ABSTRACT

Traditional pharmacies have product varieties of over than 2,000 SKUs which manage inventory levels by using only experience of a manager to estimate order quantity. The problems of inappropriate inventory level occurs which affect the high holding cost for some items and the loss of sales from stock out in some items. The Newsboy Model was considered as appropriate to find optimal order quantity in this project. The purpose of this research is to develop optimal inventory levels in pharmaceutical business and study the model of PBP pharmacy as a prototype.

In this project, the method to create optimal inventory level is the Newsboy Model which used to find the optimal order quantity. Thus, the Newsboy Model is an inventory management method that creates the maximum profit by finding optimal order quantity of product under uncertainty of demand.