RELATIONS ANALYSIS OF MIGRATION PATTERNS WITH SEA TRANSPORTATION (CASE STUDY: JAVA – BORNEO)

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Abstract

Migration of population often occur in Indonesia, one example is the migration from Java to Borneo and the opposite. To serve the migration required a reliable sea transportation because the geographical condition separated by the sea. But at peak time occurs a drastic surge of passengers so the ship carrying passengers exceed its capacity, and exceeding the allowed load factor. In addition, there are some ships that are not suitable to operate on the route Java - Borneo.

The final project analyzes the relations between migration patterns with sea transportation using questionnaires and binary logistic regression analysis. Moreover, in this final project also contains market share analysis of the company's shipping which services Java - Borneo using Herfindahl-Hirschman Index (HHI) and sea transportation planning for the migration of Java – Borneo using vehicle routing problem (VRP).

From the results of the analysis indicate that there are X variables and Y attributes that affect the migration through the sea transportation. Each study site generate different X variables and Y attributes. In the market analysis shows PT. Pelni as market leader and the type of market structure is monopoly. At sea transportation planning produces scenario 3.2 as optimal routes and ships assignment to serve the migration of Java - Kalimantan and its rate will be charged to the migrants.

Keyword: market share; migration; relations analysis; and sea transportation planning.