

WHITE PAPER

Banking (Ops) Excellence

How GenAI and AI can create bionic customer service

Banking (Ops) Excellence – How GenAI and AI can create bionic customer service

The banking customer service dilemma

Banks have been compelled to make painful tradeoffs in customer service. They have had to forge a path between two courses of action: a *cost-driven* approach, where they apply various measures to reduce operating expenses; and a *customer-centric* approach, where they invest heavily in the pursuit of excellent customer service, but inevitably at higher cost and often with a diminishing return on investment.

Against the backdrop of a highly competitive banking environment, the servicing of customers has been responsible for a considerable proportion of a bank's overall operating expenses – on average around 10–15% is spent on contact center operations and in-branch customer service. Most banks have therefore sought to optimize their customer service operations to cut costs, even if this has sometimes meant subjecting customers to longer waiting and response times and slowing issue resolution.

However, banks also know that excellent customer service - providing the best possible support when the customer needs it most – can deliver immense value for them. It certainly plays a crucial role in maintaining client relationships and preventing customer churn and, can also lead to additional revenue through cross-selling or up-selling.

How banks have sought to resolve the dilemma

Many banks and financial services providers have taken steps to square the circle – attempting to enhance productivity in their customer service operations while at the same time improving customer satisfaction. As they strove for this elusive balance, they have many things right. As an example, they have:

- Optimized contact center and in-branch shifts, as well as opening hours, based on demand forecasting.
- Expanded the mandate of their contact centers so they do not only manage simple but also complex customer servicing requests and focus on sales and relationship management.
- Invested in automation (e.g., routing algorithms to redirect complex inquiries to the right teams) and self-service technology such as in-app self-service and chatbots. This strategy helped achieve 80% automation in simple retail banking customer service.
- Nearshored or offshored contact center operations to lower-cost countries or outsourced them entirely.
- Conducted customer segmentation to provide distinct levels of service to distinct groups. For example, American Express has conducted segmentation and offers outstanding service to their Centurion (highest tier) customers day and night, and well beyond what they offer to their regular customers.
- Sought to replace certain inbound modes of contact, such as phone calls and emails, by directing customers via FAQs to call-me-back forms, structured contact forms, or assisted online chat. This strategy mirrors successful practices by industry leaders like Amazon and Apple emphasizing efficient customer interaction.

Notwithstanding these successes, advanced technologies such as GenAI can allow banks to go one step further in breaking the historic tradeoff between cost and customer experience. These technologies enhance efficiency and service excellence at the same time, securing higher customer satisfaction at lower cost, while also increasing flexibility in response to peak demand in a way that has not previously been possible.

As simple transactional customer service interactions are already highly automated, banks now need to focus the power of GenAI on more complex customer servicing requests which have in the past involved a great deal of cost and effort and have undermined customer satisfaction.

The shift in emphasis toward complex requests promises to be a critical watershed for the industry. By directing their efforts at resolving the same simple requests over and again, banks have not yet fully realized the potential impact of automation, failing to reduce contact center volumes in any meaningful way.

A bold vision for the bionic customer service of the future

To move toward this visionary and bionic customer service, and achieve the resulting gains, banks will need to elevate their ambition, going beyond what they have considered and accomplished in the past. They can exploit GenAI and AI technology to tap into the vast amount of servicing data they have at their disposal, allowing them to enhance insights and improve individual interactions, especially those previously deemed too complex or sensitive for automation and self-service.

Technology will be used in future to manage the overwhelming majority of customer requests, with human interaction exclusively restricted to extremely complex customer issues, or to cases where emotions are running high, such as fees resolution or fraud cases.

In this visionary target picture, all retail banking customer service journeys will start in a customer's mobile app. Within the app, GenAI will facilitate a seamless transition from customer self-service to bot-assisted and then reserving human assistance for most complex situations where personal and emotional connection is required, with text, voice, and video communication all in one place. Embedding customer service in mobile apps thus encourages further app engagement, in turn leading to even more automation and self-service.

It should be stressed that this target picture will not apply for the most part to corporate clients or to ultra-high-net-worth clients in the wealth management division. For these segments, service is likely to remain human-led to a significant degree.

For mass-market retail clients, however, banks can create tremendous value by investing in this visionary and bionic customer service:

- Productivity increase of 40–70% in the provision of customer service by contact center agents (including more effective routing of inquiries or identity verification).
- Productivity increase of 30–50% in customer service operations teams.
- Reduction of 40–60% in operating expenses attributable to the contact center.
- Decrease of 30% in inbound call volume.
- More than threefold increase in average customer satisfaction scores relating to problem resolution.
- Decrease of 25–35% in handoffs to other agents, empowering teams to achieve first-time resolution themselves.
- Accelerated speed to resolution (for example, offering refunds in less than 24 hours).

Exhibit 1 - Four core elements to achieve revolutionary bionic customer service

Illustrative

oioiio 1颌ioi Analyze customer oii颌i service data	Augment agent capabilities	 GenAI-powered virtual assistant Customer service co-pilot Real-time call support
 Automated call transcription via (Gen)Al Pattern recognition Best practice servicing journey identification 	Automate inbound request handling	 GenAl-enabled self-service chatbot/voicebot GenAl-automated transaction/payment execution Smart customer workflow and account management assistance
	→ Avert customer service requests	 AI-based early warning systems Proactive personalized outreaches via GenAI Automated service offerings based on client behavior

We have divided the enormous potential of bionic customer service into four specific key areas, as shown in Exhibit 1. Banks will be able to:

- Analyze customer service data to extract insights on a portfolio level.
- Augment agent capabilities to provide better and more efficient service.
- Automate inbound request handling to boost effectiveness.
- Avert customer service requests through proactive efforts.

Analyze customer service data to extract insights on a portfolio level

It has previously not been possible for banks to capture and analyze their customer servicing data on a large scale because much of the relevant process was manual and time-consuming.

However, GenAI & AI technology offers new opportunities for banks to capitalize on data from millions of customer service interactions, ranging from e-mail communication to chat to telephone calls. The content of these interactions can be automatically transcribed by voice analysis, and then structured and examined. This allows banks to make invaluable observations – for example, they can identify trend patterns in customer demand and zoom in faster to the root causes of high contact volumes.

Using this advanced analysis of previous interactions, banks can not only gain a clearer understanding of underlying issues and recurring problems encountered by customers throughout the world but can also begin to make progress in solving even the most complex service requests, boosting first-time resolution, and thus greatly reducing the number of expensive follow-ups.

Augment agent capabilities to provide better and more efficient service

To resolve customer service requests more effectively while at the same time cutting the average handling time, banks should invest in technology that boosts the capabilities of their customer service agents.

Below are some examples of such technologies, enabled by GenAI and AI:

- **GenAl-powered virtual assistant** that helps agents to find a quick answer by retrieving real-time information from the client account, policies, and other relevant documentation.
- Customer service co-pilot that drafts multilingual, personalized e-mail and chat response options for agents, taking customer sentiment into account.
- Real-time call support that provides agents with proactive and dynamic call scripts and recommended next actions, using real-time speech recognition and analysis.

To achieve a genuinely bionic service, the customer service capabilities of agents in the branch network also need to be enhanced. Similar technologies, such as a GenAI-powered virtual assistant, can be deployed. Speedy and effective resolution of customer issues, preferably on the customer's device by connecting it to large screens in meeting rooms, achieves a high-quality experience for the branch visitor. Video calls to specialists who can handle more complex customer requests might also throw up additional up-selling or cross-selling opportunities.

To make this all possible, banks need to invest heavily in training their agents, helping them to feel comfortable with these augmenting capabilities during their daily routine.

Morgan Stanley – GPT4-powered chatbot¹

In September 2023, Morgan Stanley introduced an advanced chatbot powered by OpenAl's latest technology to help the 16,000 bank's financial advisors take advantage of the company's enormous repository of research and data.

Morgan Stanley's chatbot is based on GPT 4, using approximately 100,000 pieces of research and documents that the bank has vetted for this purpose.

1. Hugh Son, "Morgan Stanley is testing an OpenAl-powered chatbot for its 16,000 financial advisors", CNBC, March 14, 2023.

Automate inbound request handling to boost effectiveness

State-of-the-art technology such as GenAI and AI generates further opportunities to automate inbound request handling. The result is faster resolution, raising customer satisfaction with the handling of more complex requests.

In our ideal target picture, most inbound client requests would be instantly processed by means of fully automated internal processes. These processes would utilize the complete range of automation capabilities – such as simple workflow automation, or GenAI.

Human interaction with customer service agents should be restricted to a few of the most complex requests, or to emotionally loaded situations or moments of truth. To achieve large-scale automation of the vast bulk of complex requests, banks should invest in various critical customer-facing capabilities:

- **GenAI-enabled self-service chatbot/voicebot** to validate and sense-check customer identity and answer customer requests, taking advantage of a bank's comprehensive knowledge repository and experience of similar requests.
- **GenAl-automated transaction and payment execution**, based on unstructured customer inputs via e-mail or phone, avoiding manual effort for customer service agents.
- **Smart customer workflow and account management assistance** that provides step-bystep support through various self-service tasks in online portals. This helps to increase self-service adoption and avoid further inbound requests, such as how to open a new bank account.
- **Automated servicing documentation** for requests that still require manual interaction. The documentation, which reduces manual efforts for agents, would be derived from GenAI-enabled call transcripts, summaries and notes saved in the CRM system.

Klarna's virtual AI assistant automating customer service chats²

Klarna, a Swedish fintech which provides payment processing services for eCommerce, launched a virtual AI assistant powered by OpenAI in 2024. The AI assistant delivers automated multilingual customer service for requests such as refunds, returns, payment-related issues or disputes (with an option to chat with live agents, if desired).

The AI assistant also helps customers to make smart and informed purchasing decisions. It explains spending limits and the rationale behind them and sets out outstanding balances and upcoming payments in real time.

Within one month of its launch, Klarna's AI assistant managed more than 60% of incoming customer service requests, performing the work of approximately 700 agents while maintaining customer satisfaction scores and even beating human agents in customer service request resolution.

2. Klarna, "Klarna AI assistant handles two-thirds of customer service chats in its first month," February 27, 2024.

Avert customer service requests through proactive efforts

Banks then need to evolve, introducing more radical innovation. They should aim not only to handle incoming client requests automatically, but also make efforts to avoid them happening in the first place. They can utilize GenAI and AI technology and their vast pools of data to anticipate potential requests and then proactively contact clients to solve issues before they arise, while also offering additional value-adding services.

As shown in Exhibit 2 below, this mode of bionic customer service hits the sweet spot, raising both customer service and productivity to a completely new level. To achieve these goals, banks need to apply AI, as well as machine learning models that are combined with GenAI, to assess all available data and identify behavioral patterns in a client's past transactions and account information. Although it is true that early-warning systems and triggers have been available for some time, GenAI offers a potential step change in effectiveness by fully capitalizing on the bank's data to achieve transformative results.

The resulting proactive personalized outreaches can be fully automated. The conversations and related operational activities can be conducted autonomously via the preferred customer channel, such as text message, e-mail, call, or app, reacting when necessary to customer responses. Anticipated customer responses allows for efficient integration into chat functions.

Despite the clear benefits, such proactive outreaches need to be handled with care. Any potential perception of data misuse or spam must be avoided, as it would damage vital customer trust.

Use case example: A customer is traveling abroad and using her credit card to purchase items in a foreign currency and accrues foreign transaction fees and conversion rates. Her bank could proactively inform her via text message of what she is being charged and why, and thus avoid a subsequent customer service request to clarify fees and charges.

Exhibit 2 - Four elements of bionic customer service – Levers among the dimensions of productivity and customer experience

Illustrative



Nearshoring, Offshoring and Outsourcing of Contact Center Operations

Many banks and financial services providers have previously invested in nearshoring/ offshoring and/or outsourcing of contact center operations. The objectives were to manage the operating expenses of contact centers through cost arbitrage, gain flexibility and scalability in volume.

Most larger banks currently operate contact center hubs in lower-cost countries to reap the associated benefits. For example, American Express runs customer service hubs in Poland and in the Philippines, while HSBC, Bank of America, ANZ, and Wells Fargo have similar operations in India.³ However, the hubs have come up against increasing complexity in managing dispersed teams, and solving for complex customer service requests as well as increased expectations of empathy and cultural understanding.

With the advent of GenAI in customer service, we anticipate that the role of these contact center hubs within financial institutions will undergo significant changes:

- GenAl technology will lead to the further automation of customer service request handling. It will increase scalability in contact center operations through using virtual assistants, chatbots and other tools which have an in-built mass of knowledge installed at the outset, rather than constantly having to train individual contact center employees. As the first-time resolution rises, the need to process simpler requests in these hubs will reduce.
- GenAI in customer servicing will work the other way too. Augmenting technologies will enable agents in nearshoring/offshoring and outsourcing operations to handle processes and activities that have previously been deemed too complex.
- Implementing GenAI at scale in customer service will generate new tasks that could also be handled in contact center hubs, such as quality assurance of output or the fine-tuning of AI models.

Activating bionic customer service today

We are entering a new era in which technological innovation and human acumen combine to redefine customer service. The strategy outlined – **analyzing** the vast amount of customer servicing data, **augmenting** agent capabilities, **automating** customer service request handling, and **averting** customer requests in the first place – are all crucial elements in this process.

As financial institutions explore this ocean of potential, they must also navigate newly emerging security concerns, such as the inherent fraud risk of confidential customer information being exposed through the injection of malicious prompts into GenAI bots. Possible regulatory issues must also be anticipated and averted. Banks and financial services providers should take care to design customer service processes that do not exclude certain customers, or force others to use self-service systems against their will.

But how do banks get started on the journey towards this new era? We recommend that they adopt the following five-step approach:

- **Conduct baselining and define North Star vision:** Assess where they are now and identify potential gaps vis-à-vis current best practices in the marketplace. They should set their level of ambition and long-term vision, setting out whether customer satisfaction or cost reduction is their overarching priority.
- Set the course: Pinpoint the capabilities required to achieve their ambition. In doing so, they need to listen to their customers and take their preferences into account.

^{3.} BCG analysis.

- Lay the foundation: Invest in the all-important data and technology foundations. This would mean building a unified data ecosystem to form a single source of truth, enabling GenAI, AI and Machine Learning to be deployed at scale so that banks can benefit fully from these technologies.
- **Harvest low-hanging fruits:** Focus efforts on use cases that have a high chance of success rather than more distant and less achievable aims. In this way, banks can achieve swift successes and build momentum within their organization.
- **Ensure adoption:** Embed technology within an end-to-end channel strategy, steering customers to the desired channel at the right time and in the right context to accelerate the adoption of innovative technologies. Customer service agents should be educated and informed in modern technologies and recognized and rewarded for using them.

At the same time, there is no one-size-fits-all strategy for realizing the benefits of new technologies. Each bank will need to make its own trade-offs, as well as a conscious decision about which elements of the bionic customer service transformation are most important for them and why. In reaching these conclusions, they will need to consider their own level of ambition and main barriers to adoption, such as organizational resistance, technology integration, security and regulatory concerns, or workforce upskilling.

By taking all the necessary measures, banks will not only spark a major increase in productivity, but also strengthen customer loyalty through facilitating an offering that enriches customer interactions, making them shorter, more personalized, and more effective.

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