General Insurance – Case study

About the Client

Client is a long-standing general insurance provider that has maintained a presence in the New Zealand market for over a century. They are listed on the NZX. With both a national and a pacific network, they offer a comprehensive suite of insurance products for both personal and commercial customers.

Client Challenge

Significant weather events have impacted the business ecosystem and highlighted gaps in customer service which has caused delays and customer dissatisfaction. This is indicated by an Average Handling Time (AHT) of 15 minutes for emails and 12 minutes 20 seconds for calls, and a Net Promoter Score (NPS) of -15 for emails and +6 for calls. Specifically, they have identified the following drivers for the POC:

Large Volume of Requests:

40% of requests are received via email, straining response efficiency, especially after adverse climate events. 6.5k emails are received monthly, 900 of these are in the "General" category.

Limited Scalability:

Current approach lacks rapid scalability during adverse events, risking customer satisfaction and client's reputation. Increasing volumes and inefficient practices create barriers to scaling customer support to meet growing demands.

Inefficient Information Retrieval:

Clients's Confluence knowledge base requires time-consuming research across >1000 pages and subpages, leading to unknown quality in replies.

Slow Training Environment:

A 16-week onboarding process and a 1:15 team leader to Customer Service Consultant ratio in the center for US Market hinder efficiency in service.

In light of the current events, the client sought to investigate generative AI solutions to foster efficiency within customer's contact center. Specifically, they wanted to build a proof of concept that leveraged generative AI to experiment with streamlining Customer Service Consultant responses to emails received in the "General" category, by querying customer's relevant knowledge base, drafting email replies and providing citations to the relevant documents from the knowledge base for quality assurance.

Deloitte Solution

Specific functions of the generative AI proof of concept built by Deloitte:

- **Information Retrieval:** Receives a copy of an email query in the "General" category, pasted via Customer Service Consultants, searches through the knowledge base and identifies relevant answers.

- **Drafted Response:** Provides a first draft of email replies to Customer Service Consultants and returns the relevant document references.

- **Validation, and Storage of Human Feedback:** Customer Service Consultants quickly cross-check to make sure information is correct, edit reply, and rate the quality of first draft generated by the tool. This feedback is saved so that it can be incorporated into an improved model in the future.

More specifically, the solution uses the following AWS services to perform these functions:

- Amazon S3 and Amazon Kendra are used to store and index documents retrieved from Confluence

- Amazon Bedrock is used as the API for LLMs and embeddings, supporting the vector search on Kendra and provides responses

- AWS Lambda is used in conjunction with Langchain for the orchestration

Results and Benefits

Some of the key benefits realized after implementing the generative AI solution for customer service response automation are as follows:

Email response times were reduced by over 25.6% (the client estimates >40%) through AI-generated draft replies, improving customer satisfaction and lowering average handling times.

The AI leveraged Confluence knowledge to rapidly research and cite credible sources in response drafts, increasing response accuracy.

Consultants saved significant time not having to search knowledge bases manually, enabling managers to redirect time to additional tasks.

The AI system was able to scale automatically to handle surges in email volume from weather events, ensuring more timely assistance.

Customer satisfaction (NPS) for email support improved from -15 to +15 after launching AI-assisted responses.

Faster, higher quality and consistency in response helped protect the client's brand reputation during high volume events when customer patience wears thin.

With freed up time, consultants could take on more value-added work and cross-training to further specialize for US Market.

10% decrease in workplace frustration, measured with a pre and post tool testing survey.

75% of users reported an increase in work satisfaction.

Overall, the generative AI solution delivered greater efficiency, scalability and quality in email response. This resolved previous pain points around information discovery, response quality, and resource constraints.

About Deloitte

Deloitte is one of the largest professional services firms in the world and a leader in digital transformation strategy. Through a network of more than 330,000 professionals, industry specialists, and an ecosystem of alliances, Deloitte assists clients in turning complex business issues into opportunities for growth. They are a strategic global systems integrator with over 17,000 certified AWS practitioners across the globe. They continue to raise the bar through participation in the AWS Competency Program with 25 competencies including Machine Learning.

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