

Abstract

In the rapidly evolving global trade landscape, the efficiency and competitiveness of export businesses depend heavily on their ability to access relevant information quickly and accurately. This study proposes the development of a specialized Question Answering (QA) system designed to meet the needs of export companies. Leveraging domain-specific ontologies and advanced Natural Language Processing (NLP) techniques, the system aims to improve operational efficiency by providing precise and contextual responses to user queries. The innovative approach of integrating various NLP methods ensures that the system can comprehensively interpret and handle complex export-related queries. The implementation results show a significant improvement in the performance of the QA system. Specifically, the response F1 Score reached an average of 89%. This initiative is able to address the unique export challenges of businesses in today's global marketplace.

Keywords: ▪ *Ontology* ▪ *Artificial Intelligence* ▪ *Machine Learning* ▪ *NLP*