ABC Analysis in the Hospitality Sector: a Case Study

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Abstract: The main objectives of this study is to analyze the inventory management techniques employed and get possible solutions to overcome the inefficiency of the inventory management. ABC analysis is used in the study to analyze the data of the XYZ hotel. It is found that ABC analysis is helpful in determining the value of the stocks present in the inventory. Through this classification, the hotel identifies the hot spots, and separates them from the rest of the items that have lower sales. The study was found to be beneficial for the hospitality industry to competently manage their inventory levels and keep a track of the items that have a significant impact.

Keywords: Inventory, Inventory management, Hospitality industry, ABC analysis

INTRODUCTION
The study is to determine the appropriate inventory levels that should be kept in order to reduce the costs of inventory and maintain the required inventory in the hospitality industry.

The inventory management involves supervising and controlling of the ordering, storage and uses of components that the company needs for sale in order to minimize the inventory cost and to guarantee smooth process. Organizations maintain inventories because it is almost impossible to forecast the demand and usage needs precisely. Inventories that are mismanaged can create significant financial problems for a business.

An inventory is an important asset of a company and is an integral part of the operations. A firm must have an optimum level of inventories. Several companies have adopted, embraced the methods and realized the impact of the same. There are different categories of inventories. The first is the raw materials, the units that have been purchased and stored for the future. The second category is the WIP or work in progress goods, which are in the intermediate stages of productions and lastly, the finished goods which are ready to be purchased by the consumer.

A company needs to know the precise number of items on their inventories in order to place orders or control losses. There are several techniques which are employed depending on type of business.

An accurate accounting system with up-to-date records is essential. Companies use perpetual system to maintain accurate inventory records, wherein a continuous record of changes in inventory is maintained. Organizations that capitalize on inventory and procurement functions as means of achieving competitive advantages often resulting in increased profitability and increased market responsiveness.

LITERATURE REVIEW
The company purchases different types of items from different suppliers. There are several types of inventory control analysis techniques such as ABC, XYZ, FSN, VED, HML etc. The concept of ABC model can be used to form a rational inventory policy which would help in the reduction of the minimization of inventory costs, including storage and manpower costs.

The process of ABC analysis classifies inventory items into A, B, or C categories based on so-called annual dollar usage. Annual dollar usage is calculated by multiplying the dollar value per unit by the annual usage rate [2]. The ABC analysis follows a simple rule of thumb: “vital few and trivial many”[3].

The class ‘A’ items are the ones that are relatively smaller in number, but account for the greatest amount of dollar annual usage. The class ‘C’ items are the ones which are relatively large in number, but they make up a rather small amount of annual dollar usage. The items in the class ‘B’ are defined as those items between the classes ‘A’ and ‘B’.

The ABC analysis offers a tool for identifying items that will have a significant impact on overall inventory cost, while also offering a tool for the identification of different categories of stock that will require different management and controls techniques. [4]. The ABC analysis is very useful as it clearly suggests that the inventories are not of equal values. [5].

It is seen from the above categorization that class A items are the ones with higher consumption, class B items are the ones with moderate consumption and the class C items are the ones with low consumption values. It has been seen that the items that belong to category C are not paid much attention.
and more focus should be on these items so that their sales are increased.

- Class ‘A’ items account for the 70% of the total annual consumption value and 10%-15% of all the inventory items.
- Class ‘B’ items account for the 20% of the total annual consumption value and 15%-20% of all the inventory items.
- Class ‘C’ items account for the 10% of the total annual consumption value and 70%-75% of all the inventory items.

The cutoffs for the ABC analysis can be modified by the management to classify the inventory. ABC analysis helps in the realizing the significance of each item of inventory in terms of the value of each item. It implies that a small portion of the stock contributes to maximum revenue.

**RESEARCH METHODOLOGY**

The study is focused at the hospitality industry. Three years data was extracted to study the trends and patterns of the inventory of the hotel. ABC analysis and Pareto analysis was also used to identify the top items for the different categories. Implementation of ABC analysis involves:

1. Preparation of list of items and their annual consumption value.
2. Arrangement of the items in the descending order of their annual usage in value.
3. Calculation of the percentage of the share of each item.
4. Separation of items into A, B, and C categories.

**Method of data collection:**

- i. The relevant data needed for the analysis was obtained by the sales reports; purchasing reports generated by the finance department of the company collected using the SAP SE(System Analyses and Programme) software. The data was extracted from the SAP SE software by suing certain T-codes for the different materials.
- ii. Interviews with the personnel in the stores, and the managers in the purchase and finance departments
- iii. Background knowledge information was obtained by review of the related literature on the ABC analysis.

**CASE ILLUSTRATION**

The inventory is bifurcated into 5 types:

1. Liquor
2. Food
3. Soft beverages
4. Tobacco
5. General and stationery items

We have considered only the “liquor”, “soft beverages” and the “tobacco” inventory data.

The following details were obtained:

- a) The lead time of the stocks is highly variable according to the demand but to be on a safer side, this is assumed to be 7 days for all the stocks except for imported liquor which has the lead time at 15 days.
- b) No theft of stock is possible due to the stringent policies of the XYZ hotel including periodic tracking of the items present in the inventory owing to the use of fully automated inventory system and perpetual inventory.
- c) Possibility of a stock out is nil on the account of the use of the software SAP which alerts the operator if the minimum stock level is breached.
CONCLUSIONS
The inventory of liquor is higher than the minimum level that should be maintained. Brand strength of liquor is high and no new brand introduction is necessary. After the ABC analysis of the data obtained, it was found that the Hotel maintained the required inventory for the class ‘A’ items. However, the level of inventory of the class ‘C’ items is higher than the optimum level for the same category. Steps have been taken to reduce the class ‘C’ item stock in the inventory by moving the class ‘C’ items by giving it away in complementary or in hampers. In order to push the recognized items, promotional events and activities can be conducted.

REFERENCES