I. INTRODUCTION

In the twenty-first century, the Internet has evolved into a platform for communicating knowledge that many people can rely on, and social media is one of these platforms. People have used social media to communicate information about their daily lives or help them with their work, particularly by sharing photos, videos, messages, and other content. Today, it is common for schools and colleges to have official social media profiles to disseminate information about the institution and improve brand awareness or popularity [1]. The outcomes of each post or upload issued by the institution include public comments that may positively or negatively influence the public's impression of the university.

Sentiment analysis, often known as opinion mining, categorizes the opinions expressed in text documents (positive or negative). With the advancement of Web 3.0 and the growing popularity of social media, there is an abundance of user-generated information on products, events, and services. Sentiment analysis is a useful technique for mining user-generated data patterns since it is often utilized for real-world situations. Research related to sentiment analysis has been carried out by various researchers such as sentiment analysis for product reviews (X. Fang and J. Zhan, 2015) [2], restaurant reviews (H. Kang et al., 2012) [3], microblogs, and social media posts twitter (F. Neri et al., 2012) [4]. Attitudes in textual data have been analyzed at different levels, including aspect, sentence, and document levels. Document-level sentiment analysis seeks to analyze the entire document. Sentiment analysis at the sentence level determines if a sentence indicates a positive or negative opinion.

In contrast, aspect-based sentiment analysis determines sentiment at a finer level, such as towards an entity. Sentiment analysis can be used to analyze comments made by students, teachers, or members of the general public in the form of opinions or college components. It is possible to do sentiment analysis to determine how each community perceives the college or university, and sentiment analysis may also help universities evaluate their performance. This sentiment survey yielded three results: “Positive,” “Negative,” and “Neutral [5].”

The main contribution of this research is to conduct sentiment analysis on university social media using the comments on each upload provided by the college or university to analyze and evaluate the performance of the university whether it was “Positive”, “Negative”, or “Neutral”. The extracted results can support the university's experience of criticism in measuring vital indicators to evaluate the university and establish the public's perception of the university. The dataset used in this study is one with labeled data that has been manually labeled and applied to the dataset. The methods that will be used in this study are Logistic Regression (LR) and Support Vector Machine (SVM). The selection of Logistic Regression and Support Vector Machine methods' is based on the efficiency and proven performance in conducting sentiment analysis on a variety of problems [6]. Giatsoglou et al. (2017) found that the SVM model achieves the best results in terms of efficiency in accuracy and process times [7]. H. Hamdan et al. (2015) said that using the LR model can compare with other models such as SVM in sentiment polarity [8]. Based on the two approaches, comparative analysis in the form of performance benchmarks for the results of the algorithms used will be provided. One way to measure university performance is to look at public opinion or sentiment which can be seen through comments made on its social media platforms.