



Sompo Japan Nipponkoa



Sompo Japan Nipponkoa Insurance Inc.

Realizing innovative call center service with AI speech recognition technology

Service: Customer Contact Center AI Solutions



Sanae Suyama
Executive Officer
General Manager
Customer Communication Planning Department
Sompo Japan Nipponkoa Insurance Inc.
"Achieving a company consensus is vital when introducing a new technology like AI (Artificial Intelligence). NTT Communications' solid project plan made it possible for us to carry out the project smoothly."



Naotoshi Maruyama
Manager
Planning Group Division
Customer Communication Planning Department
Sompo Japan Nipponkoa Insurance Inc.
"NTT Communications technologies such as speech recognition, language processing and AI can be combined to create new business opportunities that are very appealing".

Customer profile

Name: Sompo Japan Nipponkoa Insurance Inc.
Revenue: JPY 2,218.4 billions (as of December 31, 2015)
Business: Sompo Japan Nipponkoa Insurance Inc. is a P&C (property and casualty) insurance company that changed its name in September 2014 after the merger of Sompo Japan Insurance Inc. and Nipponkoa Insurance. To always be the best customer service provider, the company takes on a wide range of businesses including P&C insurance as the core and quality services that contribute to the security, health and wellbeing of customers.
URL: www.sjnk.co.jp

- Challenges**
 - Provide a knowledge support system for inexperienced advisors
 - Standardize the quality of our service without relying on the skills of individual advisors
- Solution**
 - AI and voice recognition technology for excellent customer service
 - Improve customer service quality and "visualize" customer needs
- Benefits**
 - The AI customer support system improved customer service quality
 - The innovative system can serve as Sompo Group's gateway

Challenges

Further evolution as the best customer service provider
Exploring ways to make call centers more sophisticated

Sompo Japan Nipponkoa Insurance Inc. is a leading P&C insurance company in Japan. Its holding company, Sompo Holdings, Inc. manages businesses in P&C insurance, life insurance, nursing care/healthcare and housing reform through top-quality service that contributes to the security, health and wellbeing of customers.

"Our group slogan, Innovations for Wellbeing, expresses the breadth of our business domain, which includes not only insurance but also related services, and our resolve to be the best customer service provider both at home and abroad. So it became significant for our division, the direct contact point with customers, to reinforce our service in terms of responding to customers and compiling their voiced needs. One of the most vital tasks was to improve the quality of service at customer call centers, our non face-to-face contact point with customers, where inquiries are answered and applications are accepted and partially processed," explained Ms. Sanae Suyama of Sompo Japan Nipponkoa Insurance Inc. The company had provided advisors (telephone operators) with guide manuals and training, but found that some issues could not be resolved this way.

Advisors at customer call centers provide sales consultation on products, guidance on filing car insurance claims, answers to questions from Sompo dealers nationwide on various issues, and more. A total of 1.9 million calls are made to the call centers annually. "Since the range of our products and services is so diverse, it takes a lot of time for an advisor to become experienced. Of course, we already have a system that supports FAQ searches, but finding the right information quickly depends on individual skill. So it was difficult to standardize the quality of our service to customers," explained Mr. Naotoshi Maruyama of Sompo Japan Nipponkoa Insurance Inc.

The ongoing decline in Japan's labor population was also a factor. To secure manpower while also maintaining or improving the level of service, it became necessary for us to further strengthen the conventional support system and eliminate elements in the service that relied heavily on personal skill. "This situation led our company to begin considering a new solution, which required maintenance or improvement of the level of our service while simultaneously improving productivity," said Ms. Suyama.

Solution

Artificial Intelligence technology looking ahead 10 years
Introduce AI speech recognition technology and automatic FAQ display

Speech recognition technology that analyzes the Japanese language with high accuracy makes it possible to transcribe conversations with customers into text in real time. AI can automatically find the closest appropriate candidates from FAQs stored in a database and display them on an advisor's computer screen. To select the right solution, what we valued most was not solving near-future problems in operation, but picturing "what the customer contact center would be like in the next 5 or 10 years." For example, if the content of daily inquiries from customers were all converted into a database, the data could be used to visualize hidden complaints from customers and develop products that better meet their needs. "It's no longer necessary to record customers' conversations as in the past because speech recognition technology transcribes audio to text," Mr. Maruyama explained.

In the not-too-distant future, the company plans to realize virtual advisors that automatically respond to customers' questions based on data stored in the database. When this becomes a reality, the telephone service at call centers can be diversified to raise customer satisfaction. "To build this system and reinforce Sampo Japan's call center service, we need both artificial intelligence and speech recognition technology," explained Ms. Suyama. The company reviewed solutions proposed by multiple vendors and finally chose the ForeSight Voice Mining system of NTT Communications, which uses an NTT Group voice mining system and the corevo™ AI engine.

ForeSight Voice Mining can transcribe natural speech into text with high accuracy by using deep training algorithms, acoustic models and LVCSR (large vocabulary continuous speech recognition) decoding algorithms. corevo™ is an extremely sophisticated AI engine developed at NTT R&D based on vast research on Japanese language processing technology. It can understand and respond to emotions and expressions in human speech and is also equipped with a function for learning. Using customer speech data acquired by ForeSight Voice Mining, the system displays the most appropriate FAQs on the screen and will eventually improve through a self-study function to serve as a virtual advisor.

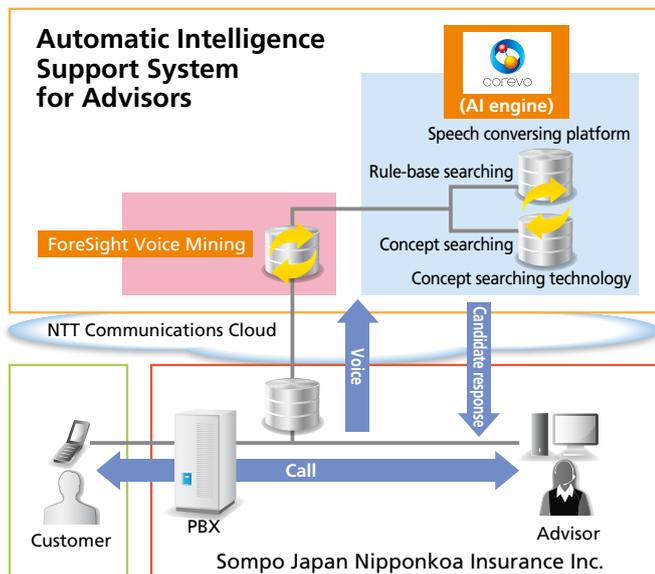
"I trust NTT Com in their commitment to develop a system that combines these two technologies. Moreover, the decisive factor in choosing them was their extreme accuracy in Japanese speech recognition, which will become indispensable for the operation of our customer contact center," said Mr. Maruyama. For example, homonyms such as kikai (meaning both "machine" and "opportunity"), will be transcribed correctly by judging the context of the conversation, regardless of the age and gender of the speaker or whether it was pronounced with an accent. Mr. Maruyama visited NTT R&D to verify the accuracy of the speech recognition technology before choosing the company.

"I was also very pleased with NTT Com's intricate plan for the realization of the virtual advisor and see the company as a partner we can rely on," Ms. Suyama added.

Benefits

Customer service that no longer relies on advisors' personal skills
A system that may ultimately be used as the entire Sampo Group's gateway

Diagram: Innovative call center service system



Speech recognition technology that processes language through high-accuracy analysis makes it possible to transcribe customers' conversations to text. AI (Artificial Intelligence) finds the most appropriate FAQ candidates from the database and displays them on the advisor's PC screen.

Through this work, Sampo Japan Nipponkoa constructed an original Automatic Intelligence Support System for Advisors platform using NTT Group's speech recognition engine and AI engine as the core. Trial operation of the system has already begun in some call centers.

The system works by transcribing the customer's real-time speech into text through ForeSight Voice Mining that runs on NTT Com's cloud environment. Then corevo™ recognizes the most significant words and candidate FAQs are instantly displayed on the screen to assist the advisor. Mr. Maruyama told us, "our goal was to shorten our time spent per customer to two thirds, and we have already achieved our goal."

After a case with a customer is processed, the advisor evaluates the FAQs displayed on the screen and the system automatically learns to improve its research accuracy based on the evaluation. More call centers will employ this system, which will be further improved for higher accuracy through the development of new algorithms. Even though the project is only half finished, the service is already relying less on the skills of individual operators and training is taking less time, resulting in lower costs.

"When virtual advisors become a reality, our customer contact centers will serve as gateways for the entire Group. Then our human advisors can assist customers as concierges to provide even higher levels of service. I look forward to receiving continued support from NTT Com and its state-of-the-art technologies," said Ms. Suyama.

NTT Communications Corporation

Website www.ntt.com

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