Presentation

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Customer-Driven Architecture for a Chatbot

Abstract:
1.26 million of passengers are travelling in Switzerland with the SBB every day. The customer service before, during and after the journey is therefore more than important. Our customers need a quick and handy way to order tickets, reserve seats and obtain information.

The volume in our customer service center increases year by year. Moreover, a big share of the requests are similar to each other. Accordingly, to keep the volume on a level, reduce cost and let our employees focus on more complex requests, we thought about a chatbot which is a highly qualified and advanced product assistant to help our customers 24/7.

We started a first pilot phase with a basic question-answer bot. The goal was to explore whether our customers would use a chatbot at all and to learn about the kind of questions they would ask. In order to gather more information about our customers we conducted qualitative interviews to get insights in what customers know about using chatbots and what expectations they have.

With the gathered insights of the question-answer bot we created a totally new structured different bot. We revised both architecture and design of the bot and included machine learning modules for more "intelligence". To a certain extent, the bot is now able to capture context and sentiments and recognize when it is time to hand over to an agent in a live chat.

The iterative approach allowed us to integrate customer continuous feedback and leveraging the bot to react more appropriate to the customer's requests. While still being in the process of further improvements, we would like to take this opportunity to present you our findings also in comparison with an almost completely dialog guided chat bot (rule-based). What did work so far, and what did not?
- how to gather insights in user behaviour/interaction with a chatbot
- which use cases are suitable for a chatbot
- why it is so important to give the bot emotions and how to detect them

Biography: Laura Gander is a project manager at SBB where she is responsible for innovation and digitalization in the customer service management. She has a management background with a BSc in Business Administration.

Antonella Bolt is product and innovation manager at SBB contact center and is responsible for various projects aimed at automating the increasing number of customer requests. She has a management background with a BSc in Business Administration and a wide background in customer service.

Ursula Stäuble is working in the SBB IT-Department as a Senior IT Project Manager, Business Analyst and Teamleader. She has taken the responsibility for several projects for the Contact Center and the Customer Service.

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