



Conversational AI and NLP

NLP is the Key to Unlocking Conversational AI's Full Potential

We live in a time of rapid digital transformation, with customers leaning on technology as the way to communicate with brands, services, and departments. Conversational AI (CAI) is right at the forefront of those interactions. Not only this, [Gartner's analysis](#) of technology trends found that through 2028, AI models will shift from technology-literate people to people-literate technology. This means that customers are leaning on technology to communicate with brands, and the onus is moving away from people translating intent to computers understanding human intent. As this happens, CAI models will need to be able to communicate with—and understand—users in a more meaningful, nuanced way. Enter NLP.

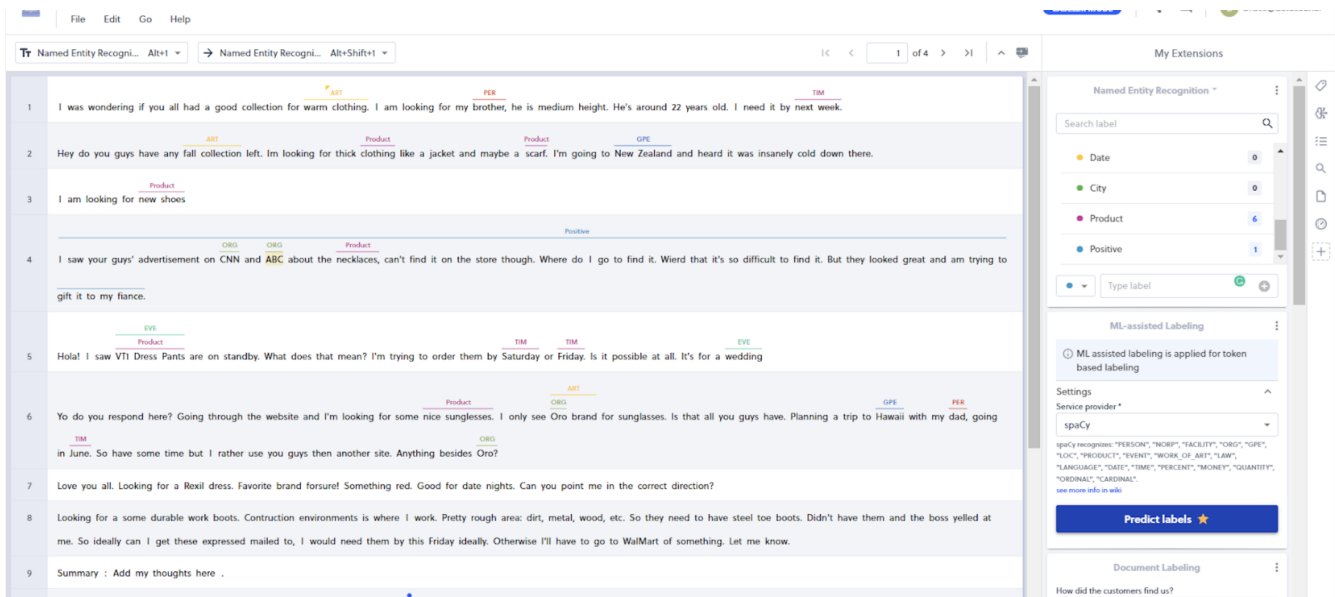
NLP has the power to deliver conversations that are accurate and as human-like as possible. When AI is moving as fast as it is, it pays to stay ahead of the game and seek out the best tools possible to keep up in the market.

The Problem Computers Face with Conversational AI

As technology changes the way people interact, digital customer experience is coming to the forefront as a major brand differentiator. One of the problems, however, is that the human language is highly nuanced and difficult for computers to understand. We just have to think about things like tone, sarcasm, slang, and homonyms to see the complexity. This was one of users' biggest frustrations with early chatbots, as they felt that the bot didn't understand them. Now, the pressure is on CAI solutions to build models that understand the human, not the other way around. To do this, it needs huge amounts of rich data sets, strong algorithms, and deep linguistic knowledge. This is where NLP comes in.

NLP and Data Labeling Can Change the Customer Journey

NLP can analyze and convert language with the help of machine learning. This helps inform the ML model and improve it to create a truly meaningful dialogue with customers using conversational, natural speech patterns. Sentiment analysis, for example, helps the computer to identify words that have a particular sentiment. With NLP, chatbots and CAI tools can understand complex sentences, in different languages, with idioms or broken grammar, transforming the user experience.

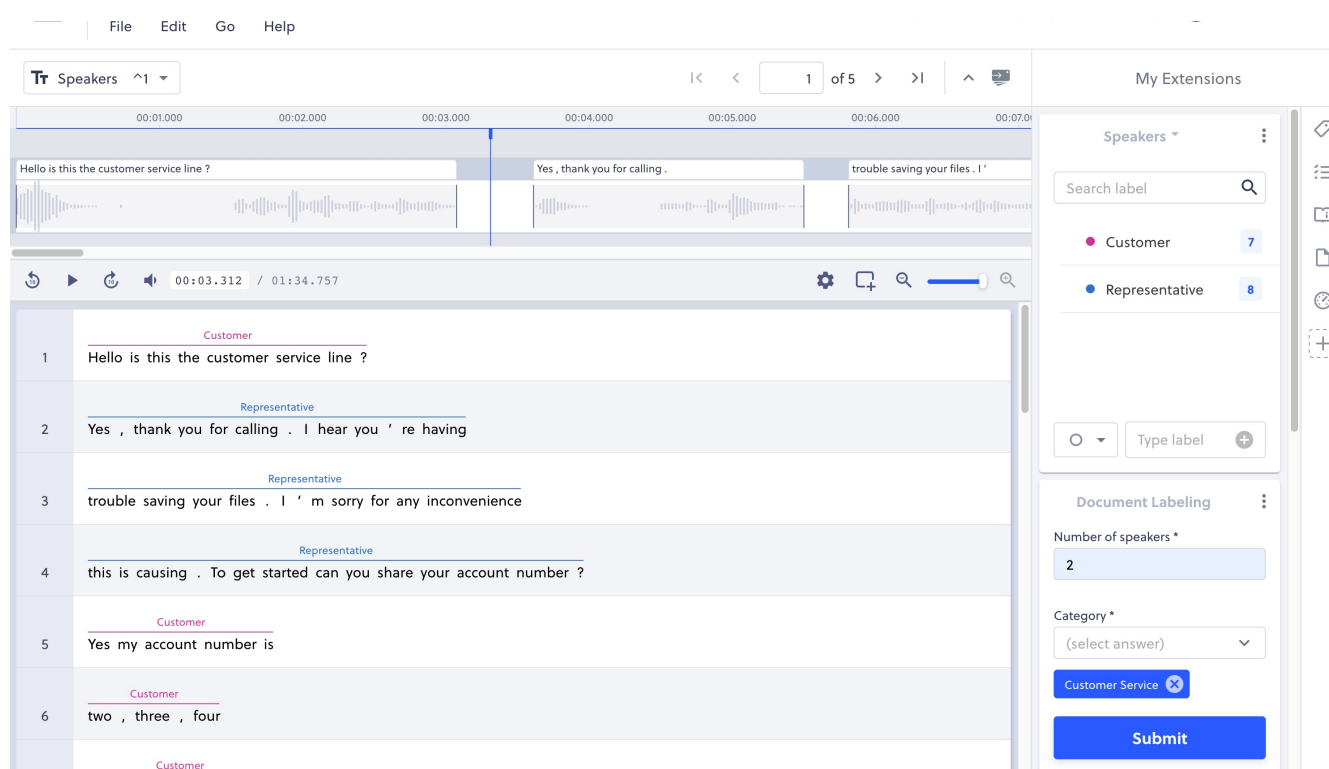


3 Ways Conversational AI and NLP Come Together

- Online Customer Support** - With the help of NLP, customers can use their own words to speak to a CAI tool, and can receive immediate, accurate responses. NLP can help sift through the information, identify trends, understand intent, and inform where to direct customers. This decreases call center volume, saves resources, and lets team members focus on more complex or specialized issues. Meanwhile, customers still receive the same level of service they expect.
- Customer Service and Contact Centers** - A healthcare organization's service center might use AI to help guide someone through a care plan. If their goal is to improve first call resolution to make sure patients don't call back confused, they can use CAI and NLP. They will lean on specific training data collected through communications, then label the data quickly to turn it into a model that will assist the call center in reaching that outcome faster.
- Internet of Things (IoT) Devices** - Most people now have at least one IoT device, whether in the form of an Alexa speaker, a smart watch, or a new refrigerator. These devices use NLP and speech recognition tools to understand and interact with the user. To provide meaningful responses, IoT devices also rely on huge amounts of quality, labeled data, which is where NLP data labeling tools are key.

Why Invest in NLP Data Labeling Tools?

To get the most out of NLP you need a labeling tool built with NLP at the core. Quality CAI tools require such large amounts of data, and labeling that data correctly and quickly is important. To do that, the labeling tool needs to be able to handle involved labeling tasks, and to be built with conversation transcription in mind. Simple labeling functions are not enough when you're building a CAI solution complex enough to understand human nuance. You need robust features and true customizability. Datasaur is built to handle audio transcription, speaker diarization, entity linking, sentiment analysis, intent labeling, and so much more. In any language, whether left to right or right to left.



Why Now?

It's never been more important to capitalize on NLP for Conversational AI. People have come to expect a new level of interaction and communication, and NLP and data labeling are now key. At this stage, it's not a matter of whether enterprises will adopt NLP and data labeling for CAI models, but when. Stay in the game with a robust, customizable tool built specifically for NLP data labeling.