Temporal databases added a new dimension to traditional transaction databases. This dimension is the life time of each item, i.e. exhibition period, starting from the partition when this item appears in the transaction database to the partition when this item no longer exists. Mining temporal association rules became very interesting topic in many applications nowadays. In this paper, an efficient technique is proposed for indexing temporal databases in order to facilitate support counting process during mining operation. Some experiments were conducted using well-known real datasets to show the performance of the proposed indexing technique with respect to index size and running time of the mining algorithm. The results show that the proposed indexing technique saves a lot of running time and works efficiently with different databases characteristics.

References

Center for Advanced Information Systems (CAIS), Nanyang Technological University, Singapore, 2003.


Index Terms

Computer Science

Databases

Keywords
Indexing Temporal Databases, Apriori Algorithm, Temporal Association Rules (TAR).