

Agentic AI: From
enterprise autonomy
to bank-in-a-box reality

Across the region, the expectation and adoption of artificial intelligence (AI)—particularly Generative AI (GenAI)—within banking departments and functions have become prominent topics. While analytics and decision science have long been integral to financial services for decades, the technological advancements and success of GenAI in 2022 created significant buzz across the banking sector. By 2023 and 2024, GenAI had become a focal point for CXOs and bank boards, with widespread interest in exploring, adopting, and realizing its potential benefits.

This growing momentum builds on a broader technological evolution that has unfolded over the past decade. Technologies such as robotic process automation (RPA), AI, predictive analytics, orchestration, hyperautomation, and GenAI—combined with enhanced computational capabilities and emerging technologies—have paved the way for the rise of the autonomous enterprise, or “bank-in-a-box,” powered by Agentic AI technology.

What is Agentic AI?

An AI agent is a system that uses large language models (LLMs) to navigate problems by reasoning, leveraging external tools, and drawing on past interactions to refine its approach, ultimately arriving at well-considered solutions. In a business context, AI agents resemble human workers. They must be carefully selected, thoroughly trained, and equipped with the right tools to perform effectively. Strategic deployment and consistent management are crucial to ensure they deliver efficiency and additional value. Integrating AI agents with human-like cognitive skills helps businesses improve productivity, streamline operations, and achieve greater success.

AI agents are intelligent systems that show reasoning, planning, and memory.

– Sundar Pichai

AI agent workflows will drive massive AI progress this year—perhaps even more than the next generation of foundation models. It is an exciting trend that everyone building AI should pay attention to.

– Andrew Ng, Leading AI Expert

Why are agents changing the game?

AI agents autonomously execute predefined, multi-step tasks, integrating multiple tools and continuously learning from user inputs. With agents, GenAI is more powerful, versatile, multimodal, and human-like than before.

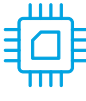
Compared to traditional AI and LLMs, agents are significantly more:



- **Intelligent:** Capable of enhanced reasoning and planning



- **Self-learning:** Able to learn from previous interactions for customized user experiences



- **Memory-enabled:** Retain and apply knowledge in future interactions and work



- **Accurate:** Better at understanding broader context and nuanced language



- **Productive:** Execute tasks more efficiently with semi-autonomous workflows



- **Adaptable:** Dynamically adjust to new information and knowledge sources



- **Capable:** Automate more complex and diverse applications

Why now? Agentic AI is evolving rapidly to revolutionize productivity

With over 1.25 billion knowledge workers globally, the stagnation of total factor productivity—growing just 0.8% from 1987 to 2023 and only 0.5% from 2019 to 2023 in many advanced economies—highlights the urgent need for innovation. Total factor productivity measures the efficiency with which labor and capital are used together in the production process. Despite advancements in technology, traditional automation has had limited impact on improving the efficiency of knowledge work, which involves tasks that require cognitive skills and decision-making.¹

Agentic AI offers a transformative solution by redefining tasks and driving productivity gains across industries. Unlike traditional automation, which often focuses on repetitive and rule-based tasks, Agentic AI leverages advanced reasoning, planning, and self-learning capabilities to handle more complex and dynamic workflows. This enables businesses worldwide to enhance productivity, streamline operations, and achieve greater efficiency in knowledge work.

Agentic AI will begin as a companion to every role in the organization—guiding, assisting, and learning. But as trust grows in its capabilities and decisions, it will quietly evolve from support to substitution, reshaping organizations into leaner, smarter systems.

Understanding and managing emerging AI risk

As AI technology continues to evolve and integrate into various business functions, it is crucial to address the associated risks to ensure responsible and effective implementation.



- **Trustworthy AI (AI risk, governance, and controls):** An effective AI risk management framework focuses on the ethical, reliable, accountable, and secure aspects of AI. It provides organizations with comprehensive guidelines to navigate AI risks effectively.



- **AI model lifecycle governance:** Robust governance of the AI model lifecycle is critical to ensure that AI systems are developed, deployed, and maintained responsibly. This includes comprehensive oversight from inception through to retirement, ensuring ethical and reliable performance throughout.



- **Regulatory considerations:** Navigating regulatory requirements is essential for AI implementation. Streamlined processes for planning, governance, execution, and quality assurance of regulatory change management help ensure compliance and reduce administrative burden.



- **Data privacy and cybersecurity:** Ensuring data privacy and robust cybersecurity measures are integral to trustworthy AI. Protecting sensitive information and safeguarding against cyber threats are critical components of a comprehensive AI risk management strategy.

Bringing it all together

The integration of Agentic AI into business operations marks a significant shift in how organizations can leverage AI to enhance productivity and efficiency.



- **Transforming core operations:** GenAI is moving beyond content creation to orchestrating entire business processes with specialized agents.



- **Beyond generation:** Modern AI agents possess the ability to plan, execute, and reflect, driving deeper automation and providing valuable insights.



- **Multiagent complexity:** Implementing multiagent systems, where tasks and communication are distributed among agents, introduces significant potential and complexity.

How to go about achieving this

To effectively implement Agentic AI, banks should invest in and develop the necessary expertise and solutions to support this journey. The initial step is to develop a Target Operating Model for Agentic AI. This foundational framework ensures that the organization is structurally, technologically, and culturally prepared for implementation. It provides a clear roadmap by considering five key pillars: strategy, governance, technology, talent-organization-culture, and delivery.

Establishing an Agentic AI Centre of Excellence (CoE) is crucial for achieving AI transformation objectives swiftly. This integrated collaboration model emphasizes rigorous governance, stakeholder alignment, and comprehensive oversight. Close collaboration across teams ensures the provision of all necessary resources for management, project control, AI capabilities, and emerging technologies. This approach enables measurable impact and cultivates a truly AI and data-driven culture within the organization.

In conclusion, by strategically investing in these areas, banks can position themselves to harness the full potential of Agentic AI, driving innovation and efficiency across their operations.

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Endnotes

1. U.S. Bureau of Labor Statistics, Total Factor Productivity Data - 2023 released on 21 March 2024.