Use case: news bot

? Problem

Having an underperforming bot that users complain about

When visionaries started predicting chatbots would be the next "big thing", early adopters run to develop their bots, to be the first ones launching. At this point, there was not a wide variety of solutions to make a chatbot conversational; they had to relay on buttons to support the communication between humans and machines.

TechCrunch was one of the first companies to jump on this technology, and in the beginning it was such a success it got voted best bot in the news category. However, as has happened with other chatbots, it still relied too much on buttons, so live users felt that the TechCrunch's bot wasn't offering anything different from the search bar at the web and started to complain.

Solution

Linguistic knowledge to improve Natural Language Understanding (NLU)

Bitext is specialized in enhancing the communication between humans and machines. Bitext bot middleware helps to speed up the time to market, and improve the user experience of conversational bots. For **TechCrunch**, the priority was to improve the interaction with its customers. Therefore, we developed a solution that works at two stages of the process:

> **During the training stage**, Bitext bot middleware automates the chatbot training with thousands of artificially generated data. Allowing users to express themselves as they normally do without fear of being misunderstood by the bot.

> **Once the bot is live**, the middleware simplifies complex queries such as double intent or negation, making the conversation more human-like.

Result

A conversational bot with an improved understanding and unique capabilities

By integrating **Bitext bot middleware** in the previous TechCrunch architecture, users were seamlessly migrated from a limited bot to a 100% conversational one, with unique features such as improved natural language understanding, and handling of double intents and negation.

Now users have the possibility to choose if they want to interact with **TechCrunch bot** by using buttons or typing free text without worrying about not being understood.

Figures highlights

> Only 10 days of development

> No data needed for training

> + 500K users per month

REACH OUT

About the client

TechCrunch is a leading technology media property, dedicated to obsessively profiling startups, reviewing new Internet products, and breaking tech news.

It was founded in June 2005, and since then **TechCrunch** has reached over 12 million unique visitors and drawn more than 37 million-page views per month. The TechCrunch community includes more than 2 million friends and followers on Twitter, Facebook, LinkedIn, Google and other social media.
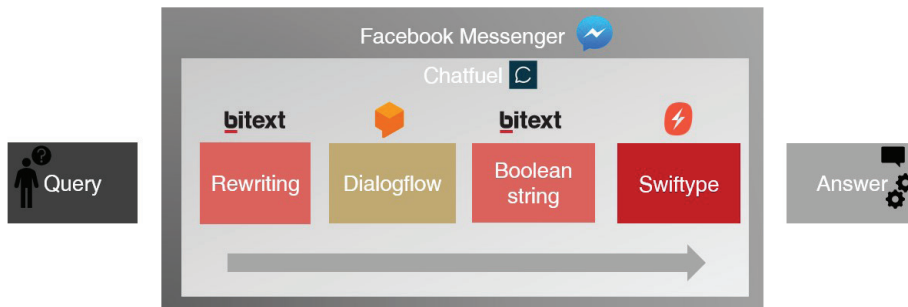
bitext

Bitext technology

A convenient NLP layer to boost the chatbot performance

Bitext solutions are flexible and can be adapted to any chat interface such as Facebook or Slack. It can be integrated with every type of chatbot framework and search engine. In this particular case, the integration combined Facebook Messenger, Chatfuel, Dialogflow and Swiftype.

How does it work step by step?

Queries typed by users go directly through the **Bitext bot middleware**.

The first step is simplifying the sentence to extract the basic order by using our rewriting technology. This rewritten sentence is sent to the intent detection engine so the chatbot can figure out what the user is asking for.

Once the intent is detected, Bitext once again rewrites the sentence into a boolean string, adding commands such as "AND" or "OR".

This step is key, so when the basic phrase that includes booleans goes to the search engine, the retrieval answer is the correct one.

The architecture is completely modular and can be integrated with any intent detection engine, messaging platform, or search engine without having to recreate the bot from scratch.

The user gets an accurate answer within seconds.

> **"** *The best bot on Messenger just got better.* **"**

— Travis Bernard, Director of Audience Development at TechCrunch

> Try it out at https://www.messenger.com/t/techcrunch

> Contact us at https://www.bitext.com/contact-us/

bitext