

Chatnukrob Panyasan 2014: Site Selection of Automotive Changing Tire Center in Bangkok and Metropolitan. Master of Engineering (Engineering Management), Major Field: Engineering Management, Faculty of Engineering at Si Racha. Thesis Advisor: Assistant Professor Sirang Klankamsorn, Ph.D. 199 pages.

The objective of this study is to investigate the factors of location selection that effect on the success of Changing Tire Service Center in Bangkok and Metropolitan Area. The Analytic Hierarchy process was used to evaluate the weight of factors and the transportation network model was developed to analyze the flow of tire from plants and distribution centers to Changing Tire Service Center.

The results from AHP shows that the descending weights of factors for location selection are the size per square meter of service center (=0.35), nearby influence (0.19), sight view of customer (=0.12), ability to approach the service center (=0.07), shape of service center (0.07), transportation route of customer (0.07) and size of market area (0.07). Because of the Consistency Ratio is 0.0067, which is below to 0.1, the conclusion is made that the decision data is consistent. The location selection is found that the Chaengwattana Branch has the highest (=1.29) to be firstly opened

The results of logistics cost calculation to deliver the tires from factories to distribution center and 55 branches of Changing Tire Service Centers can be concluded hereby. Before using the vehicle routing, the transportation cost is 160,671.83 baht per month. After using the vehicle routing, the transportation cost is decreased to 141,635.76 baht per month. The advantage of the study helps the entrepreneur to plan the location selection and can efficiently manage the logistics system in a long term.

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