

ABSTRACT

Education is a very important sector in the development of Indonesian society and nation. In the digital era, education technology has made a significant impact on the country. However, the use of mobile learning platforms has become popular and in vogue in Indonesia. Start-ups such as Ruangguru, Zenius, and Quipper have developed comprehensive digital education, offering various learning materials, interactive modules, and forums. Service quality is an important factor in determining student loyalty and satisfaction with mobile learning platforms.

This research aims to analyse the service quality of mobile learning platforms such as Ruangguru, Zenius, and Quipper in Indonesia using topic modelling and sentiment analysis. Based on the objectives, this research is descriptive research. reveals that descriptive research is research that aims to independently describe the state or value of one or more variables. This research describes service quality in ed-tech based on topic modelling and sentiment analysis. This study combines qualitative and quantitative research approaches at the same time, known as mixed research, to collect data that is more thorough, accurate, reliable, and objective. Meanwhile, according to combining qualitative and quantitative researchers, it is known as mixed research.

The author conducts pre-processing to ensure the data is relevant and suitable for analysis. The author used Ed-Tech Topic modelling and Sentiment Analysis to classify user reviews on nine dimensions. The data was labelled positive/negative and classified using the Lexicon Based Approach (LBA) method. The researchers used Python programming and divided the data into 70% training data and 30% testing data. Research using topic modelling and sentiment analysis shows that Ruangguru, Zenius, and Quipper have positive sentiments towards service quality based on m-servqual dimensions. Ruangguru is dominated by the topics of teacher and good, while Zenius is dominated by the topics of teaching and good and Quipper is dominated by the topics of quipper and teaching. Sentiment analysis shows that all dimensions are running well in Ruangguru, Zenius, and Quipper. RuangGuru's compensation dimension is very good, while Zenius needs improvement in terms of contact and Quipper's contact, and billing dimensions need to be evaluated immediately for service quality.

Keywords: *Classification Text Edtech, Perception, Service Quality, Topic Modeling.*