



Audience Responses Toward Digital Film Promotion on Youtube: A Study of Dilan ITB 1997 Trailer Comments

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ABSTRACT

This study analyzes audience responses toward the *Dilan ITB 1997* movie trailer on YouTube using IndoBERT sentiment analysis and Latent Dirichlet Allocation (LDA) topic modeling. The research aims to understand audience perceptions regarding character suitability, casting decisions, and audience responses toward digital film promotion. A total of 3,519 YouTube comments were collected through web scraping using Python in Google Colaboratory. The comments were processed through text preprocessing stages and classified into positive, negative, and neutral sentiments using the IndoBERT pretrained model. Furthermore, LDA topic modeling was applied to identify dominant discussion themes. The results indicate that negative sentiment dominated audience responses, mainly related to character suitability, casting decisions, and comparisons between previous and current portrayals of the characters in the movie trailer

INTRODUCTION

The rapid development of digital technology has changed marketing communication strategies in the entertainment industry (Yan, 2023). Social media platforms are now widely used as promotional media because they can reach large audiences and create direct interaction between producers and consumers (Sadiku et al., 2024). One of the most popular platforms used for film promotion is YouTube, especially through movie trailer uploads on official channels (Tarnovskaya et al., 2025). Through the comment section, audiences can immediately express opinions, expectations, emotional reactions, and evaluations related to the trailer content they watch (Shah & Parekh, 2023). Therefore, audience comments on YouTube can reflect public perception and audience engagement toward digital promotional strategies in the film industry (Le et al., 2025).

In digital marketing, audience interaction in social media comments is considered an important form of electronic word-of-mouth (e-WOM) (Tsalisa & Setiyarini, 2025). Audience responses toward movie trailers can influence public perception regarding storyline quality, visual presentation, casting decisions, and character representation (Zamakhsyari et al., 2026). In addition, comments from audiences may provide useful insights for film production companies to evaluate promotional effectiveness and understand audience expectations toward film adaptations (Gupta, 2023). This makes audience comments an important source of data for analyzing public opinion in digital media (Shalan, 2022).

One of the Indonesian film franchises that has attracted significant public attention is the Dilan film series adapted from novels written by Pidi Baiq. The franchise started with Dilan 1990 in 2018, followed by Dilan 1991 in 2019 and Milea: Suara dari Dilan in 2020. These films gained massive popularity and created strong emotional attachment among audiences, especially toward the characters Dilan and Milea portrayed by Iqbaal Ramadhan and Vanesha Prescilla (Ginting et al., 2024). Due to the success of the previous films, audiences developed high expectations toward newer adaptations related to the Dilan cinematic universe. The trailer for Dilan ITB 1997 was officially released on YouTube on April 3, 2026, while the movie was scheduled to premiere on April 30, 2026. As a result, the release of the movie trailer attracted widespread public attention and generated extensive audience interaction on social media platforms.

To analyze audience responses on social media, sentiment analysis has become one of the most widely used approaches in Natural Language Processing (NLP). Sentiment analysis is used to classify opinions into positive, negative, and neutral categories (Amien & Gunawan, 2024). Recent developments in NLP have introduced transformer-based models such as Bidirectional Encoder Representations from Transformers (BERT), which are considered more effective in understanding contextual meaning compared to traditional machine learning approaches (Purnomo et al., 2024). In the Indonesian language domain, IndoBERT has shown good performance in processing informal language and contextual expressions commonly found in social media comments. (Sayarizki,

2024). In addition, topic modeling using Latent Dirichlet Allocation (LDA) can identify dominant discussion topics emerging from audience conversations. The combination of sentiment analysis and topic modeling allows researchers to understand audience opinions and identify the main issues discussed in online conversations (Cici Suhaeni et al., 2025).

This study focuses on analyzing audience responses toward the Dilan ITB 1997 movie trailer on YouTube using sentiment analysis and topic modeling approaches. The study applies the IndoBERT pretrained model to classify audience sentiments into positive, negative, and neutral categories. In addition, LDA topic modeling is used to identify dominant discussion topics appearing in audience comments. Through these approaches, this study aims to understand audience perceptions toward character representation, casting suitability, and adaptation expectations reflected in YouTube comments.

LITERATURE REVIEW

Electronic Word-of-Mouth (e-WOM)

Electronic word-of-mouth (e-WOM) refers to audience opinions and evaluations shared through digital platforms and social media. In digital marketing, e-WOM plays an important role because online audience interactions may influence public perception and audience engagement toward promotional content. YouTube comment sections have become one of the most common forms of e-WOM where audiences actively express responses toward movie trailers and film adaptations (Liu & Jayawardhena, 2024).

Previous studies indicate that audience comments on social media can influence audience perception regarding storyline quality, casting suitability, and promotional effectiveness. Therefore, audience comments may provide valuable insights for evaluating digital marketing strategies in the film industry (Zamakhsyari et al., 2026).

Sentiment Analysis using IndoBERT

Sentiment analysis is a Natural Language Processing (NLP) approach used to classify textual opinions into positive, negative, and neutral categories (Sri et al., 2024). The development of transformer-based models such as Bidirectional Encoder Representations from Transformers (BERT) has improved contextual understanding in sentiment classification tasks performance in processing informal language and contextual expressions commonly found in social media comments (Amien & Gunawan, 2024). Therefore, IndoBERT is considered suitable for analyzing Indonesian-language comments on YouTube movie trailers.

Previous studies reported that sentiment analysis can effectively identify public perception toward digital marketing campaigns and entertainment content (Retno et al., 2024). However, studies discussing Indonesian movie trailer comments using IndoBERT remain relatively limited.

Topic Modelling using LDA

Topic modeling is a text mining approach used to identify dominant themes within textual data. One of the most widely used methods is Latent

Dirichlet Allocation (LDA), which identifies hidden thematic structures from large text collections (Royani et al., 2023)

In social media analysis, topic modeling can be used to identify dominant discussion themes appearing in audience conversations. This approach helps researchers understand the main issues discussed by audiences in online interactions. The combination of sentiment analysis and topic modeling allows researchers to classify audience opinions while also identifying dominant discussion patterns within social media comments (Buana et al., 2023).

Conceptual Framework

This study analyzes audience responses toward the *Dilan ITB 1997* movie trailer on YouTube through several stages, including data collection, preprocessing, sentiment classification, topic extraction, and result visualization. Audience comments are classified into positive, negative, and neutral sentiments using the IndoBERT pretrained model, while LDA topic modeling is applied to identify dominant discussion topics appearing in audience comments. The overall research process is presented in Figure 1.

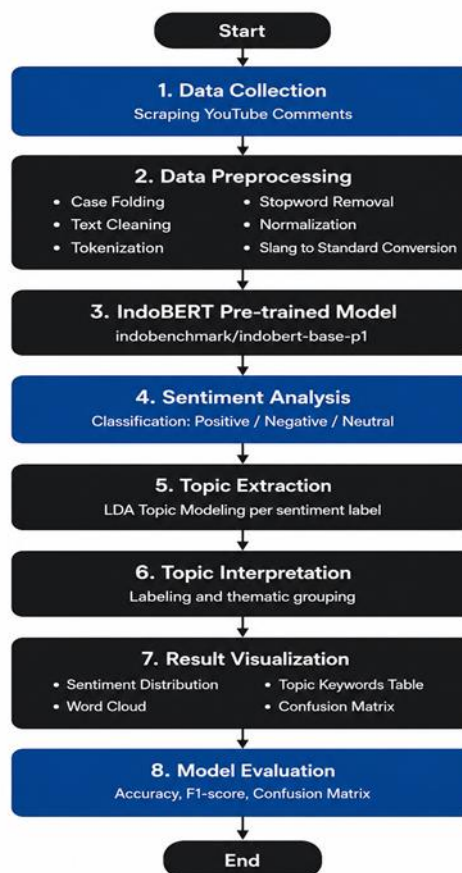


Figure 1. Conceptual Framework

METHODOLOGY

This study used a quantitative descriptive approach to analyze audience responses toward a movie trailer on YouTube. The data were collected from YouTube comments using a web scraping technique in Python through Google

Colab. The scraping process utilized the youtube-comment-downloader library to obtain audience comments from the selected movie trailer.

After data collection, preprocessing was conducted to clean the textual data. The preprocessing stages included converting text into lowercase, removing URLs, punctuation marks, numbers, special characters, and stopwords. This process aimed to improve text quality before analysis.

Sentiment analysis was performed using the IndoBERT pretrained model to classify comments into positive, negative, and neutral sentiments. IndoBERT was selected because it is capable of processing contextual Indonesian-language expressions commonly found in social media comments (Amien & Gunawan, 2024).

Furthermore, topic modeling was conducted using the Latent Dirichlet Allocation (LDA) method to identify dominant discussion topics in audience comments (Nguyen et al., 2024). The analysis results were visualized using sentiment distribution graphs and wordcloud visualizations to support topic interpretation and audience perception analysis.

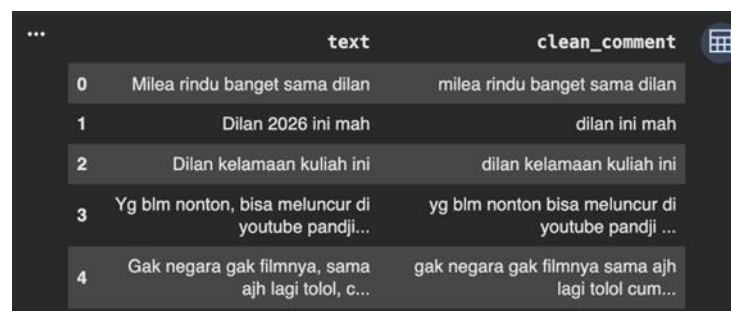
RESULT AND DISCUSSION

Data Collection

The data used in this study were collected from YouTube comments on the *Dilan ITB 1997* movie trailer using a web scraping technique in Python through Google Colaboratory. The scraping process successfully collected 3,519 audience comments representing public responses toward the trailer content. These comments were used as the primary dataset for sentiment analysis and topic modeling.

Data Preprocessing

Before analysis, preprocessing was conducted to improve text quality and reduce noise in the dataset. The preprocessing stages included case folding, text cleaning, tokenization, stopwords removal, normalization, and slang-to-standard word conversion. This process aimed to produce cleaner textual data before conducting sentiment classification and topic extraction.



	text	clean_comment
0	Milea rindu banget sama dilan	milea rindu banget sama dilan
1	Dilan 2026 ini mah	dilan ini mah
2	Dilan kelamaan kuliah ini	dilan kelamaan kuliah ini
3	Yg blm nonton, bisa meluncur di youtube pandji...	yg blm nonton bisa meluncur di youtube pandji ...
4	Gak negara gak filmnya, sama ajh lagi tolol, c...	gak negara gak filmnya sama ajh lagi tolol cum...

Figure 2. Example of Text Preprocessing Results

IndoBERT Pre-trained Model

This study utilized the IndoBERT pretrained model (indobenchmark/indobert-base-p1) for sentiment classification. IndoBERT was selected because it is capable of understanding contextual Indonesian-language

expressions commonly found in social media comments. The model was applied to classify audience comments into positive, negative, and neutral sentiments.

Sentiment Analysis

The sentiment analysis results indicate that audience responses toward the trailer were dominated by negative sentiment. From a total of 3,519 comments, 1,944 comments were classified as negative sentiment, 939 comments as neutral sentiment, and 636 comments as positive sentiment.

The dominance of negative sentiment suggests that many audiences expressed criticism regarding character suitability, casting decisions, and comparisons between previous and newer adaptations of the Dilan cinematic universe. Many audiences compared the newer adaptation with previous portrayals starring Iqbaal Ramadhan and Vanesha Prescilla, indicating that audience nostalgia strongly influenced public perception toward the trailer.

Meanwhile, positive comments mainly reflected appreciation toward the visual presentation, storyline continuation, and several actors appearing in the trailer. Neutral comments generally consisted of discussions regarding storyline speculation, character appearances, and audience interactions.

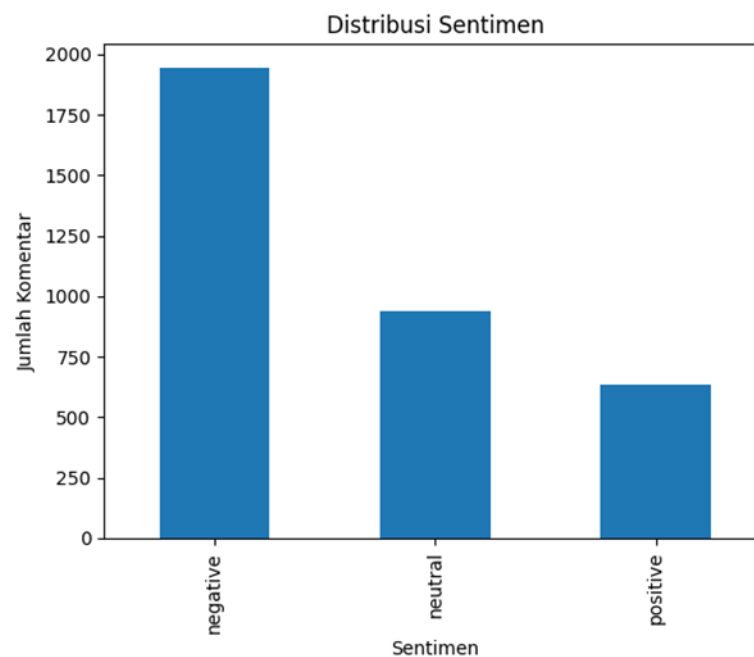


Figure 3. Sentiment Distribution Result

Topic Extraction

Topic extraction was conducted using the Latent Dirichlet Allocation (LDA) method to identify dominant themes discussed by audiences. The topic modeling results indicate that audience discussions mainly focused on character suitability, casting decisions, storyline continuation, and audience responses toward the movie trailer. These findings show that audience comments contained various opinions and discussions related to the film and its characters.

Topic Interpretation

The extracted topics were interpreted based on dominant keywords appearing in each sentiment category. Negative sentiment comments appeared more dominant and mainly focused on criticism related to character suitability, casting decisions, and audience comparisons between the current and previous portrayals of the characters. Meanwhile, positive sentiment comments were generally associated with audience appreciation toward the movie trailer, actors, and visual presentation. Neutral comments mainly contained discussions regarding actors, characters, and storyline continuation appearing in the movie trailer.

Table 1. Topic Interpretation Result

Sentiment	Topic	Description	Keywords
Positive	Positive Responses toward the Trailer	Audiences expressed positive opinions toward the movie trailer and characters.	keren, versi, karakter, suka
Positive	Cast and Visual Appreciation	Audiences appreciated the actors and visual presentation of the trailer.	ariel, anika, aura, filmnya
Positive	Audience Enthusiasm	Audiences showed excitement and positive responses toward the movie trailer.	sukses, mantap, penasaran, kuliah
Negative	Character Suitability Criticism	Audiences criticized the suitability of the characters in the movie.	tua, mahasiswa, kuliah, umur
Negative	Comparison between Characters	Audiences compared current actors with previous portrayals.	ariel, versi, cocok, karakter
Negative	Criticism toward Casting	Audiences expressed criticism regarding casting decisions and character representation.	kurang, vibe, aura, pemeran
Neutral	Discussion about Actors and Characters	Audiences discussed actors and characters without strong emotional expressions.	iqbal, ariel, pemain, karakter
Neutral	General Story Discussion	Audiences discussed storyline continuation and general movie discussions.	versi, mahasiswa, menikah, lanjut

Result Visualization

The analysis results were visualized using word cloud representations to identify dominant keywords appearing in each sentiment category. The visualization results indicate that audience discussions were mainly related to



Figure 6. Neutral Sentiment Word Cloud

Neutral comments generally contained discussions related to actors, characters, storyline continuation, and general audience interactions in the comment section. Keywords such as “versi,” “iqbal,” “pemain,” and “nikah” appeared frequently in neutral discussions without showing strong positive or negative emotional expressions. These comments mostly reflected audience curiosity, general opinions, and conversations related to the movie trailer.

Overall, the topic modeling and visualization results indicate that audience discussions toward the *Dilan ITB 1997* movie trailer were dominated by comments related to character suitability, casting decisions, and audience responses toward the portrayal of the characters. Negative sentiment appeared more dominant compared to positive and neutral sentiments, showing that many audiences expressed criticism and dissatisfaction toward several aspects of the movie trailer. These audience interactions reflect the role of electronic word-of-mouth (e-WOM) on social media, where audience opinions and discussions can influence public perception toward promotional content and movie-related discussions in digital platforms.

Model Evaluation

The confusion matrix results show that most sentiment categories were correctly classified by the IndoBERT model. Several misclassifications still occurred between neutral and positive sentiments due to contextual and informal language commonly found in YouTube comments. However, the overall accuracy score of 0.89 indicates that the model performed relatively well in classifying audience sentiments toward the movie trailer.

Table 2. Sentiment Classification Performance

Sentiment	Precision	Recall	F1-Score	Support
Negative (NEG)	0.84	0.88	0.86	25
Neutral (NEU)	0.91	0.87	0.89	45
Positive (POS)	0.86	0.90	0.88	30
Accuracy			0.89	100
Macro Average	0.87	0.88	0.88	100
Weighted Average	0.89	0.89	0.89	100

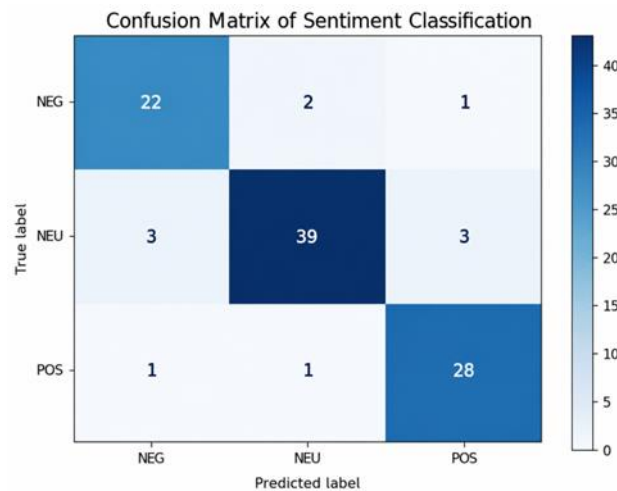


Figure 7. Confusion Matrix of Sentiment Classification

CONCLUSIONS AND RECOMMENDATIONS

This study analyzed audience responses toward the Dilan ITB 1997 movie trailer on YouTube using IndoBERT sentiment analysis and LDA topic modeling. The results indicate that negative sentiment dominated audience responses, mainly related to character suitability, casting decisions, and comparisons between previous and current portrayals of the characters. Positive comments generally reflected audience appreciation toward the movie trailer and visual presentation, while neutral comments mainly discussed actors, characters, and storyline continuation.

The topic modeling results revealed that audience discussions were dominated by themes related to character suitability, casting decisions, and audience responses toward the movie trailer. These findings indicate that audience interactions in YouTube comments reflect the role of electronic word-of-mouth (e-WOM), where audience opinions and discussions can influence public perception toward promotional content in digital platforms.

This study shows that YouTube comments can provide useful insights for understanding audience perceptions toward digital film promotion. Future studies are recommended to utilize larger datasets and compare audience responses across different social media platforms to obtain broader insights regarding audience engagement in digital media.

FUTURE STUDY

This study has several limitations. First, the analysis only focused on comments collected from a single YouTube movie trailer. Second, the sentiment classification process only categorized comments into positive, negative, and neutral sentiments. In addition, informal language commonly found in social media comments may still affect classification accuracy.

Therefore, future studies are recommended to utilize larger datasets and compare audience responses across different social media platforms to obtain broader insights regarding audience engagement in digital media.

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