Case Study

NISSIN FOODS Group improves operational efficiency with interactive chat app using Microsoft Power Platform and generative AI

Do what matters

Inspiring change

The NISSIN FOODS Group has set "NBX" (NISSIN Business Transformation) as a company-wide activity theme in its mid-to-long-term growth strategy. It is promoting initiatives to transform its business model beyond pure digitalization.

Mr. Toshihiro Narita, CIO of NISSIN FOODS HOLDINGS CO., LTD., explains: "The entire group is working on business reform by quickly adopting innovative digital technologies. Management has indicated that it is committed to adopting new technologies and changing how people work to become a global company. The IT department's important theme is to create an environment that enhances employee productivity."

Against this backdrop, GPT-4, a generative AI solution, was released. "Although I had always felt that generative AI has the potential to help improve employee productivity, when I touched GPT-4, I felt that it was an unprecedented, technological advancement," says Mr. Narita.

He immediately advised the company's CEO of his intention. In his speech at an induction ceremony for new employees two days later, the CEO introduced a message generated by GPT-4 and told the group, "I hope you will proactively adopt new technologies and learn a lot from them."

"I thought that we should provide an environment where employees can use generative AI, such as ChatGPT, and consider its usefulness by themselves as soon as possible," says Mr. Narita. "So I consulted with relevant parties on the same day and started considering the possibility of using generative AI to change the way employees work and improve their productivity."

As a result of the discussions, it was decided to first develop the company's chat solution using Microsoft's Azure OpenAI for internal deployment. Regarding the development of the front user interface (UI), Mr. Narita says: "We decided to develop a low-code application using Microsoft Power Platform and asked Avanade for its opinion on the implementation. The NISSIN FOODS Group had been building business applications using Power Platform, so we asked Avanade for advice on implementing a low-code chat application developed in-house."

Company Name: NISSIN FOODS Group

Country: Japan

Industry: Consumer Goods

Solution: Microsoft Azure OpenAI, Microsoft Power Platform

Driving innovation

Avanade's assistance included support for developing a chat application using Power Apps with generative AI (GPT-3.5 at initial release, later changed to GPT-4). "The system uses Azure Cognitive Search to index internal information," says Keishi Shinohara, Avanade Power Platform Solution Architect and Microsoft MVP. "The NISSIN FOODS Group placed importance on the UI part of the system. We were asked questions about how to implement a UI that would be easy for employees to use, and we provided support."

"After the kickoff on April 3 [2023], we spent a week and a half studying the system configuration and decided to use Power Apps, which enables low-code, high-speed development. With the help of Avanade, we completed a prototype in a few days and presented it to the CEO on April 14," says Mr. Hiroaki Takeda, Digitalization Development Office, NISSIN FOODS HOLDINGS CO., LTD.

"We were concerned that the information we entered would be used for training data for Azure OpenAI, but by learning the specifications of Azure OpenAI in detail, we understood that we did not need to worry about that," says Mr. Takanori Matsushita, IT Planning Division, NISSIN FOODS HOLDINGS CO., LTD. "I was concerned that the input information would be used for training data for Azure OpenAI," he adds.

"The NISSIN FOODS Group provided a detailed summary of the issues and proposed countermeasures for the areas to be controlled by the system and those to be covered by operations and education," explains Mr. Yuichi Miyagawa, Data & AI Specialist, Cloud & AI Solution Business Division at Microsoft Japan Co., Ltd.

Regarding the two points that led to the decision to develop Power Platform applications, Mr. Takeda cites "the in-house knowledge accumulated for low-code development and the connectivity with Azure OpenAI."

Power Apps is graphical user interface-based, easy to use and has a sophisticated UI screen. "This was the most decisive factor for us," says Mr. Takeda.

Achieving what matters

NISSIN AIchat, released on April 25, 2023, is an interactive application initially developed by NISSIN FOODS HOLDINGS CO., LTD. The application is available to approximately 4,000 users in the NISSIN FOODS Group. "In addition to text summarization and English translation, it is beginning to contribute to the standardization and equalization of skills and know-how for both new and experienced employees in the sales department, such as role-playing business negotiations and generating ideas for proposal activities," says Mr. Matsushita.

Regarding employee literacy, Chicken Ramen's (a NISSIN FOODS Group brand) character "Hiyoko-chan" is used to educate employees about the risks associated with the secondary use of information obtained from the interactive AI.

As for the impact after release, Mr. Matsushita says: "The way we gather information is changing. Symbolic of this change, however, is the fact that people are now using AIchat to ask questions first, and then search the web for corroboration." The company hopes to continue exploring new use cases in the future.

Regarding the expected quantitative effects, Mr. Narita says: "First, we are focusing on sales representatives and their use in the sales area. If we fully utilize AIchat and other generative AI tools for about 30 tasks expected in the sales area, we hope to save 400 hours of work per sales representative per year. This equals about 20% of a salesperson's annual working hours."

"Avanade's support has enabled us to develop and release products on the Microsoft Power Platform quickly, and we have been able to do so with precision and speed."

– Mr. Hiroaki Takeda
Digitalization Development Office, NISSIN FOODS HOLDINGS CO., LTD.

"It was thanks to Avanade's support that we decided to develop using the Power Platform and were able to release it quickly," says Mr. Takeda. "In particular, we were able to achieve a fast development cycle, because we received accurate responses to our technical questions on the same day."

Also, just before the release, there was a case of unknown behavior regarding the connection between Power Platform and Azure OpenAI. With the generous support of Mr. Yuto Mochizuki, Technical Specialist, Business Application Division, Microsoft Japan Co., Ltd., the problem was resolved and the release was made on schedule.

Regarding future developments, Mr. Takeda says they have several feature releases in mind. "One of the big ones we plan to release is a feature allowing users to reference internet information," he says. "We want to release features that make entering questions (prompts) easier to get the desired output from AI. This feature references internal company information and an automatic summary of web conference minutes in Microsoft Teams."

Mr. Matsushita tells companies that are feeling the challenges of internal DX: "Once you get information on technology, it is effective to start small, create a prototype and verify its applicability to business operations simultaneously."

"NISSIN AIchat is not the end of our efforts after its release, but a continuous effort is necessary," says Mr. Narita. "With technology evolving daily, we need help with our transformation efforts. We want their continued support to take this initiative to the next level."

Finally, Mr. Takeda cites "top management's keen interest in the usefulness of new technologies such as generative AI and the possibility that this technology could significantly change the way they do business" as factors that enabled this project to be completed quickly.

The team expressed a strong will within the company to utilize this technology actively. "We discussed possible risks with the relevant departments and took countermeasures, but we decided to proceed with what we could do at the earliest possible stage, rather than considering every possible situation and condition," says Mr. Takeda. He also attributed this decision to the corporate culture of the NISSIN FOODS Group, which encourages challenges.

About NISSIN FOODS Group

The NISSIN FOODS Group is a comprehensive food group that has continued to grow by pursuing food possibilities, starting with the world's first instant noodle, "Chicken Ramen", invented in 1958. Our vision of "Earth Food Creator" not only means "a person who creates food for the earth" but also embodies our great desire to "create food, which is the basis of life, for the world."

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About Avanade
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