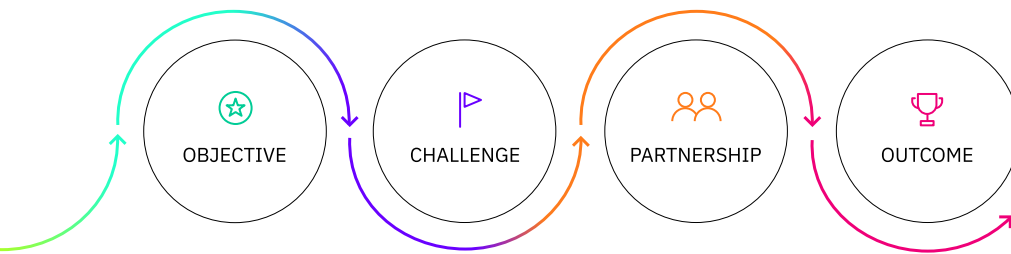


CASE STUDY

Conversica

Conversica is an enterprise-level conversational AI provider helping marketing, sales, and customer success teams engage customers at scale across channels to drive more revenue opportunities throughout the customer lifecycle.

Conversica's platform handles more than 10 million queries per month and supports API integrations with more than 50 external systems, such as CRM, marketing automation, and ABM platforms.



Objective

Conversica developed a web chat offering with natural language understanding (NLU) capabilities to provide a rich, personal experience for web site visitors. Conversica's web chat AI assistant speeds up resolution of information requests, accelerates the revenue pipeline, and augments the productivity of customer success teams.

CONVERSICA

Company Highlights

01

Conversica provides AI assistants designed to engage customers in human-like, two-way conversations that accurately understand incoming messages, respond appropriately, and drive revenue opportunities throughout the customer lifecycle. A web-based conversational experience is their latest innovation.

02

Conversica's data science team evaluated BERT, a state of the art neural network based NLP model for text classification, information retrieval, and summary generation. The BERT based system was difficult to scale and had inconsistent performance across a variety of use cases. This presented a critical challenge to the timely launch of the web chat product.

03

Conversica evaluated Vectara's Gen AI platform with different real world query samples and documents and reported significant improvements in precision, recall, and latency.



Challenge

Conversica's team of NLP scientists spent a considerable amount of time, money, and effort training, implementing, and testing BERT, a state of the art neural network NLP model created by Google, to accomplish the following:

- 01 Classify the text and intent of all customer queries
- 02 Retrieve the right information from a free form text knowledge base
- 03 Generate a summarized response to each query

The BERT-based system was costly to develop and run to meet production workload demands. The model's information retrieval efficacy metrics also varied considerably with different query types and text datasets.

The team identified these challenges as critical to resolve before launching the new web chat offering.



Vectara and Conversica

Conversica's team conducted multiple internal tests to evaluate Vectara's hybrid search performance for integration in the web chat offering. The team evaluated Vectara's precision, recall, and F1 scores with a broad array of query and document samples.

Compared to the BERT based system, Conversica's data science team reported the following Vectara search performance results:

- 01 19 point jump in precision
- 02 20 point increase in recall
- 03 30 point improvement in F1
- 04 Response latency below 100 milliseconds

"We have been extremely satisfied with results so far from Vectara, especially with the new enabled reranker. The performance jumps we saw in precision, recall, and F1 excited us to choose Vectara as part of the backend for our new chat service."



Mark Jancola
Chief Development Officer



19

point jump in precision



20

point increase in recall



30

point improvement in F1



100ms

response latency



Key Outcomes

Within a few days of testing Vectara with real world data, Conversica saw significant improvements in the key information retrieval and AI performance metrics that were crucial for launching their new web conversational AI assistant.

Vectara played a key role in enabling Conversica's science and engineering teams' rapid and successful evaluation and deployment of the high priority NLP capabilities on the product roadmap.

Vectara's benefits extend beyond product quality enhancements to free up valuable engineering resources for different product development, investment, and core IP creation initiatives.

We are excited to continue our collaboration with the Conversica team, and we are proud of what they have accomplished!



How to find out more and try Vectara for yourself

Explore how Vectara can help you to get more from your search, by visiting vectara.com. Also, try it out by signing up for an account. You can see the power of Vectara's semantic search in 15 minutes, with your own queries searching against your own data.

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