

## ABSTRACT

*The increased number of market size of e-commerce c2c every year indicated that marketplaces in Indonesia have a great potency. E-commerce did provide a lot of convenience to their customer, yet on the other hand, this online business is also potential to harm them. Handling a customer's complaints by focusing only to some kind of institution would not be enough, there should be another alternatives to facilitate the customer to file their inconvenience. The use of social media is used by Indonesian people, especially Twitter to express their opinion freely. The utilization of data analytics is able to analyze the conversations in social media by using some methods namely Wordcloud, Text Mining, and Social Network Analysis. Therefore, it is necessary to conduct a research about the use of network text analysis of conversation contents in Twitter to figure customer complaints on marketplaces in Indonesia.*

*The purpose of this research is to determine what conversations contents that Twitter might have about Tokopedia and BukaLapak as the object, to describe the customer complaints through network text, also to decide an action plan to handle a customer complaints on Twitter.*

*The data were collected through crawling process on Tokopedia and BukaLapak's Twitter account (@tokopedia, @TokopediaCare, @bukalapak, and @Bukalapak\_Care). It includes mentions, replies, and retweets that being filtered to obtain data that have relevancy to the study. From the observed data, there were 65 nodes, 382 edges on Tokopedia and 65 nodes, 305 edges on BukaLapak with the same type of graph that is directed. The data were analyzed by using several software called RStudio, web-based wordcloud generator, Tagul, Rapid Miner Studio ver 7.1 and Gephi ver 0.9.1.*

*The result showed that based on wordcloud 5, some of the content of customer complaints for Tokopedia in Twitter were "penjual, tidak bisa, proses, transaksi, dan barang", and as for BukaLapak were "transaksi, barang, pelapak, dana, dan status". The depiction of customer complaints on social media content Twitter, Tokopedia described in this network text based on degree results containing the word "barang, penjual, tidak, belum, proses, dan transaksi" and word "transaksi, barang, pelapak, belum, dana, dan tidak" on BukaLapak with supported levels of graph density graph closely enough that illustrates the level of relationships between words that contain complaints that often being discussed.*

*Based on the results, marketplaces can determine an action plan to handle customer complaints quickly and more appropriate way after learning the contents of customer complaints that being discussed in Twitter. Knowing the customer judgments are important for marketplace to help them give their customer an optimal services.*

*Keywords: customer behavior, customer complaints, e-commerce, network text analysis, social network analysis*