

Air India deploys generative AI virtual agent



Air India now has an AI virtual assistant

The first of its kind in the industry, [Air India](#)'s generative AI virtual agent is powered by Microsoft Azure OpenAI service. The AI agent 'Maharaja' with patent-pending technologies was first launched in March as a pilot project, the November 10 press release said. To date, it has answered queries from more than half a million passengers.

The AI virtual agent successfully handles more than 6,000 queries per day, according to Air India's press release. The Maharaja AI Agent manages a spectrum of passenger queries across 1,300 areas related to flight status, baggage allowances, packing restrictions, check-in, frequent flyer awards, airport lounge access, flight changes, refunds and more.

Maharaja speaks four languages: Hindi, English, French and German. Of the 6,000-plus questions received each day, over 80 percent are successfully answered in seconds. About 15 percent of customer queries require additional assistance, and Maharaja recognizes this automatically. When additional assistance is required, Maharaja hands off the passenger to Air India's contact center agents, the press release stated.

"We are dedicated to providing the best possible service and experience to our valued guests across channels," said Dr. Satya Ramaswamy, Chief Digital and Technology Officer, Air India. "We also want to be very responsive to their changing preferences. After the emergence of Large Language Model-driven Generative AI capabilities, we are increasingly seeing a definitive shift in guest preferences to use chat interactions to get the information and support they need quickly and directly as compared

to browsing several web pages.”

Ramaswamy continued, “We have used several patent-pending innovations in our AI agent Maharaja with a combination of traditional machine learning techniques and the latest in Generative AI to provide a pleasing and effective experience for our customers. Many more innovations are in the pipeline and will be made live in the months to come.”

“We are pleased to see Air India's successful deployment of their AI-powered agent, Maharaja, and the use of Microsoft Azure OpenAI Service to provide a personalized and relevant customer experience,” said Marco Casalaina, Vice President, AI Platform, Microsoft. “We believe that this is the beginning of a new era of customer service, and we look forward to seeing more organizations use the power of Generative AI and our AI-optimized Azure cloud to provide a seamless and efficient customer experience.”

Air India uses ChatGPT to analyze complex questions to improve the passenger experience in later interactions. The airline said this has allowed Air India’s virtual agent to, become more attuned to natural language.

Maharaja successes are attributed to the AI virtual agent's combination of multiple traditional machine learning techniques and Generative AI. According to the press release, there are safeguards in place to prevent biased or harmful language from being used by the AI System.

Generative AI solutions understand the intent and context of a user's query, allowing them to provide a natural response, explains the airline. Thus, enhancing the passenger experience without the need for human intervention.

The airline said it plans to launch additional patent-pending technologies to further enhance the passenger experience in the coming months. These include a novel user experience that changes the way customers interact with AI agents with a combination of textual and graphical interactions that can potentially further speed up customer interactions.

Some technological innovations have been in the works for more than two years. The airline plans to enhance the current AI virtual agent personalization capabilities to create a more reliable personal assistant for a passenger’s air travel needs. This will include travel inspiration and effortless booking experiences. Support for more Indian languages is also forthcoming, the airline said.