

## **A Study on Inventory Management with special reference to Bharathi Textiles Coimbatore**

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### **Abstract**

Inventory of materials occurs at various stages and departments of an organization.

A manufacturing organization holds inventory of raw materials and consumables required for production. It also holds inventory of semi-finished goods at various stages in the plant with various departments. Finished goods inventory is held at plant FG Stores, distribution centers etc. finished goods inventory is held by the organization at various stocking points of with dealers and stockiest until it reaches the market and end customers. Besides raw materials and finished goods, organizations also hold inventories of spare parts to service the products. Defective products, defective parts and scrap also form a part of inventory as long as these items are inventoried in the books of the company and have economic value. Inventory management is the integrated functioning of an organization to achieve maximum coordination and optimum expenditure on materials. It forms the never center in any inventory management organization.

Keywords: Inventory, Finished goods, Optimal utilization

### **INTRODUCTION**

Inventory control is the process employed to maximize a company's use of inventory. The goal of inventory control is to generate maximum profit and to ensure availability of materials in sufficient quantity as and when required. Inventory control is one of the chief concerns of businesses that have large inventory investments. Managing the level of inventory is like maintaining water in a bath tub with an open drain. The water is flowing continuously. If the water is let too slowly, the tub is empty soon. If the water is flowing too fast, the tub overflows.

The concept of inventory, stock or working progress has been extended from manufacturing system to service business and projects by generalizing the definition to be all work within the process of production—all work-in-progress has occurred prior to sale and departure from the manufacturing system. In the context of services, inventory refers to all work done prior to sale, including partially process information. Inventory is an idle stock of physical goods that contain economic value, and are held in various forms by an organization in its custody awaiting packing, processing, transformation, use or sale in a future point of time.

Any organization which is into production, trading, sale and service of a product will necessarily hold stock of various physical resources to aid in future consumption and sale. While inventory is evil of any such, business it may be noted that organization hold inventories for various reasons, which include speculative purposes, physical necessities etc.

Inventory generally refers to the material in stock. It is also called as idle resource of the company. The literary meaning of inventory is stock of goods. Inventory is the raw materials, working progress products and finished goods that are considered to the portion of business assets that are ready or ready for sale. Inventory represents one of the most important assets of the business because the turnover of inventory represents one of the primary sources of revenue generation. Inventory is a detailed list of those movable items which are necessary to manufacture a product and to maintain equipment and machinery in good working order.

Inventory management involves the assets being produced for the purpose of sale in the normal course of a company's operations. The goal of effective inventory management is to minimize the total costs-direct and indirect that is associated with holding inventories. However, the importance of inventory management to the company extends to the investment in the inventory of the company. Inventory management is an important aspect of any successful business.

## STATEMENT OF THE PROBLEM

Inventory management is a very important function that determines the health of the supply chain as well as the impacts the financial health of the balance sheet. Every organization constantly strives to maintain optimum inventory to be able to meet its requirements and avoid over or under inventory that can impact the financial figures. Inventory management system provides information to efficiently manage the flow of materials, effectively utilize people and equipment, coordinate internal activities and communicate with customers. Inventory management does not make decisions or manage operations they provide the information to managers who make more accurate and timely decisions to manage their operations, Majority of firms are incurring huge losses due to poor inventory management.

## OBJECTIVES OF THE STUDY

- To study the selective inventory control system adopted in the company.
- To identify the optimum level of inventory that minimizes the cost.
- To identify the inventory requirement of the company for the next year. To understand the inventory management bharathi textile.

## REVIEW OF LITERATURE

**Madishetti (2015)** Based on the data from two DSE-listed companies for eight years from 2006 to 2013, this study analyzes the impact of inventory management efficiency on the profitability of Tanzania-listed Dar Es Salaam Stock Exchange (DSE) cement companies. Tanga Cement Limited (TCCL) and Portland Cement Limited (PLCCL) regressed by applying descriptive statistics, correlations, and Ordinary Least Squares regression (OLS) tests. The Inventory turnover in Days (ITID) is considered as an independent variable.

**Ndubuisi, O, Uche, & Chinyere (2018)** The purpose of this research paper is to find out the association between inventory management and the financial performance of brewery companies listed on the Nigerian Stock Exchange for the seven (07) years from 2010 to 2016. Return on assets, company growth and return on equity are taken as a proxy of financial performance, and the ICP is used as a factor to measure inventory management. The panel data used in this study. Data were analyzed by Correlation co-efficient and ordinary least square (OLS) regression method using SPSS. The survey results show that there is a significant positive association between the return on assets, the company's growth and the inventory conversion period. There is a positive and nonsignificant relationship between the return on equity and the inventory conversion period

**Sunday & Joseph (2017)** The rationale of the study was to inspect the impact of inventory

management on the profits of small and medium-sized businesses in Nigeria. For the study researcher used a descriptive study design. The population includes all SMEs operating in the delta. The study used stratified random sampling. The data for this study was obtained through self-designed questionnaire surveys with sample managers or accountants. The structure of the questionnaire is designed to obtain information on transactions and financial activities in the last two fiscal years. Regression analysis was applied for the study.

**Panigrahi (2013)** The aim of this research paper is to study the inventory management perform of Indian cement companies and their effect on working capital efficiency. The researcher had tried to examine the relationship between inventory conversion periods and Firm's profitability. In this study the regression analysis applied to determine the association of the inventory conversion period with the operating profit ratio, company size, and financial debt ratio as control variables. The results demonstrate that significant negative relationship exists between the inventory conversion period and profitability. The survey results show that the inventory conversion period is inversely relative to the company's profitability, that is, when the number of days in the inventory conversion period raise, the company's profitability decreases, and vice versa.

**Oballah, Waiganjo, & Wachiuri (2015)** The motivation behind this examination was to explore the impact of inventory management rehearses on organizational performance in public health establishments in Kenya. The particular objective was to found: the impact of inventory shrinkage, inventory venture, inventory turnover, and inventory records precision on organizational performance. A descriptive analysis was utilized. Measurable investigation was done utilizing SPSS. The examination uncovered that inventory investment and inventory records precision impact on organizational performance.

**Etale & Bingilar (2016)** This investigation analyzes the effect of inventory cost management on the profitability of Nigerian listed brewery works organizations. Inventory cost management operators dependent on raw material costs, work-in-measure costs, and finished products costs, benefit specialists dependent on gross profit margin. Secondary time series data was gathered from the yearly reports and records of selected brew organizations from the Nigeria Stock Exchange from the year 2005 to 2014. The information got from NSE was dissected utilizing the multiple regression method with SPSS 20 version. The examination shows that effective inventory cost management positively affects the profitability of Nigerian brewery organizations.

**Shardeo (2015)** In this article, the investigation held to dissect a few parameters that straightforwardly show the effect of inventory management on the financial statements. This article additionally incorporates a discussion of the concept of inventory management, various inventory control advances, and their interrelationships with company financial statements. This article additionally presents the different costs brought about because of store inventory, economic order quantities, reorder levels, deficiency costs, and inventory techniques.

**Kimaiyo & Ochiri (2014)** The general goal of this study is to look at the impact of inventory management on the performance of manufacturing organizations in Kenya. The particular reason for the examination was to decide how the reduction in inventory management costs affected the performance of Kenyan manufacturing organizations, to survey how the utilization of inventory control frameworks affected the performance of Kenyan manufacturing organizations, and to explore how delivery time influenced Kenyan assembling organizations. Also, determine how supplier demand affects the performance of Kenyan manufacturing companies. The study population was 500 respondents and the sample size of the study was 83 respondents. A descriptive research design was used in this study.

**Mensah, Morrison, & Ackah (2017)** The investigation surveyed the effect of inventory management on the profitability of wholesale and distribution organizations in Kumasi, Ghana. In the wake of finishing the examination plan and quantitative information investigation, the examination received a descriptive technique. The investigation was conducted in the Metropolis of Kumasi between February, 2016 to January, 2017. The questionnaire is utilized to gather the essential information of the interviewees, while the secondary information gathered from the company's yearly financial records. Examination has utilized a regression model to set up the effect of inventory management on profitability.

**Moridipour & Mousavi (2014)** The aim of this examination is to evaluate the effect of inventory turnover on the gross profit margin of organizations recorded on the Tehran Stock Exchange. To examine hypothesis testing, utilizing regression analysis of variables. To test the hypothesis, the aggregate data of 79 organizations listed on the Tehran Stock Exchange from the year 1986 to 1991 and the software Eviews were utilized. T-test and F statistics were utilized to decide the significance and significance of the coefficients, separately. The DurbinWatson test is utilized to contemplate the autocorrelation of errors. The aftereffects of this investigation demonstrate that there is a significant inverse correlation between's gross profit margin and inventory turnover rate, which might be brought about by keeping up low inventory levels, and

it is hence lost profits because of consumer loss.

## CONCEPTUAL BACKGROUND

Inventory management software is used by the company it can track the cost of inventory throughout the manufacture and sales process, tell business when to replenish stock levels and allow them to track profits. It can also be used to forecast inventory levels and prices as well as expected product demand. Effective inventory management is important as not only is inventory one of the most valuable asset to the business there is a direct link between company profits and company profits. Inventory represent an investment that is tied up until either the item is sold, or it is used in the production of another item that is sold. Business are reliant on having items in stock otherwise customers will simply got to a competitor who can provide what they want. However holding inventory in stock is not without costs storage, insurance and maintenance all must be considered. When it comes to replenishing stock levels most management plans to seek a strike balance between having enough units when required and ensuring supplies are not overstocked. This is why having an inventory management is advantageous.

An inventory system monitors all aspect of a company's inventory as items move through the production and sales process. The process involves tracking customer orders, shipping cost, stock levels, and sales. Inventory management is the process of efficiently overseeing the constant flow of units into and out of an existing inventory. This process usually involves controlling the transfer in of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company in to jeopardy. Competent inventory management also seeks to control the costs associated with the inventory, both from the perspective of the total value of the goods included and the tax burden generated both the cumulative value of the inventory.

Inventory management is a very important function that determines the health of the supply chain as well as the impacts the financial health of the balance sheet. Every organization constantly strives to maintain optimum inventory to be able to meet its requirements and avoid over or under inventory that can impact the financial figures. Inventory management system provides information to efficiently manage the flow of materials, effectively utilize people and equipment, coordinate internal activities and communicate with customers. Inventory management does not make decisions or manage operations they provide the information to mangers who make more accurate and timely decisions to manage their operations, Majority of firms are incurring huge losses due to poor inventory management. Inventory management is more relevant to public sector companies.

### **Objectives of inventory management**

The main objective of inventory management are to provide the desired level of customer services, to allow cost efficient operations, and timely supply of goods to customers and to minimize the inventory investment.

### **Other objectives of inventory management are:**

To ensure that the supply of raw material& finished goods will remain continuous so that production process is not halted and demands of customers are duly met.

- To minimize carrying cost of inventory.
- To keep investment in inventory at optimum levels.
- To reduce the losses of theft, obsolescence& wastage etc.
- To make arrangement for sale of slow items.
- To minimize inventory ordering cost.

### **The term inventories include:**

#### **Inventory of raw materials:**

In case of manufacturing concerns, various types of raw materials are being used in the production area. To ensure smooth production function and to avoid production delays the company has to keep inventory of materials.

#### **Inventory of stores and spare parts:**

This type of inventory is that inventory that serves as accessories to the main products manufacture for the purpose of sale. Bolts, spares, nuts etc., are the example of such type of inventory. Such spare parts are being manufactured either in concerns or purchased from outside.

#### **Inventory of Work In Progress (WIP)**

All goods manufactured during particular period may not be sold immediately. These are kept in warehouse. The idea is to uncouple the production and sales function so that it is no longer necessary to produce the goods before a sale can occur.

### **REASONS FOR HOLDING INVENTORY**

- To stabilize production
- To take advantage of price discount

- To meet the demand during the replenishment period
- To prevent loss of orders
- To keep pace with changing market condition

### **MOTIVES OF HOLDING INVENTORY**

- The transaction motives which facilitates continuous production and timely execution of sales order.
- The precautionary motives which necessities the holding of inventories for meeting the unpredictable change in demand and supplies of materials.
- The speculative motives which induces to inventories for taking advantage.

### **INVENTORY CONTROL**

The main objective of inventory control is to achieve maximum efficiency in production and sales with minimum investment in inventory.

Inventory control is the planned approach of determining what to order, when to order and how much to order and how much to stock, costs associated with buying and storing optimal inventory without interrupting production and sales.

### **BENEFITS OF INVENTOYR CONTROL**

- Improvement in customer's relationship of the timely delivery of goods and services.
- Smooth and uninterrupted production and hence, no stock out.
- Efficient utilization of working capital.
- Economy in purchasing.
- Eliminating the possibility of duplicate ordering • Inventory control protects a company from fluctuations in demand of its products.
- It enables a company to provide better services to its customers.
- It keeps a smooth flow of raw materials and aids in continuing production operations.
- It checks and maintain the right stock and reduces the risk of loss.
- It helps to minimize administrative workload, manpower requirement and even labour cost.
- It tries to protect fluctuation in output.
- It makes effective use of working capital by avoiding overstocking.
- It helps to maintain a check on loss of materials due to carelessness or pilferage.
- It facilitates cost accounting activities. It avoids duplication in ordering of costs.



## **PRINCIPLES OF INVENTORY CONTROL**

Inventory is only created by spending money for materials and the labour and overhead to process the materials.

- Inventory is reduced through sales and scrapping.
- Accurate sales and production schedule forecasting are essential for efficient purchasing, handling and investment in inventory.
- Management policies are designed effectively balance size and variety of inventory with cost of carrying that inventory are the greatest factor in determining inventory investment.
- Forecast help to determine when to make orders. Controlling inventory help is accomplished through scheduling production.
- Records do not produce control.
- Control is done through people with varying experience and judgement rule and procedures to establish a base from which the individuals can make decisions. With the consistent practices being followed, inventory control can become predictable and properly related to production and sales activity.

## **INVENTORY MANAGMENT**

### **TERMINOLOGY DEMAND:**

It is the number of items required per unit of time. The demand can be either deterministic or probabilistic in nature.

### **ORDER CYCLE:**

The time period between placing an order and receipts of items

### **LEAD TIME:**

The length of time between placing an order and receipts of items

### **SAFETY STOCK:**

It is also called buffer or minimum stock

### **INVENTORY TURNOVER:**

The inventory turnover is 4 times a year that is the entire inventory is used and replaced 4 times a year.

### **INVENTORY COST RELATIONSHIP**

There are two major cost associated with inventory. Procurement cost and carrying cost. Annual procurement cost varies with number of orders. This implies that the procurement cost will be high, if the item is procured frequently in small lots. The annual procurement cost is directly proportional to the quality stock. The inventory carrying cost decreases, if the quality ordered is small. The two costs are diametrically opposites to each other. The right quantity to be ordered is one that strikes a balance the costs. This quantity is referred to as "Economic Order Quantity".

### **ECONOMIC ORDER QUANTITY**

A decision about how much order has great significance in inventory management. The quantity to be purchase should neither be small nor big because costs of buying and carrying material are very high. Economic order quantity is the size of the lot to be purchased which is economically viable. This is the quantity of materials which can be purchased at minimum costs. In determining economic order quantity it is assumed that costs of managing inventory is made up solely of two parts that is ordering cost and carrying cost. The cost relationships are shown below:

### **FORMULA FOR CALCULATING ECONOMIC ORDER QUANTITY**

$EOQ = 2 * \text{Annual usage} * \text{Order cost} / \text{Annual carrying cost per unit}$

### **SAFETY STOCK**

The economic order quantity formula is developed based on assumption that the demand is known and certain and lead time is constant and does not vary. In actual practical situations, there is an uncertainty with respect to both demand as well as lead time. Lead time is the amount of time between the placing of an order and the renewed availability, after the receipt, of the goods ordered. The total forecasted demands may be more or less than actual demand and the total time may vary from estimated time. In order to minimize the effect of uncertainty due to demand and the lead time, a firm maintains safety stock, reserve stocks or buffer stocks.

The safety stock is defined as "the additional stock of material to be maintained in order to meet the unanticipated increase in demand arising out of uncontrollable factors". In simple safety stock is the stock used to protect against uncertainties.

Because it is difficult to predict the exact amount of safety stock to be maintained, by using statistical methods, it is possible to determine the level of safety stock to be maintained.

### **DETERMINATION OF SAFETY STOCK**

If the level of safety stock is maintained high, it locks up the capital and there is a possibility of risk of obsolescence. On the other hand, if it is low, there is a risk of stock out because of which there may be stoppage in production

#### **The safety stock can be computed as follows:**

Large the safety stocks, there is a lesser risk of stock out and, hence, higher service level. Sometimes higher service levels are not desirable as they result in increase in costs, thus, fixing up a safety stock level is critical. Using past data regarding the demand and lead time data, reliability of suppliers and service level desired by management, safety stock can be determined with accuracy. Inventory management is a very simple concept maintaining adequate level of inventory i.e. avoiding over stocking and under stocking. Since there can be substantial costs involved in maintaining the optimal range, careful inventory management can make a huge difference in the profitability of the company. Although the concept is simple, the process of getting the right balance can be quite complex and time consuming task without the right technique.

Inventory management is very important for bharathi textile. It enables to make the product readily available to the customers.

## RESEARCH DESIGN

The research design used in this project is analytical in nature, the procedures using which researchers must use facts or information already available and analyse these to make a critical evolution of the inventory. The data are collected from the annual reports maintained by the company from the past few years. Tools used for data analysis are ABC, VED, Ratio analysis

### ABC ANALYSIS

The inventory of an organisation generally consists of thousands of items with varying prices, usage rate and lead time. It is neither desirable nor possible to pay equal attention of all items. ABC analysis is a basic analytical tool which enables management to concentrate the goods where results will be greater. The concept applied to inventory is called as ABC analysis.

#### FEATURES OF ABC ANALYSIS:

A class (high value)	B class (moderate value)	C Class (low value)
1. Tight control	Moderate control	Less control
2. Ordered frequently	Less frequently	Bulk ordering
3. Low safety stock	Medium	Large
4. Individual posting	Individual posting	Collective posting
5. Weekly control	Monthly control	Quarterly control

### VED ANALYSIS

VED Analysis attempts to classify the items used into three broad categories, namely Vital, Essential, and Desirable. The analysis classifies items on the basis of their criticality for the industry or company.

Vital: Vital category items are those items without which the production activities or any other activities of the company, would come to a halt, or at least be drastically affected.

Essential: Essential items are those items whose stock-out cost is very high for the company

Desirable: Desirable items are those items whose stock-out or shortage causes only a minor disruption for a short duration in the production schedule. The cost incurred is very nominal.

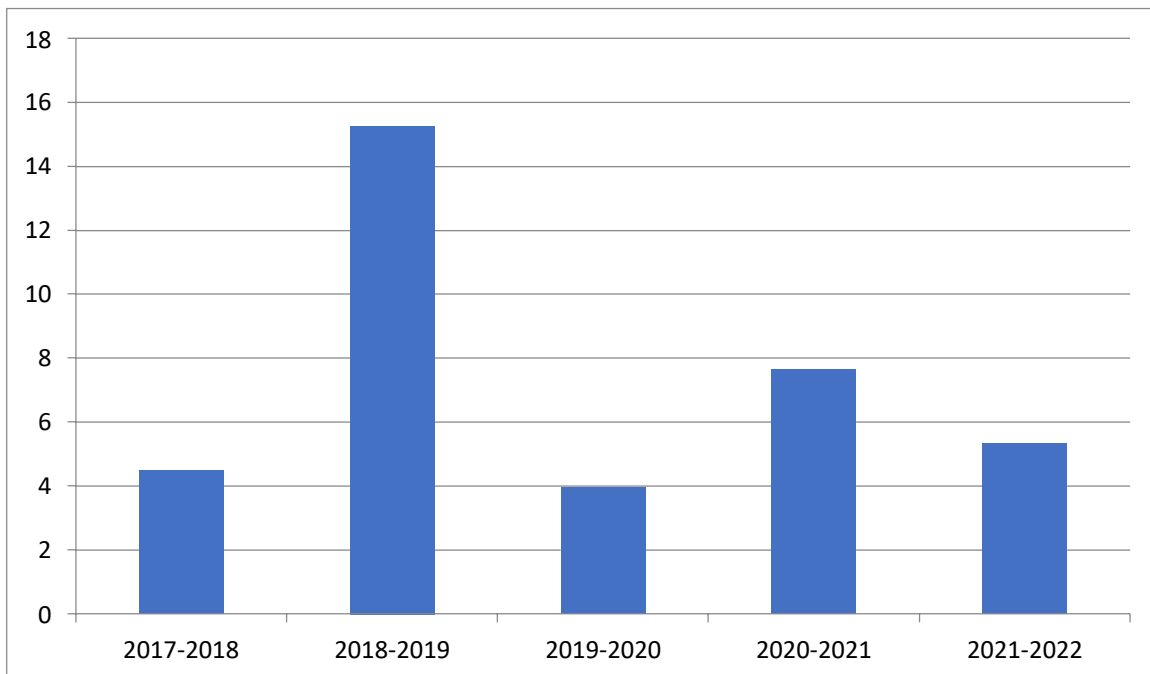
**DATA ANALYSIS**

**INVENTORY TURNOVER RATIO**

Year	Sales	Inventory	ratio
2017-2018	59,404.04	13,217.41	4.49
2018-2019	66,717.15	4,369.54	15.26
2019-2020	73,819.09	18,653.25	3.96
2020-2021	74,694.84	9,759.15	7.65
2021-2022	68,368.60	12,842.49	5.32

TABLE:4.1

Chart:4.1



**INTERPRETATION**

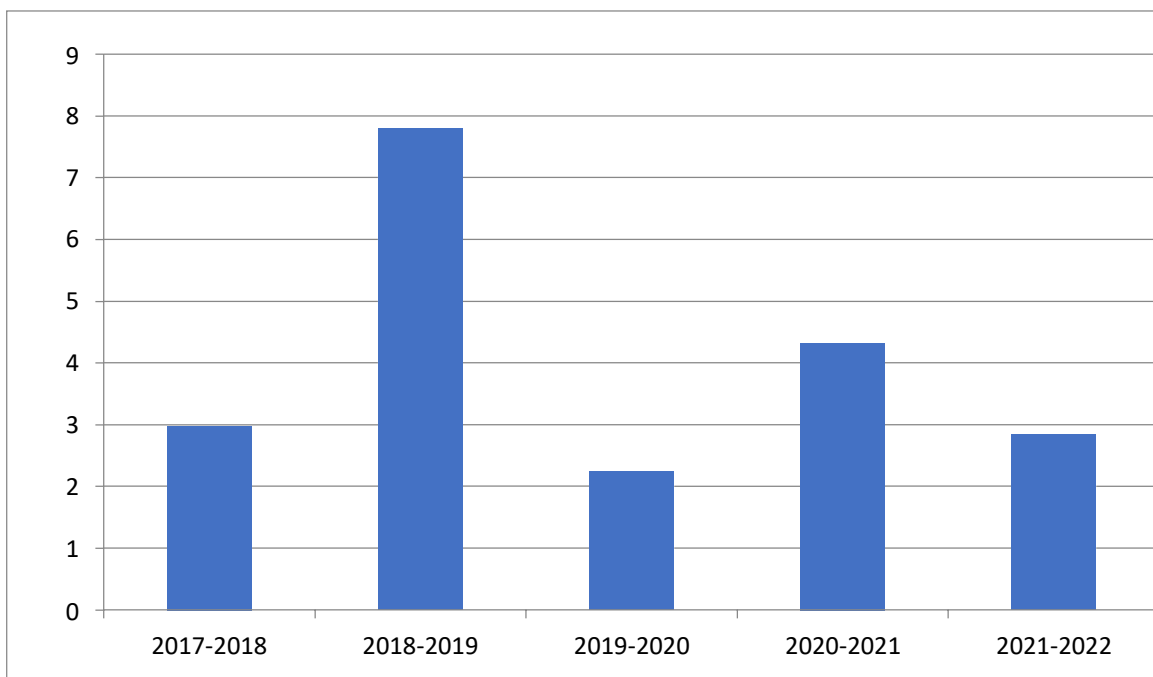
The above graph shows the 5years inventory turnover ratio of the company. In the year 2019-2020 inventory turnover ratio is 3.96. a low turnover implies weak sales and therefore excess inventory. In 2018-2019 the inventory turnover ratio is higher that is 15.26 which imply strong sales.

**RAW MATERIALS TURNOVER RATIO**

**TABLE:4.2**

Year	Raw material consumed	Average inventory	Ratio
2017-2018	39,457.39	13,217.41	2.98
2018-2019	34,044.71	4,369.54	7.791
2019-2020	4,879.27	18,653.25	2.245
2020-2021	42,174.779	9,759.15	4.321
2021-2022	36,380.28	12,842.49	2.832

**Chart4.2**



**INTERPRETATION**

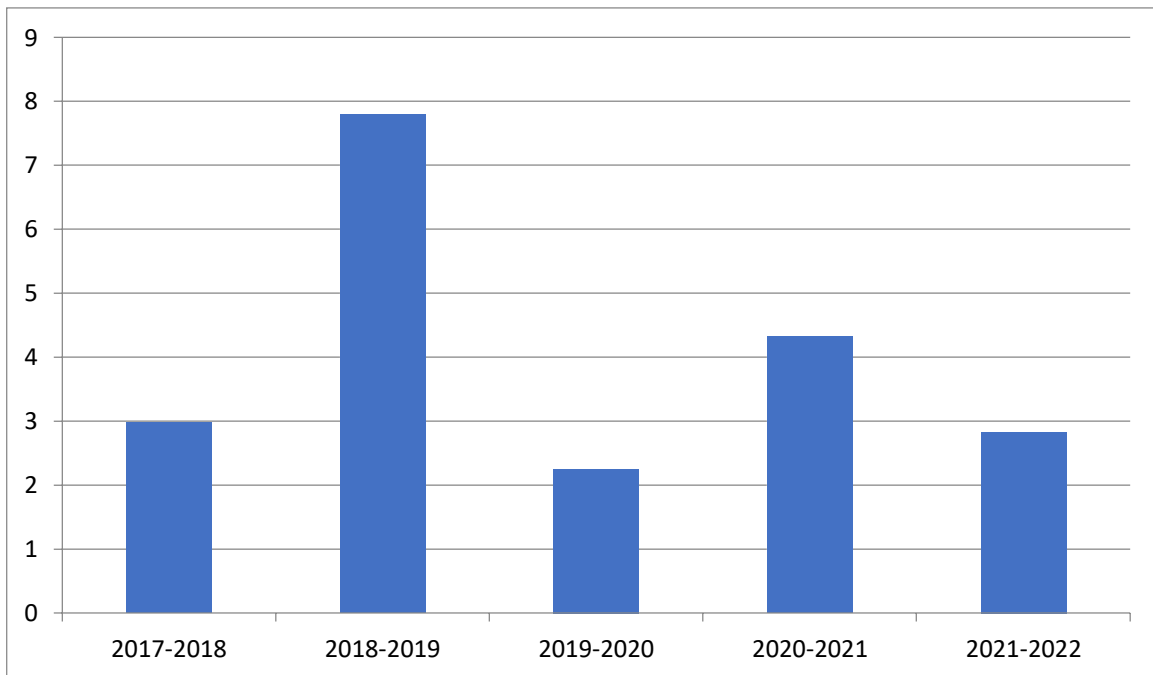
From the above graph it is clear that the raw material turnover ratio in 2018-2019 is high compared from 2020-2021. during 2019-2020 raw material turnover ratio started to decline. High raw material ratio is always beneficial to the company.

**Holding period of from material turnover**

**ratio Table:4.3**

Year	total days	Ratio	days
2017-2018	360	2.98	120.8
2018-2019	360	7.791	46.2
2019-2020	360	2.245	160.3
2020-2021	360	4.321	83.3
2021-2022	360	2.832	127.1

**Chart:4.3**



**INTERPRETATION**

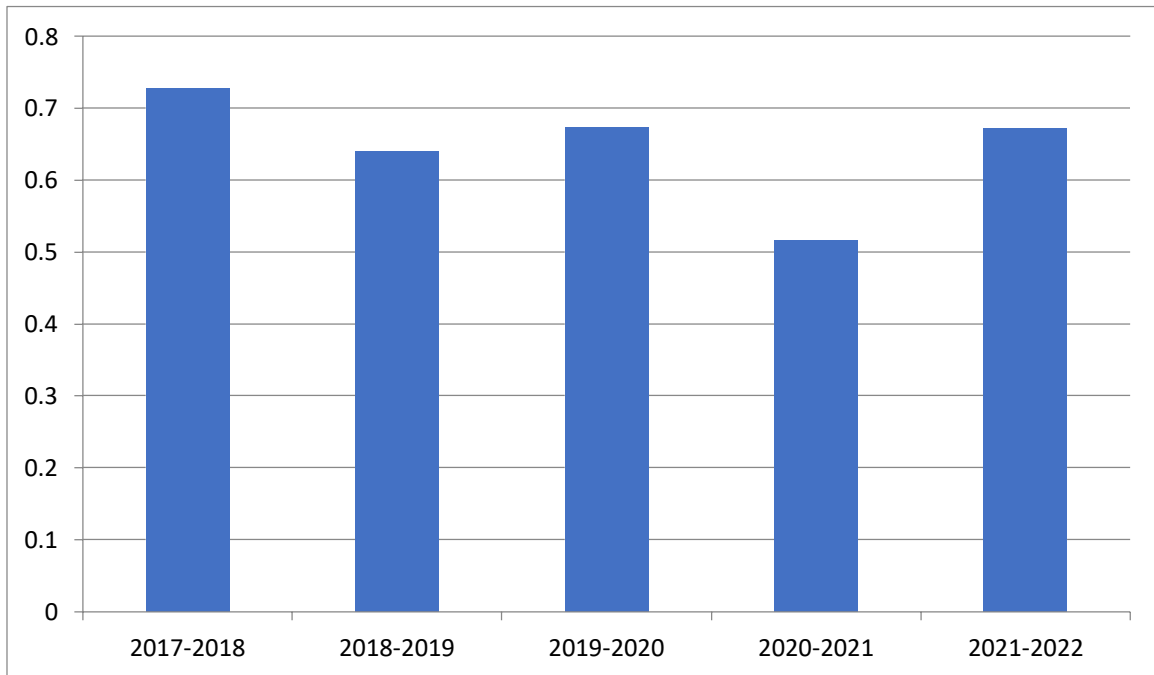
The above graph shows the holding period of raw material turnover ratio, it is started to decline from the year 2019-2020 after that it increased in the year 2020-2021. It is better to held stock in lesser period before processing because it will increase efficiency of the firm.

**INVENTORY TO CURRENT ASSET RATIO**

**TABLE:4.4**

<b>YEAR</b>	<b>INVENTORY</b>	<b>CURRENT ASSET</b>	<b>RATIO</b>
<b>2017-2018</b>	<b>13,217.41</b>	<b>18,148.13</b>	<b>0.728</b>
<b>2018-2019</b>	<b>4,369.54</b>	<b>23,207.30</b>	<b>0.640</b>
<b>2019-2020</b>	<b>18,653.25</b>	<b>27,650.54</b>	<b>0.674</b>
<b>2020-2021</b>	<b>9,759.15</b>	<b>18,896.22</b>	<b>0.516</b>
<b>2021-2022</b>	<b>12,842.49</b>	<b>19,129.61</b>	<b>0.671</b>

**Chart:4.4**



**INTERPRETATION**

From the above graph it is clear that current asset turnover ratio in the year 2017-2018 was 0.728 but it has bit decreased to in 2018-2019. It means that firms is investing 0.671 of its investment is for inventory only.

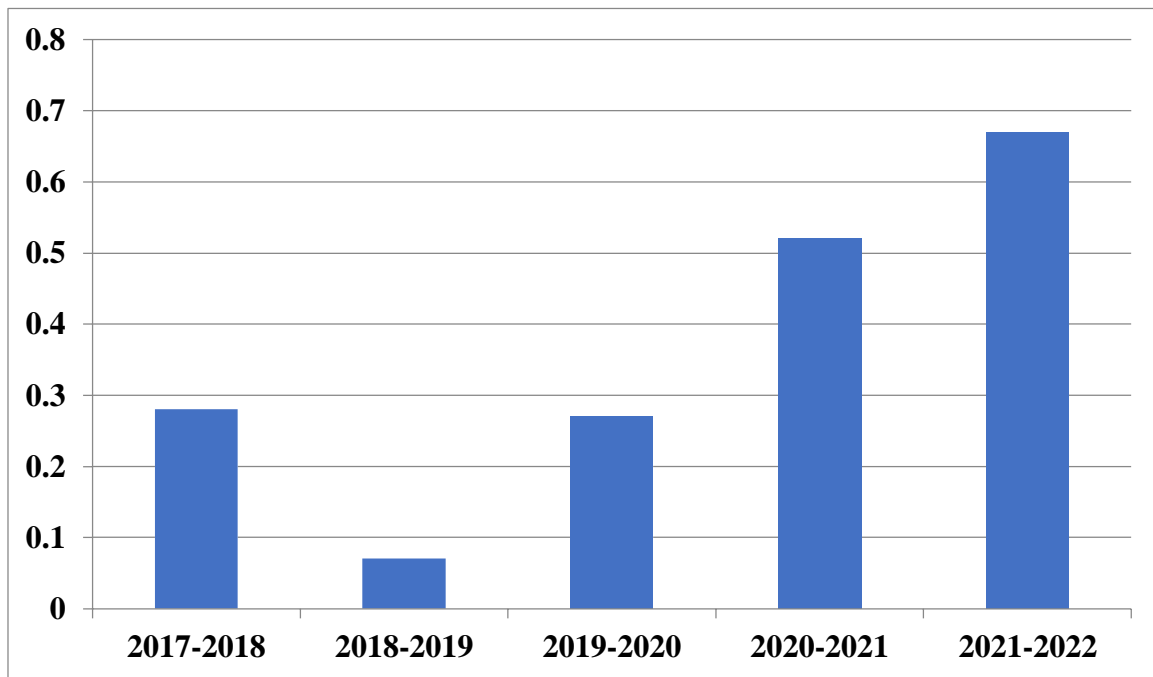


**INVENTORY TO TOTAL ASSETS RATIO**

**TABLE : 4.5**

<b>YEAR</b>	<b>INEVNTORY</b>	<b>TOTAL ASSET</b>	<b>RATIO</b>
2017-2018	13,217.41	46,959.34	0.28
2018-2019	4,369.54	64,597.37	0.07
2019-2020	18,653.25	69,388.15	0.27
2020-2021	9,759.15	18,896.22	0.52
2021-2022	12,842.49	19,129.61	0,67

**CHART: 4.5**



**INTERPERTATION**

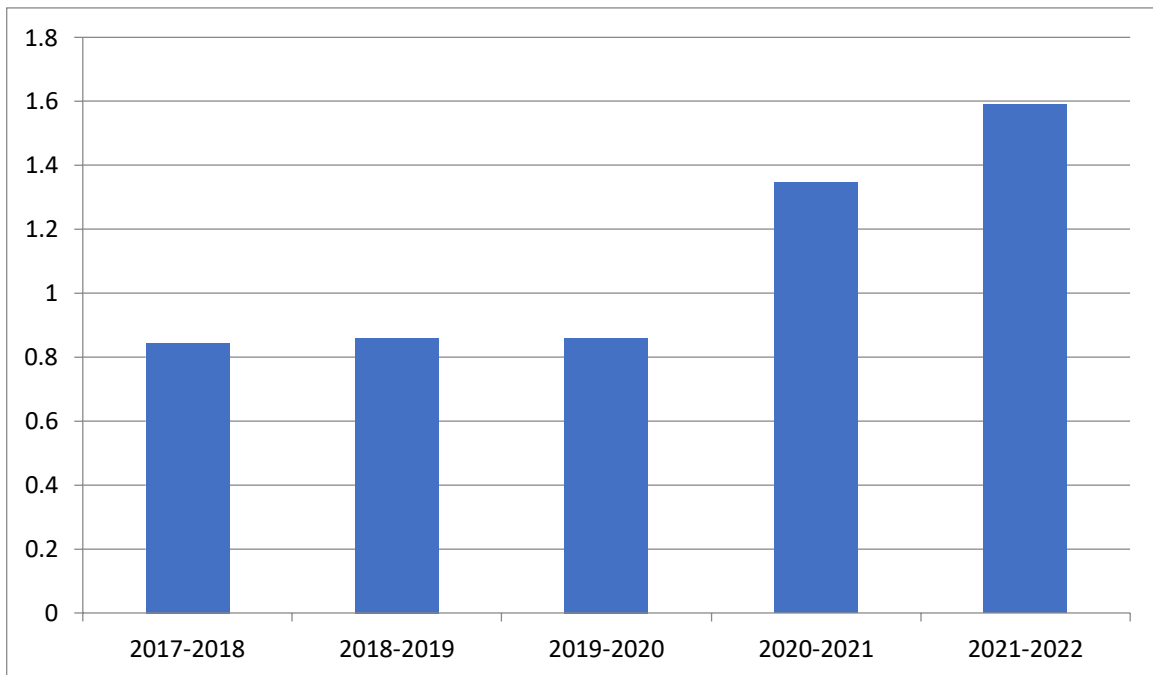
From the above graph it is clear that current asset turnover ratio in the year 2017-2018 was 0.728 but it has bit decreased to in 2018-2019. It means that firm is investing 0.671 of its investment is for inventory only.

**CURRENT**

**RATIO TABLE 4.6**

Year	Current asset	Current liability	Ratio
2017-2018	18,148.13	21,508.54	0.843
2018-2019	23,207.30	26,943.22	0.861
2019-2020	27,650.54	32,091.98	0.861
2020-2021	25,444.83	18,896.82	1.346
2021-2022	30,408.35	19,129.16	1.589

**Chart :4.6**



**INTERPRETATION**

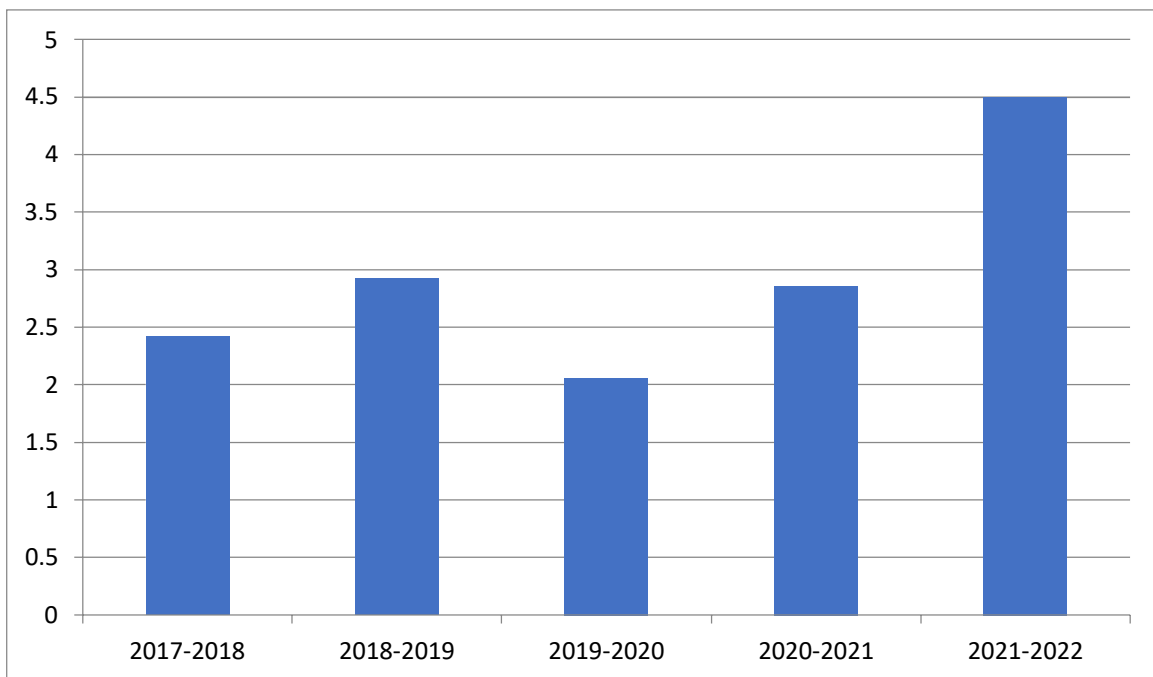
The chart indicates that the company’s current ratio is 1.589 in the year 2021-2022. Hence the firm is will not much difficulty in meeting its current liabilities. However the current ratio is just below the standard.

**FIXED ASSET TO NETWORTH RATIO**

**TABLE :4.7**

Year	Fixed asset	Net worth	Ratio
2017-2018	28,811.21	11,912.16	2.42
2018-2019	41,390.01	13,975.11	2.92
2019-2020	41,737.61	16000.86	2.06
2020-2021	38,455.10	13,464.95	2.86
2021-2022	35,642.73	7,914.02	4.50

**Chart:4.7**



**INTERPRETATION**

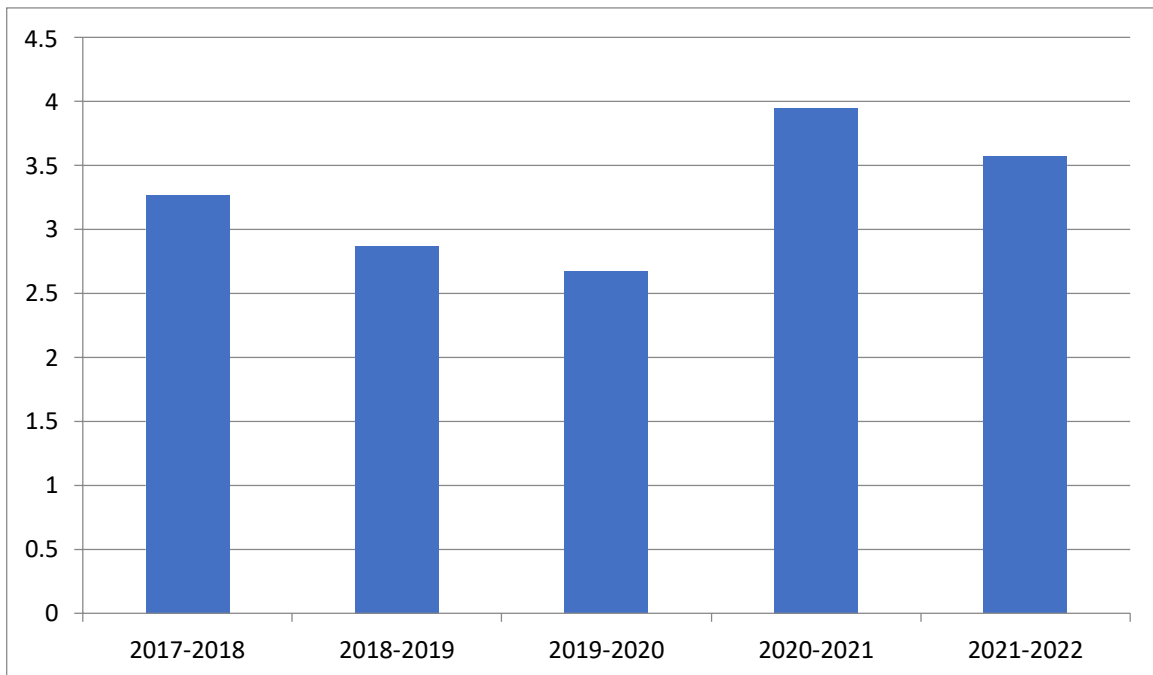
The fixed asset to net worth relationship of them in the graph shows the ratio increasing 4.50 in the year 2021-2022. It shows the good performance of the company.

**CURRENT ASSET TURNOVER RATIO**

**Table :4.8**

Year	Sales	Current asset	Ratio
2017-2018	59,404.04	18,148.13	3.27
2018-2019	66,717.15	23,207.30	2.87
2019-2020	73,819.09	27,650.54	2.67
2020-2021	74,694.84	18,896.22	3.95
2021-2022	68,368.60	19,129.61	3.57

**Chart:4.8**



**INTERPRETATION**

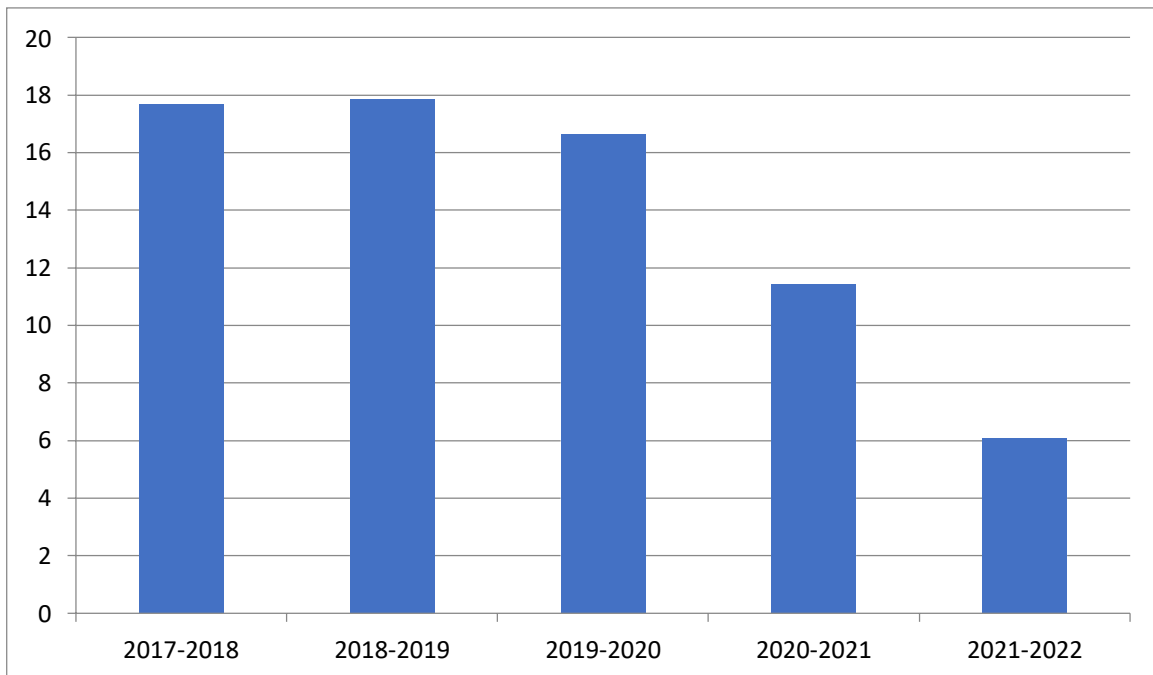
The above graph shows the relationship between net sales and current ratio from the year 2020- 2021 the ratio is increased. It indicates that the company using it current assets efficiently.

**WORKING CAPITAL TURNOVER RATIO**

**Table:4.9**

Year	Sales	Working capital	Ratio
2017-2018	59,404.04	3360.41	17.67
2018-2019	66,717.15	3,735.92	17.85
2019-2020	73,819.09	4,441.44	16.62
2020-2021	74,694.84	6,548.61	11.41
2021-2022	68,368.60	11,278.74	6.06

**Chart:4.9**



**INTERPRETATION**

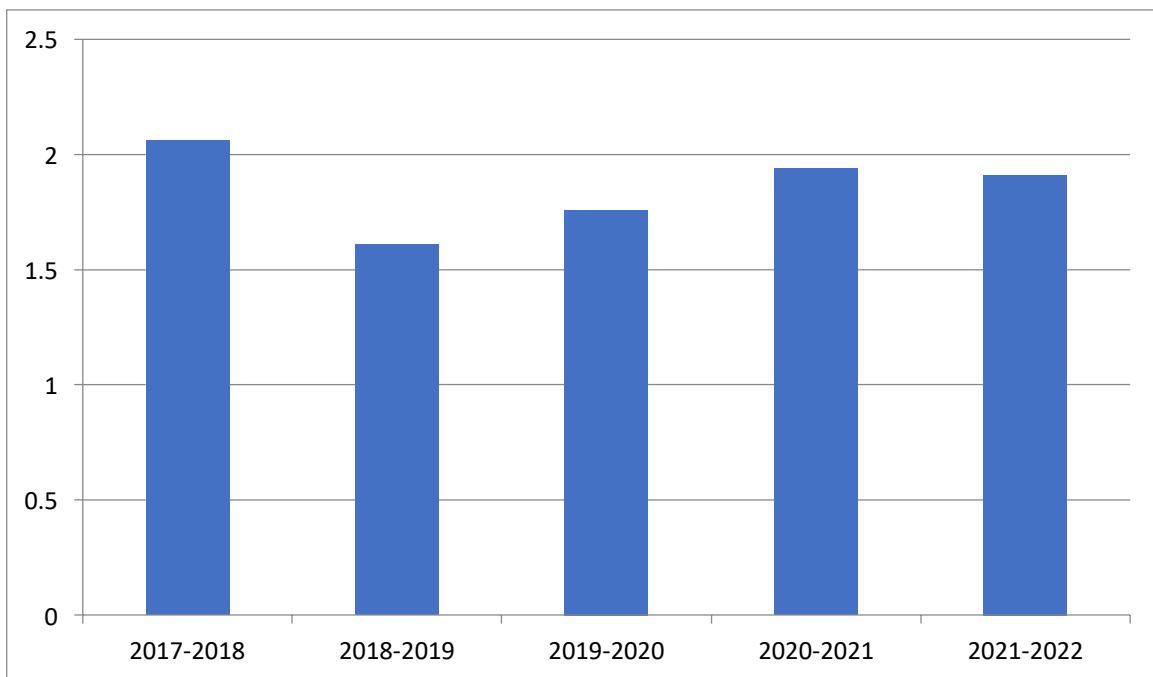
The above graph shows that the working capital turnover ratio is higher in the year 2018-2019. It is showing as upward trend. This high working capital turnover ratio indicates the working capital is efficiently used. High ratio is favourable so the firm must try to improve the present ratio for better position.

**FIXED ASSET TURNOVER RATIO**

**TABLE:4.10**

Year	Sales	Fixed asset	Ratio
2017-2018	59,404.04	28,811.21	2.06
2018-2019	66,717.15	41,390.01	1.61
2019-2020	73,819.09	41,737.61	1.76
2020-2021	74,694.84	38,455.10	1.94
2021-2022	68,368.60	35,642.73	1.91

**Chart:4.10**



**INTERPRETATION**

From the above graph during the year 2017-2018 there is higher ratio. This ratio indicates better utilization of fixed assets. A low ratio indicates the under utilization of fixed assets in generating sales in the year 2021-2022 the ratio 1.91 it is higher than the standard so the company have a better utilization.

**ABC ANALYSIS**

In order to classify the inventory management during 2017-2018 the items are classified in to a,b,c categories and presented in the following table:

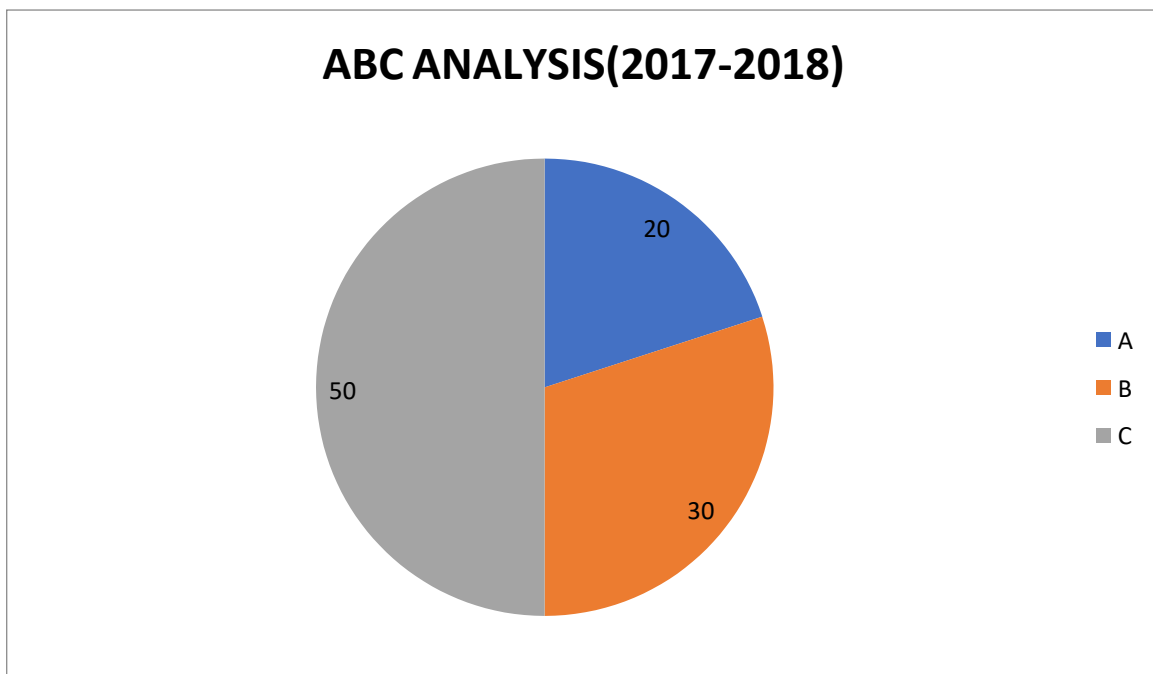
**Table : 4.11**

**ABC ANALYSIS 2017-2018**

Categories	Total no. items in classes	Percentage
A	35	20
B	50	30
C	83	50
total	168	100

Source: computed data

**Chart 4.11**



**INTERPRETATION**

The above figure shows the classification of A, B, C goods based on the value. From the classification A classes constitutes 20 of total items B classes constitute 30 and C constitutes 50 of total items. It is found that C category has maximum value in the year 2017-2018.

In order to classify the inventory management during 2016-2017 the items are classified in to A, B, C categories and presented in the following table:

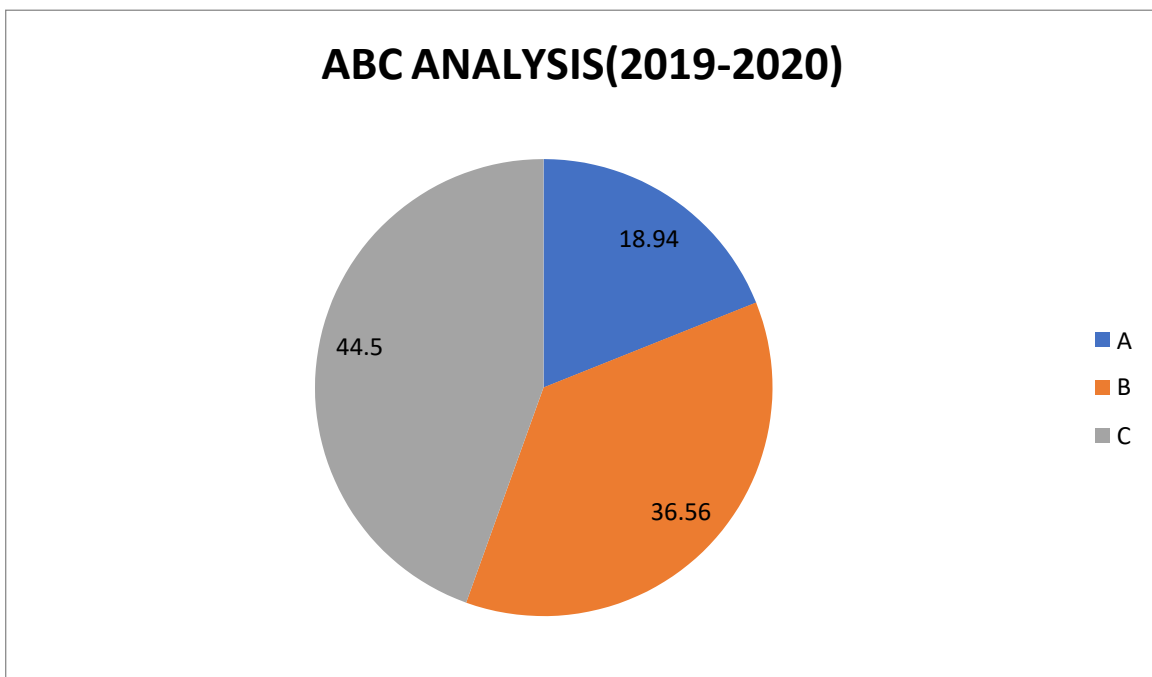
**TABLE : 4.12**

**ABC ANALYSIS 2019-2020**

Categories	Total no. Items in classes	Percentage
A	43	18.94
B	83	36.56
C	101	44.5
<b>TOTAL</b>	<b>227</b>	<b>100</b>

**SOURCE:COMPUTED DATA**

**CHART 4.12**



**INTERPRETATION**

The above figure shows the classification of A, B, C goods based on the value. From the classification A classes constitutes 18.94 of total items B classes constitute 36.56 and classes constitutes 44.5 of total items. It is found that C category has maximum value in the year 2019-2020.



In order to classify the inventory management during 2016-2017 the items are classified in to A, B, C categories and presented in the following table:

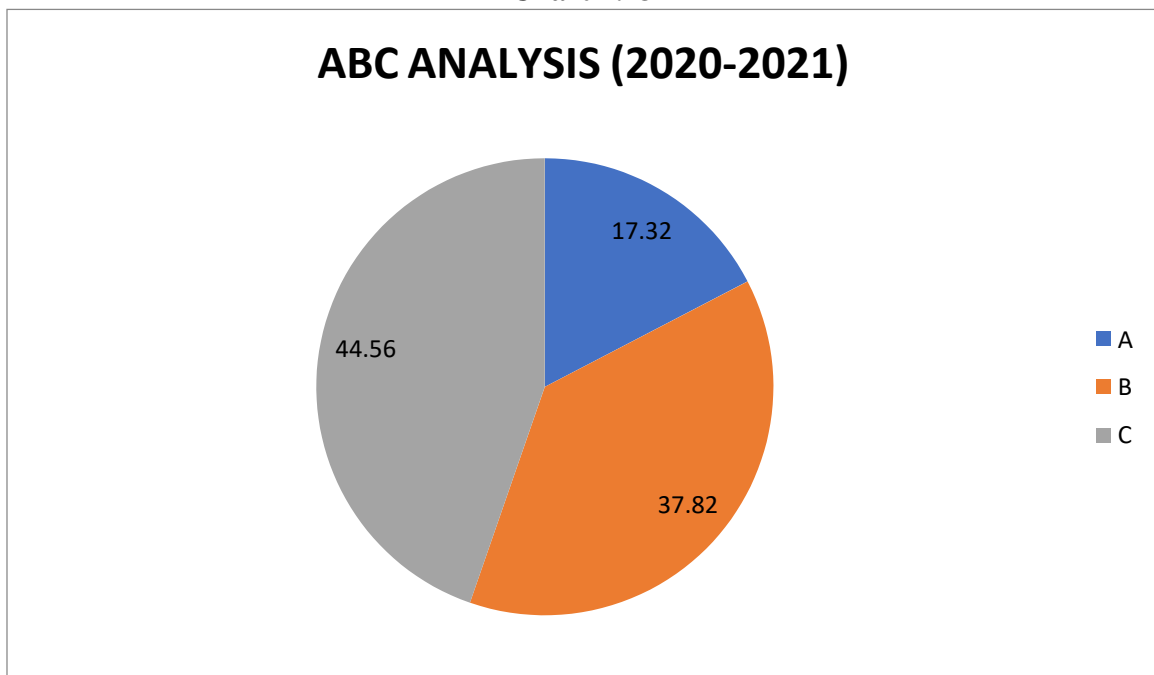
**TABLE :4.13**

**ABC ANALYSIS 2020-2021**

Categories	Total no. Items in classes	Percentage
A	34	17.32
B	73	37.82
C	86	44.56
<b>Total</b>	<b>193</b>	<b>100</b>

Source :computed data

**Chart 4.13**



**INTERPRETATION**

The above figure shows the classification of A, B, C goods based on the value. From the classification A classes constitutes 17.32 of total items B classes constitute 37.82 and C classes constitutes 44.56 of total items. It is found that C category has maximum value in the year 2020-2021.

**VED ANALYSIS**

In order to classify the inventory management during 2017-2018 the items are classified into V,E,D categories presented in the following table:

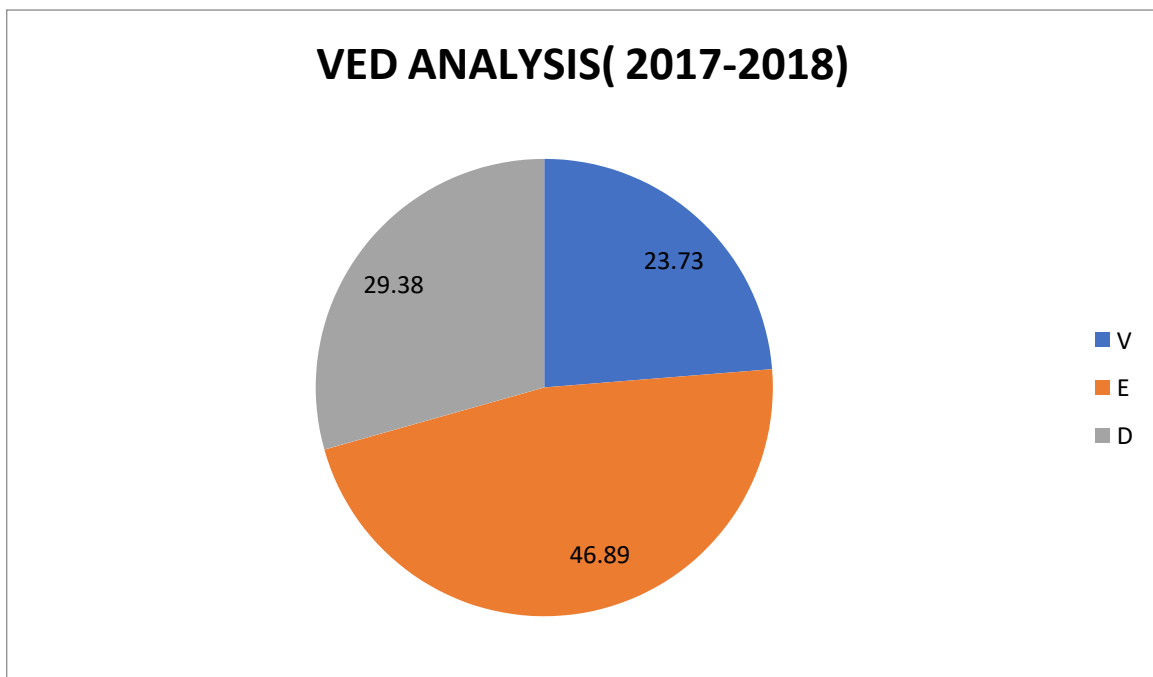
**Table :4.14**

**VED ANALYSIS 2017-2018**

Categories	Total no. Items in clases	Percentage
V	42	23.73
E	83	46.89
D	52	29.38
TOTAL	177	100

Source: computed data

**CHART4.14**



**INTERPRETATION**

The above figure shows the classification of V, E, D goods based on the importance of the Materials. From the classification V classes constitutes 23.78% of total items. It is found that E category has maximum value in the year 2017-2018.

In order to classify the inventory management during 2019-2020 the items are classified into V, E, D categories presented in the following table:

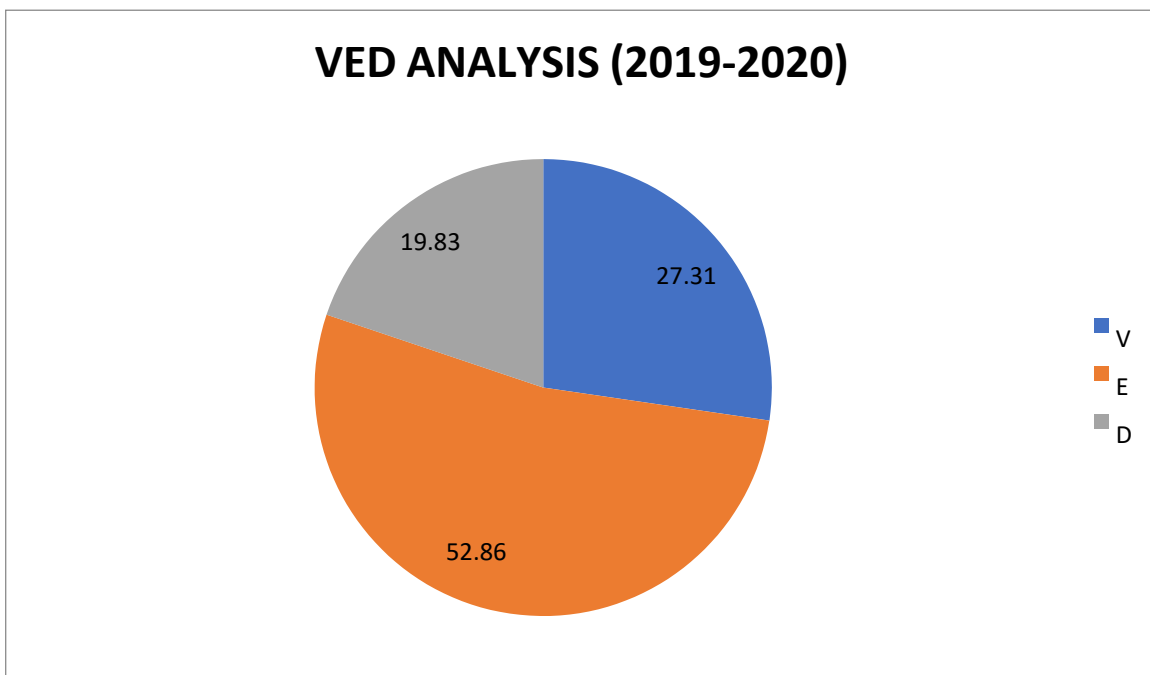
**TABLE:4.15**

**VED ANALYSIS 2019-2020**

Categories	Total no. Items in classes	Percentage
V	62	27.31
E	120	52.86
D	45	19.83
<b>TOTAL</b>	<b>227</b>	<b>100</b>

SOURCE: computed data

**CHART 4.15**



**INTERPRETATION**

The above figure shows the classification of V, E, D goods based on the importance of the materials. From the classification V classes constitute 27.31% of total items E classes constitute 52.86% and D constitutes 19.83 of total items. It is found that E category has maximum value in the year 2019-2020.

In order to classify the inventory management during 2016-2017 the items are classified into V, E, D categories presented in the following table:

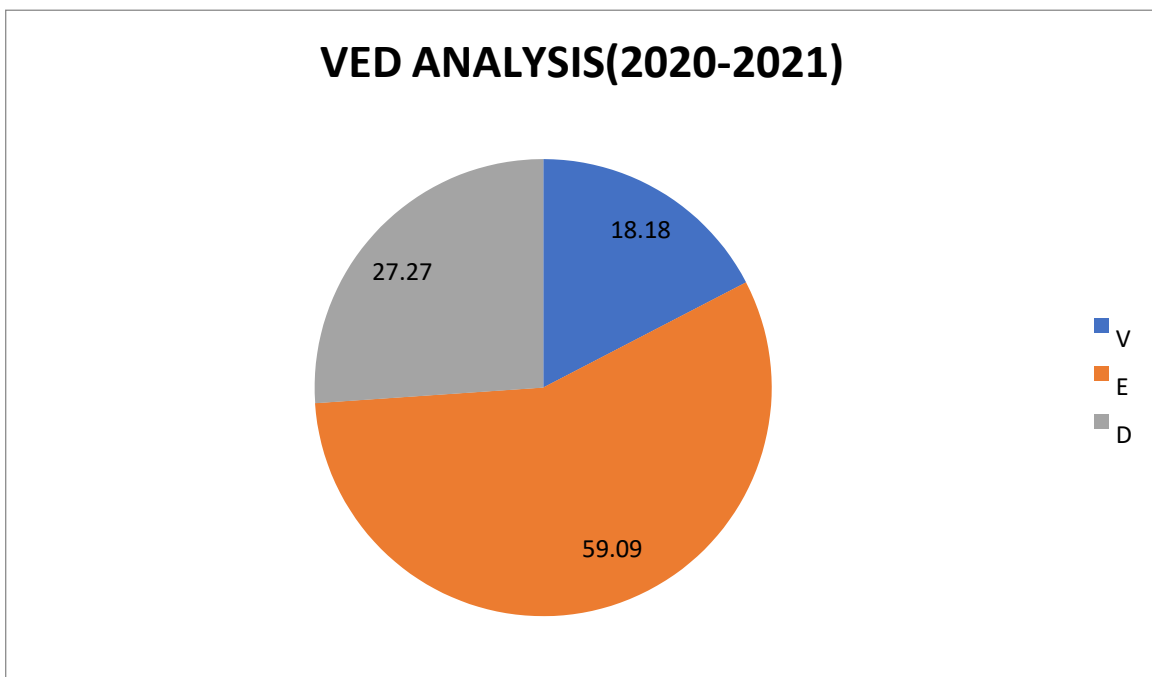
**TABLE:4.16**

**VED ANALYSIS 2020-2021**

Categories	Total no. items in classes	Percentage
V	20	18.18
E	65	59.09
D	30	27.27
Total	110	100

Source: computed data

**Chart 4.16**



**INTERPRETATION**

The above figure shows the classification of V, E, D goods based on the value expressed in lakhs. From the classification V classes constitutes 18.18% of total items E classes constitute 19.09% and D constitutes 27.27% of total items. It is found that E category has maximum value in the year 2020-2021.

## FINDINGS & DISCUSSIONS

- The inventory turnover ratio was 4.49 in 2013 which was 5.32 in 2017. Which implies good sales. The ratio is thus satisfactory.
- The raw material turnover ratio is decreased from 2.98 in 2012-2013 to 2.832 in 2016-2017. It shows company is inefficient in raw material turnover ratio
- The holding period of raw material turnover ratio, it is started to decline from the year 2013-14, after that it increased in the year 2014-2015. It is better to held stock in lesser period before processing, because it will increase efficiency of the firm.
- The current asset turnover ratio clear that in the year 2012-2013 was 0.728 but it has bit decreased to in 2016-2017. It means that firm is investing 0.671 of its investment is for inventory only.
- The company's current ratio is 1.589 in the current year. Hence the firm is will not much difficulty in meeting its current liabilities .However the current ratio is just below the standard.
- The fixed asset to net worth relationship of them in the graph shows the ratio increasing (4.50) in the year 2016-2017. It shows the good performance of the company.
- The current asset turnover ratio shows the relationship between net sales and current ratio, from the year 2015-2016 the ratio is increased. It indicates that the company using its current assets efficiently.
- The working capital turnover ratio is higher in the year 2013-2014. It is showing as upward trend. This high working capital turnover ratio indicates the working capital is efficiently used. High ratio is favourable, so the firm must try to improve the present ratio for better position.
- The fixed asset turnover ratio indicates that during the year the year 2012-2013, there is higher ratio. This ratio indicates better utilization of fixed assets. A low ratio indicates the underutilization of fixed assets in generating sales in the year 2016-2017 the ratio is 1.91. it is higher than the standard so the company have a better utilization.
- In ABC analysis, it is found that C category has the maximum number of items among spare used during three years i.e., in 2014-2015, 2015-2016, 2016-2017 (83,101 and 86 respectively)

- The company should improve its liquidity position as working capital is essential for day to day activities.
- The company's raw material conversion period is increase. But we can control this by holding the inventories lower and increase the raw material consumption per day.
- Overall profit of the company is satisfactory levelTherefore the company should maintain the positive trend of profitability.
- There can be system where in periodical review of inventory could be carried out, so that the inventory could be kept under control
- There could be a periodic review of movement of item so that any non-moving item can be easily identified and suitable action can be done.
- To increase the inventory turnover ratio by increasing the sales level and maintaining the required level of inventory the company should take proper action.
- The holding period of raw materials, work in progress should be reduced. So the company has to take more actions to control the holding periods and reduce it to within one month.
- There can be system where in periodical review of inventory could be carried out, so that the inventory could be kept under control.
- There could be a periodic review of movement of item so that any non-moving item can be easily identified and suitable action can be done.
- The company may reduce the quantity purchase of slow moving materials. More concentration should be given to monitoring fast moving materials.
- The company may try to increase the net profit and operating profit by avoiding cost and other factors which may affect the profitability of company
- The company may take necessary steps to increase the net profit and operating profits in coming years.

## CONCLUSION

The study conducted on the inventory management of Bharathi textile based on which it can be understood that the Bharathi textile is one of the leading profit makers in the field of cotton yarn. And the company inventory management is satisfactory. Company's raw material period will control by holding the inventories lower and increase raw material consumption per day and also company will have to take necessary step to reduce the conservation period of finished goods. To maintain a large amount of inventory of raw material, work in progress and finished goods should be kept in planned and controlled manner. The control of inventories is complex of many fluctuation and forms. Inventories are the result of all fluctuation areas ( production, marketing, purchasing) within the organization. The control of inventories represent a shared responsibility and it is revalued regularly. The purchase and stores department efficiently handling inventories at Marico by adopting latest technology and with the help of experienced employees. It can be concluded that inventory management techniques are important for a company to minimize inventory maintain required stock of materials so that production cannot suffer and working capital is not blocked. Since the inventory turn over ratio shows the increasing trend, there will be more demand for products in the future periods. If they could properly implement and follow the norms and techniques of inventory management they can enhance the profits with minimum cost. Thus the inventory management at Bharathi textile was good and improving the performance of the company.

## REFERENCES

- Madishetti, S. (2015, July). Impact of Inventory Management on the Profitability of Listed Cement Companies in Tanzania. (V. Kumar, Ed.) Global Vistas, 1, 1-10.
- Ndubuisi, A. N., O, E. B., Uche, E. P., & Chinyere, O. J. (2018, May/June). Inventory Management and Financial Performance: Evidence from Brewery Firms Listed on Nigeria Stock Exchange. International Journal of Research in Business, Economics and Management, 2(3), 72-93. Retrieved [www.ijrbem.com](http://www.ijrbem.com), from [www.ijrbem.com](http://www.ijrbem.com).
- Oballah, D., Waiganjo, D. E., & Wachiuri, E. W. (2015, March). Effect Of Inventory Management Practices On Organizational Performance In Public Health Institutions In Kenya: A Case Study Of Kenyatta National Hospital. International Journal of Education and Research, 3(3), 703-714. Retrieved from [www.ijern.com](http://www.ijern.com)
- Panigrahi, D. A. (2013, July). Relationship between Inventory Management and Profitability: An Empirical Analysis of Indian Cement Companies. Asia Pacific Journal

of Marketing & Management Review, 2(7), 107-120. Retrieved from indianresearchjournals.com.

- Sunday, O., & Joseph, E. E. (2017). Inventory Management and SMEs Profitability. A Study of Furniture Manufacturing, Wholesale and Eatery Industry in Delta State, Nigeria. Journal of Finance and Accounting, 5(3), 75-79. doi:10.12691/jfa-5-3-1