

ABSTRACT

The tourism industry is one of the industry sectors that continue to show positive trend every year. This is supported by a year report from the United Nations World Tourism Organization (UNWTO) by the end of 2016. One of the biggest revenues of this industry is the hospitality or leasing sector. One of the startup rental places that began to be widely used by travelers is Airbnb. . The hotel industry is still using conventional means of viewing public opinion on its services such as interviews, questionnaires, or other means that take longer and costly to say it is less efficient for the current state of the world, where everything is accessible quickly.

This study aims to find ways to gain insight sentiment and topics discussed by users of airbnb services in social media, because social media is now widely used by almost everyone. This makes social media become one of the sources of critical information and suggestions for companies that can be utilized for service quality improvement. Problems encountered in this study is the amount of data from social media that very much cause the need for methods to be able to process data quickly and precisely. This research uses naive bayes method to classify sentiment and Latent Dirichlet Allocation to model the topic.

Implementation of naive bayes text classification can classify into 3 types of positive, negative, and neutral sentiments. The results of such sentiment grouping will be re-used by using Latent Dirichlet Allocation to map any topic topics that arise from every sentiment. The result of the topic mapping yields many topics in each sentiment, for example as with the negative sentiments of many topics discussing language differences, and many positive sentiments comment on the price of the offered accommodation easier. These methods are expected to assist companies in reading criticisms and suggestions on social media delivered by users of the service quickly and concisely.

Keywords: *big data, naïve bayes, latent dirichlet allocation, social media*