

Case Study: Enhancing Customer Support with NER through AnnotationBox

Client Background



A leading SaaS-based customer support platform was facing challenges in handling large volumes of unstructured customer queries. With thousands of support tickets, chat logs, and emails coming in daily, the company needed a solution that could quickly identify critical entities such as customer names, product names, issue categories, dates, and locations to route requests efficiently and provide faster resolutions.

Challenge

The client's existing customer support system struggled with:

High response times due to manual sorting and triaging of tickets.

Difficulty in identifying key information within freetext customer queries.

Inconsistent resolutions, as support agents often missed contextual details.

Lack of a **scalable and accurate NER dataset** to train their machine learning models.

The client needed a reliable annotation partner to build a high-quality labeled dataset for training an NER system that could integrate seamlessly into their customer support workflows.

Solution Provided by AnnotationBox



AnnotationBox partnered with the client to provide end-to-end NER data annotation services, ensuring accuracy, scalability, and compliance.

Key steps included:

Implementation Process



Requirement Analysis

Collaborated withtheclientto

- define entity categories: customername,product,error type, ticket ID, date, location
 Established clear annotation
- guidelines for consistency.

Custom Annotation Workflow

- Leveraged AnnotationBox's skilled annotators with domain knowledge in customer service terminology.
- Implemented a multi-tier QA
 process to ensure data quality
 exceeded 98%.
- for efficient labeling of large datasets (emails, chat transcripts, and tickets).

NER Model Training Support

- Delivered annotated datasets optimized for machine learning pipelines.
- Provided feedback loops where the client's ML team and AnnotationBox iteratively refined labels to improve model performance.



Results

30%

Faster Ticket Triage

The system automatically extracted and categorized entities

25%

Reduction in First-Response Time

Through quicker routing to the right support teams

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Improved Agent Productivity

As contextual details were auto-highlighted

4

Consistent Customer Experience

Reducing misclassification of issues



Testimonial

"AnnotationBox played a critical role in helping us implement NER for our customer support workflows. Their attention to detail, scalable processes, and quality assurance helped us build a reliable system that has significantly improved our response times and customer satisfaction."

Head of Customer Experience, SaaS Company

Why AnnotationBox?





Expert Annotators

Trained in domain-specific terminology



Scalable Workforce

For handling large datasets



Robust QA Mechanisms

Ensuring accuracy above industry standards



Custom Workflows

Tailored to unique client requirements