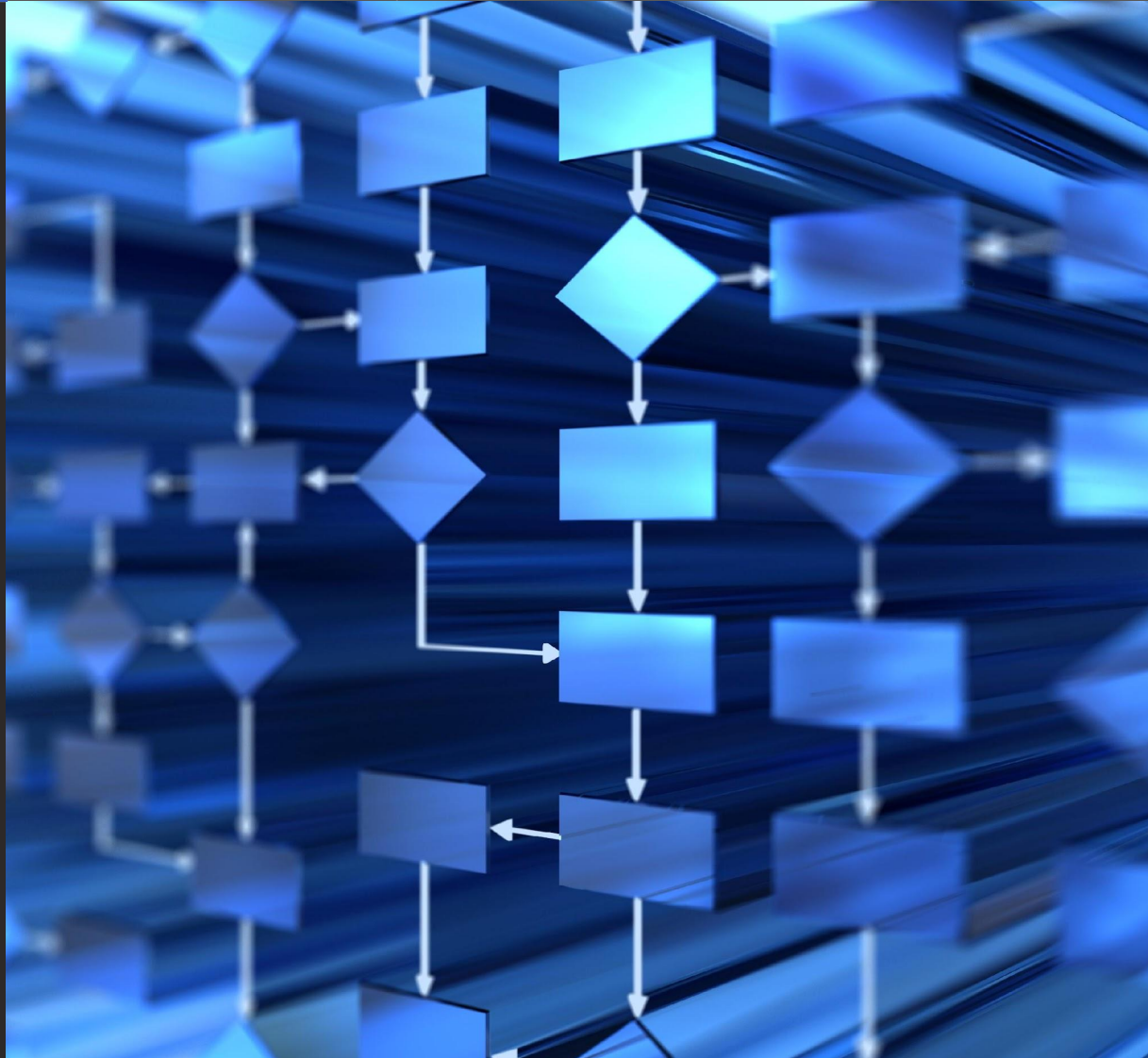


Tiger Analytics helped a leading UK retail bank boost call resolution and **achieve 70% call intent detection accuracy through NLP**

Tiger Analytics implemented a Deep Learning-based solution that used an Active Learning Loop to analyze call resolution based on customer conversations, quickly creating an 85% accurate model with 100% coverage. It also helped data ingestion, model inferencing, and final consumption reporting, with options to add more solutions in the future.



The Background

Our client is a major Retail Banking company based in the UK. They used an on-premise solution to address call resolution and identify call intent, with a rule-based approach to identify the reason for the call. So, the client wanted to build a scalable Conversational Intelligence (CI) platform on the cloud to help resolve customer problems through Artificial Intelligence (AI) and Active Learning Loops.



Key Challenges

- \\ **Problematic customer service:** Managing operational costs while increasing the customer experience was challenging.
- \\ **Low call resolution rate through agents:** It was impossible to understand and predict if customer issues were resolved from the conversations with agents.
- \\ **Lack of caller intent understanding:** There was no data on new intent journeys to reduce strain on telephony calls.

Our Solution

Tiger Analytics first focused on predicting **Call Resolution** with a Deep Learning-based approach and an Active Learning Loop to assess resolution based on call center conversations. As these conversations were noisy, the team built custom-trained models to learn signals from the data.

Then, the focus shifted to **Call Intent Detection**. An unsupervised Transformer-based clustering approach (BertTopic) was used to identify caller intent from conversations.

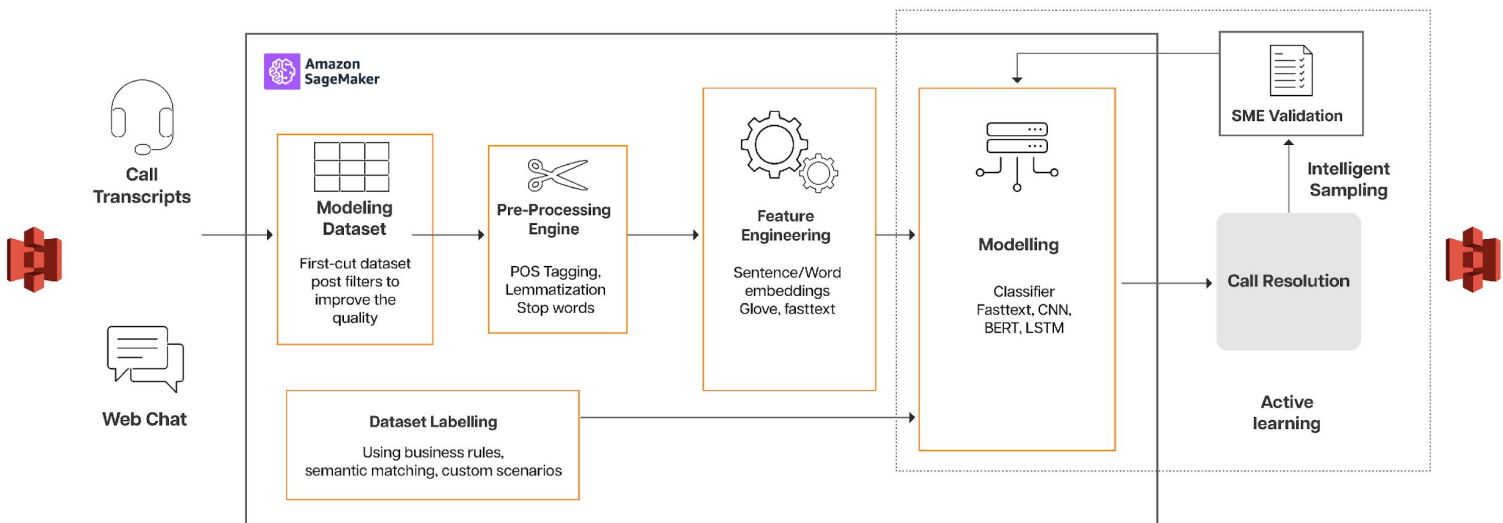
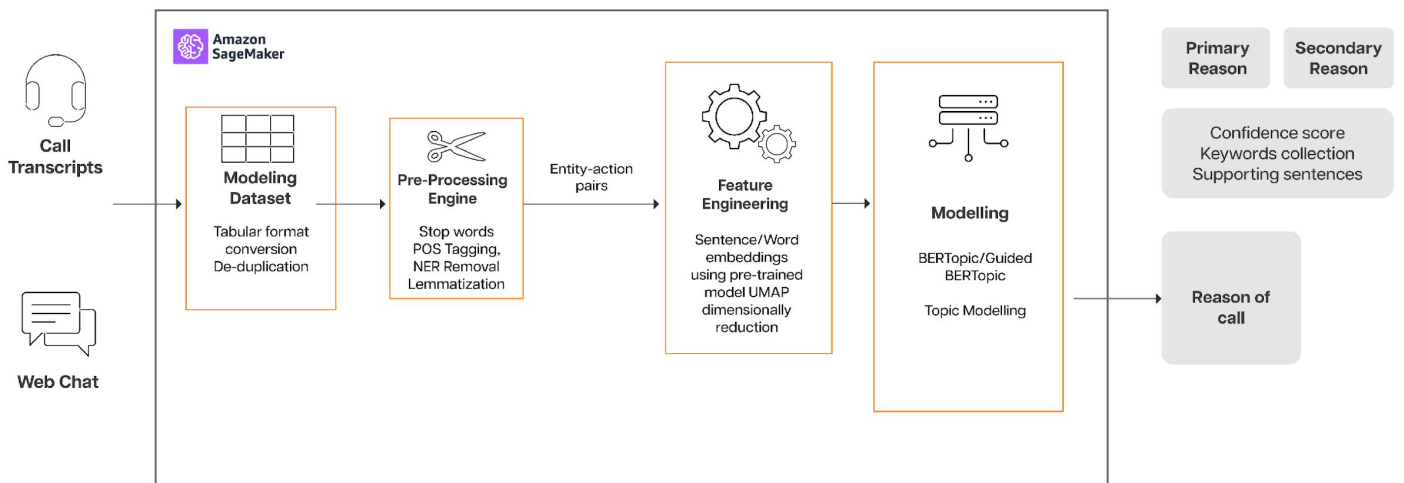
Finally, the team created an end-to-end **Deployment and Reporting Pipeline**, from data ingestion and model inference to reports for final consumption using Streamsets, AWS SageMaker, Snowflake, and Thoughtspot. This solution came with options to add more solutions or pipelines in the future.

Tech Stack

/ AWS

/ Snowflake

Solution Architecture



Value Delivered

An 85% accurate model with 100% coverage for call resolution was achieved with only two rounds of data labeling (nearly 1000).

70% accuracy was attained for call intent in a completely unsupervised approach, with **coverage of 90+%**.

About Us

Tiger Analytics is a global leader in AI and analytics, helping Fortune 1000 companies solve their toughest challenges. We offer full-stack AI and analytics services & solutions to help businesses achieve real outcomes and value at scale. We are on a mission to push the boundaries of what AI and analytics can do to help enterprises navigate uncertainty and move forward decisively. Our purpose is to ***provide certainty to shape a better tomorrow.***

Being a recipient of multiple industry awards and recognitions, we have 4000+ technologists and consultants, working from multiple cities in 5 continents.

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