Synoptek

Copilot Enhances IT Support Efficiency for Oil and Gas Leader

Customer Overview

Customer

A global leader in the oil and gas drilling industry

Profile

The company operates one of the world's largest fleets of land-based drilling rigs and provides a range of services, including drilling, rig equipment, and technology solutions

Industry
Oil and Gas

Services
Copilot Implementation

Business Need

The oil and gas company faced a significant challenge with rising ticket volumes, where manual ticket handling resulted in slower response times, inconsistent support, and an increased risk of human error. The inefficiencies of manual ticketing processes also hindered scalability, affecting both the speed and accuracy of ticket analysis and resolution.

The client sought a Copilot-based solution to streamline IT support, automate ticket analysis, and ensure timely, accurate issue resolution. The goal was to minimize variability in support quality and improve operational efficiency.

Partnering with Synoptek, the client implemented a Generative AI-driven Copilot designed to provide precise solutions, build a self-improving knowledge base, and ultimately enhance operational efficiency and employee satisfaction.

Solution and Approach

Synoptek initiated the engagement with a consultative approach, thoroughly assessing the client's IT support requirements. This in-depth evaluation enabled us to customize AI models to process and analyze support tickets.

After aligning with the client's business needs and objectives, we developed a tailored IT-Ticket Copilot that leverages Generative AI to optimize IT support workflows. The solution utilizes Azure OpenAI's advanced natural language processing capabilities to accurately understand and resolve ticket queries, ensuring enhanced efficiency and precision in support operations by automating the analysis and resolution of support tickets.

The system was designed to enable:

- **AI-Powered Client Inquiry Management:** Manage client inquiries by generating relevant responses using AI and providing associated images when necessary.

- **Automated and Real-Time IT Ticket Support:** Provide automated responses and real-time support for IT tickets, ensuring swift resolution and reducing manual intervention.

The implemented Generative AI solution was also integrated with several existing IT tools and systems.

- **Database:** Azure Cosmos DB, Azure Vector database

- **Language:** Python

- **Cloud Services:** Azure Cognitive Services, Azure Vector database, Azure ML Studio, Azure Open AI, Azure App, and Azure Blob Storage

- **Frameworks and Libraries:** Lang chain, Multimodal-RAG, and NLP
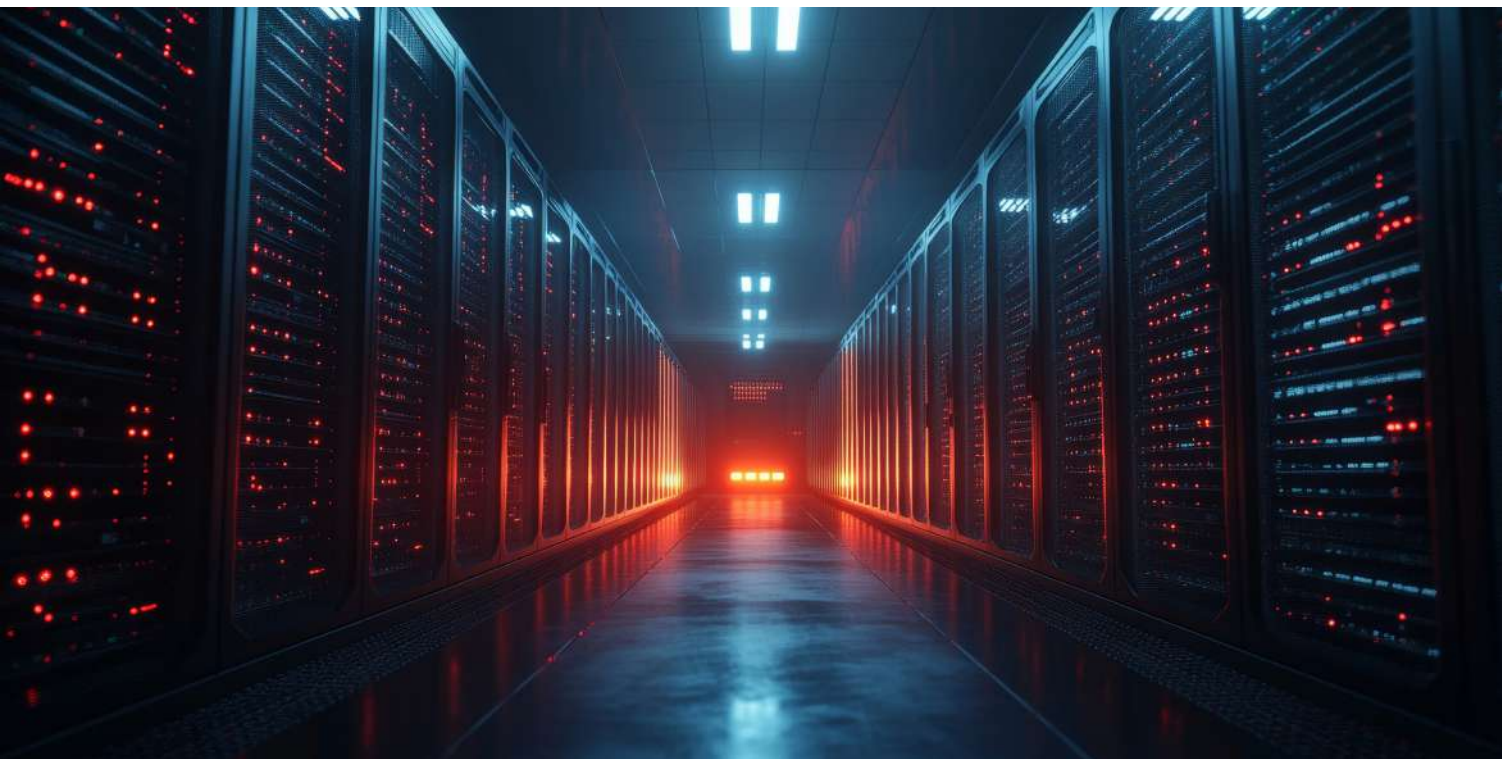
Business Benefits

The IT-Ticket Copilot developed by Synoptek provides several key benefits to the oil and gas leader:

- Speeds up responses, ensuring reliable IT support assistance even during peak periods.

- Delivers consistent and accurate support, boosting client satisfaction and trust.

- Automates routine inquiries, reducing workload and freeing support teams for strategic tasks.

- Generates quick and precise responses to user inquiries, reflecting positively on the company.

- Delivers tailored support experience with an adequate security layer and user restrictions.

- Responds to both structured and unstructured data based on user queries.

About Synoptek

Synoptek delivers accelerated business results through advisory-led, transformative full-life-cycle systems integration and managed services. We partner with organizations worldwide to help them navigate the ever-changing business and technology landscape, build solid foundations for their business, and achieve their business goals.