Unlocking the Transformative Power of AI for Contact Centers with Google Cloud and Cisco

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Introduction

We are all aware of how important customer experience (CX) is — over 70% of buyers point to CX as an important factor in purchasing decisions — while a negative experience can lead to high turnover. In fact, a Walker study states that this year, customer experience is expected to overtake price and product as the key brand differentiator. Contact centers are on the frontlines. Imagine giving customers immediate 24 x 7 self-service in a way that’s most natural to them — a conversation — and seamlessly transitioning them to human agents who have artificial intelligence (AI) at their disposal to answer more quickly and helpfully.

That’s where Contact Center AI (CCAI) comes in. At the core of this technology are bots that can talk, listen, learn, and understand. The bots can converse naturally with customers, resolving basic issues directly, and assist human agents on tougher calls, providing real-time, turn-by-turn guidance and continuously improving by analyzing conversation transcripts to identify gaps in understanding or requested information. Combining the best of Google Cloud AI with the power of Cisco’s Contact Center platform, Contact Center AI can improve customer experience and increase operational efficiency at the same time.

Even with all the hype around AI, it’s hard to overstate the impact AI will have on enterprises’ ability to compete in the digital economy. In fact, IDC predicts that by 2025, "AI-powered" enterprises will be able to achieve Net Promoter Scores that are 1.5 times higher than those of their competitors.

AI has the potential to transform CX by both empowering self-service and improving personalization. AI-powered contact center solutions can transform a frustrating transactional phone tree experience to a personal conversation where a user can speak naturally about what he or she needs, improving the experience and helping the customer feel known and valued. Today, businesses must make a trade-off between great customer support and operational efficiency. Contact Center AI breaks this link, allowing businesses to get the best of both worlds. It is making an impact — turning transactions into relationships, improving customer satisfaction and customer lifetime value, increasing operational efficiency, and helping agents become specialists.
Definitions

**Contact Center AI:** Contact Center AI combines Google Cloud’s natural language processing (NLP) and speech capabilities with third-party popular contact center software, improving customer experience as well as operational efficiency.

Benefits

Use of AI for contact centers can provide three critical benefits to an organization:

- **Increase customer satisfaction.** Customers can reach out 24 x 7 to an organization's brand and self-serve in the way that’s most natural to them — a conversation. AI can help provide fast, timely, and accurate responses. NLP can parse topics based on the conversation, identify customer intent, and automatically respond accurately. If a human agent is required, seamless transition between the virtual agent and a human agent can provide context, transcripts, and real-time, turn-by-turn guidance.

- **Empower human agents.** AI in contact centers can transform human agents into specialists. It can offer real-time guidance by delivering information, workflows, and turn-by-turn instruction while ensuring consistent experience for customers. It can surface relevant and useful documents to help call center agents serve customers quickly and more accurately. It can suggest chat responses for agents using conversation context. It can provide guidance on the conversation flow to agents from the identified customer intent. It can help identify why users are contacting them in real time and automate call disposition classification. AI can do all these tasks because it listens in on the conversations, understands what customers are saying/asking, and is therefore able to effectively help the human agents. AI assistance can help human agents focus on more specialized work, which helps increase customer satisfaction and foster relationship building because customers are getting the focused attention they need. A pop-up dialog box of the right information at the right time provides an easier ramp-up for newer agents. Overall, it leads to higher job satisfaction and lower turnover among human agents.

- **Augment business insights.** AI in contact centers can help businesses gain in-depth know-how about their customers. Organizations can leverage NLP to identify the reasons customers are contacting the business. NLP can help surface the top call drivers and sentiments that can help organizations prioritize strategy/product/service/improvements and so forth. It can assist organizations with compliance by identifying key phrases to help operations and QA stay on top of the most important obligations. It can also surface sentiment and language data to understand how agents interact with customers and drive faster complaint resolution.

Overall, AI in contact centers can help businesses ensure consistent "brand voice" to customers across all channels. It can help increase brand sentiment and loyalty, reduce customer churn, and increase customer lifetime value while driving contact center operational efficiency with improved call deflection, reduced call time, increased agent efficiency on calls, simplified agent training, and increased agent satisfaction. Additionally, by deflecting repetitive, tactical tasks and aiding agents in the...
background on more complex support issues, AI empowers agents, improves agent job satisfaction, and reduces agent churn (which is a major cost for contact centers today). All this means better return on investment, less overhead, and lower costs. Customer lifetime value is linked to customer satisfaction and is directly tied to revenue growth.

**Key Trends**

In the digital era, where customer service is becoming a major competitive differentiator, organizations worldwide are looking to enhance their contact center as an asset to the company. Low customer satisfaction, high churn rate of human agents, lengthy call times to assist customers, and lack of 24 x 7 support are the current reality of most contact centers. Typically, contact centers and the marketing department have been separate organizations, where the contact center responds to inbound customer questions and marketing drives new business and demand. The marketing department is concerned with customer retention, and because a large part of customer interactions happen in the contact center, these two organizations should work together.

Organizations now need a common voice across all channels, including across the contact center and marketing. Contact centers need better analytics for customer insights to make proactive and informed business decisions. Executives are concerned about their customer satisfaction scores, customer effort scores, and Net Promoter Scores and ensuring they are not only high but also increasing over time. Contact center executives are partnering with marketing executives and exploring the power of artificial intelligence to drive consistent brand experience across all touch points and channels.

**Considering Google Cloud and Cisco Contact Center AI**

Google Cloud’s conversational AI — which incorporates speech recognition, synthesis, and natural language understanding (NLU) — is at the core of Contact Center AI. Unlike use of robotic, pre-recorded voices or rules-based fixed hierarchy bots, Google’s version of conversational AI supports human-like text-to-speech generation "on the fly" and AI-powered virtual agents. While legacy conversational AI solutions support clunky speech transcriptions that require regular tuning, Google Cloud’s conversational AI is auto-tuned and has AI-driven speech models running on TPUs (accelerated computing).

Contact Center AI incorporates broader Google innovation, uses the most advanced deep-learning neural network algorithms for speech recognition, and reportedly has one of the best accuracy rates in the industry. Google Cloud’s Speech-to-Text supports 120+ languages (with more on the road map) and can auto-detect up to four languages. The Text-to-Speech function supports seamless integration with a REST- or gRPC-capable application, 110+ voices to choose from, and exclusive multilingual access to DeepMind’s WaveNet technology, which offers the most human-like voices. Dialogflow, Google Cloud’s platform that enables users to build engaging voice- and text-based conversational interfaces, such as voice applications and chatbots, is powered by AI and enables a human-like conversational experience.

Cisco is known for its decades of focus on unified and omni-channel contact center solutions. According to Cisco, it has a robust installed base with 3.6 million agents across 30,000+ enterprises using Cisco Contact Center solutions in flexible cloud, on-premises, and hybrid deployment options. By integrating Google Cloud Contact Center AI capabilities across the contact center portfolio, customers can now leverage functionality such as Conversational IVR, Customer Virtual Assistant (chatbots), and Cisco Answers — which improve contact center key performance indicators (KPIs) such as reducing average handle time, increasing call deflection, and improving first-call resolution.
With conversational IVR, customers calling into the contact center enjoy a more natural, conversational initial interaction with the ability to simply speak what they’re calling in about and quickly get routed to either a virtual agent for self-serve requests or to the best matched agent for more complex tasks. Leveraging the deep integration between Google Cloud and Cisco, customers benefit from contact center business logic (which can call to an integrated customer relationship management database or external database) to inform which calls are routed to Google Cloud IVR. In instances when a call needs to be escalated from a virtual agent to a human agent, the customer intentions identified by Google Cloud’s Natural Language Understanding hit Cisco routing scripts and are routed to the best matched agent based on the customer's intent and the agent's skills and proficiencies.

These virtual agent capabilities (with the ability to escalate to a human agent) can similarly be leveraged in a contact center chat environment for an improved omni-channel customer experience. With the introduction of the Customer Virtual Assistant, contact center customers can connect their Google Cloud Virtual Agent to service customers coming into the contact center via chat. Just as in the voice context, a virtual agent can assist customers with self-service requests that don’t require a live agent and then escalate to a human agent when a more in-depth engagement is needed by the customer. When the chat escalates, it brings along with it the history of the conversation to enable a seamless transition from self-service chat to assisted chat. The agent can then easily request and access experts and colleagues outside the contact center for additional help if needed. The Customer Virtual Assistant helps reduce the agent’s workload and allows the agent to spend more quality time helping customers on more complex requests.

Additionally, customers can use Cisco Answers, a cloud-based AI solution powered by Google Cloud’s Contact Center AI, that empowers agents in the background with the needed context and information to deliver personalized and proactive care while they’re interacting with a customer. Instead of requiring agents to manually search for information during interactions, Cisco Answers proactively presents intelligent suggestions, documents, and key forms of enterprise knowledge to the agent desktop in real time. Agents feel empowered because they're more informed, and it minimizes the need for triple-tasking, which can be distracting while assisting customers. This speeds service, improves agent productivity, and drives differentiated customer experiences that lead to customer loyalty and improve customer lifetime value.

Cisco is integrating these capabilities across the entire contact center portfolio — with connectors to both its cloud (Webex Contact Center and Webex Contact Center Enterprise) and on-premises Unified Contact Center Enterprise (UCCE) and hybrid deployments. Contact Center AI services can be purchased as a Flex subscription, which can be leveraged by both cloud and on-premises customers with a path to cloud.

By understanding what makes a great performer, supervisors use Cisco’s contact center reporting and analytics to provide individualized coaching and training. Organizations can consolidate and correlate information, from all channels, and create blueprints aligning performance with business needs. Teams gain insight into the skills, knowledge, and behaviors of top performers and correlate these behaviors directly with performance indicators, such as first-call resolution, average handle time, or Net Promoter Scores.

Cisco abides by the most stringent compliance standards (e.g., HIPAA, PCI, SOC2, GDPR), supports end-to-end encryption, and provides enterprise-grade availability. Google Cloud adheres to 99.99% availability as a service-level objective, which eliminates unplanned downtimes. Google Cloud and Cisco both have global enterprise customers. They have mutual channel partners (e.g., Accenture, Deloitte) that can sell solutions and provide services. The combination of Google Cloud AI and the power of the Cisco Contact Center platform is designed to deliver an end-to-end solution for Contact Center
Al, which can support smarter and faster models and improve the customer experience while increasing operational efficiency.

**Challenges**
The quality of both the technology and the implementation significantly impacts the customer experience. A poorly designed virtual agent can frustrate — rather than help — customers. Understanding which customer issues can be solved effectively through AI and which issues are better served by human agents is critical to the success of Contact Center AI.

Other critical challenges for Google Cloud and Cisco are speed to market and the general availability of a complete sellable solution as the broader set of cloud competitors are stepping up their game and launching their own Contact Center AI solutions.

**Conclusion**
IDC believes that the Contact Center AI market will continue to grow and be an important measure of customer experience. As customers embrace and adopt AI and the offerings continue to evolve and mature, the Cisco blended AI approach will help counter the risks associated with virtual agents frustrating customers at the point of contact.

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**About the Analyst**

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Ritu Jyoti is Program Vice President, Artificial Intelligence Strategies with IDC's software market research and advisory practice. Ms. Jyoti is responsible for leading the development of IDC’s thought leadership platform for AI Strategies and management of the newly formed AI Strategies research team. Her research will focus on the state of enterprise AI efforts and organizational impact as well as provide guidance on building new capabilities and prioritization of investment options.
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