ABSTRACT

The increase of economic growth will affect demand for container transport in the scale of transport service. Demand for sea transport services are highly qualitative and have different characteristics as a function of time, trip purpose, frequency, type of cargo transported. With the increasing of economic growth, the opportunities for movement of domestic containers will increase. This situation will affect the sea transportation industry that provides sea transportation services using container ships with a liner system. Therefore we need an analysis about the optimum route in the face of increasing demand for container transport.

The purpose of this final project is to find out the optimum model calculations to determine the optimum route of container ship’s based on its container demand with fixed port of loading and port of discharge to obtain the maximum profit.

To achieve the purpose, this final project used the optimization method of transportation model. With that method, we can obtain the number of potential container’s demand that can be transported and the number of trips that the ship must be served for one year due to the one year determination of container ships’s operating time. Then, the container demand can be served and can generate maximum profit.

Keywords: Route Planning, Voyage Calculation, Maximum Profit