# PROSES ASSOCIATION RULE UNTUK MENGETAHUI KECENDERUNGAN BELANJA PADA KOPMA UNJ MENGGUNAKAN ALGORITMA APRIORI DAN ECLAT

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#### ABSTRACT

**NURUL NISA HABIBAH**, Association rule Process to Know Shopping Trends in Kopma UNJ Using Apriori and Eclat Algorithms. Essay. Informatics and Computer Engineering Education Study Program, Faculty of Engineering, Jakarta State University. 2020. Advisor Lecturer Dr. Widodo, S.Kom., M.Kom and Bambang Prasetyo Adhi, S.Pd., M.Kom.

UNJ Student Cooperative or commonly abbreviated as Kopma UNJ is a forum for UNJ students who want to learn business with the principle of cooperatives. With various companies built by Kopma UNJ, the resulting transactions will be huge. Kopma UNJ, which has a motto going forward with members, wants to have a maximum business but has not been able to process transaction data that is large enough to know the shopping basket rules or the rules of shopping associations purchased by customers. This is the background of the research carried out. The purpose of this study is to find out the results of the analysis of the association rule process to determine spending trends in KOPMA UNJ. The research method used in this study is experimental laboratory research using the Association Rule technique using apriori and eclat algorithms. The data used are Kopma UNJ store transaction data located in building P, Campus A, UNJ with a total of 76,266 transactions obtained from January 26, 2018, to January 14, 2020. Algorithms with large confidence values and short running times are considered good, informing association rules. The results obtained from this study are Kopma UNJ customers with a confidence value of 1.0 must buy mineral water both 600 ml aqua and 600 ml ads and use the logo print service if using a binding service with a confidence value of 0.534. Also, in terms of performance, the eclat algorithm is faster, that is, less than 1 second informing its association rules than apriori algorithm, which takes more than 34 seconds. From this research, it can be concluded that print and binding services and beverage sales can help other unsold products to be sold so that profits become more optimal, and a good algorithm in forming association rules is the eclat algorithm.

Keywords: Association Rules, Algorithms, Apriori, Eclat, Support, Confidence