



**ARAB ACADEMY FOR SCIENCE & TECHNOLOGY &
MARITIME TRANSPORT**

The Impact of vendor managed inventory approach on the supply chain performance in the retail industry

By

Ahmed Abd El-Hakeem Ahmed

A Thesis Submitted to AASTMT in fulfillment of the requirements for the award for
Master Degree in Business Administration – Academic MBA

Supervised

By

Prof Dr. Mohamed Hassan

Prof Dr. Aamal Asfour

December 2014

DECLARATION

We here by certify that the material in this research project report that is not our own work has been identified, and that the contents of this research project report reflect our own personal views, and are not necessarily endorsed by the Academy.

The contents of this report reflect the views of the researchers who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the AAST. This report does not constitute a standard, specification or regulation.”

(Signatures)

.....

(Date) _____

Supervised by:

Name: Prof Dr. Mohamed Hassan

Office: Senior Lecturer

College of Maritime Transport & Technology

Supervised by:

Name: Prof Dr. Amal Asfour

Office: Senior Lecturer

College of Maritime Transport & Technology

ACKNOWLEDGEMENT

The researcher would like to record his gratitude to supervisors, Prof Dr. Mohamed Hassan, Prof Dr. Amal Asfour, to whom I am heavily indebted for their readily offered support and encouragement. I would also like to record my gratitude, and the continues encouragement and support the researcher would like to thank Dr. Sara El-Gazar, and to my lecturers and colleagues in the Institute of post graduate studies, whose guidance and encouragement have greatly helped us, finish this research project in due course.

ABSTRACT

Title: The Impact of vendor managed inventory on supply chain of retail industry

This study elaborates the strategic information sharing in supply-chains where a retailer can ex-post decide whether to share private demand information with an upstream manufacturer after the content of information becomes known. We highlight the equilibrium interaction between the retailer's incentives to stimulate lower wholesale prices and decreases the time needed for transportation from the retailer premises to the customer's premises, by the sharing of information the supplier gets control of some of the retailer's authority over his inventory through strategic information sharing and the manufacturer's rational inference about the retailer's optimal disclosure strategy.

We find that the retailer should share more information when his capability to acquire information improves. However, the retailer may not always want to pursue perfect information capability even when doing so does not incur any direct cost. In addition, we find that retailers should disclose less information when the market becomes more competitive. We also examine the role of inter-chain externality in the firms' profitability and the retailers' efforts to improve information capability.

In particular, we show that firms can benefit from the rival retailer's efforts to improve information capability, and a retailer's incentive for information capability improvement can increase with the intensity of competition or with the rival retailer's information capability

Degree: Master Degree.