

## **ABSTRACT**

# **DETERMINING BUNDLING PACKAGES AND PROMOTIONS USING FP-GROWTH BASED ON CUSTOMER BEHAVIOR**

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*An effective sales strategy is an important factor for business success amidst intense competition in online retail/e-commerce. Online retail/e-commerce stores abundant sales data which is often not utilized as a sales strategy. This research aims to optimize Shopee online/e-commerce retail sales data for April and June 2022 as a sales strategy. The sales strategy carried out is by creating bundling and promotional packages. Determination of bundling and promotional packages is carried out using data mining techniques, especially the FP-Growth algorithm in the association method based on understanding customer behavior. The results of the analysis produced 14 bundling packages or rules, with 10 of them having different rules. The resulting bundling has an effective minimum support value of 0.0005, confidence 1, and the highest lift ratio of 445.69. The resulting bundling also has a promotional package price determined using the dynamic pricing method. Thus, the results of this research are able to create bundling and promotional packages using FP-Growth based on customer behavior as a sales strategy amidst intense competition in online retail/e-commerce.*

**Keywords:** *Customer Behavior, Data Mining, FP-Growth, Bundling Packages and Promotions, Sales Strategies*