Abstract

This study aims to find interesting patterns on the database transaction so that it can be used as a recommendation sales promotion and inventory product. Companies have difficulty finding interesting transaction patterns in large databases, so it will be difficult to determine the right product promotions and inventory. To resolve these problems are to use data mining techniques with association rule. In previous studies, most studies adopt Apriori algorithm to analyze the association rules. In this study, the data mining technique used is the association rules algorithm FP-Growth. In the FP-Growth algorithm did generate candidates as in Apriori algorithm and using a development concept Tree in frequent itemset search so that it requires faster than Apriori. Some of the analyzes produced in this study are higher minimum support values and minimum trust used will result in fewer items and association rules. Association rule in this study has a lift ratio value of more than 1.00, meaning that item K and L are actually bought together. The higher the lift ratio produced shows the stronger the association rules are formed. The results of this study are the minimum confidence of 97.63%, the maximum trust is 99.37% and the lift ratio is 1,00013798. These results can be used as recommendations for
optimizing product promotions and inventory.

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Index Terms

Computer Science Algorithms

Keywords

Promotion, Knowledge Discovery Database Data Mining, Association Rule, Fp-Growth, frequent itemset.