Abstract

Traditional association mining often produces large numbers of association rules and sometimes it is very difficult for users to understand such rules and apply this knowledge to any business process. So, to find actionable knowledge from resultant association rules, the idea of combined patterns is explored in this paper. Combined Mining is a kind of post processing method for extracting actionable association rules from all possible association rules generated using any algorithm like Apriori or FP tree. In this approach, first the association rules are filtered by varying support and confidence levels, then using the interestingness measure Irule, it is decided whether it is useful to combine the association rules or individual rules are more powerful. For experimental purpose, the Combined Mining approach is applied on a survey dataset and the results prove that the method is very efficient than the traditional mining approach for obtaining actionable rules. The scheme of combined association rule mining can be extended for combined rule pairs and combined rule clusters. The efficiency can be further improved by the parallel implementation of this approach.
- http://www.rsscse.org.uk/stats4schools
- Agrawal, Rakesh; Imielinski, Tomasz; Swami, Arun, "Mining Association Rules Between Sets of Items in Large Databases," SIGMOD Conference 1993, pp. 207-216

Index Terms

Computer Science

Information Sciences
Keywords

Association Rule Mining  Data Mining  Knowledge Discovery in Databases  Pattern Mining