

ABSTRACT

Increasing internet usage in current times cannot be separated with the improvement of telecommunication technology in terms of accessibility's speed and quality. This happens due to the existence of National Telecommunication Provider services, mainly the biggest ones such as Telkomsel, Indosat, and XL Axiata. In its development, social media creates a facility that provides easiness for its user in expressing their daily life in such quick and easy manners, using various way such as text messaging, instant messaging (IM), and email. This exchange of information among connected users creates opportunity for social network analysis to capture the quantity of provided information, in which later on can be projected for empirical observation towards a certain particular topic. In this case, Twitter became one of the main media social sites that frequently used by Indonesian citizens exchange information and sentiment expression in open and direct way. Emphasizing on that matter, Twitter is not only proven useful for individual usage but also can be utilized by enterprises in improving familiarity with theirs customer. In that way, enterprises can observe the perception of their brand quality (brand perceived quality) through expression given by the customer. The usage of social network analysis and text mining methods is implemented so that perception about brand quality, dominant problems, semantic group, and semantics association which emerge throughout conversation happened in Twitter became main focus of this research.

Theories that used within this research are big data, social computing, social media, data mining and social media mining, text mining, wordcloud, social network analysis, community detection, and brand perceived quality.

This Research processes conversation data within social media using word cloudgenerator to shorten those conversation, for later on being classified based on dominant words which has been determined beforehand. After that, it produces data of dominant words for each brand which are "Indosat" and "Telkomsel". The next step is visualization process for dominant word's network using Gephi software. Association rules and community detection methods are used to finding words association and words group. The produced result will be the subject of analysis to obtain quality perception for each brands.

Based on mentioned process, result analysis is obtained in the form of quality perception, based on branding mention for "Indosat" and "Telkomsel" brands. This shows that process which has been done in this research is reliable to produced brand perceived quality of a particular brand in easier manner.

As Conclusion, Text Network Analysis Process can be utilized in expression processing from social media within the form of association among representative words to produces Brand Perceived Quality and possible to be extended for Market Analysis, Product Analysis, and so on.

Keywords: Social Network Analysis; Text Mining; Brand Perceived Quality