Next-generation contact centers powered by unified communication platforms

Abstract

Contact centers are largely seen as a means to resolve customer issues. However, the financial services industry is now looking at transforming contact centers into customer engagement hubs that facilitate continuous engagement across the customer lifecycle. In such next-generation contact centers, multiple communication channels like telephony, video, chat, messaging, and e-mail converge to provide a seamless and frictionless experience through unified communications platforms (UCPs). Further, banks are exploring contact-center-as-a-service (CCaaS) or communication-platform-as-a-service (CPaaS) with built-in opti-channel support and artificial intelligence (AI) capabilities to enhance customer service. While banks offer an extensive catalog of self-service options through their contact centers, they still rely heavily on the voice channel. This paper discusses how banks can improve customer experience through additional self-service channels and eventually embrace UCPs.

Contact centers as customer engagement hubs

Contact centers are the face and backbone of enterprises, and the same is true for the banking and financial services industry as well. With rising focus on customer experience, contact center interactions are now viewed as a strategic opportunity to engage with customers when it really matters and are rapidly evolving into customer engagement hubs. The objective is to take customer service to a whole new level by not merely resolving issues but also recommending the next best action to facilitate continuous engagement across the customer lifecycle.

Communication sits at the core of contact center operations, and currently, banks typically use various modes like voice, chat, email, and so on. However, rapid strides in technology are now enabling the move to next-generation contact centers. Such contact centers leverage UCPs where a multitude of communication channels like telephony, video, chat, messaging, and email, among others, converge to deliver a seamless and frictionless customer experience. Additionally, with AI capabilities embedded into next-gen contact center platforms, banks' aspirations of converting the contact center into a customer engagement hub have the potential to become a reality.

Evolution of contact centers

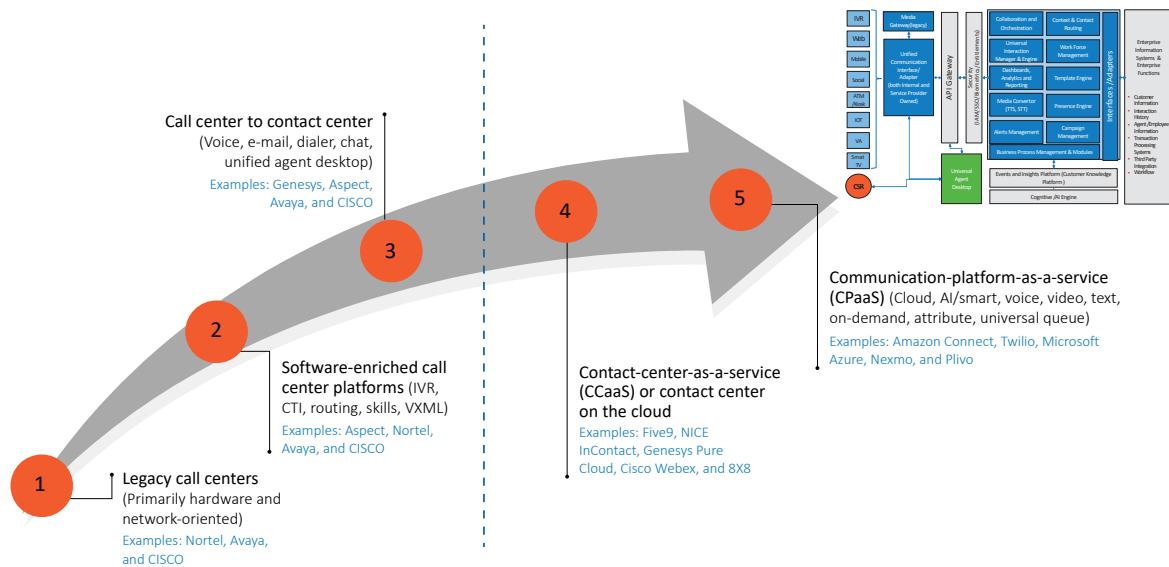Contact centers have evolved significantly over the decades (see Figure 1).

Figure 1: Evolution of contact centers

Level 1 represents the legacy, hardware-oriented, and network-centric call centers that used PBX or ACD systems to link calls to customer agents, requiring no other integrations.

Level 2 denotes the next-generation, programmable call centers armed with interactive voice response (IVR) systems, computer telephony integration (CTI), intelligent routing, and more. This is integrated with enterprise systems to enable some self-servicing before connecting an agent with the customer.

At **Level 3**, the 'call center' transformed into a 'contact center' as it began encompassing multiple digital channels like chat, e-mail, and social media, in addition to voice.

Level 4 denotes CCaaS that includes hosted contact center solutions with built-in capabilities for opti-channel support, intelligent routing, unified desktop, and integrated workforce management (WFM) tools. With all these bundled features coupled with a configuration-based approach, the CCaaS platform improves time-to-market for modernizing the contact center. New age contact centers have the potential to improve the overall customer experience, in turn leading to high net promoter scores (NPS) and customer satisfaction index.

Level 5 represents CPaaS with programmable application programming interfaces (APIs) for developing functionalities, AI-backed UCPs, and plug-ins for standard customer relationship management (CRM) suites and other contact center ecosystem products like WFM and more. The CPaaS model supports open standards-based integration, enabling a high degree of flexibility to develop applications targeted at specific business needs without being constrained by product limitations.

Our experience reveals that most banks and financial institutions are still at **level 2** or **3** and are yet to move past these levels. While **levels 4** and **5** are cloud-based solutions, there is a minor difference between CCaaS and CPaaS models. The CCaaS model provides built-in capabilities with a configuration-based approach, whereas the CPaaS model offers APIs that require development effort but drive flexibility.

Building blocks for transitioning to UCPs

So, how can bank contact centers embrace UCPs to move to next-gen contact centers? The building blocks for transitioning to UCPs (see Figure 2) serve as the base for transforming the contact center to a state-of-the-art customer engagement hub.
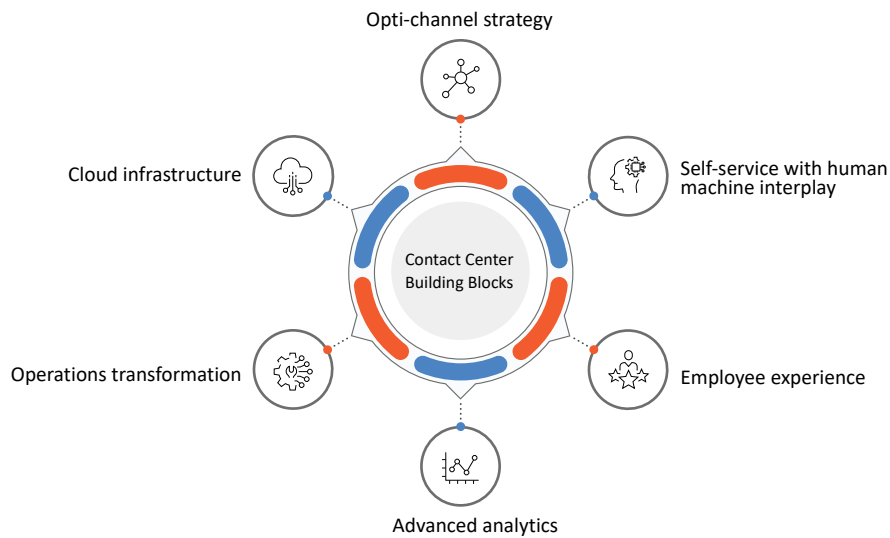
Figure 2: Building blocks of a next-gen contact center

Cloud infrastructure
On-premise management of contact center communication infrastructure leads to increased capex and opex besides inhibiting adoption of the latest technology capabilities. Given rapid advancements in communication infrastructure and cloud platforms, banks must consider separating core business capabilities from the underlying infrastructure. In our view, utilizing the underlying infrastructure through the as-a-service model will seamlessly deliver both technical (feature set, flexibility, scalability, availability) and commercial benefits.

Opti-channel strategy
A variety of channels should be available to customers so that they can interact with their banks through their channel of choice. Customers should be able to seamlessly switch the interaction from one channel to another without delay or hindrance. To accomplish this, banks must embrace an opti-channel engagement strategy. Such a strategy will help bank contact centers to route customer queries to the right channel depending on the context of the interaction. For instance, a customer seeking to cancel a card will be automatically routed to an agent who can suggest alternative options after understanding the reason for the request. In this situation, other channels may not be able to offer the human touch and empathy needed to change the customer's decision. Understanding the context thus becomes critical.

Self-service with human-machine interplay
Banks must provide bot-based self-service options to customers. Based on customer context, chatbots can provide support for routine interactions of simple to medium complexity, and transfer complex queries to human agents. Bots should be used to screen incoming e-mails, identify intent, and respond to customers based on actions taken. IVR systems backed by natural language processing (NLP) technology, should be used to enable customers to communicate in natural language. For example, "I want to know my account balance" instead of choosing from hierarchical menu options. IVR systems must have the capability to transfer the interaction along with the context to human agents in case of need. Voice biometrics should be leveraged for real-time identification and validation. This mix of human-machine interplay goes a long way in delivering superior customer service.

Employee experience

The financial services industry operates with several intermediaries like insurance agents, brokers, wealth management advisors, mortgage advisors, and program administrators. Providing a great experience to these intermediaries as well as employees is critical as it improves their performance, productivity, and satisfaction. Banks must implement capabilities like 360-degree customer view, opti-channel support, process simplification and agility, agent-assist, AI-driven intelligence and guidance, end-to-end automation, and analytics-driven interactions. For example, an end-to-end view of the customer context and life stage will help agents recommend appropriate products.

Advanced analytics

Contact centers should leverage advanced analytics to gather insights from various customer interactions for contextual and personalized servicing. This will help contact centers predict call intent, identify upsell or cross-sell opportunities, leverage real-time insights based on speech analytics, and forecast call volumes. Analyzing historical spend information and wallet share can help predict customer churn and suggest ways to ensure retention.

Operations transformation

The operations staff at contact centers handle functions like debt collections, know your customer processing, anti-money-laundering checks, risk reviews, and sales support. Given the involvement of multiple teams, continuous monitoring and appropriate resource allocation is key to efficiency, which can be achieved by adopting AI-enabled WFM tools and advanced call and screen recording mechanisms. This will help ensure compliance as well as training of the operations staff.

Paths taken by BFSI organizations

Our experience of working with various banks reveals that small and medium-sized financial institutions are exploring CCaaS solutions with integrated features like opti-channel support, intelligent routing, unified desktop, analytics, reporting, integrated WFM, call recording, and more, to reduce operating costs and modernize their contact centers. Large banks, on the other hand, tend to have multi-year contracts with telephony and contact center providers. After detailed due diligence, they shortlist vendor partners and run a pilot with a specific line of business (LoB) to test the new platform's capabilities before gradually migrating other LoBs.

The way forward

Most banks operate with legacy infrastructure resulting in poor customer service and experience. Given evolving customer expectations, it is imperative for banks to modernize and transform their existing contact centers to take customer experience to the next level. To accomplish this, banks must:

- Envision the future-state customer engagement model

- Perform gap analysis

- Establish platform evaluation criteria

- Compare CCaaS and CPaaS to identify the right platform

- Build a strong business case

- Define an implementation roadmap

- Define target-state architecture

- Implement solutions ensuring incremental value delivery

Contact centers can no longer be considered just a channel to reactively resolve customer issues. They must be seen as engagement hubs where each interaction is an opportunity to engage with customers through their preferred channel, proactively send personalized offers and next-best recommendations, and drive sales conversions. Going forward, banks must establish next-gen contact centers underpinned by UCPs to transform the way they engage with customers, deliver delight, improve customer satisfaction index, and NPS.

About the authors

Pranav Karkare

Pranav Karkare is an enterprise architect with the Technology Advisory Group within TCS' Banking, Financial Services, and Insurance (BFSI) business unit. He has 22 years of experience working with global BFSI clients in the areas of consulting, business development and solution design, focusing on contact center modernization and automation-led transformation. Pranav is also a TOGAF-certified architect and holds a bachelor's degree in Electrical Engineering from Visvesvaraya National Institute of Technology, Nagpur, India.

Annamalai Anbukkarasu

Annamalai Anbukkarasu (Anbu) heads digital and emerging technologies in the Technology Advisory Group within the Banking, Financial Services, and Insurance (BFSI) unit at TCS. His current responsibilities include advisory and architecture consulting and design, solution design, pre-sales and sales support. He has 23 years of experience working on large IT projects and channel transformation engagements. He has also led contact center transformation programs and has played key roles in many projects leveraging digital and emerging technologies. Anbu is also a TOGAF-certified architect and holds a master's degree in Engineering with specialization in Optical Communications.

About Tata Consultancy Services

Tata Consultancy Services (TCS) (BSE: 532540, NSE: TCS) is a digital transformation and technology partner of choice for industry-leading organizations worldwide. Since its inception in 1968, TCS has upheld the highest standards of innovation, engineering excellence and customer service.

Rooted in the heritage of the Tata Group, TCS is focused on creating long term value for its clients, its investors, its employees, and the community at large. With a highly skilled workforce of over 590,000 employees in 55 countries and 202 service delivery centers across the world, the company has been recognized as a top employer in six continents. With the ability to rapidly apply and scale new technologies, the company has built long term partnerships with its clients – helping them emerge as perpetually adaptive enterprises. Many of these relationships have endured into decades and navigated every technology cycle, from mainframes in the 1970s to Artificial Intelligence today.

TCS sponsors 14 of the world's most prestigious marathons and endurance events, including the TCS New York City Marathon, TCS London Marathon and TCS Sydney Marathon with a focus on promoting health, sustainability, and community empowerment. TCS generated consolidated revenues of over US $30 billion in the fiscal year ended March 31, 2025. For more information, visit **www.tcs.com.**

For more information,
write to us at **bfsi.marketing@tcs.com**