## **ABSTRACT**

The results of sales at retail stores every day record a lot of sales transactions, and always increase with changing times. management only looks at reports on the number of items sold and how much income is seen from the party there is follow-up to determine decisions in the future. By using the association method, management can make decisions about what requires more inventory than other products. This research was conducted by implementing the application of FP-Growth with the rule association method using rapid miner tools. The results obtained from this study are a support value of 0.2% and a confidence value of 0.6% with a total of 135 transactions from 246 products in a week having 5 combinations of equipment 3 items purchased simultaneously by customers. With this research, it is hoped that retail store management in the UK can see more profitable business strategies and prepare for the future, and also store management can provide discounts for the purchase of 3 items of baby equipment purchased simultaneously.

Keyword — Association Rule, Algorithm FP-Growth, Rapid Miner, Support, Confidence