

ABSTRACT

Transportation is one of the most important factors that affect the export of products from a company to its customers. This project focuses on the evaluation and selection of multi model transportation by selecting the best suitable transportation mode for exports to Malaysia

This project studies four transportation modes, road, sea, air and rail, by using five evaluation factors: routing, capability, loss and damage, freight rate, and transit time. After that the project sets up five scenarios to demonstrate the five factors and reveal the advantages and disadvantages of each transportation mode.

This project applies the Analytic Hierarchy Process, which is flexible and simple in the decision making process. There are calculations both in Excel and Expert Choice software for decision making. This process brings together the cross functional people to make a relative judgment by using a comparison with a 1-9 scale which is easy to understand, and commutates a consistency ratio for checking the answers.

This project attempts selection by comparing the highest scale from the Analytic Hierarchy Process to get the best solution of a new choice of transportation mode which could be applied in the company.

Moreover, the Analytic Hierarchy Process can be applied in the future to make decisions about other problem in the company, and the company could continue to benefit from this useful process.