

# Twimbit AI Radar

**Roundup of Innovative Enterprise  
Deployments and Announcements In AI**

**#9** Banking Edition

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## Summary

This article is part of the monthly AI Radar series, providing a recap of innovative AI deployments and related company announcements in telecommunications, financial services, and customer experience fields of practice. It also offers insights into companies deploying AI, aimed at assisting business executives and technology leaders develop their own AI projects and long-term strategies.

Company(s)	Deployment/Initiative
 中国农业银行 AGRICULTURAL BANK OF CHINA	In partnership with SenseTime, Agricultural Bank of China has introduced AI-powered receptionists using facial and voice recognition to enhance customer interactions and streamline branch services.
 <b>kotak</b> Kotak Mahindra Bank	Kotak Mahindra Bank's Keya 2.0 chatbot, powered by AI, automates queries, offers multilingual support, and delivers predictive insights, transforming customer service efficiency.
 NH농협은행	Nonghyup Bank utilizes AI for personalized recommendations and fraud prevention, leveraging big data and machine learning for secure and tailored banking experiences.
 <b>Shinhan Bank</b>  <b>DEEPBRAIN AI</b>	Shinhan Bank, in partnership with DeepBrain AI, has deployed virtual tellers and sentiment analysis systems to enhance service efficiency and detect fraud in real-time.
 केनरा बैंक Canara Bank  HDFC Bank	Canara HSBC Life Insurance's OmniGen AI, powered by AWS Bedrock, uses generative AI to revolutionize underwriting with precise decision-making and predictive analytics.

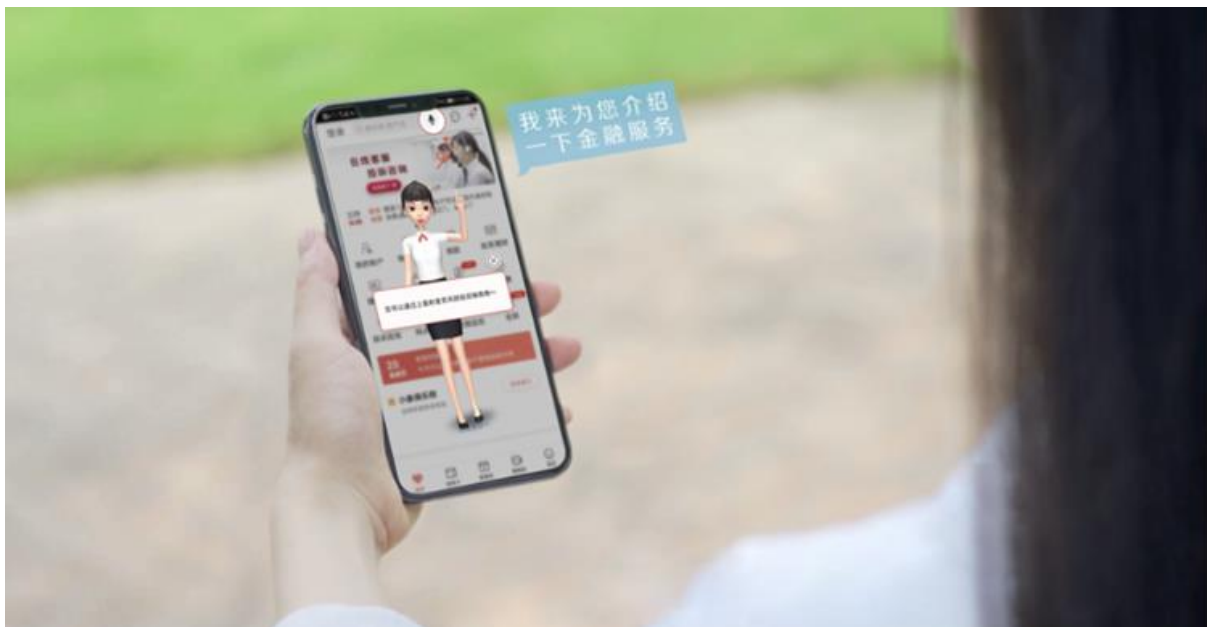
## Introduction

The integration of Generative AI (GenAI) into the banking and financial services sector is ushering in a transformative era, offering unprecedented opportunities to enhance operational efficiency, elevate customer experiences, and drive innovation. GenAI has the potential to add between \$200 billion and \$340 billion in value annually to the global banking industry, representing 9% to 15% of operating profits.

Financial institutions are increasingly adopting AI technologies to automate routine tasks, improve decision-making processes, and deliver personalized services. A recent survey indicates that nearly 70% of financial services leaders view GenAI tools as beneficial for their organizations, highlighting a growing recognition of their strategic value.

This report explores the current landscape of AI applications in banking and financial services, examining their impact on various facets of the industry, including customer engagement, risk management, and operational efficiency. We aim to provide a comprehensive understanding of how GenAI is reshaping the financial sector and the strategic considerations for its effective implementation.

## Agricultural Bank of China: AI Greet You at the Door



The Agricultural Bank of China (ABC) has introduced AI-based digital receptionists in its branches to enhance customer service and operational efficiency. Developed in partnership with SenseTime, this technology mimics human receptionists,



offering personalized and automated services. Installed at ABC's Zhongshan branch in Hangzhou, the system includes a video screen, camera, microphone, and speakers, enabling real-time customer interactions. The AI receptionists autonomously engage with customers, reducing the workload of duty managers and improving the overall in-branch experience. The system is also integrated with ABC's mobile app, allowing customers to access AI-driven services remotely.

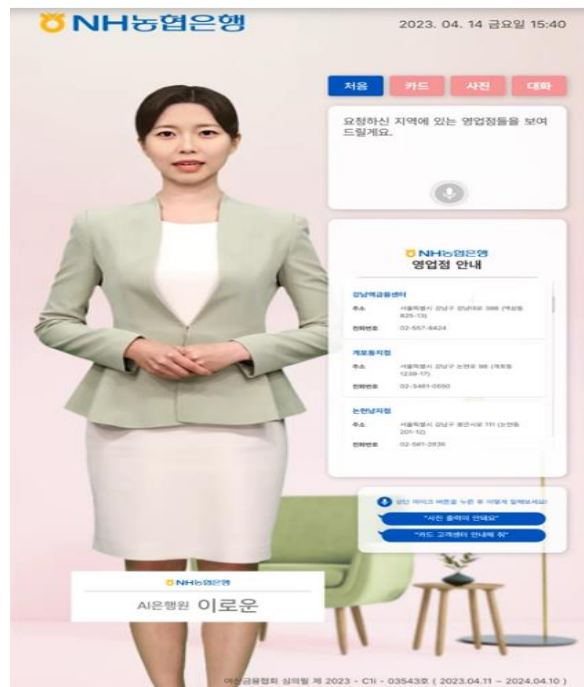
Since its deployment, the AI receptionist has demonstrated remarkable results. Transaction processing times have decreased by 25%, significantly improving operational efficiency. Additionally, the AI's ability to recognize customer moods and preferences has led to a 15% improvement in customer satisfaction rates. This increase in satisfaction reflects the system's success in providing personalized service and reducing wait times. Encouraged by these positive outcomes, ABC plans to expand the use of AI receptionists across more branches. Future plans include integration into mobile apps and online platforms, providing 24/7 service and further enhancing accessibility. This innovative approach underscores ABC's commitment to leveraging AI for a more efficient, customer-centric banking experience.

## Kotak Mahindra Bank: Keya 2.0: Your Digital Banking Buddy

Kotak Mahindra Bank has set a new benchmark in customer support with the launch of Keya 2.0, an AI-powered chatbot that leverages natural language processing (NLP) and machine learning technologies. Keya 2.0, available on the bank's website, mobile app, and other platforms, efficiently handles 90% of customer queries and automates many routine banking tasks. This AI-powered voicebot is capable of answering balance inquiries, facilitating fund transfers, processing loan applications, and assisting with card-related queries. Its advanced NLP capabilities ensure smooth, real-time interactions, with a high accuracy rate of 93%.

The introduction of Keya 2.0 has had a transformative impact on customer service operations. The chatbot's automation of routine tasks has optimized workforce dynamics, reducing the need for 70 human agents to just two platform overseers. This optimization has resulted in significant cost savings and minimized human errors, while ensuring reliable service. Furthermore, Keya 2.0 has increased customer satisfaction by 20%, thanks to faster resolutions and enhanced self-service options. Looking ahead, Kotak Mahindra Bank plans to expand the chatbot's capabilities by adding multilingual support and refining its fraud detection features through predictive analytics, reinforcing its position as a leader in AI-driven banking solutions.

## Nonghyup Bank: AI-Powered Precision and Protection



Nonghyup Bank (NH Bank) has implemented AI-powered avatars to enhance in-branch customer services and bolster security. Developed in collaboration with DeepBrain AI, these avatars are integrated into NH Bank's kiosks, providing 24/7 support while delivering consistent, on-brand service. The avatars, designed to reflect the appearance of the bank's staff, utilize conversational AI technology to assist with routine tasks such as account inquiries and product recommendations. They are also capable of supporting over 80 languages, catering to NH Bank's diverse customer base.

The introduction of AI avatars has brought several operational benefits. They improve customer experience by offering personalized, round-the-clock service, which reduces wait times and streamlines operations. Additionally, the avatars' automation of routine tasks has boosted productivity and reduced labor costs. The integration of fraud detection capabilities within the avatars ensures that suspicious activities are flagged in real-time, enhancing security. NH Bank is also using AI to analyze transaction patterns and predict anomalies, which has significantly reduced fraud-related losses.

Moving forward, NH Bank plans to refine its AI offerings, incorporating advanced predictive analytics for even better fraud detection and personalization, underscoring its commitment to innovation and customer-centric service.

## Shinhan Bank: Tellers That Think and Feel

Shinhan Bank has transformed its customer service by introducing AI-powered virtual tellers, developed in collaboration with DeepBrain AI. These advanced virtual tellers replicate many functions of traditional ATMs while offering a more interactive, personalized banking experience. The virtual tellers, modeled after real bank employees, engage customers in lifelike conversations using advanced speech and video synthesis. They are capable of handling 64 tasks, such as deposits, loan applications, and credit-backed loan executions. The virtual tellers are available 24/7 across digital desks and smart kiosks in Shinhan Bank's South Korean branches, ensuring uninterrupted service and reducing wait times.

The deployment of AI-powered tellers has significantly increased efficiency and customer satisfaction. By automating routine banking processes, the tellers free up human staff to handle more complex inquiries, enhancing productivity and service quality. The continuous availability of the virtual tellers also aligns with modern consumer demand for convenience.

Additionally, Shinhan Bank has integrated AI-powered sentiment analysis, developed in partnership with KT, to detect signs of distress or dissatisfaction in customer interactions. This technology aids in fraud detection and allows for the prompt escalation of critical issues. As part of its future plans, Shinhan Bank aims to further expand the capabilities of its virtual tellers and integrate more advanced sentiment analysis tools, positioning itself as a leader in AI-driven banking.

## Canara HSBC Life Insurance: OmniGen AI: Redefining Underwriting Excellence

Canara HSBC Life Insurance is redefining the underwriting process with OmniGen AI, an advanced generative AI solution powered by Amazon Web Services (AWS) Bedrock. This innovative system functions as a co-pilot for underwriters, processing complex inputs such as underwriting guidelines, manuals, risk profiles, and model



outputs to deliver swift and accurate decisions. By providing rationale and references, OmniGen AI ensures a high degree of precision and transparency in risk assessment. Its ability to forecast future risk outcomes further strengthens its role as a transformative tool in underwriting.

Traditional underwriting processes, often manual and time-consuming, are prone to errors, biases, and inefficiencies. OmniGen AI addresses these challenges by leveraging cutting-edge generative AI and large language models (LLMs) to analyze multi-dimensional data, identify patterns, and deliver consistent, data-driven decisions. This results in faster turnaround times, improved operational efficiency, and enhanced accuracy in risk evaluations. The system also streamlines the customer experience, ensuring seamless policy issuance and claims settlement. Moreover, it continuously refines underwriting manuals and frameworks, enabling the creation of ecosystems where AI systems evolve through human expertise, transitioning from traditional manual inputs to AI-driven insights.

The benefits of OmniGen AI extend across stakeholders. For customers, it enables quicker decisions, transparent risk evaluations, and a smoother policy journey. For the company, it reduces operational costs, minimizes backend workload, and establishes scalable and efficient underwriting models. These advancements align with Canara HSBC Life Insurance's commitment to innovation, customer-centricity, and operational agility. By integrating generative AI into its processes, the company not only enhances business value but also strengthens its ability to deliver superior customer outcomes.

# Enhancing Banking with GenAI: A Vision for the Future

Generative AI (GenAI) is set to redefine the banking landscape by providing innovative solutions that go beyond operational efficiency to create deeper, more personalized customer experiences. With GenAI, banks can offer hyper-tailored services that predict customer needs, provide real-time financial insights, and assist with complex banking tasks through intuitive AI-driven interactions. For instance, GenAI-powered virtual assistants can engage customers in human-like conversations, while advanced analytics can deliver personalized financial advice, helping customers make better investment decisions. Moreover, banks can streamline back-office operations such as document generation, fraud detection, and risk management, leading to enhanced accuracy and cost savings.

To effectively incorporate GenAI, banks should focus on key areas for transformation, such as customer support automation, improved decision-making through data insights, and operational optimization. It's essential for banks to invest in the right data infrastructure, foster collaboration between business and technology teams, and ensure that AI tools align with the organization's broader strategic goals. Equally important is the ethical deployment of GenAI, particularly when dealing with sensitive customer data. Banks must prioritize transparency, fairness, and accountability in their AI systems, ensuring that data is collected, processed, and utilized responsibly. By adopting ethical AI practices—such as avoiding bias in algorithms and maintaining privacy standards—banks can build trust with customers and navigate regulatory requirements. Through a balanced approach that embraces both innovation and ethics, GenAI can drive long-term growth while ensuring the banking sector remains a trusted partner in financial services.

## Combined Expert Perspective: GenAI's Strategic Importance in Banking

The adoption of GenAI in banking is not merely a technological upgrade—it is a strategic shift towards a more efficient, secure, and customer-centric financial ecosystem. From enhancing in-branch experiences with AI receptionists to revolutionizing underwriting with LLMs, these use cases exemplify GenAI's versatility and impact.

### Key Takeaways:

1. **Operational Excellence:** GenAI-driven automation reduces costs and boosts efficiency, enabling banks to reallocate resources to strategic initiatives.
2. **Customer-Centric Innovation:** Hyper-personalization fosters deeper relationships and loyalty, a vital asset in competitive markets.

3. **Future-Proofing:** Predictive analytics and fraud detection position banks to pre-empt risks and adapt to evolving customer needs.

To maximize the potential of GenAI, financial institutions must invest in robust data infrastructure, ensure ethical AI practices, and foster collaboration across technology and business teams. By aligning GenAI applications with strategic goals, banks can harness its full potential, driving long-term growth and industry leadership.