## Abstract

Some company has strategy in the operational sector that to choose a location for the warehouse's company, especially for companies which give priority to distribution to their customers. Customer in here what it meant is a company that supplies product to them. Selection for path distribution warehouse is considered by distance from the warehouse to the customer, then the path distribution of warehouse was oriented by distribution. In the fact, there is some company that distributed their product to many customers. Usually, this company will analyze about their location to find out cost for distribution is minimized or not. Cost distribution was included transportation cost, customer service cost, and warehouse operational cost.

In this final project, writer will bring about the method from spatial science into management science which is the method use to find out the distance from each warehouse to the customer by a system. This method, called NN Queries. But in this case, the customer has many branchs. So, in this final project, writer proposes Group NN Queries to solve this problem to find out the distance from each customer. In management science, there is a method that can use to make a decision for location warehouse from candidates location of warehouse. This method called Load Distance Method. This method considers to distance from each warehouse to customer and how much the warehouse can load the product to each customer. The system will find out which the path distribution was optimum.

With this system created, hopefully can help operational activity to get the location of warehouse easier and optimum.

**Keyword**: warehouse, operational, *Load Distance Method*, *query*, *Group NN Query*, *NN Query*