ABSTRACT

Competition in the business world is getting tougher, especially in sales at online stores. Many business people are competing to open online stores because of their wide reach and ease of dealing with buyers. Therefore, business people who open online stores must think of new sales strategies in order to maintain their business. Artpedia is an art and painting tool shop that also sells its products online through several Indonesian e-commerce sites. In 2019, there were a number of specific months that experienced a decline in sales of 57-80% of the highest number of transactions. The decline in sales occurred due to semester breaks for students. To overcome this, Artpedia must find a new sales strategy in order to stabilize product sales that have declined. One strategy to increase sales is to utilize sales transaction data which will later be processed into useful information for new sales strategies. This research focuses on data processing (Data Mining) sales transactions owned by Artpedia to determine the pattern of relationships between items with one another using a priori algorithm. The results of this study are 6 pairs of itemset that meet the applied rules, namely with a minimum value of confidence and lift ratio 1. The relationship between the 2 itemset can be used by Artpedia for product placement in the offline store or can also be used for product recommendations for customers who buy incorrectly one of the two itemsset.

Keywords— Apriori Algorithm, Business Strategy, Data Mining, Product Recommendation.