## ANALYSIS OF TRANSACTION PATTERNS FOR PACKAGE MENU RECOMMENDATION ON GEPREK CHICKEN OUTLETS WITH APRIORI ALGORITHM

## **ABSTRACT**

The application of data mining can help culinary industry players before making a business decision to develop their business. The method taken can use the association technique with an apriori algorithm to determine rules that can convert data into more useful information. The apriori algorithm is part of the association method in data mining which aims to find frequent itemset from certain data sets. The apriori algorithm process is carried out by determining frequent itemsets that meet the predetermined minimum support and minimum confidence requirements. The appropriate items and itemset will later be combined with themselves, to produce a k-itemset that will be tested with predetermined values of minimum support and minimum confidence.

This combination will produce an association rule with the best confidence and lift ratio values as a result of the research. This study aims to find a combination of the A La Carte menu with the Beverage menu which is purchased separately outside the package menu, using 949 records processed from 12,503 records of raw transaction data at the Geprek chicken outlet in the period from March to May 2020. The final association rules are used as recommendations. The package menu at the Ayam Geprek outlet is the rule that "81.9% Milo Beverage buyers, will buy A La Carte Ayam Geprek", with a support value of 0.15806, a confidence value of 0.81967 and a lift ratio of 1.8972.

**Keywords:** Transaction Pattern Analysis, Data Mining Association, Product Correlation At Ayam Geprek Outlet, Data Mining Apriori Algorithm