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INVENTORY MANAGEMENT FOR MANUFACTURING SECTORS: A CASE STUDY ON AKAY INDUSTRIES DHARAWAD

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ABSTRACT

The study investigates the inventory management of Akay Industries Dharawad. for the period from 2018 to 2022 (5 years). Managers has to plays the very imperative role in managing their inventory effectively. The study discloses the ABC analysis is suit for the firm. It helps the company to reduce the material handling cost, which helps company to increase their profits. The study uses the ratio analysis to analyse and interpret the data. This study provides the valuable inputs for the manufacturing concerns. which are looking forward to optimize their inventory management. The findings highlights the strategy which has to been used by the firm. This includes JIT (Just in Time) inventory system and EOQ (economic order quantity), these are all the real time inventory tracking solutions are used by the company.

Keywords: Inventory management, ABC analysis, JIT, EOQ, Turnover ratios.

1. INTRODUCTION

Inventory management refers to it has the procedure of the activities are ordering, storing, and tracking of a firms goods or products. Its main objective is to ensure the right items are prepared to in the right quantity at right time, it also minimizes the costs and prevents the stockouts . The inventory management will helps to business or firms to optimize their supply chain, improve the cash flow and enhance the overall performance of company in effectively. While the effective inventory management results the businesses to get together the right quantity of stock at the right time to assure the customer demands while avoiding excess stock, which has to be the tie up with the capital and increases holding costs. By using the various methods such as the ABC analysis, Just in Time (JIT), inventory and Economic order quantity (EOQ), the firms can streamline their inventory processes, it will increases the cash flow, and enhance overall productivity. In the end, adept management of inventory aids companies in enhancing their capacity to provide superior customer service. Simultaneously, it boosts profitability and cultivates a competitive advantage within the market.

2. LITERATURE REVIEW

Gaur, Fisher and Raman: Comprising data from 311 retail companies publicly listed, this research encompasses the period from 1987 to 2000. Its objective is to comprehend how inventory behavior is manifested at the firm level within the retail sector. Furthermore, it offers recommendations for establishing an alternate gauge of inventory efficiency, denoted as adjusted inventory turnover. This metric finds utility in the scrutiny of performance evaluation and managerial choices.

Sahari, Tinggiand Kadri: The researchers has to conduct study on the 82 constructions firms in Malaysia for the period 2006-2010. Using the regression and correlation analysis methods for the for reduce the inventory management is positively correlated with the firm performance.

Panigrahi: they took the in depth study of inventory management practices followed by the Indian cement firms and its effect on the working capital efficiency. This study provides the relationship between profitability and inventory conversion period.

Ayad K Ali: a study on the pharmacy operations, inventory refers to stock of pharmaceuticals products retained to meet the future demand. The author reviews of methods of inventory management in a pharmacy practice.

3. OBJECTIVES OF THE STUDY

- The study is associated to which inventory components are important for the ordering levels in the firm.
- The study about the understand and measures the performance of the firm with help of the turnover ratios.
- To examine the inventory management methods with the help of the ABC analysis.

4. RESEARCH METHODOLOGY

Source of data:

The study on the Inventory management of the Akay Industries Dharawad is on the bases primary and secondary data.

Primary data:

The primary data will be composed through the analyzing of the financial reports of the company, and also data has to be gathered through directly interactions with the various department of the company.

Secondary data:

The secondary data should be gathered from the text books, journals and the additional articles are published in online and updated information about the inventory management, and also apart from that primary data the secondary data has been collected from the company broachers, Magazines and from the website of the company etc.

5. DATA ANALYSIS AND INTERPRETATION

TABLE: 1. AVERAGE 5 YEARS INVENTORY TURNOVER RATIO :

YEAR	Cost of Goods Sold (in Rs)	Average Inventory (in Rs)	Inventory Turnover Ratio
2017-18	8,78,28,735.00	5,17,54,062.00	1.69
2018-19	9,37,52,651.00	7,36,08,040.00	1.27
2019-20	6,78,45,343.00	5,11,34,172.00	1.32
2020-21	8,11,32,637.00	6,11,25,432.00	1.33
2021-22	9,65,64,308.00	7,21,12,562.00	1.34

ANALYSIS AND INTERPRETATION:

Gleaned from the provided table, it becomes apparent that there is a decline in the inventory turnover ratio during 2017-18 and 2018-19. Conversely, a surge in the ratio is observed in subsequent years, namely 2019-20, 2020-21, and 2021-22. The generally accepted range for the inventory turnover ratio lies between 5 to 10. In this context, the inventory turnover ratio exerts an adverse impact. However, there is a notable increase in the ratio when compared to the preceding year, indicating potential benefits for the firm's productivity enhancement.

TABLE : 2 ASSETS TURNOVER RATIO :

Year	Sales (In Rs)	Net Assets (In Rs)	Asset Turnover Ratio
2017-18	21,27,98,445.00	23,16,35,531.00	0.91
2018-19	26,86,72,833.00	22,34,87,083.00	1.20
2019-20	19,75,58,854.00	18,60,81,872.00	1.06
2020-21	18,45,36,751.00	18,68,94,004.00	0.98
2021-22	20,13,53,163.00	22,63,66,316.00	0.88

ANALYSIS AND INTERPRETATION

The provided table distinctly displays variations in the asset turnover ratio. Evidently, in 2017-18, the ratio experiences a steady rise, followed by a decrease in 2018-19. Subsequently, it sees a decline again in 2019-20, followed by further reductions in 2020-21 and 2021-22. A higher turnover ratio signifies more effective asset management and utilization, whereas lower turnover ratios indicate the underutilization of resources and the existence of idle capacity.

TABLE: 3 FINISHED GOODS TURNOVER RATIO :

Year	Cost of Goods Sold (In Rs)	Average Inventory (In Rs)	Finished Goods Turnover Ratio
2017-18	8,78,28,735.00	5,17,54,062.00	1.69
2018-19	9,37,52,651.00	7,36,08,040.00	1.27
2019-20	6,78,45,343.00	5,11,34,172.00	1.32
2020-21	8,11,32,637.00	6,11,25,432.00	1.33
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ANALYSIS AND INTERPRETATION:

The turnover ratio of finished goods can be understood as a metric that exhibits oscillations on an annual basis. A substantial ratio signifies an elevation in production. The presented table underscores that the ratio is lower in 2020-21 but registers a greater value in 2021-22, indicating a surge in production in comparison to the preceding year.

TABLE :4 ABC ANALYSIS FOR THE YEAR 2021-22

Group of Items	Percentage of Items	Percentage of Cost
A	5.0	78
B	15.0	14
C	80.0	8
Total	100	100

ANALYSIS AND INTERPRETATION:

The components under ‘A’ class items are costlier and enjoy greater degree of control, where as ‘C’ class items lower degree of control as they are costly, ‘B’ class items are composed of those items that are less costly.

The table shows the 5%of items account for 78% of total inventory cost,15% of items of consumption have the share of 14% and 80% of items consume material worth of 8% of the inventory cost.

FINDINGS:

- ✓ The firm is uses Always Better Control (ABC) method for inventory management.
- ✓ Re-order level, Lead time, Safety stock etc has to be considered to be before placing an order.
- ✓ From the physical observation of inventory management I understand that the company has having the only those materials stock for they are having orders in hand.
- ✓ The firm has to be increase their productivity to comparing the finished goods turnover ratio.
- ✓ The ratio of assets turnover has to indicates underutilization of the available resources in the company.

6. CONCLUSION

From this study we can be concluded to the liquidity of a firm’s is not high because of inventories, while the conversion of the inventory to in cash it takes the time so it will be better to reduce the inventories in hand, and also I came to know from this study to average level of investment of the units is increasing year by year.

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