

Google Cloud Contact Center AI Platform

The rapid evolution of technology has transformed the contact center industry over the last few decades, from the early days of voice and touch-tone to the current era of AI-driven self-service and omnichannel communication. However, despite the promise of improved efficiency and better customer experiences, many contact center leaders need help to realize the full potential of these technologies.

One of the primary reasons is that the proliferation of tools and vendors has led to a complex and fragmented contact center ecosystem. Rather than providing a seamless, integrated experience, these point solutions have often created more problems than they solve, making it difficult for agents to navigate the various systems and reducing overall efficiency.

AI has been treated as an add-on to an already complex solution. Fortunately, the technology has improved, and we can re-imagine customer service from an AI-first perspective. It has become essential to adopt an AI-first approach to streamline the entire contact center stack, from the data center to the public cloud. This is where the partnership between UJET and Google Cloud comes into play. The two firms are well suited to continuously deliver innovation across the entire stack and leverage generative AI to accelerate capabilities and improve efficiencies.

An AI-first approach eliminates the trade-offs and compromises between contact center efficiency, enterprise concerns, and customer experience. Instead, we can streamline operations, reduce complexity, and deliver results for all stakeholders. As a result, contact center leaders can improve efficiency, enhance customer experience, and drive success for their enterprise and brand by leveraging generative AI and partnering with companies like Google Cloud.



Where Did Generative AI Come From?

Generative AI has sparked a revolution in artificial intelligence, and it all began at Google. The tech giant's groundbreaking invention of transformer architecture in 2017 paved the way for a new era of large language model (LLM) generative AIs. Google's innovation has transformed how we think about AI and set a new standard for the industry.

Google Cloud

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The transformer architecture is a neural network-based system capable of processing large amounts of sequential data. It uses attention mechanisms to give different weights to different parts of the input data, allowing the network to identify the relationships between the most relevant information, and then use those relationships to respond to new and original questions. This technique proved highly effective in language modeling and has since become the cornerstone of most LLM generative AIs.

The impact of Google's transformer architecture on the AI industry cannot be overstated. Since Google released the first research papers on transformers in 2017, Google and other tech giants have used transformer-based models to create complex outputs such as chatbots, language translation, and creative writing. The advancements in generative capabilities have revolutionized the possibilities for solving customer problems.



Generative AI in CX

At its core, generative AI uses machine-learning algorithms to create new data and content based on existing patterns and data sets. Generative AI has the potential to revolutionize customer service. Using advanced algorithms and machine learning techniques, generative AI can help businesses automate many of the processes involved in customer service, allowing them to provide a more efficient and effective service to their customers.

One of the key ways in which generative AI is changing customer service is by enabling businesses to provide personalized and proactive customer service automatically. By analyzing data from various sources, including

social media, customer feedback, and purchase history, generative AI can identify patterns and trends that can be used to understand and sometimes anticipate customers' needs and provide them with targeted recommendations and services.

Chatbots and virtual assistants powered by generative AI can respond to customer inquiries and assist around the clock without human intervention. This not only

helps improve customer satisfaction but may also reduce costs by freeing up human resources to focus on more complex tasks.

Another way in which generative AI is transforming customer service is by improving the quality and accuracy of the support provided.

By analyzing data and identifying patterns, generative AI can identify common issues and provide automated solutions to customers, reducing the need for human intervention. This speeds up the support process and reduces the risk of errors and inconsistencies.

Harnessing the power of this technology can improve customer satisfaction, reduce costs, and gain a competitive advantage in the marketplace. The technology will continue to evolve, so we will likely see even more innovative applications of generative AI in customer service in the years to come.

Is Generative AI Safe?

While AI can improve automated conversational experiences, the emergence of these generative models has introduced new risks. These next-generation bots are only recommended for enterprise adoption after addressing several factors, such as rigorous testing of the models as well as the security, compliance, and privacy tools that are used to deploy the models.

Before implementing generative AI, customers are advised to review the privacy tools that are used to deploy and manage the AI models. Here are some suggested questions to review:

1. Does the platform allow choice of LLM/GenAI model, so that you can select the one with the appropriate parameters for your business and use case?
2. Does the provider offer content grounding tools, so that you can ensure the inputs and responses are appropriate for your users and your data security controls?
3. Is there an option to fine-tune the foundational models towards your business use cases, content, languages, etc?

These checks are important to ensure that generative AI can be integrated into business systems. Integration is necessary to both provide responses grounded in data and perform transactions. Google has been working to mitigate privacy and other risks and has added safeguards to ensure that generative automation can be implemented safely.

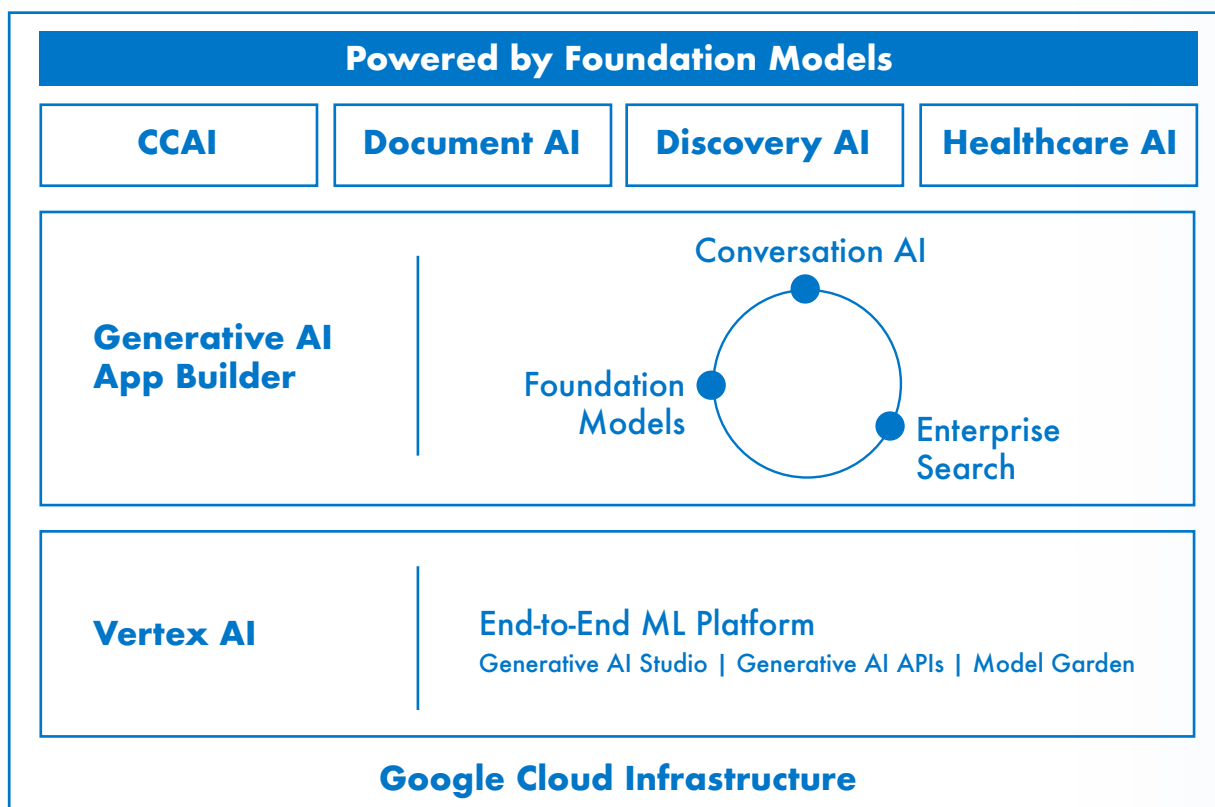
Implementation in Days, not Months

Generative AI has revolutionized how businesses operate today by enabling human-like conversations, iterative problem-solving, and content creation with minimal development effort.

Google offers its customers two paths to generative AI bots.

Google Cloud Generative AI

To support the needs of generative AI-centric enterprise development



Google Cloud Vertex offers three paths to generative AI using foundation models. Developers can use large language models to build applications using APIs, Generative AI Studio, or Model Garden.

- Google's foundation models are available to use as APIs. This includes text, dialogue, code generation and completion, image generation, and embeddings. Vertex APIs make it easy to build generative capabilities into an application like any other Google Cloud API. Developers do not need to concern themselves with provisioning storage or compute resources.
- Generative AI Studio is a managed environment in Vertex AI where developers can interact with and deploy foundation models. Generative AI Studio provides a wide range of capabilities, including a chat interface, prompt design, prompt tuning, and more. Users can implement newly tuned models directly into their applications or deploy models to production on Vertex AI's ML platform.
- The Google Cloud Model Garden provides an environment to search, discover, and interact with Google's AI foundation models and soon hundreds of open-source and third-party models. Users will be able to build next-generation applications with access to multimodal models. The Model Garden will always provide options for open-source partners and an ecosystem of partners.

The suite of models, enterprise search, and conversational AI also offers a Generative AI App Builder, where users can create solutions for contact centers and take CX experiences to the next level.

Google is also enthusiastic about its new Generative AI App Builder, which allows conversational bots to be created quickly using auto-creation tools and pre-built components. The Generative AI App Builder is the fastest way for developers to build intelligent apps such as bots, chat apps, digital assistants, custom search engines, and more.

The Gen App Builder lets developers build in minutes or hours, not weeks or months. It can use existing organizational data to generate relevant responses. It also supports a native search utility across text, voice, and media modalities. Most importantly, apps can be built to do more than inform — they can transact. The Gen App Builder simplifies integrations with purchasing and provisioning systems and can escalate to a human agent when the context demands.



Generative AI is transforming every business by automating creative processes, analyzing vast amounts of data, and making predictions and

recommendations that were previously impossible. As companies continue to explore the possibilities of generative AI technology, we can expect to see even more transformative changes in the years to come.

With these new generative AI capabilities, users can leverage Google's AI to revolutionize all pillars of customer service. Generative AI makes building virtual agents and bots 10 times easier and faster. The first step is to connect your content and data repositories to allow your new chatbot to answer questions grounded in data. Then, apply Google's pre-built flows that offer drag-and-drop and reuse options for popular use cases. Thirdly, define a high-level business logic using natural language. That's it; press Create, and voila! Intelligent generative AI chatbots can be created in minutes with these tools.

Additionally, users will have simplified controls over the level of generative AI (restrictive or more open) based on their use case. Integrating with popular messaging apps, telephony providers, and live agents is done through simple clicks, and tools also exist that provide insights and analytics of bot performance.

Google continues to work with its partners and customers to make conversational AI and generative AI capabilities more accessible to enable game-changing solutions for contact centers.

Google Cloud and UJET

The Google Cloud CCAI platform was created by partnering with UJET's award-winning CCaaS experience. This partnership has resulted in a comprehensive, AI-first, end-to-end solution for contact centers, including telephony, IVR, reporting, WFM, and more. The solution offers an integrated platform with a fast time-to-value proposition. By leveraging metadata across the stack, the Google Cloud CCAI Platform enables businesses to gain deeper insights into customer interactions and operations.

Contact Center AI Platform leverages advanced AI capabilities, so businesses can provide personalized and contextually relevant responses to customer queries, automate routine tasks, and optimize their operations for improved efficiency and customer satisfaction.

With the UJET-Google Cloud partnership, businesses can use advanced AI capabilities such as natural language processing (NLP), sentiment analysis, and conversational AI. These capabilities enable contact center agents to provide personalized and contextually relevant responses to customer queries, improving customer satisfaction and retention. Integrating these AI solutions into the contact center platform also enables businesses to automate routine tasks, reducing the burden on agents and allowing them to focus on more complex interactions that require human intervention.

The Google Cloud CCAI Platform solution is flexible and scalable, making it easy for businesses of all sizes to implement and customize it to their needs. And, of course, it's a cloud-native solution that ensures companies have access from anywhere and can be confident it's up-to-date with the latest features and security patches.

Google + Google

Google Cloud offers advanced CCAI technologies, robust call processing capabilities, and a vibrant ecosystem of related services and applications. The Google Cloud CCAI Platform can be implemented as a contact center solution or a component of a larger Google ecosystem that includes ChromeOS and Google Workspace.

The contact center is a strategic use case for ChromeOS, and it's rapidly been embraced by leading CCaaS providers. The contact center can reap significant benefits from using Chrome OS as its computing platform of choice. These include increased agent productivity, streamlined onboarding and management, and enhanced security measures that protect sensitive business and customer data from potential ransomware attacks.

Meanwhile, Google Workspace is widely recognized as the world's most popular productivity suite, serving over 3 billion users and 9 million paying customers. With such a massive user base, the potential for integrating generative AI into Workspace is immense. Overall, the intersection of Google Cloud's CCAI platform with ChromeOS

and Workspace offers a glimpse into the future of cloud-powered customer service.

Final Thoughts

The contact center is undergoing significant change. For the past decade or so, there's been a slow transition toward digital channels and self-service, but these options were limited in capabilities. New generative conversational AI technologies are suddenly creating an opportunity to reduce costs via automation and self-service while simultaneously improving the customer experience.

This disruptive opportunity represents a changing of the guard. New approaches will rapidly displace legacy approaches (and vendors). A new expectation of customer service is upon us, and the contact centers that win will be the first movers to embrace and adopt these technologies.

One of the most crucial aspects of AI's growth and development is its ability to handle many model parameters. This means the models can process and analyze vast amounts of data, generating more accurate and precise results, and creating entirely new content that never existed before. As the number of model parameters continues to increase, AI's capabilities are expanding. It can now perform more complex tasks than ever before.

In the enterprise communication space, many companies invest in AI, claiming to have their own AI or partnering with AI experts. However, Google's investment in AI is unparalleled. With over 3,000 researchers and 7,000 scientific publications, Google has led the AI research field for years. The company's full-time researchers are working tirelessly to advance AI's capabilities and develop innovative solutions that can be applied across various industries.

Google's expertise in AI is particularly evident in its development of NLP models. These models have revolutionized how we interact with technology and are critical to many enterprise communication products. With the help of NLP models, businesses can automate their communication processes and improve their customer service operations significantly.

In conclusion, the growth of AI's time and the number of model parameters has led to the development of robust and sophisticated large language models. These models are now powering enterprise communication products, improving their efficiency and effectiveness. While many companies invest in AI, Google's expertise in AI research is unmatched. The company's extensive research and development efforts have produced cutting-edge solutions that are transforming our lives and work.



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