

APPLYING AHP TO THE PRIORITIZATION OF MARITIME BOOKING CONFIRMATION

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ABSTRACT

This paper presents an application of the Analytic Hierarchic Process (AHP) technique in helping a decision making process of a group of executives of a ship agency operating in southern Brazil. The decision comprised the prioritization of maritime booking confirmation for shipments of export cargoes at a particular time, in a situation of scarcity - a lack of empty containers or reduced allocation on available vessels. The method proved to be appropriate to expand the minds of the decision makers giving them the opportunity to incorporate other factors beyond the purely financial view in the decision making process, such as managerial and organizational factors. The factors specification, as well as their hierarchical structure and relative weights, was subject of discussion by the group of executives, finally reaching a consensus. Four alternative solutions were evaluated, lastly getting the best collective decision. The validation of the process by the group of executives included an assessment of the quality of the decision making progress. The main difficulties reported by the executives were related to the comparison between the alternatives. While the pairwise comparisons of the criteria haven't showed major problems of consistency, the comparisons between the alternatives presented initial inconsistencies for the executives. Such inconsistencies were removed during the bargaining process and accommodation of participants' opinions. The executives involved were unanimous in stating their satisfaction with the results obtained using the technique.

Keywords: group decision making, shipping allocation, decision support systems, shipping agency

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