## ABSRACT

The development of online business today cannot be separated from the use of AI technology. AI technology has important uses for the advancement of online business, this can be seen from the application of artificial intelligence technology in all well-known e-commerce platforms in Indonesia. The use of AI in online business can be used for various things. The most common feature is the Virtual Assistant feature. The Virtual Assistant feature is an AI device whose function is to serve conversations with potential buyers by automatically imitating human conversations via voice messages, text chats, or both. AI technology is here used by Tokopedia to predict customer needs for a product. Then, Tokopedia can notify sellers about the high demand for their products.

Research conducted at PT. GOTO through quantitative methods and samples were carried out by non-probability sampling method. Distribution of questionnaires via whats app, Telegram and Line to 100 customers who have used the Tokopedia virtual assistant. The analysis uses the Importance Performance Analysis (IPA) method and determines the level of satisfaction based on the satisfaction index. Data processing is done using SPSS software.

The results of this study indicate that the average conformity level of service quality performance is at an average conformity level of 90% to the satisfaction given by customers and the customer satisfaction index is 81% with the Satisfaction category. there is a strong relationship between service quality between customer loyalty and there is also a significant relationship. Service Quality and Customer Satisfaction simultaneously have a significant influence on customer loyalty.

*Keyword*: Artificial Intelligence. Customer Satisfaction, Customer Loyalty Service Quality, Virtual Assistant,