ABSTRACT

ANALYSIS OF CUSTOMER BEHAVIOR TO DETERMINE THE LAYOUT OF THE USER INTERFACE USING MARKET BASKET ANALYSIS (MBA)

Oleh
Mahda Laina Arnumukti
NIM 20102302

The growth of e-commerce in Indonesia continues to experience a significant increase, making a positive contribution to overall economic growth. The increase in business actors in e-commerce in 2022 reached 2,995,986. This makes competition in e-commerce even tighter. Changes in consumer behavior that are increasingly turning to e-commerce are caused by the ease of making transactions without the need to leave the comfort of home. Therefore, it is important for business management to understand marketing strategies that can increase purchases on e-commerce platforms. Analysis of consumer behavior is a critical step in understanding transaction patterns, the Market Basket Analysis method with the a priori algorithm is used with a focus on understanding customer purchasing patterns through an association rules approach. One of the algorithms applied in association rules analysis is the Apriori Algorithm. The results of association rules use a minimum support value of 0.005 and a minimum confidence value of 0.01. The resulting rules meet the criteria for the lift ratio value with a lift ratio value> 1. Rules are classified with the Naïve Bayes method to determine the highest probability when consumers enter keywords. The results of the largest rules are the product categories {Steering Wheel} and {Game Boy} which have a support value of 0.005 and a confidence value of 0.88. The goal is to determine the highest probability value when consumers enter keywords. For example, the use of the keyword {nintendo switch} has a probability of 0.14, providing more specific product recommendations to consumers based on consumer behavior. The generated rules can be a reference for effective e-commerce marketing strategies, enabling more specific product recommendations based on consumer behavior.

Keywords: Association rules, Customer Behavior, E-commerce, Market Basket Analysis, User Interface,