ABSTRACT

This study aims to find out phenomena in the field of operations management, related to New Product Development that occurred in social media on the launch of Apple products, namely the iPhone 11, iPhone 11 Pro and iPhone 11 Pro Max. This study obtained data by streaming data on Twitter social media. The data processed in this study uses the data population uploaded Twitter social media users related keywords "#iPhone11", "#iPhone11pro", "#iPhone11promax" and "AppleEvent2019" in the period of 3 September to 30 September 2019 and divided into three research periods i.e. pre-release, release period and post-release. The data obtained were processed using Sentiment Analysis and Topic Modelling using Python software version 3.6.7. With this research, the results show that the Latent Dirichlet Allocation method (LDA) is able to extract in-depth insights related to the subject of the iPhone 11 product discussion in the pre-release, release and post-release periods, the results of which are dominated by camera topics. Then, Dynamic Sentiment Analysis through the Naïve Bayes Classifier method, the results can be used to classify the dynamics of consumer sentiment correctly, in this study it is known that the iPhone 11 product has positive sentiment related to camera quality but has negative sentiment related to camera design. With the results of this study the company is expected to obtain valuable information to solve the problem and take prevention strategies for the next product launch in order to avoid the same mistakes.

Keywords: New Product Development, Sentiment Analysis, Topic Modelling, Latent Dirichlet Allocation, Naïve Bayes Classifier, Twitter.