

Abstract

In industry, any company engaged in both manufacturing and retail industry requires other companies to become partners in running the company. Thus the selection of partner firms are also included in the criteria that cannot be 'arbitrary' will be a lot of the important factors in determining the company's review where we are going to form a partnership, and with companies where the partnership is to be terminated. The concept of Supply Chain Management teaches the importance of thinking itself is detailed in the suppression of errors whether caused by humans, the production process, and in terms of the company's own liabilities. One of which also determines the partner companies themselves, how your partner choose a good company based on several criteria optimally provided, and in each of these criteria will be weighted at each assessment criteria to be used as a reference. And to determine the appropriate weight to each criterion is necessary precautionary, and therefore the Particle Swarm Optimization Algorithm with Tabu Search combined use in optimizing the composition of the weight of each criterion so that the weights are found can be applied in the selection of partner companies. This research use Matlab 2009b as its development tool, and in the end, this research help the company to make a decision easier with optimum criteria.

Key words: selection of partner companies, Supply Chain Management, Particle Swarm Optimization, Tabu Search