

LOCATION DETERMINATION WITH ASSIGNMENT METHOD IN DESIGN SEAWEED SUPPLY CHAIN

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Abstract

Assignment methods are widely used to determine the suitability of several supply and demand choices if the availability of each option is one. Property owned by the assignment method can also be used to determine the suitability of the location of the placement that has resources with its production capabilities, so that the assignment method can be used to determine the exact location adapted to the capabilities of the location. This study aims to obtain an industrial location in accordance with the capabilities of the industry in an area consisting of four locations, which have the ability to be a location of agriculture (plant), processor (producer), basic materials (distributors), and finished products (main industry). Industry capability is measured by factors that influence the success of the supply chain, namely: procurement cycle, manufacturing cycle, replenishment cycle, customer order cycle. Each location has advantages and disadvantages to carry out industrial activities, in order to obtain information on the advantages of each location, weighting is done using the Analytical Hierarchy Process (AHP). After obtaining the next weight, determining the location is predicted to have a strong preference to be used as an area for the development of the seaweed commodity industry, by obtaining the maximum amount of weight from the four observation locations, using the assignment method. Results of this research showed that in supplier side and the producer side, the quality dimension must be emphasized on the performance. Meanwhile, in the distributor have to focused on performance of excellence in packaging, likewise, in the main industry, the conformance aspect is the main focus where the main industry is able to follow the schedule made by consumer.

Keywords: AHP, Assignment method, Location, Supply chain design.