ABSTRACT

One of the key success from SCM is supplier relationship management. One of the main part from supplier relationship management lays on the process of selecting corporate business partner. This is important because by choosing the right corporate partner, the company can reach its maximum profit. There are lot of ways to choose this business partner. This thesis used fuzzy system and ant colony optimization. Ant colony optimization was chosen to generate fuzzys membership function values and fuzzy multi criteria decision making was chosento determined the business partner's level because it has the ability to select a number of solution with certain criteria. The result showed that fuzzy system and ant colony optimization have a good accurate result.

Kata kunci: Supply Chain Management (SCM), Ant Colony Optimization (ACO), Fuzzy System, Business partner selection, Supplier Relationship Management