ABSTRACT

The company's ability to generate profit and measure the effectiveness of company management is what it meant by the profitability ratio. This study uses a sample of 15 sub-contractor companies annual reports that recorded on the Indonesia Stock Exchange (IDX) and figures 2 ratios of profitability as a main formula which are Gross Profit Margin (GPM) and Net Profit Margin (NPM) using k-means clustering as a method for clustering data. The purpose of this study was to examine the company profit for the 2019-2021 period. The clustering process starts from the selection stage of the evaluation stage using Google Colab tools on the Python programming language from several libraries including pandas, matplotlib, mumpy, scikit learn and plotly express. The results of the study show that cluster 0 is a company with steady GPM value, and certain data comply with the industry standard. Cluster 1 is a company with the lowest NPM and GPM ratio, which has no great value according to industry standards. Cluster 2 is a company with a ratio value in accordance with industry standard.

Keywords: K-Means Clustering, Gross Profit Margin, Net Profit Margin and Profitability