Abstract

The idea of combined mining is very useful and flexible for identifying in-depth patterns through combining sets of items from multiple datasets or using multiple data mining techniques. The identified combined patterns disclose in-depth business intelligence, which are more informative and actionable for business decision-making. The business data is scattered at various locations and to arrive at decisions it needs analysis of data by integrating entire data.

This paper emphasizes on applying Association Rule Mining technique on various data sources located at different locations and patterns so obtained are transported to main site. Finally by applying the proposed novel Pattern Merger Algorithm on the aforesaid patterns, all the generated patterns are merged to obtain actionable rules. These actionable patterns assist in strategic business planning and also pin points various issues arising post application of the data integration technique. Domain Knowledge concept is also included in the Rule generation technique to obtain the final results which are in the form of actionable rules.
References

3. Paul O’Dea, Josephine Griffith, Colm O’ Riordan, “Combining Feature Selection and Neural Networks for Solving Classification,” In Article 7/2001 CiteSeer
5. Chuen-He Liou, "Improve the Quality of Product Recommendation based on Multi-channel CRM for E-commerce," In International Conference on Data Mining, DMIN’13
6. Xiaoxin Yin and Jiawei Han, "Efficient Classification from Multiple Heterogeneous Databases," In Knowledge Discovery in Databases PKDD 2005, 2005 - Springer

Index Terms

Computer Science  
Algorithms
Keywords

Pattern merger, actionable rules, association rule mining, business intelligence, combined mining.