



## Public perception of online news: big data analysis using netlytic

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### ABSTRACT

*This research investigates people's perceptions of online news using Netlytic, a powerful big data analytics tool. By analyzing data from social media, news sites, and forums, this research aims to understand the sentiments, preferences, and behaviors of news consumers. The research uses sentiment analysis, trend identification, and data visualization techniques to present a comprehensive picture of public opinion towards online news. This methodology provides a powerful framework to uncover trends and insights that traditional research methods may miss, offering a deeper understanding of the digital news landscape.*

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### 1. Introduction

The digital era has fundamentally changed the information landscape, bringing significant changes to the way society consumes news (NS Lubis & Nasution, 2023). Traditional media, such as newspapers and television, which were once the main sources of information, now face stiff competition from online news platforms. The Internet offers unmatched speed of access, flexibility and diversity of news sources (Ummah, 2022). In a matter of seconds, users can access various news from around the world with just a few clicks. However, this convenience also brings new challenges, especially related to the credibility, accuracy and bias of information that is widely spread in cyberspace (Alamsyah et al., 2024).

The development of information and communication technology has changed the way people access and consume news. In this context, online news has become one of the main sources of information for many people (Andzani, 2023). Public perception of online news is greatly influenced by various factors, such as the speed of information dissemination, affordability and ease of access (Firdaus et al., 2021). To understand more deeply about this perception, big data

analysis using tools such as Netlytic becomes very relevant. Netlytic is a social media analytics platform that can collect, analyze, and visualize data from various online sources. With Netlytic, researchers can explore patterns and trends in people's conversations about online news, identify common sentiments, and uncover the most frequently discussed topics (Arpandi, 2023).

This phenomenon has significant implications for how society consumes and processes information. On the one hand, online news offers the advantages of easy access, interactivity, and the ability to follow the latest developments in real-time (Pustikayasa et al., 2023). The rise of fake news, misinformation and disinformation is a real threat that can damage public trust in the media and affect social and political stability (Award, 2020).

Online news has the potential to reach a wider and more diverse audience compared to traditional media. However, with this ease of access comes the challenge of ensuring that the information consumed is accurate and trustworthy (Achmad & Juwito, 2020). In this context, understanding public perceptions of online news becomes very important. These perceptions not only influence how people interact with the news, but can also influence their level of trust in the media as a whole.

This research aims to explore people's perceptions of online news through big data analysis, using Netlytic, a text and social network analysis tool. By collecting and analyzing data from various online platforms, this research seeks to uncover the sentiment, preferences and behavior of news consumers (Fernandes et al., 2023). This methodology allows us to get a more comprehensive and in-depth picture of how online news is perceived by the public, as well as identify the factors that influence that perception. (PRIANDANU, 2021).

In this analysis, we not only look at general sentiment towards online news, but also try to understand the patterns that emerge from public discussions. By using advanced analytics tools like Netlytic, we can dig deeper into the data, identify trends, and provide more detailed insights into public perception. The ultimate goal of this research is to provide guidance for media practitioners and policy makers in improving the quality and credibility of online news, as well as rebuilding public trust in digital media. (Gora & S Sos, 2019).

## 2. Method

This research methodology involves several critical steps in collecting, processing, analyzing and visualizing data to understand people's perceptions of online news. Each step is designed to ensure that the data obtained is representative, accurate, and provides in-depth insight into the topic under study (Hildawati et al., 2024). Data collection was carried out from various online platforms, including social media such as Twitter and Facebook, news sites, and public discussion forums such as Reddi. These platforms were chosen because they provide a broad and diverse sample of public opinion. The data collected includes comments, posts and discussions related to online news, covering a wide range of issues and events (Saputra, 2024). After the data is collected, the next step is preprocessing or data cleaning. The raw data collected often contains a lot of noise, such as duplication, irrelevant content, and spam. Therefore, the data cleaning process is essential to ensure high data quality. Netlytic provides effective built-in data cleaning features, such as automatic removal of non-text elements and filtering of irrelevant posts. Netlytic uses advanced natural language processing (NLP) techniques to perform sentiment analysis. This tool categorizes text data into positive, negative, or neutral sentiment based on context and keyword usage. This sentiment analysis is important to understand how the public responds to online news and what influences their perceptions (Azizah, 2023). The sentiment analysis process involves the use of Netlytic's sentiment analysis module, which uses a combination of machine learning algorithms and lexical resources to determine the sentiment polarity of text segments (Nugraha et al., 2020). This data visualization technique is important for communicating findings to a wider audience, including stakeholders who may not be familiar with technical details. Interactive dashboards were also created to allow users to explore the data in more detail, providing drill-down capabilities that allow for more in-depth analysis (Pratiwi & Sulisty, 2024).

### 3. Analysis and Results

#### 3.1. Public Sentiment Towards Online News

Sentiment analysis results reveal that people's views of online news vary widely and are often influenced by context such as news topics and information sources. Overall, there is a mixed sentiment pattern with clear trends around major events. For example, news about a health or political crisis tends to trigger strong emotional responses, both positive and negative. Analysis data shows that news that is considered credible and informative receives more positive sentiment. However, there are many concerns regarding the quality and accuracy of online news, especially in the context of fake news. Negative sentiment often arises from distrust of news sources or dissatisfaction with perceived reporting (Suharyanto, 2019).

Public sentiment towards online news is not uniform, but shows a mixed pattern with certain trends, especially during major events. News topics and information sources greatly influence how people respond to the news. There are many concerns in society about the quality and accuracy of online news. The phenomenon of fake news (hoaxes) is one of the main factors that gives rise to negative sentiment. Negative sentiment is often related to distrust of news sources. Dissatisfaction also arises if reporting is perceived as biased or unfair. News providers need to improve the quality and credibility of their reporting to reduce negative sentiment. Transparency and accuracy of information is the key to gaining trust and positive responses from the public (Febriansyah & Muksin, 2020).

Variations in Public Perception: People have varying views of online news, which not only depend on the content of the news but also on contextual factors such as topic and news source. Mixed Sentiment Pattern: Public sentiment towards online news is not uniform, but shows a mixed pattern with certain trends, especially during major events. Influence of News Topics and Information Sources: News topics and information sources greatly influence how people respond to the news. Influence of News Topics and Information Sources: News topics and information sources greatly influence how people respond to the news. Distrust and Dissatisfaction: Negative sentiments are often related to distrust of news sources. Dissatisfaction also arises if reporting is perceived as biased or unfair. Implications for News Providers: News providers need to improve the quality and credibility of their reporting to reduce negative sentiment. Transparency and accuracy of information is the key to gaining trust and positive responses from the public (Solihin, 2021).

#### 3.2. Key Trends

The main trends in various fields show significant changes influenced by technological developments, changes in consumer behavior and global economic dynamics. In the technology sector, advances such as artificial intelligence (AI), Internet of Things (IoT), and blockchain continue to drive innovation and efficiency in the industry. Meanwhile, in the business world, there is a shift towards more sustainable and environmentally friendly business models, in line with increasing awareness of environmental issues. This trend is also reflected in consumption patterns, where consumers are increasingly choosing products that are not only of high quality, but also have a positive impact on the environment. On the other hand, in the global economy, digitalization and e-commerce have changed the way people shop and interact with the market. The COVID-19 pandemic has also accelerated the adoption of remote work and reinforced the importance of reliable digital infrastructure. All these trends are interrelated and point towards more innovative, sustainable and digitally connected developments (Jauhari, 2024).

Key trends emerging from data analysis show that major events such as elections or pandemics increase the volume of discussion about online news. During this period, the public was more active in sharing opinions and debating about the news they consumed. This suggests that major events can serve as catalysts for increasing public participation in news discussions. In addition, issues such as trust in the media and the quality of journalism are frequently discussed topics. Discussions about trust often focus on the credibility of news sources, with more trustworthy

media receiving more positive endorsements. Debates about the quality of journalism also include criticism of sensationalism and the lack of in-depth investigative reporting (Latif & Sos, 2022).

### 3.3. Credibility and Trust

One of the key findings from this research is the importance of credibility in shaping people's perceptions of online news. News sources that are considered trustworthy tend to receive higher positive sentiment. This is in line with agenda-setting and framing theory, where media that is able to present news in a way that is trusted by the public can significantly influence the views and behavior of the audience. Concerns about fake news and misinformation are also prominent in public discussions. Many users express skepticism towards the information they find online, indicating a crisis of trust in digital media. This shows the need for improvements in fact verification and transparency in news reporting to rebuild public trust.

Credibility and trust are two concepts that are very closely related in the context of social interaction and communication. Credibility refers to other people's perceptions of a person or entity's abilities, expertise, and integrity. When a person or organization is considered credible, they are deemed to have the knowledge, skills, and morality necessary to provide accurate and reliable information. On the other hand, trust is a person's belief that others will act in an expected, consistent, and reliable manner. Trust is formed through experience, reputation, and honest and transparent communication. When credibility and trust exist together, they create a strong foundation for healthy, collaborative, and productive relationships in various aspects of life, whether in personal, professional, or societal contexts at large. (Ratiwi et al., 2024).

### 3.4. News Consumption Behavior

Despite concerns about credibility, data shows that many users still rely on online news as their primary source of information. News consumption patterns are strongly influenced by the accessibility and convenience factors offered by digital platforms (Riswanto et al., 2024). Users can easily access real-time news and update themselves with the latest developments. However, there is also increasing awareness of the need to diversify information sources. More tech-savvy users tend to verify news from multiple sources before forming an opinion. This suggests changes in news consumption behavior driven by concerns about accuracy and bias, as well as efforts to gain a more holistic view of events.

News consumption behavior refers to individual habits and preferences in accessing, reading, and interpreting information from various news sources. In the current digital era, this behavior is influenced by developments in technology and the internet which allows fast and easy access to various news platforms, whether through websites, social media or mobile applications. News consumption is also influenced by demographic factors such as age, education, and employment, as well as personal preferences for certain topics. Some individuals may prefer news presented in text format, while others prefer visual formats such as videos or infographics. Additionally, trust in news sources plays an important role in determining what consumers read and believe. In the midst of an ever-flowing stream of information, the biggest challenge for news consumers is sorting and selecting accurate and trustworthy information among a sea of fake news or misinformation. (P. Lubis et al., 2023).

## 4. Conclusion

This research reveals that people's perceptions of online news are complex and influenced by various interrelated factors. These factors include the credibility of the news source, the quality of the journalism applied, and the public's news consumption patterns. The credibility of the news source is very important because it influences the extent to which readers trust the information presented. In addition, the quality of journalism, which includes aspects such as thoroughness in fact verification, clarity of presentation, and balance of information, also plays a crucial role in shaping public perception. By using big data analysis through tools such as

Netlytic, this research succeeded in providing in-depth insights into sentiment and trends in public opinion towards online news. Netlytic allows researchers to identify certain patterns in online conversations, which helps reveal how people react to various issues and how their sentiments evolve over time. The results of the analysis show that despite significant concerns about fake news and media bias, online news remains a primary source of information for many people. This shows that people still rely on online media to obtain the latest information, although they are also increasingly critical of the quality and integrity of the news they consume. To improve the quality and credibility of online news, the media needs to focus on several important aspects. First, transparency in the news creation process must be increased, so that readers can understand the sources of information and the methods used to collect it. Second, fact verification must be a top priority to ensure that any information published has gone through a rigorous vetting process. Third, the presentation of information must be balanced and in-depth, giving readers a comprehensive view of the issues being reported. In this way, the media can rebuild public trust and ensure that online news remains a reliable and respected source of information.

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