Implementation Association Rule Method in Determining the Layout of Qita Supermarket as a Strategy in the Competitive Retail Industry in Indonesia

Authors : Dwipa Rizki Utama, Hanief Ibrahim

Abstract : The development of industry retail in Indonesia is very fast, various strategy was undertaken to boost the customer satisfaction and the productivity purchases to boost the profit, one of which is implementing strategies layout. The purpose of this study is to determine the layout of Qita supermarket, a retail industry in Indonesia, in order to improve customer satisfaction and to maximize the rate of products' sale as a whole, so as the infrequently purchased products will be purchased. This research uses a literature study method, and one of the data mining methods is association rule which applied in market basket analysis. Data were tested amounted 100 from 160 after pre-processing data, so then the distribution department and 26 departments corresponding to the data previous layout will be obtained. From those data, by the association rule method, customer behavior when purchasing items simultaneously can be studied, so then the layout of the supermarket based on customer behavior can be determined. Using the rapid miner software by the minimal support 25% and minimal confidence 30% showed that the 14th department purchased at the same time with department 10, 21st department purchased at the same time with department 13, 15th department purchased at the same time with department 12, 14th department purchased at the same time with department 12, and 10th department purchased at the same time with department 14. From those results, a better supermarket layout can be arranged than the previous layout.

Keywords : industry retail, strategy, association rule, supermarket
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