OPTIMIZING EXPORT SALES THROUGH AN INTEGRATED APPROACH OF GOAL PROGRAMMING DAN ANALYTICAL HIERARCHY PROCESS AT PT.PABRIK KERTAS TJIWI KIMIA

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ABSTRACT

Allocation of export sales is an important aspect in international trade because it can optimize profits, reduce costs and avoid any risks. However, it is always faced a lot of high uncertainty, change of environmental trade and of course, objectives of company itself, in which it will push the company to create a technique, strategy, and the right decision to achieve allocations of target sales. The process of decision making of the optimized problems is restricted by constraint of resources and some alternatives must be selected properly. Moreover, some objectives of the company often conflicts each others. The effects of wrong decision will appear some costs and risks in which it can be actually avoided.

Considering the problems, to optimize output this research accommodates multi conflicted objectives and involves tangible-intangible factors. Many approaches can be implemented to make a decision, such as Analytical Hierarchy Process (AHP) and Linear Goal Programming (LGP). However, each has weaknesses and strengthens. Considering the aspects, this research offers an integrated approach of LGP and AHP. AHP will be used as an approach dealing with decision making of country’s and customer’s preference, while LGP will be implemented to optimize multi objective functions.

The result shows the integrated combination of LGP-AHP can identify and measure risk countries and customers. Moreover, it can optimize allocations and profits, avoid any opportunity loss and un-utilized capacity loss. This research also shows that the integrated combination results more optimally output than only AHP.

Key-words: Analytical Hierarchy Process (AHP), Linear Goal Programming (LGP), export sales