

ABSTRACT

This research was carried out at one of the companies engaged in the cement industry, which distributed its products throughout Indonesia. However, based on audit result for Central Java region, there are still a number of minor and major statuses in warehouse management perspectives and the percentage of warehousing cost components to the total distribution costs that exceeds the maximum limit set at the warehouses rented from the distributor. Therefore, it's necessary to determine a new distribution warehouse location owned by the company by considering qualitative and quantitative aspects, then stop the operation of the a rented warehouse from distributor because of the high subsidy costs. The method used in this research is investment feasibility analysis using Net Present Value and Benefit Cost Ratio calculations, determining optimal locations using P-Median method, and determining location based on multi-criteria using Analytical Network Process method. The results showed that the location with the highest weight based on multi-criteria decision making and declared feasible based on investment feasibility analysis was located in Cilacap Regency with the optimal location in North Cilacap District. If this decision is carried out, the company can reduce the total distribution costs that must be incurred by the company.

Keywords: Analytical Network Process, New Distribution Warehouse, Feasibility Study, Determine of Location, P-Median