

## ABSTRACT

*The furniture market in Indonesia is currently developing in accordance with consumer preferences who view furniture as a necessity with a modern style. One of the furniture entrepreneurs in Yogyakarta, Ayoyoo, realized that more and more competitors were becoming similar business competitors. Over time, sales and revenues from 2021 to 2023 continued to decline significantly. The optimization carried out was to utilize a large collection of transaction data in determining sales strategies using the data mining method. This study aims to group consumers based on transaction data to provide information in determining the right sales strategy to increase sales using the K-Means Clustering and FP-Growth Association Rule - Market Basket Analysis methods. The results of this study obtained 4 clusters with good clustering category quality. Each cluster has different purchasing characteristics based on the consumer behavior that is formed, namely cluster 1 as strategic buyers, cluster 2 as value seekers, cluster 3 as premium customers, and cluster 4 as impulsive buyers. The results of the association rule method provide additional information regarding the relationship between products. The main products formed from the 22 rules are Bravura Latte Ear and Kozilabs which have strong relationships with several complementary products such as Roxette Doubleseat, Arto, and Muji.*

**Keywords:** *clustering, AR-MBA, sales strategy, furniture*