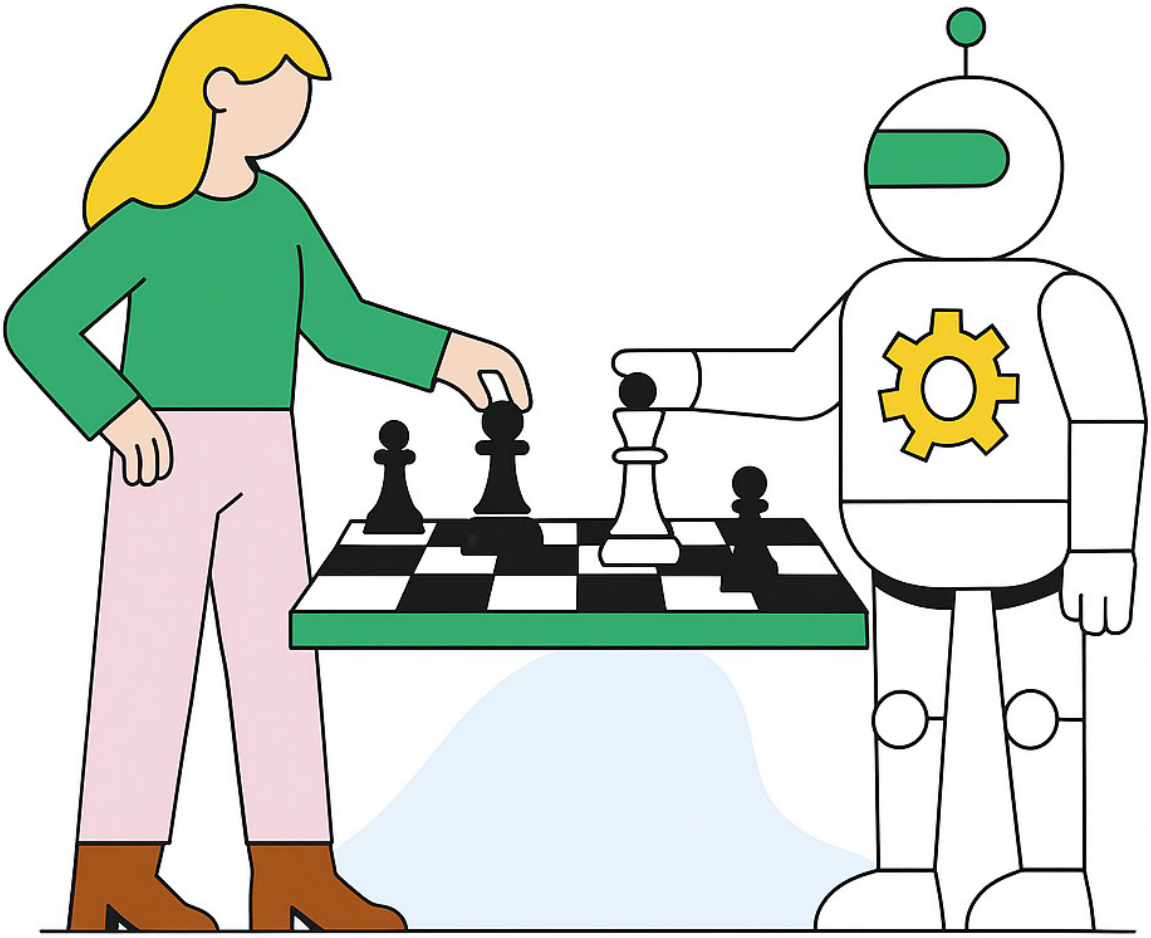
AI is changing the rules of competition

AI offers remarkable opportunities, but it also presents a double-edged sword in a changing competitive landscape. On one hand, it brings significant opportunities for growth and efficiency. But on the other, it challenges traditional banking models and introduces new, rapidly evolving potential for disruption. GenAI and agentic AI tools are introducing new forms of competition that banks can no longer afford to ignore.

Historically, banks have benefited from customers sticking to one financial provider out of convenience and familiarity. This however is no longer the case, as AI-powered agents make it easier for customers to explore and compare offerings from a variety of banks.

Banks have also relied on complex rate structures, fees, and lending terms that created pricing power through opacity. But AI-driven transparency is dismantling this advantage, helping customers make more informed decisions and pushing banks to compete on pricing and intangible value. Digital platforms are also deploying AI to deliver personalized services that draw customers away from traditional banking channels.

With all these challenges at play, banks are now in a race to embed AI into their operations. Those who lag in this race risk losing relevance in a marketplace that is increasingly driven by intelligent systems.



What is driving the gap between potential and performance?

Getting ahead of the curve will depend on how well banks can identify their blind spots, take those insights, and use them to inform AI-driven strategies. Our research points to five underlying gaps that explain why many financial institutions struggle to turn intent into outcomes.

EXHIBIT 5

5 key drivers of the gap between Future-built/leaders and laggards

1 Insufficient C-level sponsorship & weak governance

*"It is **very difficult to even start a pilot** … [leaders] **don't understand the benefit of AI**"*

*"[Teams] are **working in silos** … each **spawning their own ideas**"*

9x Laggards less likely to report that C-suites are deeply engaged in the AI program (vs Future-built)[1]

2 AI imagination gap

*"We have done AI fraud identification and AML … **that is only basic AI**"*

*"There are **many pilots going on**… for digital document processing, HR, internal chatbots … but **no holistic roadmap**"*

44% of AI investments today focused on individual productivity, not transformative initiatives[2]

3 Weak data foundations

*"There is **no clear ownership** of data"*

*"[We] **struggle to implement business intelligence/analytics due to data gaps** … let alone AI"*

Only **10%** of banks have fully documented data[3]

4 Fragmented technology stack

***"Without using cloud systematically, doing AI is a lot harder** because you cannot use models, APIs, etc."*

*"Because of data residency rules, we must use hybrid cloud, which **makes tech investment more complex**"*

6x Laggards less likely to have central AI platforms (vs Future-built)[4]

5 Scarce AI-ready talent

***"The talent is not here** [in Indonesia] … we **cannot find data scientists**"*

*"We are engaging vendors for projects, but will **need internal capabilities to make AI sustainable**"*

2/3 of Financial Institutions shared difficulties hiring AI talent[5]

[1]"How would you describe your C-suite's mindset and ownership around Agentic AI".
[2]"Which of the following statements best describes the focus of AI adoption in your company?" BCG Build for the Future 2025 Global Study (n=45 Financial Institutions for this question).
[3]BCG Future of Finance 2025 Global Study
[4]"Has your company adopted platform thinking for AI deployment?" BCG Build for the Future 2025 Global Study (n=64 Financial Institutions for this question)
[5]BCG AI in Financial Institutions 2025 Global Study

Insufficient C-Level sponsorship and weak governance

Despite the rising potential of AI, business leaders are hesitant to engage in AI-driven activities and initiatives, particularly those centered around GenAI. Across Indonesia's financial sector, relatively few leaders have taken on an active role in driving AI adoption across their institutions. Laggards are 9 times less likely to report that the C-suite are deeply engaged in AI programs, compared against future-built organizations.

Many C-level executives have yet to develop the technical knowledge needed to fully grasp how AI capabilities can deliver meaningful impact on their operations. This knowledge gap limits their ability to champion AI initiatives and investments or shape governance frameworks.

Even among the more tech-savvy leaders, there is a growing concern over GenAI's current limitations and ethical risks. Looking at LLMs as an example, these models can hallucinate and produce inaccurate or non-factual content when not properly controlled. LLMs also still struggle to process real-time data feeds which is a critical capability in some financial applications.

As a result, many banks tend to tread cautiously when it comes to investing in AI systems and tools. Indonesian banks are adopting a 'wait-and-see' approach, positioning themselves as 'followers' rather than leaders. Instead of investing heavily in technology they are unsure about, these banks are choosing to wait for tangible proof of value before committing to investments in GenAI.

BCG's AI Radar 2025 survey found that while one in three companies in the Asia Pacific (APAC) region plan to invest more than USD25 million in AI, and three in four companies plan to increase tech investments. However, Indonesian banks remain cautious. This hesitation is costing them both time and value, as competitors are scaling up aggressively.

For many Indonesian banks, AI is not yet a leadership priority. C-suite level attention remains divided across competing priorities such as maintaining efficiency in a dynamic macro-environment, ensuring compliance in an evolving regulatory landscape, and driving digitization and tech resilience. Because of this, AI initiatives are often confined to innovation labs or stay within the purview of chief information officers (CIOs) and chief data officers (CDOs)—limiting cross-functional visibility.

This lack of ownership and governance has tangible consequences for financial institutions:

- **No clear success metrics.** Nearly 60% of financial institutions have yet to define key performance indicators (KPIs) or financial metrics to track AI outcomes. Without measurable goals, banks will struggle to see the return on investment (ROI) that AI can deliver.

- **Weak governance structures.** Many banks have not established formal governance models for AI or have folded them into existing IT and digital governance policies, often without C-level ownership.

- **Limited business-tech collaboration and funding.** The absence of C-level ownership creates fragmentation in collaboration between business and tech teams, putting AI adoption at the bottom of the business priority list. One banking leader we interviewed shared that "[the tech team] needs to collaborate with businesses to define use cases clearly [but] business unit leaders focus only on their respective domains." Without a unified approach to AI from the top, AI champions struggle to secure funding for projects. Many Indonesian banks still do not have dedicated funding to mobilize AI projects beyond the pilot stage with teams finding it difficult as they have to compete with business units or functional teams for resources.

While being cautious is understandable, leaders who are overly cautious are creating barriers to progress. Until AI becomes a business priority or C-level executives start taking ownership of AI initiatives, Indonesian banks will not realize the potential value of AI.

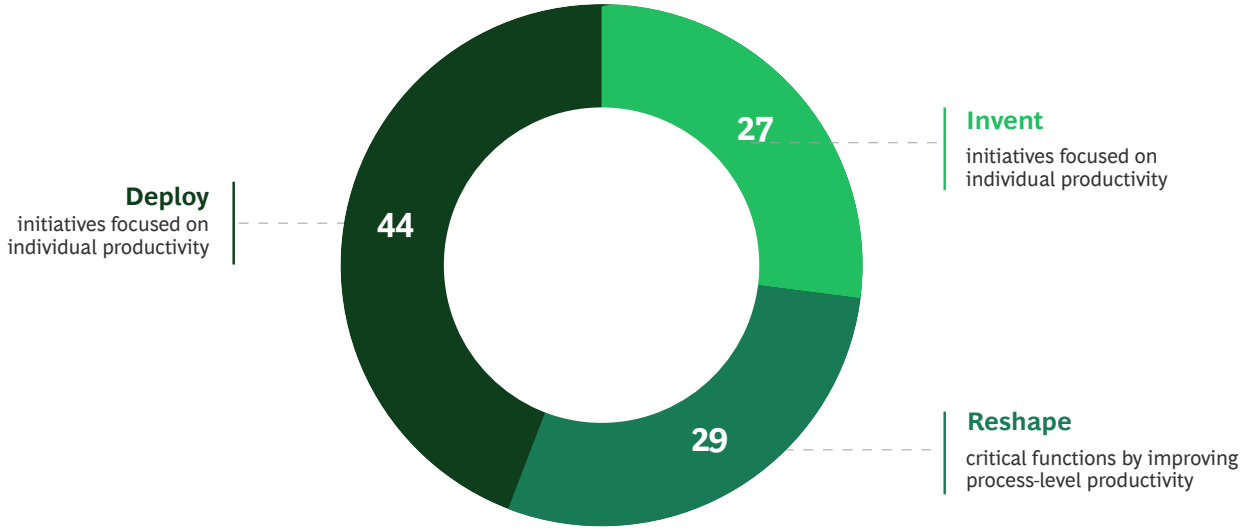
The AI imagination gap

The power that AI and GenAI have to disrupt banking has not gone unnoticed. Nearly 90% of business leaders expect the majority of AI's value to stem from step-change improvements. Despite this, 44% of AI funding continues to focus on individual productivity gains rather than company-wide efficiencies.

EXHIBIT 6

Large share of AI investments remain focused on individual productivity, not transformative initiatives

Share of AI investments (%)



Source: BCG Analysis

Many AI-driven initiatives are designed to tackle task-level issues, as opposed to reinventing key functions or creating entirely new ways of working that support company-level innovation.

This is largely driven by the fact that individual productivity gains have proven their worth across various operational areas. In fact, many banks are now shifting their AI focus to isolated applications such as:

- **Knowledge synthesis.** Banks are now automating document reviews and analysis such as the examination of commercial loan agreements.
- **Creative tasks.** GenAI tools support marketing and communications professionals in content generation.
- **Workflow automation.** Low-code or no-code automation can be applied to repetitive processes, streamlining workflows.

GenAI is growing beyond these niche applications, expanding into core financial workflows particularly in areas of customer engagement and service. Banks are now using AI to power autonomous chat agents capable of engaging customers beyond scripted dialogues. AI tools are also being used to approve loans in real time and automate document processing.

In practice, this allows banks to offer the same level of personalized service that customers would get from human-agent interactions without the need to add on to their workforce. However, Indonesian banks continue to struggle when it comes to articulating and quantifying the value of GenAI.

"We struggled to quantify improvement in customer satisfaction of the new [GenAI-enabled] customer service, [but] leaders need to see clear value before we can build or pilot projects," said a respondent from one Indonesian bank.

Without understanding the full picture of how GenAI can transform enterprise-level operations, banks might potentially be underinvesting in initiatives that could strengthen their competitive position among future-built institutions.

Weak data foundations

Developing and deploying AI models at scale requires a strong foundation with high-quality, accessible data. Most AI models rely on structured and complete datasets that can easily be consumed by systems to process inputs and outputs.

When compared to other industries, financial institutions often have richer data assets and content that are supported by organized data sourcing, publishing, and monitoring processes. Yet, while AI models continue to grow in sophistication, slow, incomplete, or fragmented data is still holding banks back.

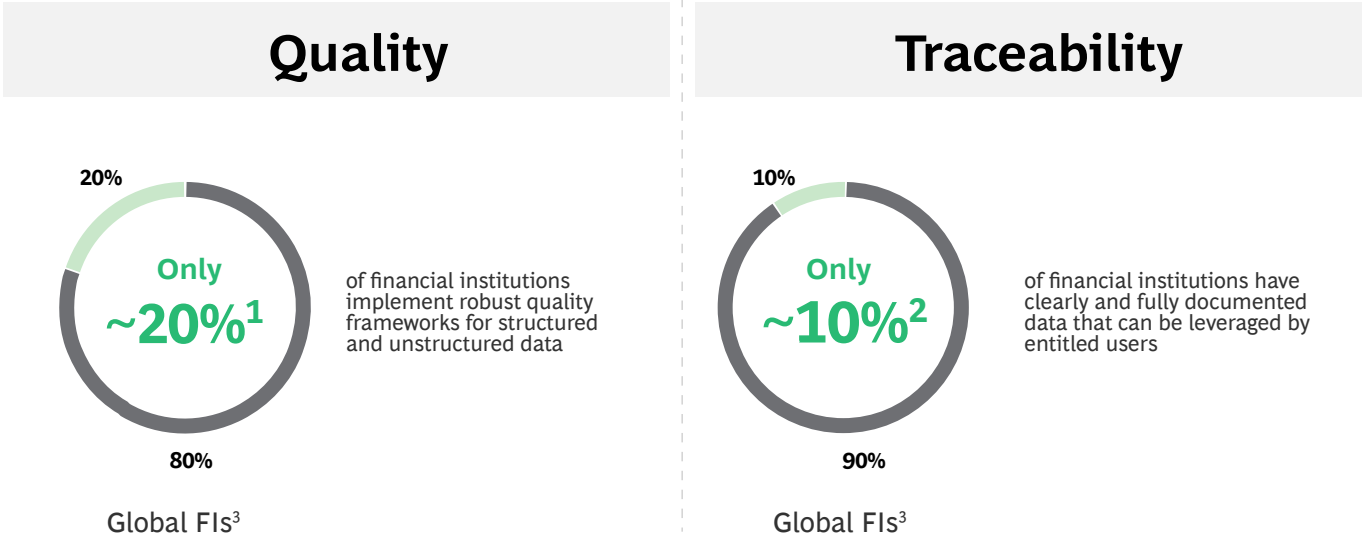
The lack of structured data, among other things, continues to limit scalability:

- **Technical debt.** Unlocking AI's full potential requires modernizing legacy IT systems and addressing technical debt. Failing to do so often results in stagnant AI initiatives that are stuck at the proof-of-concept stage.
- **Data integration.** Banks still lack seamless data integration between cloud and on-premise environments, limiting real-time visibility across workflows. This means that data flows are restricted, creating bottlenecks for adaptive and autonomous AI models.
- **Weak data governance and ownership.** Only 9% of financial institutions have centralized data policies and embedded end-to-end data governance. A large majority of banks operate with just basic governance frameworks and limited enforcement, resulting in inconsistent data management across the organization.

Data management continues to be one of the biggest challenges banks face, especially when it comes to data processing. Only 20% of banks have implemented robust quality frameworks for both structured and unstructured data, while just 10% of banks maintain fully documented datasets that can be easily accessed by authorized personnel.

EXHIBIT 7

Data quality and traceability challenges for financial institutions



Source: BGG Build for the Future 2025 Global Study (n=147 for global financial institutions, n=38 for APAC financial institutions)
[1]Financial Institutions

In the short term, having incomplete datasets and inconsistent data quality will lead to delays in AI deployments. But if this continues to go unaddressed, banks risk exposing themselves to compliance risks and weakening the foundation of their digital transformation. "*[We] struggle to implement business intelligence/analytics due to data gaps … let alone AI*," noted one Indonesian bank leader.

Fragmented technology stack

Before even considering deploying AI, banks must assess whether their current systems are up for the task. Legacy and fragmented tech stacks constrain a bank's ability to experiment and scale AI capabilities effectively. As such, most banks are forced to build AI solutions from scratch, making AI deployment slow, costly, and difficult to sustain.

This is also largely due to the fact that many banks operate in technological patchwork systems where multiple generations of software and infrastructure are integrated into one ecosystem. While this may work on an operational level, it cannot accommodate new AI components without adding further complexity and mounting technical debt.

Escalating IT costs further discourage banks from updating their tech stack, with costs expected to rise at a 9% compound annual growth rate (CAGR)—well above the projected inflation rate. APAC banks already spend 11% of revenue on IT. What's more, our analysis shows that globally, 60% of this spend likely goes towards ensuring bank operations run smoothly—leaving limited capacity for innovation or investments in AI.

Traditionally, banks have viewed IT infrastructure as a high-priced cost center that is necessary for operations but does not generate revenue. This approach has led to inefficient resource utilization and limited accountability as expenses are shared across departments without clear attribution. The lack of focus on IT infrastructure as a source of competitive advantage stifles its role in driving company-wide transformation.

Indonesian banks are also slow to adopting cloud-based infrastructure. The majority still heavily rely on on-premise infrastructure and are hesitant to switch to the cloud because of several key concerns.

- **Data sovereignty obligations.** Banks are required to maintain personally identifiable information (PII) and other sensitive data on-premise. As a result, many banks adopt a conservative risk posture that limits cloud migration.Talent limitations. Banks still lack seamless data integration between cloud and on-premise environments, limiting real-time visibility across workflows. This means that data flows are restricted, creating bottlenecks for adaptive and autonomous AI models.

- **Talent limitations.** A limited talent pool makes it difficult for banks to properly assess cloud-related risks and propose effective mitigation strategies that comply with AI and data protection regulations.

- **Regulatory assurance.** Inadequate understanding of regulatory requirements and the technology products offered make it challenging for Banks to assess and certify regulatory compliance with Indonesia's Personal Data Protection (PDP), sector related AI guidelines and laws.

- **Budget constraints.** State-owned enterprises (SOEs) often prioritize operating-expense (OPEX) efficiency over total-cost-of-ownership (TCO) optimization. This makes the business case for cloud adoption less compelling as cloud costs disproportionately impact OPEX and capital expenditure (CAPEX).

Cloud adoption is critical for financial institutions who want to deploy AI at scale. Modern cloud platforms provide banks with:

- **Specialized computing hardware for AI.** Cloud infrastructure gives banks access to hardware that can handle AI workloads with speed, scale, and elasticity to scale up or down for cost efficiency.

- **Managed services, APIs, and off-the-shelf AI solutions.** Cloud providers help banks accelerate AI adoption by offering solutions that are ready for implementation. This reduces the need for in-house development and engineering of AI solutions.

- **Continuous access to the AI and GenAI models.** Cloud-based systems offer frequent updates and upgrades that would be costly and time-intensive to replicate on on-premise infrastructure.

- **Advanced security and compliance frameworks.** AI solutions that run on the cloud are backed by strong security solutions built on large-scale global investments and expertise. These security solutions provide proactive threat monitoring and ensure alignment with international and local regulations.

- **Banking-specific expertise and solutions.** Cloud providers consolidate global best practices and de-risk AI implementation by offering banks industry-specific solutions for anti-money laundering (AML), know-your-customer (KYC), and reference architectures.

Scarce AI-ready talent

AI is in demand, and so too is the talent that underpins these new technologies. Specialized skills such as data science, data engineering, software engineering, solution architecture, and business analytics, are needed to build AI models and solutions that are capable of delivering impact.

Globally, two-thirds of financial institutions reported difficulties in hiring qualified AI professionals. Competition for AI talent remains fierce with job openings for AI-related roles at an all-time high, despite softening in the global labor market. Indonesian banks face similar challenges as they struggle to find experienced AI practitioners, particularly those who are familiar with regulated financial environments. One respondent from an Indonesian bank highlighted “There are [few] data scientists here [in Indonesia], or at least there are no talents ready for banks to consume.”

In an environment with scarce AI-ready talent, banks should pivot to building an AI-ready workforce. Decision-makers, oversight teams, and everyday users must have the skills to assess, challenge, and apply AI outputs responsibly, especially as banks pursue more complex and transformative use cases.

However, many frontline and control teams still struggle to interpret AI-driven recommendations, let alone justify them to regulators. This undermines confidence in AI decision-making and gives bank even more reason to scale back on adoption. Therefore, banks should look to developing an AI-ready workforce with people and processes that are prepared for AI-driven changes in banking.

Rethinking the path to get ahead with (Gen)AI

Future-built banks that have seen success in their AI implementation take on distinctly different approaches to the new wave of innovation. Our research shows that banks winning in the AI era are not just investing in technology, but are also changing how they organize, lead, and execute their AI agenda.

Lead from the top, backed by AI-ready governance

Our findings indicate that leadership sponsorship is one of the most significant differentiators between future-built banks and laggards. Banks who have yet to turn a profit from their AI initiatives see only 11% of C-suite engagement, whereas C-suites are deeply engaged in AI programs across nearly 100% of future-built banks.

Banks that bring AI programs to the board and CEO level and demonstrate their value are 3.5 times more likely to succeed, as opposed to those with an initiative-level approach to AI. Having senior-level leadership supports future-built banks in their efforts to resolve systematic challenges and provide organization-wide clarity on what is working and where to focus. With visible AI advocacy, financial institutions can drive adoption and deliver meaningful impact across departments.

Effective AI leadership and governance frameworks typically share similar characteristics. For starters, most of these frameworks have a centralized prioritization of AI efforts. Instead of spreading resources thinly across different initiatives, future-built banks focus on a selected number of high-impact opportunities as a starting point. This helps maintain focus on delivering strategic returns before diving deeper into other AI solutions.

Secondly, leading institutions establish cross-functional ownership and collaboration by joining business and technology teams. With joint ownership of AI initiatives, teams have shared accountability, dedicated budgets, and clearly defined outcomes from use cases. Future-built companies are 1.5 times more likely to have business-tech shared ownership of AI initiatives.

Lastly, future-built banks practice outcome-focused tracking and reporting. These banks consistently measure ROI rather than counting pilots, and are four times more likely to track and report results from AI initiatives. Keeping goals measurable is key to ensuring AI programs stay on track and deliver on their ambitions.

For Indonesian banks, achieving similar outcomes requires a mindset shift. Most business leaders today scrutinize proposed AI initiatives through the lens of technical performance, potential value, cost, and feasibility long before the technology has had an opportunity to demonstrate its impact. Leaders must move away from this traditional way of evaluating a new initiative if they want to succeed in the age of AI.

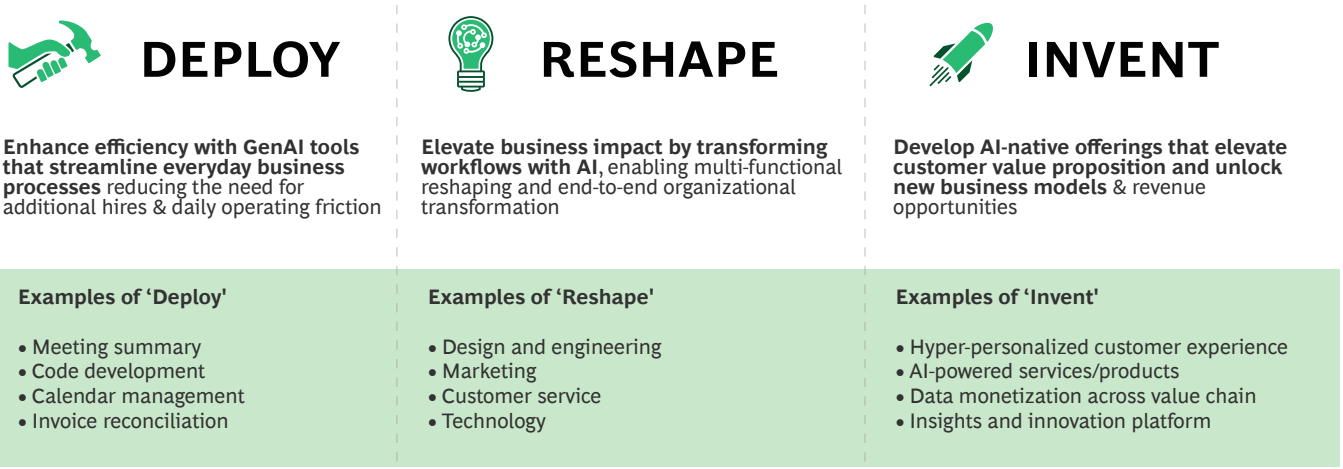
To accelerate value creation, business leaders must step out of their examiner roles and step into the role of co-creator. This means working alongside digital and tech teams to explore new use cases, prioritize opportunities based on potential business impact, and jointly execute pilots to drive adoption. By working hand-in-hand with tech teams, business leaders can champion AI and effortlessly scale solutions across institutions.

Transform agendas to deploy, reshape, and invent AI

When it comes to developing new AI initiatives, future-built banks think beyond just automation and individual productivity gains. These banks focus on how they can reshape existing workflows and end-to-end processes with AI-first workflows and business models. This approach is anchored in three complementary plays to implement AI.

EXHIBIT 8

3 complementary strategic plays to maximize the value potential of AI



- **Deploy.** Banks can drive company-wide productivity gains with off-the-shelf GenAI tools that are readily available to streamline everyday operations, while reducing the need for additional hires and minimizing operational friction.
- **Reshape.** Workflows should be redesigned with AI as the anchor. By doing so, banks can bolster their impact and create multi-functional departments.
- **Invent.** Banks can develop new products, business models, and services built on AI capabilities from the ground up to deliver more personalized and innovative solutions.

Leading financial institutions are focusing on 'reshape' and 'invent' AI strategies with 68% and 23% of AI leaders prioritizing these plays for AI adoption, as opposed to just 9% who are primarily focused on 'deploy'.

Moving from an incremental to a transformative AI agenda will require a clear articulation of AI's business value. Indonesian banks who want to achieve this should draw inspiration from global AI use cases—as outlined in chapter two—and build on that with local pilots or small-scale experiments to prove value.

Set transformative agenda to reshape and invent, with ruthless prioritization

For many banks, fragmented data environments and unclear accountability are the biggest barriers to AI deployment. Only 10% of banks have fully documented data. If financial institutions want to truly move the needle to become future-built organizations, they must strive to produce high-quality, accessible, and ready-to-consume data. Building this data foundation means addressing data gaps with stronger governance, modern infrastructure, and a parallel approach to data and AI development.

Banks must clearly define ownership and accountability of data assets and track performance through robust KPIs when establishing effective data governance. For example, customer-related data ownership should lie with customer-facing business unit leaders. Targeted initiatives to improve data quality should follow suit, ensuring that ownership and accountability are in place before corrective measures are taken.

To build AI-ready systems, banks must consolidate and standardize data across systems, supported by mechanisms for efficient discovery, access, scalable reuse, and version control. Reinforcing these data foundations requires addressing technical debt from legacy systems and IT shortcuts, an intensive but necessary effort to scale AI sustainably.

As such, Indonesian banks cannot afford to hit pause on their AI programs while fixing data issues—both must progress in parallel. By developing AI solutions and data foundations simultaneously, financial institutions can create a self-reinforcing cycle of value.

In action, banks will benefit from immediate business impact from AI solutions which strengthen justifications for ongoing financial investments. Improved data foundations, in turn, provide the reliability, scalability, and governance needed to deploy those AI solutions on an enterprise-level.

This parallel and incremental approach to addressing data gaps hinges on effective prioritization with a focus on high-value data that aligns with a bank's broader AI and digital roadmap. By working on solidifying data foundations and developing AI solutions at the same time, banks can build both the technical and organizational readiness needed to become future-built.

Build AI-ready data foundations and governance incrementally, along with AI solution development

A flexible, modular, and interoperable tech stack is what sets future-built banks apart from laggards. Without it, banks are looking at a mountain of technical debt just to develop and deploy AI at scale. This is especially true with the adoption of GenAI and agentic AI in banking, where seamless integration makes or breaks successful implementation.

Both GenAI and agentic AI demand effective orchestration which connects AI models to relevant data assets and links them to prompt repositories. In Indonesia, this is further compounded by the specialized nature of banking functions and Bahasa-language inputs and outputs.

These needs call for more sophisticated solutions, such as retrieval-augmented generation (RAG) and domain-specific small language models (SLMs), that can process localised data and understand cultural nuances. In this environment, having a flexible and modular tech stack becomes essential to build and scale AI capabilities.

In addition to this, future-built banks operate within a hybrid infrastructure that blends cloud and on-premise environments. In Indonesia, certain sensitive data and processes have to remain on-premise for regulatory and compliance reasons. But, this does not mean that banks cannot leverage cloud infrastructure to accelerate AI value creation.

In our interviews with Indonesian banks, they highlighted how cloud managed services and API access and controls significantly reduce build complexity and efforts. This means that teams can focus on solution design rather than infrastructure management.

Additionally, banks can access specialized AI hardware through the cloud with scale and speed, eliminating delays typically associated with on-premise procurement and installation. With cloud-based infrastructure, banks can scale capacity based on demand, optimizing performance and cost.

The imperative for cloud-enabled, platform-based tech architecture is clear, but regulatory uncertainty remains a key consideration—both globally and in Indonesia. In our research, we found that 61% of financial institutions have regulation as a top concern in deploying AI.

There is certain ambiguity around specific compliance requirements for data storage, processing, and cross-border flows pending the implementation of Law No. 27 of 2022 on PDP in Indonesia. Nevertheless, Indonesian banks can already begin building AI solutions on compliant cloud stacks—as chapter five of this report will illustrate.

As with data, achieving AI value at scale requires developing AI solutions and modernizing the tech stack in parallel, rather than sequentially. This should be a top priority for banks, along with ensuring that AI initiatives align with the bank's broader AI goals.

Accelerate shift to a cloud-enabled hybrid tech stack, enabled by proactive triparty engagement

To get AI programs off the ground, banks need to secure the right mix of technical, analytical, and change management talent. However, AI-ready talent remains scarce across the world and in Indonesia where competition for experienced professionals is intensifying. As one banking leader shared "Data scientists [and] people with knowledge of the business and change management capabilities are very hard to find in Indonesia."

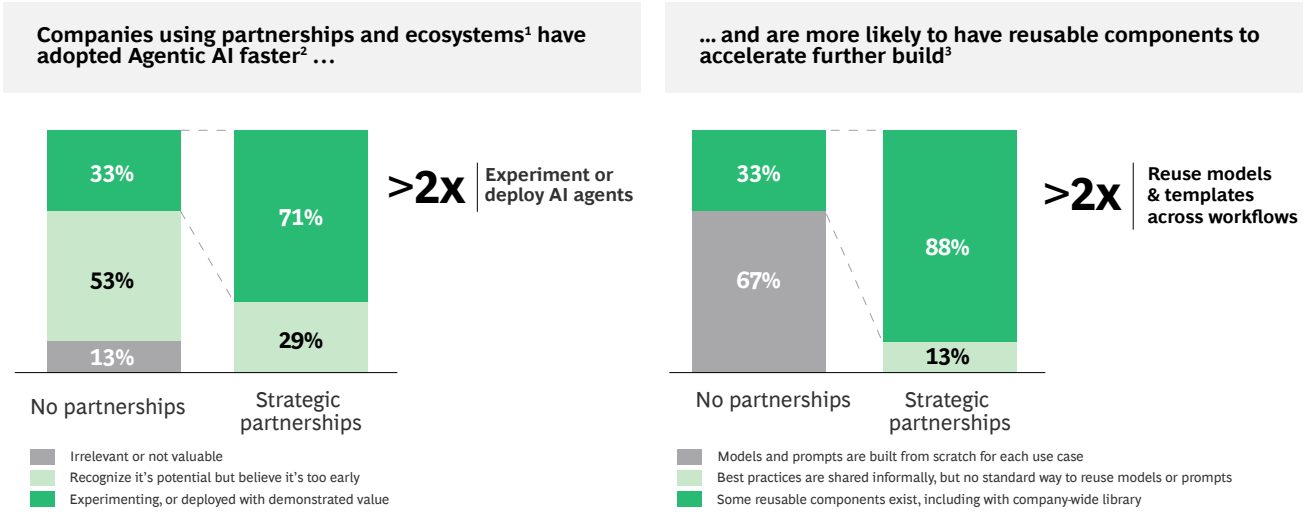
Given this talent gap, banks must change how they approach talent sourcing and explore methods beyond traditional hiring. A balanced 'buy', 'borrow', and 'build' strategy—which combines recruitment, partnerships, and upskilling—offers banks alternative ways of securing the AI talent they need.

In the short term, borrowing capabilities through partnerships can help Indonesian banks advance their AI agendas. One banking leader we interviewed echoed that "The best approach would be to involve some partner or consultant who has experience with AI."

Banks can draw on a mature ecosystem of infrastructure, platform, application, and service providers. In particular, strategic partnerships with platform providers that bring cloud and AI ready stacks accelerate implementation. We found that financial institutions with structured or strategic partnerships are twice as likely to have experimented with AI agents, demonstrated value, and built libraries of reusable AI components to accelerate future development.

EXHIBIT 9

Companies that partner strategically have adopted Agentic AI faster, and are building more scalably



Source: BCG Build for the Future 2025 Global Study
[1]Does your company use partnerships and ecosystems to deliver AI, and are they selected strategically? (n=147 Financial Institutions)
[2]How would you best characterize your company's current stance on Agentic AI?
[3]How structured is your approach to building and reusing AI models and prompts?

In the medium term, banks should focus on building internal capabilities. Upskilling programs across technology, data, and AI will help banks create a workforce that is capable of designing and scaling AI solutions. Many Indonesian banks are already doing this by recruiting graduates or junior professionals and investing in their growth through 'learning by doing' and 'learning by observing'.

Through a combination of borrowing and building AI capabilities, banks can kickstart a talent-impact flywheel. Early AI wins, that are delivered through borrowed and built capabilities, help banks demonstrate tangible business value. This, in turn, will position financial institutions as a top contender for AI talents.

However, AI talents can only deliver in the right environments. To maximize contributions, banks must ensure that AI teams are provided with strong executive sponsorship, modern tools, and high-quality data. One bank we spoke with described how a high-caliber AI engineer—recruited to drive the bank's AI program—spent most of his time fixing data quality issues instead of applying his expertise. As a result, the bank was unable to fully leverage his skills and deliver on the program's full potential.

Over the long term, banks must move beyond ad-hoc responses to talent shortages. Building systems that can continuously attract, develop, and retain AI capabilities will be key as AI reshapes the nature of work banks do and the skills needed to thrive.

Global AI leaders in banking have already shown what success looks like with AI at the wheel. These future-built banks will continue to pull ahead through board- and CEO-driven AI programs, transformative AI agendas, and AI-ready data, tech, and talent.

Indonesian banks may begin from different starting points and face unique challenges, but that does not mean that they cannot leverage the same playbook to get ahead. To rise as an AI leader in banking, Indonesian banks should use these proven strategies to guide their journeys from experimentation to implementation.

- **Think big.** BAI transformations must be led from the top down. Banks that aim to reshape key functions or create AI-first business processes are the ones realizing sustained competitive advantages. With top-level sponsorship, anchored in a strong understanding of AI's full potential, these banks are mobilizing capital and talent to deliver true impact.

- **Start small.** Leading banks have their priorities in order. By focusing on a few 'big rocks'—AI initiatives core to the business strategy—these banks are reinforcing tech, data, and talent foundations incrementally. Deferring AI implementation until tech, data, and talent foundations are complete means never starting at all. Future-built banks are starting with lighthouse use cases to prove value and create momentum, helping secure leadership confidence and organizational buy-in.

- **Scale safe.** As banks move from pilots to enterprise-level deployments, they are partnering with technology leaders and ecosystem players to leverage proven solutions, accelerate implementation, and manage risks. By combining internal capabilities with external collaboration, these banks are expanding their AI footprint responsibly and with speed.

With decisive action and a proven playbook, Indonesian banks can leverage global best practice to carve out their own areas of leadership in the next era of AI in banking.

GenAI & Agentic AI Technology for Banking

Seizing the GenAI and Agentic AI opportunities requires a technology stack that supports both cutting-edge AI capabilities and rigorous compliance and security standards.

Three key technological pillars for such a tech stack are: the foundational infrastructure, the unified Model Lifecycle (MLOps) platform, and the architecture for building complex, autonomous Agentic AI systems. Deploying these AI-ready technical components requires robust security controls and interoperability/core integration.

The Bank-Ready AI Reference Architecture

The foundation for any regulated AI workload is a robust, secure Cloud Infrastructure/Platform that addresses key concerns such as data sovereignty, operational resilience, and compliance. The architecture is defined by security controls and zero-trust principles across five key layers:

Layer	General AI Technology concept	FSI Imperative and Compliance Focus
Data Plane	Scalable Data Warehouse, Data Lake Governance, and Data Loss Prevention (DLP)	Data Governance & PII Protection: Provides a centralized, high-scale data foundation. Utilizes data governance tools to manage metadata, lineage, and discovery. DLP tools are critical for identifying, classifying, and masking sensitive PII before models consume it, ensuring compliance by design.
Integration	Message Queueing/Event Stream Processing and Managed ETL/Data Transformation Service	Real-Time Responsiveness: Enables high-throughput, asynchronous communication for Event-Driven Architectures (EDA), vital for real-time risk scoring (e.g., fraud) and instant customer service. Data transformation services prepare complex financial data for model consumption.
Serving	Container Orchestration Platform and Serverless Compute/Microservices Platform	Scalable, Secure Inference: The primary choice for mission-critical MLOps deployments, offering containerized security, auto-scaling, and fine-grained controls for high-volume inference. Serverless alternatives support transactional model endpoints.
Security	Identity and Access Management (IAM), Private Networking/Service Perimeter, and Security Posture Management	Perimeter Control & Data Exfiltration Prevention: Mandatory controls establish a secure, private perimeter around sensitive services (data, models, storage). Ensures the FSI maintains cryptographic key sovereignty over its data, while security tools provide continuous risk and compliance monitoring.
Ops (Monitoring)	Centralized Logging and Monitoring Systems	Auditability & Observability: Provides comprehensive logging and alerting for model performance, infrastructure health, and security events. This data is non-repudiable and forms the core of the regulatory audit trail.

Unified MLOps Platform for Governance

The deployment of AI is governed by a Unified MLOps Platform (Machine Learning Operations Platform) that integrates AI/data engineering, data science, and security controls to support the rigorous Model Risk Management (MRM) framework required by FSIs.

- **Model Discovery and Choice:** Institutions gain access to a wide repository of models, including proprietary Large Language Models (LLMs) and open-source models. This "choice of models" allows selection based on performance, cost, and latency for specific financial tasks.
- **Retrieval-Augmented Generation (RAG) and Grounding:** This is a critical governance tool that uses a Vector Database/Search Engine to securely connect Foundation Models to an FSI's internal, proprietary data (e.g., policy manuals, legal clauses). This process, known as grounding, compels the model to base responses on verified internal data, minimizing hallucinations and ensuring factual, verifiable, and compliant outputs.
- **Tuning and Pipelines:** The platform supports private model customization (e.g., supervised fine-tuning) using sensitive institutional data, managed through Workflow Orchestration/ML Pipelines. These pipelines automate the model development workflow, generating detailed lineage records essential for the Risk Management function.

- **Guardrails, Evaluation, and Monitoring:** These serve as direct governance hooks:
  - **Guardrails:** Enforced via policy APIs to proactively filter model inputs and outputs, blocking sensitive or high-risk content.
  - **Evaluation:** Tools to systematically assess model quality, bias, and, critically, Explainability (Explainable AI), which helps analysts understand feature contributions in high-stakes models like credit scoring.
  - **Monitoring:** Continuous monitoring tracks model drift and data drift in production, alerting risk teams to shifting economic patterns that could degrade performance in prediction models

Agentic AI Systems Architecture

Agentic AI systems use LLMs to reason, plan, and autonomously execute complex, multi-step tasks across external systems, such as processing an entire insurance claim or managing an anti-money laundering (AML) investigation with minimal human intervention. Such capabilities are enabled by the following key patterns:

Key Agentic AI Patterns

1. **Tool-Use (Function Calling):** The fundamental pattern where the autonomous agent can dynamically determine the need for external information or action. It securely and reliably invokes external FSI systems (e.g., CRM APIs, core banking systems) to query data or initiate transactions (e.g., query policy details, initiate payment).
2. **Multi-Step Workflows (Planner/Executor):** For complex tasks, a main agent (Planner Agent) breaks the request into sub-tasks, which are then executed sequentially or in parallel by specialized agents (Executor Agents). This allows for complex workflows like AML triage, where separate agents research transaction history, analyze graph relationships, and write a summary report.
3. **Iterative Refinement (Reflection):** This self-correction pattern involves an agent's output being reviewed by a Quality Evaluator Agent**.** If the output fails a defined threshold (e.g., lack of factual grounding), the agent iterates and re-executes the plan, ensuring higher-quality, auditable final results.
4. **Human-in-the-Loop (HILT):** Crucial for high-stakes regulatory decisions, the agentic flow includes explicit pause points for human review, especially before irreversible actions (e.g., approving a loan). This maintains accountability while the agent generates the initial analysis and evidence packet.

Agentic FSI Architecture Layers

Enabling Agentic AI patterns requires enhancements to banks' existing tech stacks. The architecture uses a modular, layered design:

- **Presentation Layer:** Hosts the front-end (e.g., chatbot, internal dashboard) that accepts prompts.
- **Orchestration Layer:** Contains the Coordinator Agent that performs intent recognition, plans the workflow, manages state, and invokes sub-agents.
- **Agent Layer:** Houses the specialized Executor Agents (e.g., researcher, summarizer, policy checker) that connect to the Tool and Data Layers.
- **Tool/Data Layer:** The external systems the agent interacts with, including data warehouses, core banking APIs, and Vector Search (RAG).
- **Governance Layer:** Overlays the entire stack, enforcing security (service perimeter), policy (Guardrails), and auditability (logging).

Bank-Ready Controls and Interoperability

Security Controls

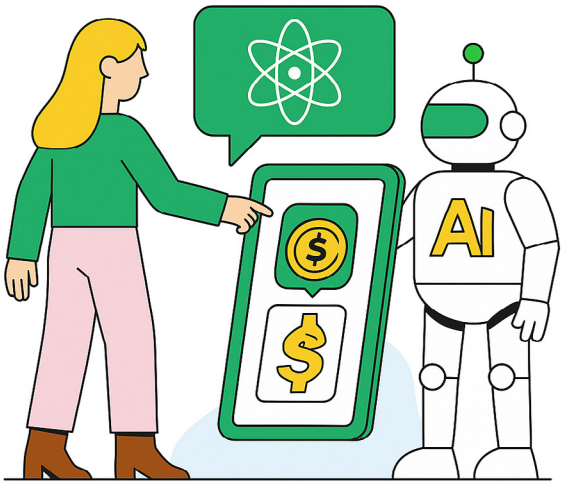
AI deployment requires advanced security features that protect the model itself and the data it processes:

- **Confidential Computing:** This advanced protection goes beyond standard encryption at rest and in transit. It involves using Trusted Execution Environments (TEEs) to encrypt data and code in use, ensuring the processed data is inaccessible even to privileged cloud administrators.
- **Private Networking and Private Endpoints:** Ensures that traffic between on-premises data centers and cloud services, or between different cloud services, never traverses the public internet, drastically reducing the attack surface.
- **Identity-Aware Access (IAM):** Governs all access to models, data, and tools using a strict least privilege principle.
- **Audit Trails (Immutable Logging):** All actions, including every model inference request, tool call, and administrative access, are recorded in immutable logs to fulfill regulatory requirements for comprehensive, non-repudiable audit trails.

Interoperability and Core Integration

AI must seamlessly interact with the FSI's existing IT landscape, especially legacy core banking systems:

- **Hybrid/Multi-Cloud Management:** Allows for the consistent deployment and management of AI workloads across various cloud environments and on-premises systems, enabling models to run close to sensitive data when necessary.
- **Event-Driven Architectures (EDA) for Core Integration:** The most common integration point is through EDA, where the core system publishes events (e.g., "Customer updated") via a managed queue. The AI agent subscribes to these events and triggers automated analysis or action, successfully decoupling the modern AI layer from high-volume core systems.
- **Data Integration (Connectors):** Tools that enable robust and scalable integration with external services and proprietary data stores (e.g., mainframe databases) to provide the high-quality, real-time data required for Gen AI.



Call to action: The Scaling AI Playbook

Define a central and holistic AI strategy. To deliver on AI ambitions, banks must pivot from ad-hoc or disconnected initiatives to a central strategy with steering and coordination from the CXO- or board-level. The key actions to get started are:

- **Lead from the top.** AI strategy must be championed at the CXO or board level, with sponsorship from both tech and business leaders—not just the CIO/CDO. This requires building a strong, shared foundation of understanding of what AI can do and what it takes to deliver across key stakeholders.

- **Centralise efforts under a single AI strategy and roadmap.** Banks must extricate themselves from "pilot purgatory" by defining and aligning to a single strategy and roadmap, under central leadership. Without central coordination, banks are likely to remain with siloed initiatives, duplicate effort, and fail to solve systemic challenges (e.g., on data, tech, and talent).

- **Define clear goals and KPIs.** Banks must robustly track AI outcomes, focusing on what matters to business—revenue uplift, cost savings, ROI, and time-to-impact—not number of pilots. Key stakeholders in both business and tech must be accountable for delivering on these goals/KPIs.

Mobilize teams and capital to deliver. Achieving value with AI requires diverse capabilities and deliberate experimentation. The key actions are:

- **Empower business-tech collaboration.** Cross-functional collaboration is critical to harness AI for business value. Effective collaboration requires joint accountability—both business and tech in the driver's seat. For Indonesian banks, this requires a mindset shift: business is a co-creator with tech, rather than an evaluator of ideas that come from tech.

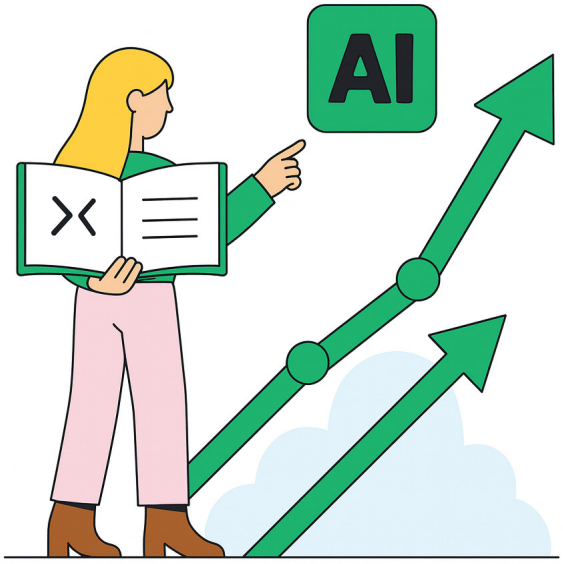
- **Dedicate capital for AI experimentation and implementation.** Without dedicated budgets, AI initiatives struggle to get off the ground, as tech and business teams wrangle for funding. Experimental budgets are critical for teams to articulate and prove value before deeper investments, but these budgets must be effectively governed to keep focus on the most promising bets.

Prioritize depth and speed over breadth. Mobilized resources should be focused on transformative "big rocks" with greatest potential to deliver financial or operational impact, accelerating time-to-value. The key actions are:

- **Systematically evaluate where AI can drive ROI.** Banks must rigorously assess the potential value of AI use cases/initiatives with detailed quantification and clear assumptions. AI use cases/initiatives should be prioritized based on potential value, cost and feasibility. Companies that focus effort on a small number of high-potential use cases are most likely to see success.

- **Identify business domains for end-to-end transformation.** The most value will come from transformative initiatives to reshape processes with AI end-to-end, or inventing new AI-first processes, rather than deploying tools to boost individual productivity. Especially as GenAI and Agentic AI capabilities mature, expanding into core financial workflows.

- **Build tech and data foundations in sync with AI.** Banks cannot afford to wait for tech and data foundations to be "perfect" before seizing the AI opportunity. Banks should identify high-value data which are critical for priority AI use cases, and key tech gaps, and reinforce those in parallel with AI initiatives. Returns from AI initiatives help to justify tech and data investments, while tech and data investments ensure a solid foundation for AI. Leveraging cloud solutions is critical to doing this fast.



Systematically partner to "borrow" capabilities. While AI talent remains scarce, the ecosystem continues to mature rapidly. Achieving value fast and sustainably requires a well-calibrated approach:

- **Partner across a rapidly maturing ecosystem.** Partnerships are often the best and sometimes the only way to secure required talent and access latest technology. The rapidly maturing ecosystem includes model providers, hyperscalers, platform companies, and solution providers with many industry and function-specific offerings. Banks must approach such partnerships systematically, evaluating not only performance, but also security, compliance, and continuity risks.

- **Progressively build in-house expertise.** Banks must strike a balance between "borrowing" capabilities to accelerate impact with AI and building critical capabilities in-house to ensure the AI journey is sustainable. This will mean investing in upskilling where talent is not readily available, and enabling teams to "learn by doing" and "learn by observing" alongside partners.

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