ABSTRACT

In today's fast-paced and ever-changing business environment where the competition amongst organisations and business makers apt to getting tight, this particular challenge forces companies to be more sensitive and able to adapt dynamically in order to compete and exist permanently. Therefore all kind of manoeuvres and creative steps is extremely needed for the purpose of understanding this very challenge.

This final assignment studies the optimization of production and distribution planning system in PT. Semen Gresik (persero) Tbk. This matter is crucial to be examined because of there are a lot of conflictual purposes wishing to be achieved by the company. Because of that reasons, it is hoped that this planning optimization can make compromise solution which will be able to support the management with its decision making process in order to achieve the company's goals.

Planning optimization is carried out by identifying the involved variables within company's decision making process, and then, goals formulations and identifying problems are done, in which later models are to be developed. As to the approach which is used in solving the problem, compromised programing is used and the solution from the purpose function will achieve a point for every variable decision which is made by the help of LINDO software and those results are used to find compromise solution with the practical of compromise programing.

Through the result of this research, it is understood that with the optimization process, information about the amount of optimum quantity is gained and from which sources the cement can be distributed to the distributor areas. With the comparison analysis methods, it is also understood that the model built up is valid. This is proven by the optimization value obtained from minimize cost which is far smaller compared with its realisation value.

Key words: Optimization, Multi Criteria Decision Making, Production and Distribution, Compromise Programming