

BAB 1 INTRODUCTION

1.1 Background

In today's era, technology is developing rapidly and providing convenience in various aspects of life, such as daily needs, education, work, entertainment, and access to information.¹ The development of modern technology is also in line with the advancement of information technology in the digital era, which allows internet users to obtain the latest information from around the world more easily. Various news from various parts of the world can be accessed through online news websites, such as Kompas, Tribun News, Detik.com, CNN, and so on.²

The ease of disseminating information does not only reach the digitization of news, in 2004 the term web 2.0 appeared, the term WEB 2.0 explains how new ways developers and users use the Website to become a platform whose content is no longer created and published individually, but can be modified flexibly by all users in a participatory and collaborative manner.³ WEB 2.0 is a social media that is now a must-have for everyone for personal or business purposes. The emergence of WEB 2.0 such as Blogspot, Facebook, twitter(X), Youtube, and so on makes it easier for everyone to share personal information or certain parties with the general public.⁴

The ease of dissemination of information that occurs now creates a gap for several evil groups in falsifying news or better known as hoax news. Hoax news is news that is deliberate and can be declared false and can mislead readers. And another meaning about hoax news is false news that is deliberately intended to mislead readers, there are 2 main characteristics of this definition: first, fake news contains false information that can be stated as such. Second, fake news is made with dishonest intentions to mislead readers.^{5, 6}

The Election or General Election is an event to elect candidates for the next 5 years of Indonesian leaders, the Election Event is a democratic party where everyone has the right to vote and voice their choice, but there are certain groups that lead public opinion to choose envoys on their side in various ways, one of which is fake news.

In each election period, there are certain individuals who use fake news for the benefit of their group. Ahead of the 2024 elections, the Ministry of Communication and Information Technology (Kominfo) has identified 101 hoax issues related to the election that are circulating from January to October 26, 2023. This number

¹ Putri "Adaptation to a Digital Society."

² Sari "10 Most Actual and Trusted Online News Portals."

³ Kunti Puspitasari and Irwansyah, "Interpretive flexibility of web 2.0 technology for managers social media of government agencies"

⁴ Hendri "The Utilization of Elearning with WEB 2.0 Applications as a Means of Learning in Universities in Indonesia."

⁵ Allcott and Gentzkow, "Social Media and Fake News in the 2016 Election."

⁶ Shu et al., "Fake News Detection on Social Media : A Data Mining Perspective Fake News Detection on Social Media : A Data Mining Perspective."

increased almost tenfold compared to the previous year, where in 2022 only 10 hoax news were recorded. This increase can have a negative impact on the implementation of this year's elections and needs serious attention, because the existence of hoaxes related to the election not only reduces the quality of democracy, but also has the potential to divide the nation.⁷

Hoax news is very dangerous for us, therefore it can damage the good name of others, causing confusion, hatred, hostility, disputes, and divisions. In Surah Al Hujurat verse 6 Allah SWT said:

يَا أَيُّهَا الَّذِينَ آمَنُوا إِن جَاءَكُمْ فَاسِقٌ بِنَبَأٍ فَتَبَيَّنُوا أَن تُصِيبُوا قَوْمًا بِجَهَالَةٍ فَتُصْحِرُوا عَلَى مَا فَعَلْتُمْ لِنَدِمِينَ (الحجرات 6 :)

Meaning: O you who believe! If an wicked person comes to you with a message, then examine the truth, so that you do not harm a people because of ignorance (carelessness), and you will regret your deeds. (Al-Hujurat : 6)

As mentioned in the above verse, we as intelligent Indonesian citizens, must be careful and thorough in reading a reading, so as not to bring harm to others because of our negligence in reading. But there are still people who lack literature or lack reading so that they are vulnerable to being deceived by hoax news that circulates.⁸ From the research entitled Final Report of the Community Literacy Development Index Study conducted by the National Library of the Republic of Indonesia (Perpusnas) in 2022, the value of the Indonesian Literacy Development Index nationally received a score of 64.48. According to the National Library, the Indonesian People's Literacy Index is in the Medium category. Thus, a machine learning program is needed that can process a news and classify it whether the news is true or a hoax automatically.⁹

This research aims to create a machine learning program that can classify news as true or hoax automatically, machine learning used in the form of Text Mining which can process text data or documents to get the information needed. in this study using the data mining method, namely *K-Nearest Neighbor*(KNN), judging from previous research, these 2 methods have been very stable in classifying Hoax News. with the data we take in the form of fake news and true news, fake news data we take from the Turn Back Hoax site from MAFINDO (Indonesian Anti-Defamation Society) which has labeled Hoax News circulating in the community, and we take true news data from Detik.com sites that have been verified to be true. So, it is hoped that this research can help in reducing Hoax News circulating during the 2024 election.

⁷ Komdigi "Minister of Communication and Information: Election Hoaxe Issue Increases Almost 10 Times"

⁸ Ilahi and Gani "The Relationship between Digital Media Literacy and the Spread of Hoaxes in the Circles Generation Z."

⁹ National Library of the Republic of Indonesia "Final Report on the Study of the Community Literacy Development Index in 2022"

1.2 Problem formulation

Based on the problems that exist in the background above, the formulation of the problem in this study is that the spread of fake news (hoaxes) is increasingly rampant and has a negative impact on public opinion and a healthy election process.

1.3 Purpose

Based on the formulation of the problem above, it can be concluded that the purpose of this study is to classify fake news using the K-Nearest Neighbored (KNN) method.

1.4 Benefit

The researcher hopes that this research can benefit other parties, including the following:

1. For Students

It can be a learning and broadening of horizons in the field of Text Mining, especially in the case of Hoax News Analysis using the K-Nearest Neighbored (KNN) method

2. For other Researchers

It can be a reference for research for other researchers who want to develop research in the case of Hoax News Analysis and take an evaluation of the performance of the system model and method used.

3. For the Community

It can help the public during the election period in knowing the truth of the news that is being read automatically.

1.5 Problem limitations

For the efficiency of the research, problem limits are made in order to launch this research as follows:

1. The research language in this program is Python.

2. This research only provides a classification of hoax news and true news.

3. The data collection in this study came from Detik.com for True News and Turn Back Hoax for Hoax News.

1.6 Systematics of discussion

This research will use the following writing systematics:

CHAPTER 1: INTRODUCTION

1.1. Background of the Problem

1.2. Problem formulation

1.3. Research objectives

1.4. Usability of research

CHAPTER 2: LITERATURE REVIEW

2.1. Previous Research

2.2. Foundation/Conceptual Framework

2.3. Hypothesis (if any)

CHAPTER 3: RESEARCH METHODS

3.1. Time and place of research

3.2. Research tools and materials

3.3. Experimental design

3.4. Research stages

3.5. Data analysis

CHAPTER 4: RESULTS AND DISCUSSION

CHAPTER 5: CLOSING

5.1. Conclusion

5.2. Suggestions

BIBLIOGRAPHY

APPENDICES

