

ABSTRACT

An Analysis of An Inventory System in an Oil Company

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This study involves an analysis of an inventory control system in an oil company.

The company is a merged organization of two (2) previous cultures, an American system and a British system. The former system used a cadex system to update records for about sixty thousand items while the British system used a computerized inventory control batch type data-base system. Another major area of difference between the two cultures is the type of coding used for the materials in stock. At present, work is in progress to use the Materials and Equipment Specification Code (M.E.S.C.) for all of the sixty thousand different items in stock.

Computerization of all stock in the three (3) major warehouses is presently being established.

However, the system would remain a batch type one where different reports would be printed every month. An on line integrated computer system is proposed. With such a system rapid analysis of consumption patterns of items, for example, can be done leading to a more efficient ordering of items and hence a closer inventory control of how much is stocked in the different warehouses.

The basis economic order quantity (E.O.Q.) model was used on some of the materials in stock at the Point Fortin warehouse for the cases of:

i) Constant demand items.

ii) Variable demand items.

The Lotus 1-2-3 spreadsheet software was used to tabulate the consumption data, and the necessary calculations for each item, to derive a cost savings using the EOQ model over the present ordering system of the company.

It was noted that the items with smaller consumption patterns had EOQs' very close to the actual ordering policy for the items in the Point Fortin warehouse.

Generally for large consumption patterns of the items, about half of the calculated EOQ values were used on the ordering policy of the company.

A mention was also made of the cycle counting frequency and forecasting methods available for use by the company.

Finally, the costs involved to set up the on-line computer system together with the benefits of such a system to the company were reviewed.