

ABSTRACT

Rapid technological developments make many companies vying to capture every business opportunity that exists. For example, PT Aksama Brewu Berkah is a company engaged in the e-commerce of Muslim fashion. This company has 20 human resources, one of which is the Customer service (CS) division required to continue to carry out activities in the form of answering questions asked by customers manually, which requires accuracy and speed repeatedly.

With the above problems, the author tries to develop a Robotic Process Automation (RPA) which is used to carry out Customer service (CS) work in collaboration with artificial intelligence (Artificial Intelligence) by utilizing Natural language Processing (NLP) as the system. RPA is used to automate Customer service (CS) work processes such as inputting customer data, retrieving customer data, and checking customer data. At the same time, chatbot is a medium for customers to communicate with the company. For the chatbot to understand the questions asked by customers, the author uses a Natural language Processing (NLP) platform called Google Dialogflow.

From the research results that have been done, the author succeeded in creating an integrated Virtual Customer service system following the company's current business processes. With the test results in the form of a score of 83.60% from 100%. Which means "fit" to replace the current business processes in the company. Keywords: RPA (Robotic Process Automation), artificial intelligence (Artificial Intelligence), Customer service (CS)

Keywords: *RPA (Robotic Process Automation), Artificial Intelligence (Artificial Intelligence), Customer service (CS)*