Using voice commands and AI:

A practical cargo application

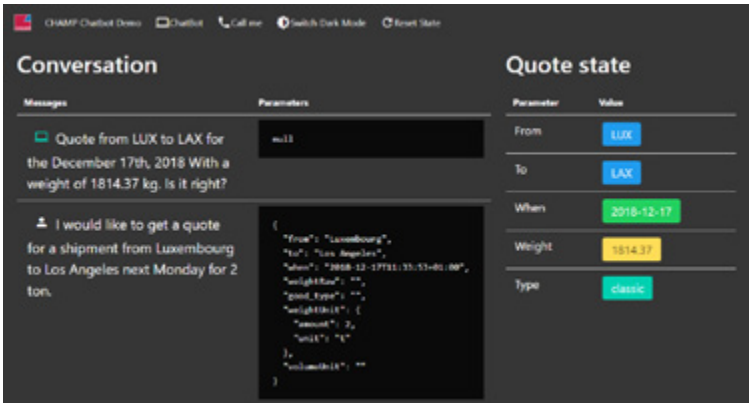
Lucas Fernandez, Head of Innovation

While chatbots have been around for quite some time now, their potential has only been realized with the advent of Artificial Intelligence (AI). Using Google technology and Dialog flow, one can easily become mesmerized by the ease with which you can build a chat interface which infers what a human intended to ask.

AI and chatbots offer immense opportunities for anyone looking to innovate within a portfolio. Even for CHAMP, chatbots have quickly imposed themselves as a necessary technology to explore, knowing especially the past experiences done with the Amazon Alexa system. However, the idea was to further push the concept - shifting from a simple digital assistant to something that could be offered as a new product or transforming the usage of an existing one.

Leveraging the opportunity of participating in TIACA's Air Cargo Forum 2018 in Toronto, CHAMP decided to virtualize a booking agent to automate the quote request process. As usual, the intent behind this digitization was not to remove the human from the process, but to free them from the 80% of "business as usual" tasks / activities and enable them to focus on the more high-value tasks with the ultimate goal to offer aneven better service to the customer, potentially enhancing the user experience in multiple areas.

CHAMP quickly developed a proof of concept experiment and worked on modeling the workflow in a chatbot framework.



The Chatbot

First, the team set up a phone number customers could call to get a quote. Our chatbot would answer them on the phone and gather the minimum information required to get a quote: origin, destination, the weight of the goods and date of the shipment. Of course, gathering all this data must be done in a conversational manner - meaning that you should have an experience as pleasant as if speaking with a real human being.

When the minimum set of data has been collected, a request was sent to CHAMP's Cargospot Quotes to deliver a set of options to the customer with potential dates, flights, and costs of transportation. Furthermore, the callers could choose which option they prefer and register that quote in the system.

In addition to this workflow, CHAMP also designed a screen to display the conversation in real-time to the users.

CHAMP performed nearly 40 demonstrations in Toronto, seeing an accuracy rate of over 90%. What is interesting is the variety of reactions from the audience, which varied from the most positives ones, such as: "I love chatbots, we are operating in the B2C sector and we put chatbot everywhere to speak with our customers. Right now, I have a huge team of people just on the phone asking everywhere where our shipments are. If I could have robots to make the calls it would be invaluable."

To: "There is no way that my customers will ever want to chat with a robot, here on my continent we do not like using them and we prefer to interact with real agents."

That's ok, chatbots may not be the solution and way forward for all situations or geographical regions at once. But technology is evolving and the chatbot functionality is maturing, enhancing the overall experience.

Overall, most of the reactions from the audience were of curiosity and willingness to engage in a small experiment. The response has encouraged CHAMP to continue the refinement of the Chatbot for subsequent inclusion in the portfolio.