Just in time inventory system

Technology

Previous assignments requested in-depth research surrounding the exterior aspects of financial analysis for corporate and small businesses. The group found it challenging and informative being exposed to the introductory components of the accounting environment, financial statements, financial markets and sources of capital, working capital management, financial planning, and internal controls. The team will now further its financial education by exploring the internal aspects of financial analysis.

In researching the companies for the previous assignments the team discovered that the companies used Target and Wal-Mart both utilize some form of JIT inventory systems. The primary focus of this paper will cover just-in-time (JIT) inventory. The paper will explore what JIT is, how it is used and which industries/organizations utilize the process. In addition the paper will highlight the advantages and disadvantages of the JIT inventory system.

What is JIT?

The term just in time (JIT) refers to a production system where both the movement of goods during production and delivery from suppliers are timed together so that the batch arrives for processing nearly after the completion of the first batch. The just-in-time process results in no idle items are waiting to be processed and no idle workers or equipment waiting for items to process (history, 2005). Just-in-time originated in Japan. Its introduction as a recognized way of working is generally associated with the Toyota motor company.

The just in time inventory management process has revolutionized the way organizations manage their inventory. Big box retailers such as Wal-Mart, Target and Home Depot in particular utilize the JIT inventory management process because it allows them to carry smaller amounts of physical inventory, yet have the quantities on hand needed to meet the needs of their consumers. These organizations take advantage of computer assisted ordering, which increases the efficiency of the inventory management process.

When an item is scanned and sold by using the preprinted barcode the item is recorded and removed from the physical inventory of the store. When enough of this particular item is sold to meet the minimum order quantities set by the suppliers and the buyers of the company the item is automatically ordered. This process allow these and other companies to receive smaller more frequent orders without having to tie up the capital needed to house larger amounts of inventory.

Cash is a raw material that companies need to carry on production (Brealey, 2003). Ordering and receiving smaller more frequent orders is a definite way to free up cash and space in the warehouses of these companies. This process also helps with the damage and loss of merchandise because the merchandise does not have to be handled or moved as many times when using JIT. Typically the merchandise is received and stocked on the shelf within a 24 hour window and never has to be handled by the staff again.

On the other hand if merchandise is stored in large quantities the merchandise may have to be handled several times to manage the inventory. There are definite costs to holding inventories; money tied up in inventories does not earn interest (Brealey, 2003). Naturally these large companies that do business with many levels of suppliers are not able to use the JIT inventory process with all suppliers due to the possible limitations of the suppliers.

Smaller vendors may not have the resources to participate in JIT inventory. In addition when using the JIT inventory management process in the retail industry one must consider that the smaller more frequent deliveries are likely to increase the costs of transporting the merchandise and the cost of the ordering process and that larger order may have a better cost. Therefore one must complete a cost analysis to ensure that the savings leverages the cost of the system over a period of time.