# **CASE STUDY**



# TRANSCENDING IT SERVICE Language Barriers with AI

## Abstract

When Jordan Moore, the Head of IT Service Desk Operations for a US-based life sciences and industrial solutions manufacturer discovered that language barriers were affecting the costeffectiveness of his multilingual support centres, he partnered with Infosys BPM. Together, they deployed a Conversational AI solution that optimised operations, reduced the dependency on language experts, and reduced projected resource costs worth over \$1 Mn annually.





## At a loss for words

Jordan Moore is the Head of IT Service Desk Operations for a US-based manufacturer of advanced life sciences and industrial solutions for a global clientele. The company's IT service desk is the main contact point for its employees and service providers across 25+ locations in 5 countries, helping solve the various types of mission-critical IT issues they face. And so, Jordan is laser-focused on ensuring that all the queries coming in through the service desk, regardless of language or channel, are addressed in line with servicelevel agreements.

As part of his role, Jordan continuously seeks opportunities to enhance his team's efficiency – and establishing a support centre in India was a significant step in that direction. By operating out of the Pune delivery centre (DC), the India service desk aimed to deliver global multilingual support 24x5 by consolidating services in a single location. While this was strategically sound, some on-ground challenges hindered the full realisation of Jordan's goals.

The company's service desk not only had queries coming in through multiple channels such as phone, app, or portal, but in multiple languages as well — Mandarin, Korean, Japanese, Canadian French, European French, and English — which created a significant language barrier. This required agents proficient in multiple languages to shoulder the responsibility of understanding and processing non-English queries accurately. So, when they were unavailable or queries increased during peak seasons, the service desk struggled to maintain consistent support.

Further, for the service desk to provide 24X5 support, Jordan would need 15 such multilingual staff based between China, Poland, and the Czech Republic, apart from the service desk team in India. Additionally, the over-reliance on language experts hindered any plans to expand operations.

While assessing the team's performance, Jordan also found that though the overall volume of service desk queries was low its operational costs were quite high. He realised that the primary reason for this was the high cost and time-consuming effort needed for hiring and retaining agents fluent in multiple languages, across different countries.

# A support for service agents

To deal with all these challenges, Jordan started exploring the possibility of leveraging generative AI models to offer multilingual support and thereby reduce the serving costs across the company's global locations. The company's senior management found the idea compelling, and readily consented to engaging a suitable service provider. Then, after several detailed consultations, the manufacturer eventually entered into a contract with Infosys BPM.

Soon, Kabir Mathur, the Al and Automation expert from Infosys BPM, met with Jordan

to discuss the project's requirements and then gathered a team of Infosys BPM's experienced analysts. Their task was to create and deploy an AI-based solution to translate messages from other languages into English.

#### **Approach summary**



After considering the service desk's channels, architecture, and supported languages, Kabir's team deployed the proprietary Infosys multilingual conversational AI solution. This solution supported the real-time translation of texts and documents, making it ideal for Jordan's requirements.

The Al solution could instantly read and translate a client's message in French, Mandarin, Japanese, or Korean — sent

# Language fluency, the AI way

Once the innovative multilingual conversational AI solution was operational, it neutralised language barriers within through the portal or via email to the customer centre — into English. A service agent at the delivery centre in India could then promptly read and respond to the query in English, eliminating unnecessary wait times. The team later integrated the AI solution with the manufacturer's ServiceNow platform, providing a seamless experience for service desk agents.

Along with their email messages, clients often attached documents to substantiate

their queries. Therefore, Kabir had the team deploy a complementary stand-alone solution so agents could translate these scanned or handwritten, native-language documents on demand.

The Infosys BPM team not only completed the end-to-end implementation of the Al solution in a record 60 days, but also ensured it was fully scalable.

Jordan's service desk team. This muchneeded AI prowess proved pivotal in creating a seamless support system for the manufacturer's employees and service providers.

#### **Key benefits**



Jordan was also thrilled by looking at the projected savings worth over \$1 Mn in resource costs as he consolidated English and non-English support within the India team. He also freed up work between China and Europe, by reducing the staff required from 25 to just 5, while expanding the India team to 22, with this consolidation optimising operations even further. Another burden was lifted from Jordan's shoulders as the reduced reliance on language experts outside India lowered the cost and time associated with recruiting and training resources in these countries.

As he reviewed the project and its outcomes, Jordan acknowledged Kabir's

exceptional leadership and the Infosys BPM team's expertise in developing generative AI models. In the future, Jordan aims to expand the solution to new languages, countries, and processes and further revolutionise his service desk operations.

\*Names have been altered to preserve the identities of the people involved.



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