

ABSTRACT

The confectionery company operation was studied to improve profits of the company in the recent competitive market. To achieve that, production batch size was analyzed under the assumption that smaller production batch size could provide optimal inventory and would consequently provide optimal safety stock and achieve service level target.

Computer simulation was used to simulate replenishment cycle of the studied product. Input of the simulation was historical data between January - May 2009. The simulation comprised of forty-four scenarios of replenishment operations.

This case study proved that smaller production batch size could reduce finished goods inventory of the studied product. Target service level was also achieved. In addition, implementing the smaller production batch size means shorter lead time of responsiveness. This provides opportunity for company's market expansion.

