

# **Analysis of Book Borrowing Patterns at Universitas Klabat Library Using the Apriori Algorithm**

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## **Abstract**

Data owned by an institution is one of the assets of the institution. The existence of daily operational activities will increasingly multiply the amount of transaction data. Universitas Klabat Library is one of the special academic libraries located on the campus of Universitas Klabat. Provide a variety of library materials such as books, literature, scientific magazines, general magazines, tales and other textbooks. In this research, the researcher utilized Apriori Algorithm to analyze the lending data of book in Klabat University Library based on the tendency of item set that appear together in a literature visit activity. Apriori algorithm is one of the algorithms in data mining that can be used in the Association Rule by using KDD (Knowledge Discovery in Data) method as a process to help find patterns or rules in a data. With the Apriori Algorithm, the result of the analysis proves that all the rules do not exist that meet the minimum support and confidence that have been determined and the results of the analysis also said that the books titled Troubleshooting Family and Sowing Seed Reap Results, Rules, Patterns and Words and Pictures for Language Learning, Education Dynamics Christian and Christian Religious Education, Indonesia Sues and Events Around Proclamation 17-8-1945, fit with Weight Training and Seniors Health with Nursing Care Approach, never borrowed equally by library visitors.

**Keywords:** *data mining, Apriori Algorithm, support, confidence*