

Enhancing the Inventory Control Effectiveness of a Pharmaceutical Distributor in Egypt: A Case Study

Abdel-Aziz M. Mohamed^{*}
Associate Dean of Graduate Studies
College of International Transport and Logistics
Arab Academy for Science, Technology and Maritime
Transport Cairo, Egypt

Ahmed S. Ahmed
Retail Procurement Manager, Graduate Student,
Institute for International Transport and Logistics
Arab Academy for Science, Technology and Maritime
Transport Cairo, Egypt

Corresponding Author:

E-Mail: amohamed55@yahoo.com (Dr. Abdel-Aziz M. Mohamed)

ABSTRACT

Enhancing the inventory effectiveness is critical in the pharmaceutical industry due to the numerous products, high operating costs, and low profit margins. This research paper studies the impact of the inventory classification techniques, handheld devices on the effectiveness of the inventory control system of a pharmaceutical distributor operating in Egypt. The distributor provided some KPI's to quantify the inventory effectiveness; such as nondelivered items, number of delayed orders, productivity, damages, etc. Results revealed that handheld devices had significantly decreased the non-delivered items and enhanced the labor productivity. ABC-VED approach identifies the drugs requiring stringent, moderate and low managerial control; used to plan a cycle counting schedule. This study recommends assigning service levels based on the VED results leading to higher safety stock for the vitally important drugs and lower holding costs for the other drugs. It further recommends classifying the inventory based on unit costs and using different packaging colors accordingly.

Keywords: Classification approaches, Cycle counting, Handheld device solution, Record accuracy, Inventory effectiveness