ABSTRACT

This research aims to analyze the competition among entertainment apps in Apple AppStore. The samples of this study were 2400 apps that were included in the entertainment category. Big data analytics is employed in this study to analyze the competition among entertainment apps and measured by user's minimum age, price, in-app purchase option, rate, and number of raters; these factors are processed using hierarchical clustering. Another factor is the description of the apps extracted to keywords and processed using LDA topic modeling and text network to analyze the competition based on the offering products/contents.

Hierarchical clustering resulted 7 clusters. The user's minimum age that the apps' developers commonly state is four years old. The apps are majority priced at IDR.0 or free, and the highest is IDR3.299.000. The price makes it the only app in cluster 4 because there are no other apps that have a price close to it. Cluster 5 contains free apps with good performance measured by good ratings, many raters, and an in-app purchase option. Ten topics resulted from LDA topic modeling that was further visualized by the text network. Text network shows that the words game, app, video, and image are the most common words that occur in most topics; these also have a high degree centrality and betweenness centrality. It indicates that most apps offer products in the form of games, videos, and images.

Keywords: Big Data Analytics, Competition Analysis, Demand-based Factor Performance, Pricing Strategy, Product, Supply-based Factors, Users' Characteristics