

INVENTORY CENTRALIZATION IN AN ELECTRONICS RETAIL BUSINESS

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Abstract

This research examines the impact of changing a distribution system from a direct distribution system (from supplier direct to each store) to a DC system, in the EGR Company (a pseudonym), which is a multi location electronic retail company in Thailand. The DC system is an inventory centralization distribution system that centralizes inventory in one place for distribution to other locations. Each store keeps inventory only at safety stock level, most inventory being kept at a DC.

The research statistically compares a three-month period of implementing a DC distribution with the same period of the previous year in order to eliminate the seasonal nature of the product sales volume.

The total distribution cost consists of the average aggregated stock level, transportation cost, and inventory management and administration cost, and the researcher expected a reduction after the company implemented a DC system. Indeed the results did show that a DC system can reduce the total distribution cost. However, the results of the impact on transportation cost are surprising, as weighted sales volume transportation cost is reduced by a DC distribution system which is the opposite to what was expected.

INTRODUCTION

The EGR Company is a multi-location electronic goods retail company, which has seven branches in southern Thailand. It has 25 product categories with well-known electronic brand names such as Samsung, JVC, Philips, and Electrolux. There are 2,200 SKUs in these 25 products.

The long-term competitiveness of any retail company depends on the success of its logistic management system capabilities, which would improve its market position and financial performance, create new industry standards and new niche markets, and renew the organization.

*This is a shortened version of Mr. Pattanavekin's MSc Research Report.