

## ABSTRACT

Instagram Reels has grown rapidly, yet content success is often measured only by likes, shares, views, and the number of comments, while the content of comments containing opinions, suggestions, critiques, and ideas from the audience is often overlooked, even though comments are a valuable source of information. This study aims to automatically classify the aspects of Instagram Reels comments using Transformer models, IndoBERT and IndoRoBERTa, enabling content creators and brands to gain deeper insights into the content of comments. The dataset was collected from scraping 661 Instagram Reels links, covering a diverse range of public content in Indonesia, including culinary, product reviews, entertainment, education, and lifestyle, to capture varied language contexts and topics. Since the original comments were unlabeled, they were processed with the help of a Large Language Model (LLM) to learn language patterns and generate labeled synthetic data. The synthetic data was then used for training, validation, and testing after preprocessing, with models trained over five epochs. Results indicate that IndoBERT outperformed with an accuracy of 92% and an F1-score of 93%, while IndoRoBERTa achieved an accuracy of 91% and an F1-score of 91%. Aspect classification proved effective in analyzing comments in detail and provides a basis for strategic recommendations for content creators and brands.

**Keywords:** Instagram Reels, Comments, Audience Opinions, Aspect Classification, Transformer, IndoBERT, IndoRoBERTa