PolyAI

GUIDE

Modernizing financial services CX with voice AI.

INTRODUCTION

Obstacles in adopting new technology.

Between legacy systems, shifting markets, and regulatory requirements, the financial services industry faces many obstacles in adopting new technology.

From traditional banks juggling complex compliance needs and aging infrastructure to fintech companies scaling fast and looking to stand out in customer experience, everyone is feeling the pressure to modernize. Despite their differences, both sides face the same challenge: how to move forward without compromising trust.

As they say, time is money, and every dollar counts. In an age of deft disruption, financial institutions, especially at the enterprise level, urgently need to embrace the new era of customer experience. And while AI is at the heart of this transformation, one solution is leading the way: AI agents.

Consumers expect always-available, deeply personalized experiences. Where legacy chatbots fail to satisfy consumers' need for personalized experiences, banks and financial firms are sustaining success with AI agents.

This guide outlines an overview of voice AI for financial services, including optimal use cases to introduce voice AI into your organization to reduce operational burden, and deliver the kind of CX that builds customer trust and keeps customers loyal.

What is Voice AI for finance?

Voice AI is reshaping customer engagement in financial services by offering efficient, secure, and personalized support, without the friction of outdated systems or long hold times. Powered by natural language processing (NLP), machine learning (ML), and large language models (LLMs), voice AI understands spoken requests in real time and responds in a conversational, human-like way.

For customers managing their finances, whether they're reporting fraud, checking payment status, or disputing a transaction, natural, intelligent conversations matter. AI agents can pick up on tone, urgency, and context, allowing callers to speak naturally without rigid menus or scripted responses. This builds trust, reduces frustration, and keeps conversations moving.

Smart, contextual AI agents also encourage self-service where it counts. The best voice AI for financial services can handle industry-specific language—think card lock, chargebacks, ACH transfers—and can distinguish between similar-sounding requests based on context. And when a situation calls for it, AI agents know when to hand off to a human seamlessly.

This level of intelligent, empathetic support isn't just about improving the experience. It's how leading institutions are earning customer loyalty, driving efficiency, and staying compliant.

75%

of firms are already using artificial intelligence (AI), with a further 10% planning to use AI over the next three years.

The need for transformation in financial services.

Legacy IVRs, long wait times, and unresolved issues don't just frustrate customers; they cost banks money. Even with the growth of chat, text, and email, the phone remains the go-to channel for most customers.

But many large banks are still operating on systems built decades ago. While these platforms still function, they weren't built for the flexibility or speed that today's customer experience demands. A recent **AI in customer service trends report** found that 3/4 of CX leaders agree that customers expect both immediate responses and more knowledge and guidance from advisors.

In a market where most products look the same, customer experience is one of the few things that can really set a bank apart. But making meaningful improvements means dealing with the tech reality under the hood and getting clear on what better CX actually looks like in practice.

86%

of Gen-Z say live support is still the preferred channel when they need help

Why banks are exploring AI voice agents now

The gap between what customers expect and what traditional banks deliver is growing. While most banks offer similar products—checking, savings, credit, and loans, those offerings have become commoditized. What sets institutions apart today is how they deliver them.

Delivery often starts with a phone call. Whether it's a customer with a blocked card, a fraud concern, or a question about payment processing, the voice channel remains a critical touchpoint.

Unfortunately, the voice channel can be the source of customer frustration. Long wait times, confusing menus, and slow escalation paths drive customers away.

Adding to the pressure, compliance and regulatory requirements continue to grow more complex. Financial services organizations must balance modernizing the customer experience with following strict security and data governance.

Voice AI impact on financial services costs.

In addition to improving client experiences, deploying voice AI decreases operational costs and can improve revenue. By automating common requests at scale, financial services organizations can handle higher call volumes while also lowering costs.

In financial services, AI can drive:

30%

drop in call volume with self-service

15pt

increase in NPS due to reduced wait times and increased self-service

AI is expected to save the financial services industry billions of dollars within the next decade through improved efficiency, scalability, and reduced overhead and operational costs.

Voice AI impact on financial services costs.

There are numerous benefits to using voice AI in financial services:

Scalability

Voice AI can handle thousands of calls at once, allowing financial institutions to scale quickly and manage spikes in call volume without the time and expense of hiring and training new agents.

Improved security and trust

Automating knowledge-based authentication with voice AI ensures every single interaction is private and secure and that every identity verification step meets industry regulations.

Handling sensitive conversations with care

Whether it's fraud, payments, or account issues, customers often call during high-stress moments. Voice AI can deliver empathetic, helpful responses that make self-service encourage continued use.

Consistent service, 24/7

Voice AI provides reliable, always-on support—ensuring every caller receives consistent, accurate service, day or night.

Operational and cost efficiency

Voice AI helps reduce costs and improve key contact center metrics. Many institutions see improvements in call containment, average handle time, wait times, and overall customer satisfaction.

So, where is the best place to start?

The following are some of the most frequent use cases to begin your organization's voice AI journey. They deliver maximum impact and help demonstrate the ROI of voice AI.

Intelligent call routing

Replace traditional IVRs with voice AI that lets customers ask specific questions and share detailed queries, directing them to the right department, agent, or service. Voice AI accurately handles complex names and financial terms, enhancing satisfaction by understanding the customer the first time.

Self-service FAQs

Reduce agent load by using voice AI to answer common customer questions, providing fast and accurate responses without requiring human intervention, ensuring every customer's inquiry is addressed on the first call.

Smart scheduling

Automate appointment scheduling with voice AI to allow customers to book, reschedule, or cancel meetings with financial advisors at their convenience—no human agent needed.

Manage billing and payment

Enable customers to pay bills, update payment details, and discuss financing options, including loan terms, credit limits, and payment plans with voice AI, creating a smooth and secure self-service experience.

Record requests

Automate record retrieval and document requests with voice AI, allowing agents to focus on more complex inquiries, such as financial planning and investment advice.

Automated support

Voice AI can assist customers with balance inquiries, recent transactions, and setting up alerts, freeing agents to handle more complex queries like loan applications or mortgage approvals.

Customer feedback

Collect customer feedback using natural language surveys triggered at key points in the customer journey. Voice AI enables customers to give feedback on their experience in their own words, creating a virtuous interaction loop.

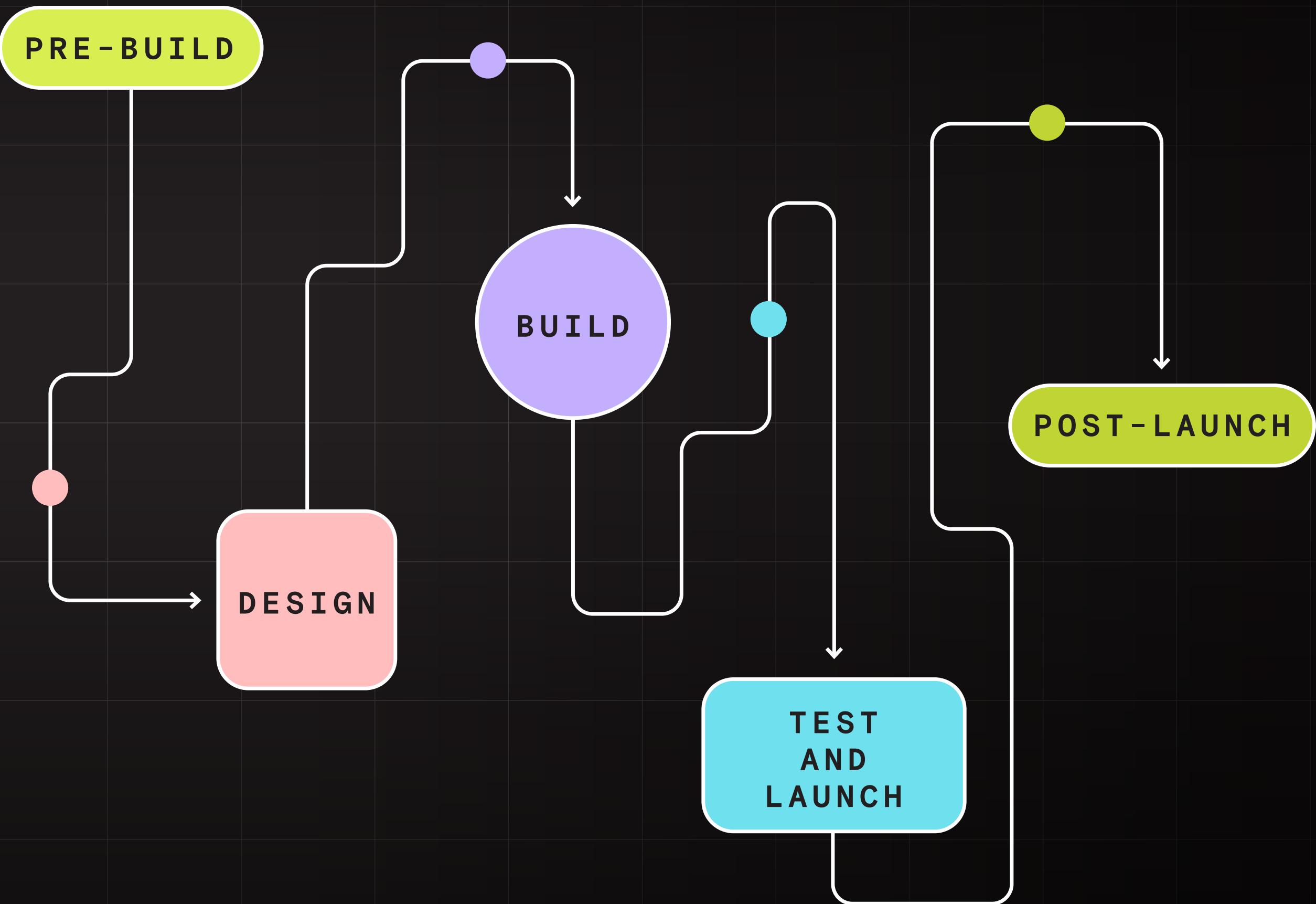### Personalized financial support

Voice AI can recall past customer interactions to offer personalized financial services, such as reminders for important dates (e.g., loan payments or investment check-ins) and tailored support for high-value accounts, ensuring customers receive the attention they need at scale.

Deploying voice AI in financial services.

Knowing where to begin with your AI transformation can be challenging, especially if you have cumbersome infrastructure and legacy systems.

Navigating AI integration in large financial institutions requires strategic planning, strong leadership, and an understanding of internal dynamics. While you can employ internal staff to develop voice AI, it is often more efficient and cost-effective to work with conversational AI experts who can guide you through every step of the process.

PRE-BUILD

BUILD

DESIGN

TEST AND LAUNCH

POST-LAUNCH

PRE-BUILD

Here, you assemble your implementation team and map out your current IVR system to pinpoint where your voice AI will have the most impact. Next, you define change management strategies to secure stakeholder buy-in, gather baseline data on key metrics, and set clear objectives. Finally, you'll conduct a technology audit to understand your technical architecture and determine the best way to integrate voice AI.

DESIGN

In this phase, you'll select an AI voice that matches your brand. Then, you'll design for automation which means creating engaging and user-friendly conversations that make a positive first impression, adapt to the customer's tone, and simplify complex information. Finally, you'll create a handoff protocol that smoothly transitions to a human agent when necessary, considering urgency, sensitivity, and revenue impact.

BUILD

Now, you'll build your AI agent. Focus on ensuring it can listen, reason, and speak effectively. This involves using automatic speech recognition, spoken language understanding, large language models, dialogue management, and safety guardrails. The goal is to create an AI agent that understands callers, responds appropriately, and speaks naturally. A simple SIP or PSTN connection is all that's required to route calls between your voice assistant and your team.

TEST AND LAUNCH

Before going live, you'll want to run several tests, including quality assurance, load tests, and team demos. Once we determine everything is operational, it's time to launch! You can either do a rolling launch or dive in fully. It's important to monitor early calls, make sure things are running well, and make any adjustments needed.

POST-LAUNCH

After launch, you'll regularly monitor key metrics like AHT, call volume, and containment. Continuously update and refine the ASR, machine learning, and dialogue design to improve performance. Voice AI, like any AI product, needs ongoing attention to deliver great customer experiences.

Getting started with voice AI for financial services is a solid step forward in modernization and in improving the customer and employee experience.

Experience PolyAI voice AI for financial services.

At PolyAI, we design our voice AI for financial institutions to deliver ease, security, and care that you want your customers to experience every time they interact with you.

As a trusted partner, we deliver:

Security

24/7 support with compliance certification to meet your needs including ISO 27001, SOC 2, PCI DSS, GDPR and more.

Learn more

Integrations

No need to change your tech stack. Out-of-the-box and custom integrations make implementation safe and easy.

Learn more

Data and Insights

Real-time insights. No data gaps, manual compiling, or business decisions based on guesswork.

Learn more

Enterprise-ready platform

Get access to AI models designed, trained, and built specifically for customer service use cases and deliver unbeatable conversational experiences to every customer.

Learn more

Hear PolyAI for yourself.

Check out our recorded voice **AI demos.** Or, to find out more about how PolyAI can help you answer every call immediately, improve loyalty, resolve over 50% of calls, and deliver effortless CX at scale, request a demo.

Ready to get started now?

Request a demo