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Voice-activated transactions for mobile banking with agentic AI

Banking

Business challenge and opportunity

Consumers continue to adopt digital banking channels, with 55% of banking customers using mobile apps as the primary tool for managing finances.[1] While digital banking is surging, traditional application interfaces can still be a barrier for many customers. Navigating complex menus to find specific features like fund transfers or account statements often creates friction, especially for less tech-savvy users and those on the go. This friction can lead to lower app engagement and increased reliance on time-consuming branch visits or call center support for basic queries.

Banking customers today expect intuitive experiences similar to what they encounter with their smart homes and personal devices. The inability to interact naturally with banking apps using voice commands represents a potential missed opportunity to deepen customer engagement and accessibility.

The banking sector's embrace of voice technology is on the rise. According to a Gartner® report, 70% of customer service journeys will begin and be resolved through conversational third-party assistants built into customers' mobile devices by 2028.[2] In Kyndryl's view, this indicates a strong customer shift toward voice/conversational interfaces.

Integrating voice capabilities directly into the mobile banking experience offers a powerful solution, especially when enabled with agentic AI. Agentic AI provides an opportunity to streamline voice-based banking processes so customers can execute transactions through simple spoken instructions, banks can simplify navigation, improve accessibility and position themselves as innovators in customer experience.

Technical challenges

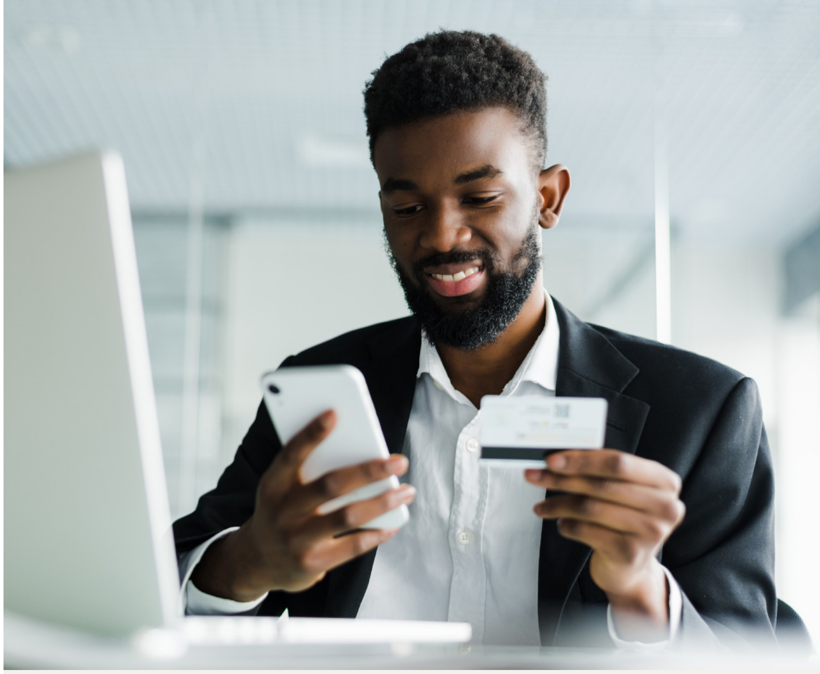
Banks aiming to help cyber-crime agencies have common technical hurdles to cross to streamline the process with agentic AI:

1. **Seamless "listening" to customer commands** needs to operate effectively without compromising app security or performance. Implementing voice commands requires expertise in integrating edge-AI word libraries into a bank's native mobile codebase and supporting processes operate with compliance standards.
2. **Accurate interpretation of customer intent,** using Natural Language Processing (NLP), must recognize speech with varied phrasing for commands like "check balance" and "send money," then must reliably redirect the customer to the correct deep-linked screen within the app without making them navigate a large number of menus manually.
3. **Sensitive actions,** like fund transfers, require the voice agent to hand off control precisely to standard security protocols to ensure transactions remain secure and compliant. Building this requires stringent integration of the voice AI with the bank's existing backend authentication protocols and anti-spoofing software to prevent deepfake fraud.

Our solution

Kyndryl delivers an agentic AI–powered voice solution that can integrate seamlessly into an existing mobile banking application to enable intuitive, hands-free transactions. The solution:

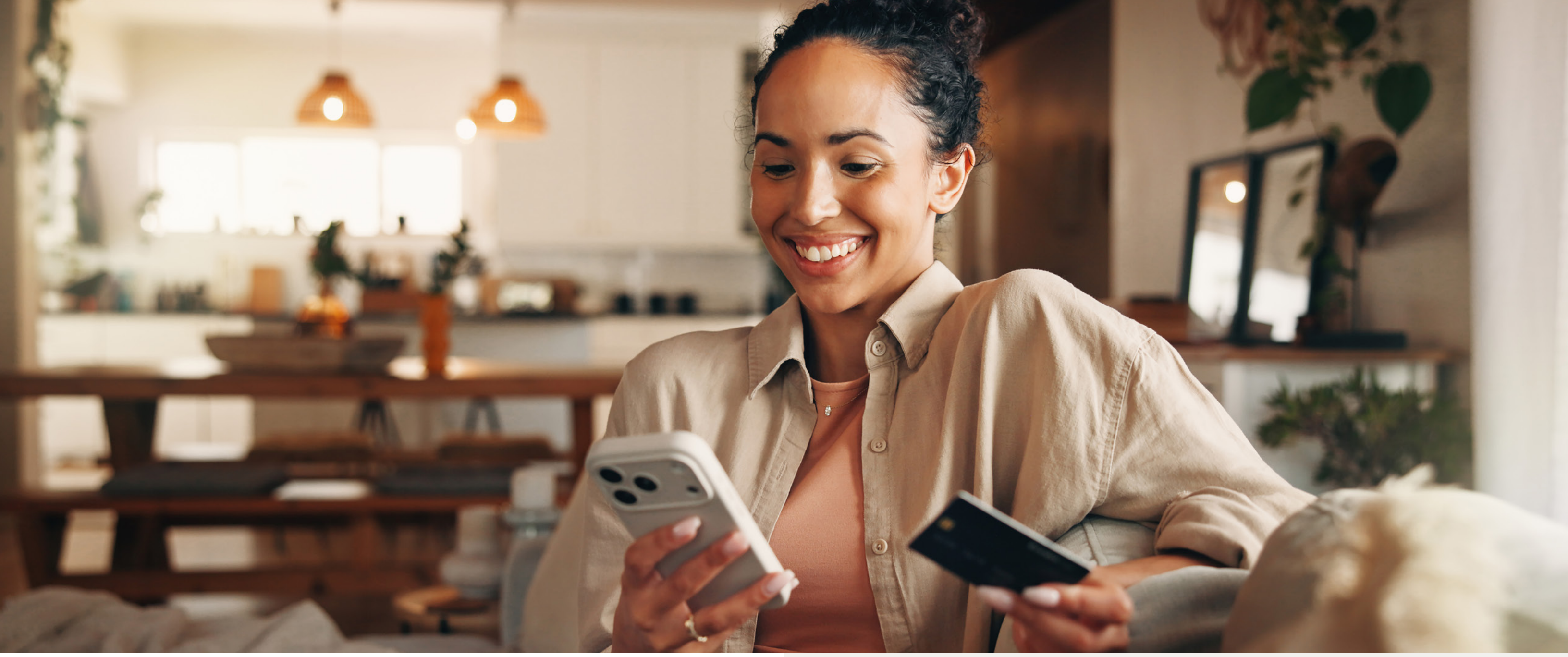
- **Embeds voice intelligence directly within the mobile app** using a lightweight software development kit (SDK), enabling a secure voice agent that listens for and responds to customer commands, making the experience convenient for customers and expands the bank's reach.
- **Uses natural language processing to understand customer intent,** even when commands are phrased differently (for example, balance checks or money transfers), and intelligently routes customers to the correct in-app destination. Multiple languages and nuances within speech patterns can be recognized for a more inclusive customer experience.
- **Supports high-frequency banking interactions,** including customer profile access, account balance inquiries, mini statements and fund transfers providing customer convenience and building on the bank's reputation.
- **Streamlines fund transfers** by interpreting intent, pre-filling available data and guiding customers to the appropriate transaction screen for final authentication and execution.
- **Delivers instant responses for information requests,** such as balance checks, by retrieving and displaying data directly within the relevant app screen, providing an expedient customer experience.
- **Balances intuitive customer experience with enterprise-grade security,** with Kyndryl Consult experts designing the interaction flow and technical teams assisting with compliant, secure integration.



Benefits you could achieve

Integrating voice capabilities directly into the mobile banking experience with agentic AI can deliver:

- **Enhanced customer accessibility:** Make banking services accessible to a broader audience, including the less-technical or visually impaired customers, through simple voice commands.
- **Simplified navigation:** Remove the need for users to dig through complex menus, allowing them to jump directly to the feature they need.
- **Increased app engagement:** Provide a modern, frictionless experience that encourages more frequent use of digital channels over physical branches.
- **Streamlined transactions:** Reduce the time it takes to complete common tasks like fund transfers by automating the navigation and set-up steps.
- **Future-proofed platform:** Build a foundation for conversational banking that can scale to handle more complex financial advisory interactions in the future.



Why Kyndryl?

With decades of mission-critical operations experience, we bring deep expertise in designing, building, and managing AI across complex IT estates.

The Kyndryl Agentic AI Framework brings together the right governance and security controls and human oversight to enable businesses to move beyond isolated pilots to integrated, intelligent systems. It combines secure, scalable agent orchestration with real-time observability and governance, powered by Kyndryl Bridge.

Through Kyndryl Consult, we align AI strategy with business outcomes. Kyndryl Vital provides proven user-centered design and rapid prototyping. And our trusted delivery experts support frictionless integration and help with reskilling and upskilling to build the foundation for success at scale.

We apply a forward engineering approach—using insights from existing systems to design and deploy future-ready AI agents and architectures that are adaptive, resilient, and scalable. Our method is grounded in open ecosystems, data sovereignty, and transparent decision-making.

And with a carefully selected alliance ecosystems—across cloud, data, and AI—we bring the right partners and technologies together to design fit for purpose solutions and orchestrate AI at scale without disrupting the business.

With Kyndryl, AI becomes a core capability—not just a tool—driving productivity, innovation, and growth.

Accelerate your journey to AI-native

Our AI Benchmark Assessment provides a maturity snapshot and personalized roadmap for accelerating the value of AI in your organization.

Take the assessment →

What's your enterprise vision for AI? Let's co-create it together.

Talk to an expert →

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1. National Survey: Record Number of Bank Customers Use Mobile Apps More Than Any Other Channel to Manage Their Accounts; American Bankers Association, 2024

2. Gartner Top Emerging Technology Trends in Banking 2026: Part 1 — 6 Autonomous Agent-Led Banking, Alistair Newton, 10 February 2026 (Accessible to Gartner clients only). GARTNER is a trademark of Gartner, Inc. and/or its affiliates.