

## 1. Introduction

Along with the development of technology, especially the internet, the internet is becoming an increasingly important part, especially for mankind [1]. Entering the 4.0 era, it seems that the health industry is the industry most likely to benefit from the combination of physical, digital, and biological systems [2]. In recent times, there has been a significant expansion in the use and development of digital health applications and telemedicine. In the present era, telemedicine is advancing at an accelerated pace, with one notable example being the Practo application [3]. To enhance the healthcare services within the application, it becomes imperative to analyze the sentiments expressed in the user comments as the user base continues to grow. This sentiment analysis will provide valuable insights and opinions regarding the users' experiences with the health services offered through the application [4].

Sentiment analysis is an approach employed to extract opinion-based information, automatically comprehend and process textual data, aiming to identify and determine the sentiment expressed within an opinion [5]. The results of sentiment analysis on Practo application reviews will be divided into two parts, namely positive and negative reviews. Positive reviews reflect the valuable feedback provided by application users, whereas negative reviews suggest that the comments given have lesser value, implying that the reviewed Practo application is not satisfactory. The importance of doing this sentiment analysis is because the sentiment obtained can be sampled according to the comments, both positive and negative. In addition, it can also be seen that there is an inconsistency between the rating and comments given by the user, which in turn, the data containing this information is useful for developing the product quality of the Practo application in the future.

In sentiment analysis, several types of features can be used that will make it easier to get sentiment analysis. Feature extraction is necessary because certain features can have a negative impact on classification performance [6]. In this research problem, the feature extraction technique employed is TF-IDF, which quantifies the importance of words by assigning them weights based on their frequency and rarity in the dataset [7]. The reason for selecting this feature is its ability to assign a numerical value to each word in a document, reflecting its importance or relevance within that document [8].

The approach employed for sentiment analysis in this study utilizes the Naïve Bayes method. Naïve Bayes is a classification method by calculating probabilities based on the Bayes rule formula used to solve classification problems on numeric or nominal data features [4]. Naïve Bayes is used because it is known to have an efficient classification algorithm but has high accuracy. In research [5] After conducting the necessary analysis, it has been established that utilizing the Naïve Bayes technique for categorizing opinions on the Halodoc application achieves an accuracy level of 81.68%.