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**STUDY ON INVENTORY MANAGEMENT AND
TECHNIQUES OF INVENTORY CONTROL**

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Study on Inventory Management and Techniques of Inventory Control

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Abstract – Inventory Management is a critical part of dealing with an organization effectively. Inventory is a crucial piece of current resources for the most part in assembling concerns. Immense assets are resolved to inventories as to guarantee smooth stream of generation to take care of shopper demand. Keeping up Inventory likewise includes holding or conveying costs alongside circumstance cost. An proficient inventory management guarantees ceaseless generation by keeping up inventory at an attractive level. It too limits capital venture and cost of inventory by maintaining a strategic distance from load of item. Proficient and Successful Inventory Management goes far in effective running and survival of business firm.

Keywords: Inventory Management, Inventory Control, ABC Analysis, Organization.

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INTRODUCTION

The term 'inventory' is only a load of goods that is kept up to encourage the nonstop creation of products and ventures. S.E. Bolten watches, "The term 'inventory' alludes to the reserve of the item a firm is putting forth available to be purchased and the parts that make up the products."1 at the end of the day, one might say that inventory is made out of advantages that will be sold in future in the typical course of the business activities.

MEANING OF INVENTORY

The lexicon significance of the word 'inventory' is a "point by point rundown of products, furniture, and so on." Numerous comprehend "inventory" as a supply of goods, yet the for the most part acknowledged importance of the word 'products' in the bookkeeping dialect, is the load of Finished products as it were. In an assembling association, be that as it may, notwithstanding the supplies of Finished products, there will be a load of mostly Finished goods, crude materials and stores. The aggregate name of all these things is inventory.

The advantages which firms store as inventory fully expecting need seem to be (1) crude materials, (2) work-in-process (semi-Finished goods), and (3) Finished products. The crude material inventory contains in wording that are obtained by the organizations from others and are changed over into Finished products through the assembling procedure. The work-in-process inventory comprises of things as of now being utilized as a part of the generation

procedure. Finished goods speak to last or finished items that are accessible available to be purchased. The inventory of such goods comprises of things that have been delivered yet will be yet to be sold. To extend the meanings of inventory to fit assembling organizations, one might say that inventory signifies, "The total of those things of unmistakable individual Holdings which (1) are held for the normal course of business; (2) are in procedure of generation for such deals; and (3) they are to be at present devoured in the creation of products or managements to be accessible for sale."2

Dark, Champion U. Mill operator, have given a nitty gritty importance and meaning of inventory. It would hold any importance with recreate the dialect as far as which they have clarified the term 'inventory'. As indicated by them, "Inventories are expandable physical articles held for resale, for use in assembling an item or for utilization in carrying on business movement. Illustrations are inventory, products acquired by the business which are prepared available to be purchased:

Finished goods being produced available to be purchased by the organizations that are prepared products;

Materials articles, for example, crude materials, semi-Finished items, or Finished parts, which the strategies for success to fuse physically into the Finished items;

Supplies articles which will be devoured by the business in its activities however won't be physically as they are a piece of the product."³

To put it plainly, inventory might be characterized as the materials which are either in advertise or usable specifically or by implication in the assembling procedure and it likewise incorporates the things which are prepared for making Finished items by some different procedure or by contrasting them either by the worry itself and additionally by outside gatherings. As it were, the term 'inventory' means the materials having any of the accompanying qualities, It might be

- (a) saleable in the market;
- (b) straightforwardly useable in the assembling procedure of the endeavor;
- (c) useable in a roundabout way in the assembling procedure of the endeavor; and
- (d) prepared to send it to the outside gatherings for influencing useable or saleable items to out of it.

In the present examination crude materials, stores and extra parts, Finished goods and work-in-process have been incorporated into the inventories.

MEANING OF INVENTORY MANAGEMENT

Inventory is known as the "Graveyard of business" since it has been a fundamental reason for the disappointment of numerous organizations. Inventories constitute the most noteworthy piece of current resources of a substantial dominant part of organizations. In view of the substantial size of inventories kept up by the organizations, a lot of funs is required to be permitted to them. It is, in this manner, totally basic to oversee inventories successfully and productively keeping in mind the end goal to dodge superfluous speculation. A firm dismissing the management of inventories will risk its long run benefit and may bomb at last. Along these lines, keeping in mind the end goal to deal with the inventory legitimately, a requirement for inventory management emerges.

Inventory management is worried about the assurance of the ideal level of venture for every part for every segment of inventory and the inventory overall, the proficient utilization of the segments and the task of a powerful control and survey component. The management of inventory requires cautious arranging with the goal that both the abundance and the shortage of inventory in connection to the operational necessity of an endeavor might be kept away from. In this way, it is fundamental to have an adequate level of interest in inventories.

Inventory management might be characterized as the entirety of those exercises, which are fundamental for the securing, storage, deal and transfer, wellspring of

material, D. Schall Lawrence and W. Haley Charles watch, "Dealing with the level of interest in inventory resembles keeping up the level of water in a bath with an open deplete. The water is streaming out ceaselessly. On the off chance that the water is let in too gradually, the tub before long gets unfilled. On the off chance that the water is let in too quick, the tub floods. Like the water in the tub, the specific things of the inventories continue changing, however the level may continue as before. The fundamental monetary issues are to decide the correct level of interest in inventories and to choose how much inventory must be obtained amid every period to keep up that level."⁴

L.R. Howard watches: "The correct management and control of inventory tackles the intense issue of liquidity as well as builds the yearly benefits and causes generous diminishment in the working capital of the firm."⁵

It is a subject which justifies the consideration of the best level management and impacts the choice of the arranging and the official staff. It involves profound worry to those managing creation, deals, guaging, inventory arranging, showcasing, material taking care of, fund, item planning, and so on.

Inventory management oversees inventory in such a way, to the point that there are no unnecessary and deficient levels of inventories and an adequate inventory is kept up for the smooth generation and deals task. In this way, the target of inventory management is to decide the ideal level of inventory. Destinations of Inventory Management

A crucial target of a decent inventory management is to submit a request at the perfect time from the correct source to secure the correct amount at the opportune place and quality. While building up a suitable level of inventory the accompanying destinations ought to be remembered:

- Interest in inventory ought to be kept least so undue sum isn't secured up it as interest in inventories includes costs.
- A firm should try compelling endeavors in purchasing amount of crude materials in agreement to its needs.
- Ceaseless endeavors ought to be made to abbreviate the generation cycle. The more extended generation cycle runs substantial expenses and the danger of the additional inventory venture.
- A firm ought to keep up inventory to such a level, to the point that smooth and unencumbered creation is guaranteed with no block.
- A firm ought to keep up adequate measure of Finished products to take care of the

demand of clients consistently in light of the fact that on the off chance that it isn't done then the clients may move to the contenders, which will add up to a changeless misfortune to the firm.

- To the degree conceivable, a firm should attempt to limit the likelihood of the danger of misfortune through oldness or shrinkage in the market an incentive between the season of procurement of fabricate from one viewpoint and the season of offer, on the other.
- To fill in as a methods for the area and manner of latent and out of date things of store.
- To keep every one of the consumptions inside the spending approval.

Inventory management, in this manner, should strike a harmony between a lot of inventory and too little inventory. The proficient management and successful control of inventories help in accomplishing better operational outcomes and decreasing interest in working capital. It affects the productivity of a worry.

INTENTIONS FOR HOLDING INVENTORY

The topic of managing inventories emerges when the worry holds inventories. Holding up of inventories includes tying up of the worry's assets and conveying costs. In the event that it is costly to hold inventories, for what reason do concerns hold inventories? There are three intentions in holding inventories.⁶

- (a) Exchange thought process;
- (b) Preparatory thought process; and
- (c) Theoretical thought processes.

Inventories are held simply to carry on exchanges easily, and in the meantime, guaranteeing that the cost of requesting is kept negligible. Such a rationale is called exchange thought process. In some cases, inventories are expanded as a support or assurance against inventory-out when it turns out to be obvious to the management that the lead-time for a specific thing is probably going to increment or there is a probability of short supply. This expanding of the security inventory emerges from simply a preparatory thought process. Ultimately, a circumstance may emerge when an inside and out cost increment is required because of market request or because of changes in cost. In such a circumstance, the organization management is quick to clutch the inventories or increment them so as to show signs of improvement cost for the Finished products. Such a thought process is known as the theoretical rationale.

INVENTORY CONTROL

Inventory control alludes to a system, which guarantees the supply of required amount and nature of inventory at the required time and in the meantime forestalls pointless interest in inventories. As per P.K. Ghosh and G.S. Gupta, "Inventory control is worried about the obtaining, storage, taking care of and utilization of inventories in order to guarantee the accessibility of inventory at whatever point required, giving satisfactory pad to the possibilities, inferring most extreme economy and limiting wastage and losses."⁷

Outlining a sound inventory control system is in a substantial measure of an adjusting task. It is the point of convergence of numerous apparently clashing interests and contemplations, both short-extend and long-go.

Inventory control is worried about keeping the coveted inventory level and looking after it. Its essential goal is to keep a sufficient inventory level and keeping up it at the base inventory conveying cost. The point of inventory management, in this way, ought to be to stay away from unnecessary and deficient levels of inventories. Endeavors ought to be made to put in a request at the ideal time with the correct source to procure the correct amount at the correct cost and quality.

The proficiency of inventory control influences the adaptability of the firm. Wasteful methods may bring about an unequal inventory, here and there out of inventory or overloaded, requiring exorbitant speculation. These wasteful aspects eventually will adverse effect benefits. Turning the circumstance around, contrasts in the effectiveness of the inventory control for a given level of adaptability influence the level of venture required in inventories. The less effective is the inventory control, the more noteworthy is the speculation required. Over the top interest in inventories builds costs and lessens benefits. Along these lines, the impacts of inventory control on adaptability and on the level of venture required in inventories speak to two sides of the same coin.⁸

In managing inventories, the association's target ought to be in consonance with the riches amplification rule. Different kinds of organizations control inventory for the accompanying purposes to

- guarantee a consistent supply of crude materials to encourage continuous generation.
- keep up adequate supplies of crude materials in times of short supply and foresee value changes.

- keep up adequate goods inventory or smooth deals activities and effective client benefit.
- limit the conveying expense and time.
- control interest in inventories and keep it at an ideal level
- limit costs and augment benefits
- control capital speculation
- exploit positive crude material cost, and
- insurance against strikes and work stoppages and demonstrations of God.

to accomplish all these the firm ought to decide the ideal level of inventory and it should be possible through the accompanying inventory management strategies:

1. **ABC Analysis:**

This procedure depends on particular control of inventory. Where there are numerous things in the inventory, it ends up fundamental to have an esteem thing analysis (known as ABC examination) that endeavors to relate how the inventory esteem is concentrated among the individual things and it is otherwise called Control by Significance and Exemption (CIE). As the things are grouped by the significance of their relative esteem, this approach is otherwise called Corresponding Worth Analysis (PVA).

The ABC inventory control strategy depends on the rule that a little segment of things in inventory may regularly speak to the main part of cash estimation of the aggregate inventory utilized as a part of the creation procedure, while a moderately vast number of things may shape a little piece of the cash estimation of stores. The cash esteem is found out by increasing the amount of materials of everything by its unit's cost. As indicated by this way to deal with inventory control, high esteem things are more firmly controlled than low esteem things. Everything of inventory is given A, B or C division relying on the sum spent for that specific thing. 'A' or the most elevated esteem things ought to be under the tight control and under obligation of the most experienced staff, while 'C' or the least esteem thing might be under basic physical control.

This idea might be clarified with the assistance of the accompanying:

"A" Classification - It comprises of things that have a high speed or speed in use and have high unit esteem. The things incorporated into amass an include the biggest speculation i.e. 70 to 75 % of the aggregate estimation of inventory and speak to 10% of the aggregate number of things. This class of things requires thorough control.

"B" Classification - It comprises of things that incorporate generally little venture i.e. 15 to 20 % of the aggregate expenses of inventory and 20% to 25 % of the aggregate number of things. Subsequently, somewhat lesser time and endeavors ought to be given to the control of such things.

"C" Classification - It incorporates those things which are of pitiful unit esteem i.e. 5 to 10 % of aggregate estimation of inventories, having a low recurrence in use. These inventories speak to 70 to 75 % of the aggregate number of things.

The errand of inventory management is the correct order of all the inventory things into one of the over three classes. In short, it can be set up as takes after:

Inventory reach down between number of things and inventory an incentive under ABC analysis.

Particulars	"A" Items	"B" Items	"C" Items
Control	Tight	Moderate	Loose
Requirements	Exact	Exact	Estimated
Postings	Individual	Individual	Group or none
Check	Close	Some	Little
Control	Exact	Exact	Approximate
Expediting	Regular	Some	No
Safety inventory	Low	Medium	Large

It is obvious from the above graph that gathering A comprises of 10 for every penny of aggregate things however the aggregate esteem rate is 75 %. Consequently, powerful control ought to be executed on it. Gathering B incorporates 20 % of aggregate things and 20 % of aggregate esteem. Along these lines, general or routine control is vital for it. Under gathering C, the circumstances is 70 % of aggregate things yet their aggregate esteem rate is just 10 %. Thus, there is no need of viable control yet such things can be dealt with by customary techniques for inventory management.

2. **Fixation of Standards of Inventory Holdings**

The standards of inventories could be set by either the best management, or by the materials division. The best management ordinarily sets fiscal points of confinement for interest in inventories. The materials division at that point needs to dispense this speculation to the different things and guarantee the

smooth tasks of the worry. It would be beneficial if standards of inventories were set by the 'Management by Destinations' idea. This idea anticipates that the best management will set the inventory standards in counsel with the materials department.⁹

Various components go into thought in the assurance of inventory level for singular things with the end goal of control and economy. Some of them are:

1. The rate of utilization;
2. Lead time for conveyances;
3. Requirements of assets;
4. Capacity costs;
5. Accessibility of room;
6. Value variances;
7. Protection costs;
8. Out of date quality dangers;
9. Occasional thought of cost and accessibility; what's more,
10. Financial request amount.

Any choice including obtainment storage and use of things should be founded on a general valuation for the impact of the basic ones among them.

Conveying excessively or too little of the inventory is hindering to the organization. On the off chance that too little inventories are kept up, the organization should confront visit inventory-outs and cause overwhelming requesting costs. Large inventories subject the organization to overwhelming inventory conveying costs notwithstanding pointless tie-up of capital. A proficient inventory management, in this manner, requires the organization to keep up inventories at an ideal level where inventory expenses are least and in the meantime there is no inventory-out that may bring about loss of offer or stoppage of generation.

CONCLUSION

As we have now moved toward the twenty-first century, inventory management will expect expanding significance in the modern world. To date, just the most dynamic assembling firms understand that materials accessibility, building, acquiring, determinations and creation costs are largely factors which eventually add to add up to material cost. Dynamic firms likewise understand that all elements which influence material cost ought to be facilitated

and controlled by a system arranged inventory management approach, if the aggregate materials cost is to be limited. The variables just specified, combined with the quick expanding utilization of PC based data systems, expanding global business action and developing materials deficiencies feature the significance and open doors for modern management around there.

Inventory management has a critical part in the Indian economy. In a few enterprises more than 50 for every penny of the aggregate cost of the item or the activity is by and large the cost of materials alone. The shipyard business is one of them. Tragically, the significance of legitimate materials management has not been completely acknowledge in India and next to no consideration has so far been paid to the undertaking of controlling interest in materials through the utilization of different logical procedures. Conversely, propelled nations of the West and Asian nations like Japan have made pick up strides in the effective utilization of inventory management procedures.

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