

## **ABSTRACT**

The establishment of the ASEAN Economic Community (AEC) at the beginning of 2016 allows participating countries to make easier transactions. Indonesian retail market has been developed as a modern outlet whose number is increasing. At the same time, the internationalization of local food product becomes an opportunity for foreign companies to sell their products to Indonesian customers and vice versa. This phenomena leads enterprises to produce more FMCG products, therefore not only the quantities of products that is increasing but also the variety, especially, food and beverage products. These products attract foreign community including Malaysia to consume Indonesian products. The number of imported food and beverage products from Indonesia to Malaysia increased by 14.08% every year. One of the Malaysian company that sees this phenomenon as a business opportunity is Integra Logistic Sdn Bhd, Malaysia logistics company that distributes FMCG products originated from Indonesia to retailers. However, the company has some transportation issues, Integra Logistic Sdn Bhd does not implement any distribution method which leads company to losses because of its service.

Saving matrix method is used to find the shortest distribution route so that companies can reduce fuel costs because of the distance will become shorter. Therefore, the author conducted a research to find the shortest route of distribution, seeking productivity service, and cost efficiency of distribution, titled "OPTIMIZING DISTRIBUTION ROUTE USING SAVING MATRIX METHOD AT INTEGRA LOGISTIC SDN BHD".

After saving matrix method is applied, route productivity level is increased to 50.50% and the cost efficiency obtained is 30.37%.

This research is expected to be the solution of transportation problem at Integra Logistic Sdn Bhd. For other companies which business activities include the distribution process, it is expected to apply the proper distribution method to prevent financial loss. For further research, more optimal results can be obtained by adding additional methods that support the distribution process such as scheduling and inventory calculations at the warehouse.

Keywords: operations management, saving matrix, logistics, productivity, efficiency.