Synoptek

Case Study

Tailored Email Responses with Generative AI Enables a Nonprofit to Enhance Community Experiences



Customer Overview

Customer

A nonprofit that shapes and coordinates a community sponsorship system that leverages the power of welcoming Americans.

Profile

The nonprofit is dedicated to growing the role of communities in the protection, resettlement, and integration of refugees and other forcibly displaced people.

Industry

Nonprofit

Services

Generative AI

Business Need

The nonprofit struggled to manage the high volume of daily email queries on cases. The manual process of reading and responding to each email was time-consuming and inefficient, which impacted community experiences.

The client had a knowledge base which serves as a repository of most of standard processes to follow and a database of historical cases around queries made by users and wanted to utilize this data to efficiently generate a draft email that users can review, tweak (if required), and then send the response, case by case.

The nonprofit sought to leverage Gen AI to develop a system that generates customized email responses using its knowledge base. This system needed to seamlessly integrate with the legacy portal to handle queries more effectively, ensuring timely and accurate responses for efficient case management within a given SLA.

Solution and Approach

Synoptek proposed an automated system leveraging Generative AI to generate draft responses for the high volume of email queries. The system was designed to generate contextually relevant responses from the organization's knowledge base and seamlessly integrate with their existing legacy application. This approach aimed to reduce manual workload, improve response times, and enhance overall communication quality and effectiveness.

Consulting Services

Synoptek provided consulting services to implement the Gen AI-powered email response system. This involved understanding the client's specific needs, customizing AI models to suit the existing knowledge base, and ensuring seamless integration with the legacy platform for a unified customer interaction platform.

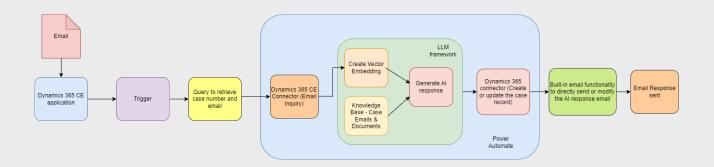
Implementation Services

Once the business needs and objectives were finalized, Synoptek implemented the GenAI solution and enabled the required integration with the client's legacy ERP platform:

- Database: Azure Vector database
- Language: Python
- Cloud Services: Azure Cognitive Services, Azure Vector database, Azure Cosmo DB, Azure ML Studio, Azure Open AI, Azure App.

The solution used Azure Cognitive Services for language understanding and Azure Open AI for generating responses.

Process Flow Diagram



Business Benefits

The automated system developed by Synoptek allows users to save around 7 minutes per case query, aggregating to savings of 2-3 hours/user/day. In addition, the nonprofit enjoyed several other business benefits:

- Significant reduction in manual workload, improving overall operational efficiency and streamlining email management processes.
- Prompt and accurate responses, reinforcing the organization's commitment to responsive communication.
- Contextually relevant and tailored responses that enhance the quality and effectiveness of customer interactions.
- Enhanced depth and accuracy of responses by utilizing the organization's comprehensive knowledge base.
- Seamless integration with the legacy platform provides a centralized hub for managing customer queries, feedback, and interactions.
- Improved tracking and analysis of customer communication enables data-driven insights into customer preferences, behaviors, and trends.
- Better collaboration and cohesion across various business functions, creating a unified environment for effective customer engagement and communication.

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.