INVENTORY CONTROL SYSTEM : A COMPARATIVE STUDY ON ECONOMIC ORDER QUANTITY (EOQ) MODEL AND JUST-IN-TIME (JIT) SYSTEM

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Zaliana Zainuddin

Shah Alam, 1991.

ABSTRACT

Inventories should be properly managed. The importance of an effective inventory management is directly related to the size of investment in inventory. A sufficient level of investment in inventory is necessary so that the various functions are effectively uncoupled. A lower investment in inventory will increase the rate of return and also increase the value of the firm. However, by reducing the inventory investment a firm is subject to lost sales due to stock-out or to costly production slowdown. Therefore, managers should maintain inventories at levels which balance the benefit of reducing the level of investment against the costs associated with holding smaller inventories.

For this project paper, a study is done on two inventory control systems, namely Economic Order Quantity (EOQ) model and Just-In-Time (JIT) system. And a comparison was made between the EOQ and JIT technique.

The collection of data is made of library research and interviews. Most of the information gathered was from the library research. Interviews were conducted and information gathered in order to have real life data on how the above mentioned inventory control system was

practised.

Although JIT has been reviewed as a better method, not all companies prefer to adopt it. Some companies with inventory items that have a continuous, uniform and independent demand would prefer to adopt EOQ instead of JIT. JIT seems to suit the Japanese environment where shortage of material is not likely to occur. This is pertaining to the nearby and reliable suppliers.

It was found that JIT system is not an alternative of EOQ model, but actually a modification of the basic EOQ model.