

A STUDY ON THE IMPACT OF INVENTORY MANAGEMENT ON PROFITABILITY WITH REGARDS TO SHIVA LOGISTICS

Submitted in partial fulfillment of the requirements for the award of Degree in
MASTER OF BUSINESS ADMINISTRATION

by

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**DEPARTMENT OF BUSINESS ADMINISTRATION
SCHOOL OF MANAGEMENT STUDIES**

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

**Accredited with Grade "A" by NAAC | 12B Status by UGC | Approved by AICTE
JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI-600119**

MAY 2023



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SCHOOL OF MANAGEMENT STUDIES

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **NANDHINI S 41410209** who carried out the project entitled "**A STUDY ON THE IMPACT OF INVENTORY MANAGEMENT ON PROFITABILITY WITH REGARDS TO SHIVA LOGISTICS**" under my supervision from January 2023 to March 2023.

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15-Apr-2023

TO WHOMSOEVER IT MAY CONCERN

SUB: Confirmation of MBA Final year Project Completion

We wish to confirm that Ms. Nandhini S (Reg No: 41410209), who is pursuing final year MBA in Sathyabama Institute of Science and Technology Chennai, has completed Operations project titled "A STUDY ON THE IMPACT OF INVENTORY MANAGEMENT ON PROFITABILITY WITH REGARDS TO SHIVA LOGISTICS "in our company on 10.04.2023.

We wish the student best of luck for the future endeavors.

For Shiva Logistics

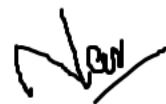


DECLARATION

I **NANDHINI S (41410209)** hereby declare that the Project Report entitled “**A STUDY ON THE IMPACT OF INVENTORY MANAGEMENT ON PROFITABILITY WITH REGARDS TO SHIVA LOGISTICS**” done by me under the guidance of **Dr. PRINCY A S** is submitted in partial fulfillment of the requirements for the award of Master of Business Administration degree.

DATE:05.05.2023

PLACE: Chennai

A handwritten signature in black ink, appearing to be 'Nandhini S', with a stylized flourish at the end.

NANDHINI.S

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to Board of Management of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

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I would like to express my sincere and deep sense of gratitude to my Project Guide **Dr.PRINCY A S** for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

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NANDHINI.S

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ABSTRACT

This study examined the impact of inventory management on the profitability of an organization, taking Shiva Logistics as the case study. The study was guided by the following research objectives. To identify the factors affecting the Profitability of Shiva logistics. To ascertain the complications faced by the company during Inventory management. To find the relationship between Inventory management and profitability. To enhance the improvements of Inventory management and its maintenance. Using a sample of 90 respondents, a case study design, involving the use of both qualitative and quantitative methods of data collection was employed to assess the effect of Inventory Management on the profitability of an organization. The findings revealed that there is a positive relationship between materials handling and the profitability of Shiva Logistics since materials handling facilitates a shorter operating cycle, reduces handling costs, eliminates unproductive handling of materials, reduces idle machine capacity, reduces idle time for labor, maintains quality of materials, facilitates better customer care and better quality products and ensures timely production. The study recommended that organizations should prioritize the material handling function since it is a very vital cost center. The study concluded that every successful organization must have an efficient materials handling department and also give keen interest on the other factors that influence the profitability of the organization.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION:

No company can work efficiently without inventory management. This study aims at analyzing the relationship between inventory management and profitability with regards to shiva logistics. Inventory can be managed in a way that it should contribute something in return to the company in the name of profit. This study is formulated in such a way that it focuses first on the relationship between inventory management and profitability and it also analyzes the factors which affects the profitability which can be used for concluding the relationship between inventory management and profitability. This will also help the company to identify the main factor they should focus on in terms of profit.

1.2 INDUSTRY PROFILE

The logistics industry in India is growing rapidly, with the country's economy expanding at a rapid pace. The sector is expected to grow at a compound annual growth rate (CAGR) of 15.5% between FY2019 and FY2024, according to various market research.

The sector employs around 22 million people and is expected to create another 1.2 million jobs by 2025.

The government's focus on infrastructure development, FDI reform, and the implementation of the Goods and Services Tax (GST) are some of the key drivers of growth in the sector. The government's initiatives such as Make in India and Digital India are also expected to boost the growth of the logistics industry in the country.

1.3. COMPANY PROFILE

With advanced infrastructure, trained personnel and excellent equipment, they provide latest variety of containers offices updated as per latest trends and tastes of the clients. Chennai based manufacturer and services provider, Shiva Logistics provides us with mobile office container, bunk house, and site office container, along with the services for container repairing and maintenance, and

container conversion. The company imparts fantastic quality and durable containers to the clients for different purposes. These containers can easily be used as offices, bunk house, and site office, and also, we provide service for container conversion that includes converting containers into anything according to your requirements. So far they have attained much experience in the domain and have gained credibility with our clientele for on-time delivery, and for providing excellent output meeting their requisites effectively. At Shiva Logistics, they are committed to serve their customers with well-furnished and appropriate mobile office containers, site office container, and bunk house container meeting their specifications. Also, they undertake container conversion, and repairing and maintenance services for container so as to make the containers serve the purpose efficiently.

1.4 PRODUCT PROFILE

We, Century Container Care, are a progressive manufacturer and supplier of the following range of products:

- Bunk Houses
- Containers
- Insulated Containers
- Office Containers
- Portable Toilet
- Prefabricated security Cabin
- wardrobe Cupboard





- Curio Cupboard
- Modern Kitchen
- Interior Decoration
- Aluminium Partition
- False Ceiling
- All Kind of Interior Works



1.5 STATEMENT OF THE PROBLEM

In the earlier years, Inventory management was treated as a cost center, since purchasing department was spending money on materials while store was holding huge inventory of materials, blocking money and space (Ramakrishna, 2005). However, with the process of liberation and opening up of global economy, there has been a drastic change in the business environment, resulting in manufacturing organizations exposed to intense competition in the market place. The manufacturing companies' worldwide have been forced to work out various strategies to face the challenges and to cut down manufacturing costs to remain competitive. One major area of emphasis is Inventory management whereby companies are no longer compromising on efficiency of the Inventory management function in the organization. Understanding that the primary goal of organizations is to make profits; the researcher is intrigued by recent emphasis on inventory management by organization; compelling her to investigate the effect of Inventory management on the profitability of an organization.

1.6 NEED FOR STUDY

- A firm cannot achieve its goals unless inventories are controlled effectively and capital is allocated efficiently. Therefore, study on inventory management is inevitable.
- When market demand is high at that period, if there is lack of proper inventory there will be few productions and cannot supply regularly. Sometimes due to over stock level inventory hold unnecessary They should try to give quality, durable and cheap price for product to the customer.
- Thus, it is very important to know how the Shiva Logistics utilizes its inventory to fulfill its objectives.

1.7 OBJECTIVES OF THE STUDY:

This project is designed mainly to identify the relationship between inventory management and profitability

1.7.1 Primary objective:

To study the relationship between inventory management and profitability with regards to Shiva Logistics.

1.7.2. Secondary objectives:

To identify the factors affecting the Profitability of Shiva logistics.

To ascertain the complications faced by the company during Inventory management.

To find the relationship between Inventory management and profitability.

To enhance the improvements of Inventory management and its maintenance.

1.8 SCOPE & SIGNIFICANCE OF THE STUDY

- This study focuses on examining the relationship between Inventory Management and the profitability of an organization.
- This study is conducted in order to find the types of Inventory management and the factors that affect the profitability of an organization besides Material Handling.
- This research study is conducted at Shiva Logistics located at Chennai.

1.9 LIMITATIONS

- The study is confined to small scale industry only.
- Due to shortage of time and other constraints, the study has been limited to 90 respondents only.
- Lack of transparency is the main limitation to conduct this study.
- As the respondents are closely related to the company the data may not be genuine.

CHAPTER 2

REVIEW OF LITERATURE

In this Chapter, the researcher has made an attempt to study and understand the concepts of Inventory Management. This attempt includes, understanding the basic concepts of inventory and analyzing factors and relationship between inventory management and profitability. For this, the researcher has used various books, research Journals and websites. The detailed list is further elaborated in the Bibliography. Through this Literature Survey researcher wants to find out which are the important factors among teachers.

- Hsu, C.-H., & Li, S. (2023). Inventory management with two demand classes and carbon emissions. *Omega*, 102, 102450. This study proposes a model for inventory management that considers both demand classes and carbon emissions, and provides a solution to the resulting optimization problem.
- H., Zhang, Y., & Liu, Y. (2022). Inventory management with lost sales and product substitution: A review. *European Journal of Operational Research*, 282(1), 1-18. This review article provides an overview of the literature on inventory management with lost sales and product substitution, and summarizes the main approaches and results.
- Budiharjo & Hadikurniawati (2020) used historical data to process data to be processed further. Both studies have similarities with the previous reference, which using the forecasting method in their research. This research aims to forecast future order demand which can be used to manage the inventory. This method is also believed to be an indicator to measure success in selling and offering the products that the companies researched.
- Candra (2019) conducted research about inventory problems resulting in overstocks on some goods and shortage of stock in other goods. They used the method which is done by doing forecasts calculations. The purpose of their research is to find available inventory space and to determine the maximum usable inventory.
- Another research from Nisa (2019) studied hospitals that had problems with expired drugs. Data processing requires several data such as demands, order cost, and storage cost in this study. She uses analyses of the ABC, EOQ, and

ROP methods for data processing. This research aims to identify and analyze drug grouping based on the ABC method, the optimum amount of drug ordering using the EOQ method, and the time of reordering medicine using the ROP method.

- Edwin Sitienei and Florence Memba(2015) Conducted a study on Effect of Inventory Management on profitability of Cement Manufacturing Companies in Kenya. The study concluded that Gross profit margin is negatively correlated with the inventory conversion period, Increase in sales, which denotes the firm size enriches the firm's inventory levels, which pushes profits upwards due to optimal inventory levels. It is also noted that firms inventory systems must maintain an appropriate inventory levels to enhance profitability and reduce the inventory costs associated with holding excessive stock in warehouses.
- Hari R. Swami(2015) in his research work materials management in public undertakings evaluates the performance of materials management in the central public undertakings in Rajasthan Viz., Instrumentation Limited, Kota Unit, HMT, Ajmer Unit, Hindustan Zinc Limited, Debari Unit, Hindustan Copper Limited, Khetri Unit and Sambhar salts limited. The study covers various aspects of materials management in these enterprises.
- Suresh Krishna(2015) advocates the need for professionalism in materials management to achieve the organizational goals.
- Ben-Daya Mand Duffuaa.S.O (2015):The relationship & interaction between maintenance production and Quality have been discussed one approach for linking and modeling the relationship between maintenance & Quality so that they can be jointly optimized. It is been on the idea that maintenance affects the failure pattern of the equipment and that should be modeled using the concept imperfect maintenance.
- Prem Virat(2015) highlights the importance of increasing materials productivity in Indian industries.
- Srinivas Rao Kasisomayajula(2014) An analytical study was conducted on "Inventory Management in Commercial Vehicle Industry In India". A sample of five companies' was selected for study. The study concluded that all the units in the commercial vehicle industry have significant relationship between Inventory and Sales. Proper management of inventory is important to maintain and improve the

health of an organization. Efficient management of inventories will improve the profitability of the organization.

- Gopalan(2014) stresses the importance of productivity through efficient materials management in manufacturing enterprises.
- According to Prasad(2014) the important areas in material function which have a direct and importance bearing on the productivity are purchasing, transportation, materials landing and disposal of obsolete surplus and waste products.
- Lal(2014) emphasises the need for proper planning and good inventory management systems in achieving organizational goals.
- Gunasekaran A Marri H.B, Yusuf.Y(2014):Conceptual model has been developed to provide frame work for the decision concerning the implementation of ABC system, ABC system trace more exactly of the real costs of the products than any other volume based cost systems. Therefore, more accurate overhead cost allocations lead to fewest distortions. However, a trade-off should occur between the economic benefits of an ABC and the costs of implementing it. The management should adopt an activity based management system and achieving their primary target, which is making profit.
- Panigrahi (2013) Undertook an in-depth study of inventory management practices followed by Indian cement companies and its affect on working capital efficiency. The study also investigated the relationship between profitability and inventory conversion days. The study, using a sample of the top five cement companies of India over a period of 10 years from 2001 to 2010, concluded that a considerable inverse linear relationship existed between inventory conversion period and profitability.
- Lwiki et al (2013) A survey conducted on all the eight (8) sugar manufacturing firms in Kenya established that there is generally positive correlation between each of inventory management practices. Specific performance indicators were proved to depend on the level of inventory management practices. They established that Return on Equity had a strong correlation with lean inventory system and strategic supplier partnerships. As such, they concluded that the performance of sugar firms could therefore be stated as being a function of their inventory management practices.

- Sahari, Tinggi and Kadri (2012) Empirically analysed the relationship between inventory management and firm performance along with capital intensity. For the purpose they took a sample of 82 construction firms in Malaysia for the period 2006-2010. Using the regression and correlation analysis methods, they deduced that inventory management is positively correlated with firm performance. In addition, the results indicate that there is a positive link between inventory management and capital intensity.
- Nyabwanga and Ojera (2012) They Highlighted the association between inventory management practices and business performance of smallscale enterprises (SSEs), in Kisii Municipality, Kisii County, Kenya. They used a cross-sectional survey study based on a small sample size of 79 SSEs. The study inferred that inventory comprised the maximum portion of working capital, and improper management of working capital was one of the major reasons of SSE failures. The empirical results disclosed that a positive significant relationship existed between business performance and inventory management practices with inventory budgeting having the maximum influence on business performance ensued by shelf-space management. The study suggested that by following effective inventory management practices business performance can be enhanced.
- Soni (2012) Made an in depth study of practices followed in regard to inventory management in the engineering goods industry in Punjab. The analysis used a sample of 11 companies for a period five years, that is, 2004-2009 and was done using panel data set. The adequate and timely flow of inventory determines the success of an industry. She concluded that size of inventory enhanced marginally over the period as compared to a hike in current assets and net working capital. Inventories constituted half of the working capital which was due to overstocking of inventory as a result of low inventory turnover especially for finished goods and raw materials. Rise in sales and favourable market conditions lead to a rise in inventory levels. It was also inferred that sales increased more as compared to inventory.
- Peter Hines And Nick Rich (2012):This paper has outlined a new typology & decision making, process for the mapping of the value stream or supply chain. This general chose the most appropriate methods for the particular industry, people and type of problem that exist.

- Alperto De Toni, Guido Nassim Beni, Btefano Tonclia (2012):It is a method for evaluating performance and for productive resource management. The soundness of the results depends on the reliability production in contexts where competitive drive from cost, time &Quality performance, performances that are heterogenic and not easily estimated.
- Camelia Burja; Vasile Burja (2010) in the Journal “Annals of the University of Petrosani: Economics” says -“The inventory represents an essential component for the assets of the enterprise and the economic analysis gives them special importance because their accurate management determines the achievement of the activity object and the financial results. The efficient management of inventory requires ensuring an optimum level for them, which will guarantee the normal functioning of the activity with minimum inventory expenses and funds which are immobilized. The paper presents an analysis model for inventory management based on their rotation speed and the correlation with the sales volume illustrated in an adequate study. The highlighting of the influence factors on the efficient inventory management ensures the useful information needed to justify managerial decisions, which will lead to a balanced financial position and to increased company performance”.
- Somayajulu(2010) highlights an integrated view of the role of materials management in improving the profitability of the undertakings.
- Dilip Roy ; Debdip Khan (2010)in the Journal “International Journal Of Industrial Engineering Computations” says -“we address the optimization of an integrated line balancing process with workstation inventory management. While doing so, we have studied the interconnection between line balancing and its conversion process. Almost each and every moderate to large manufacturing industry depends on a long and integrated supply chain, consisting of inbound logistic, conversion process and outbound logistic. In this sense an approach addresses a very general problem of integrated line balancing. Research works reported in the literature so far mainly deals with minimization of cost for inbound and outbound logistic subsystems. In most of the cases conversion process has been ignored. Thus, the main aim of this paper is to translate the underlying problem in the form of mixed nonlinear programming problem and design the optimum supply chain so that the total inventory cost and the cost of balancing loss of the conversion process is jointly minimized and ideal cycle time of the production process is

determined along with ideal sizes of the stock chambers. A numerical example has been added to demonstrate the suitability of our approach”.

- Mukherjee(2009) expresses the view the material management would be a profit centre of great importance in industries where materials cost would correspond to 50 to 60 percent of the cost of production and where the entire working capital is in the form of inventory.
- Michalski Grzegorz (2009) in the Journal “Medjunarodni Problemi” says - “The basic financial purpose of the firm is maximization of its value. An inventory management should also contribute to realization of this basic aim. Many current assets management models which we can find in the literature relating to financial management were constructed with the assumption of book profit maximization as basic aim. These models could lack what relates to another aim, i.e., maximization of enterprise value. This article presents the value based inventory management model modification”.
- Aleksandra Marcikic ; Boris Radovanov (2009) in the Journal “Perspectives Of Innovations, Economics And Business” says- “In this paper inventory management is analyzed as an organic part of the supply chain managing process. In today’s competitive economic environment traditional inventory policies should be improved. Simulation models enable a priori managing and analyzing variety of possible results and implication of selected inventory policies. The model presented in this paper uses the Monte Carlo simulation method and variables taken as random, in order to depict a harmonization and integration of dynamic quantitative analysis and theoretical, qualitative concepts of inventory management”.
- Jianzhong Chen (2009) in the Journal “International Journal of Business and Management” says-“In order to meet the dynamic demand in the reality, recent researches on inventory management issues have concentrated on the time-varying demand over a finite planning time horizon. In this paper, the genetic algorithm is used to construct a production-inventory model (EPQ) with time-varying on both demand and production sides with shortages which are completely backlogged. The purpose of this paper is under the consideration of minimizing the average costs of inventory, to determine the optimal number of production cycles should be planned in a finite planning time horizon and when to produce within each production cycle. Furthermore, a numerical examination is made and

some suggestions for using this algorithm to improve efficiency and effectiveness are also mentioned”

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- Sambasiva Rao. K(2008) In his Study on Materials Management in Public Sector Ship Building Industry evaluates. The performance of materials

management and identifies some problems faced by materials management in the heavy engineering industry. The method of investigation involves the documentary evidence and survey of expert opinion. He evaluates the existing purchase systems and lead time involved in procurement of materials and suggests that the long lead time should be reduced. His study points at the excess inventory in terms of number of months cost of production in all the engineering units. He also highlights some of the problems in the area of materials management such as delay on the part of customers in supplying their own materials, existence and disposal of surplus and non-moving items, excessive lead times and excessive dependence on imports. According to him the administrative and procurement lead times of the company are on the higher side due to the peculiar nature of the industry. He suggests liberalized purchase procedures, increased financial powers to the personnel, Opening up of liaison offices in various countries to reduce the lead time.

- Bern at de William year 2008 This overview says that the primary center of stock administration is on transportation and warehousing. The choice received by administration relies on upon the conventional strategy for stock control illustrations. The conventional technique for stock administration is how much helpful in nowadays the creator tell about it. He is likewise expressing that the conventional technique is not an expense diminishing, it is so much costly. In any case, the dealing with the stock is more critical work for any assembling unit.
- Delaunay C, Sahin E, 2007. A great deal of work has been done, however now in the event that we need to proceed, we must have great perceivability upon this field of examination. That is the reason we concentrated on a system for a comprehensive audit on the issue of production network administration with stock errors. The creator said that their point in this work is additionally to exhibit the most imperative measure that permits a refinement between the diverse sort of dealing with the stock.
- Braglia. Andrea Grassi And Rober To Montanari (2007):Inventory constraints, cost of cost production, safety and Environment objectives, strategies of maintenance adopted, logistics aspects of space parts classification is thus defined with respect to multiple attributes on Inventory policy matrix is defined to link the different classes of spare parts with the possible inventory management policies so as to identify the “best” control strategies for the spare stock.

- Bansal (2007) in his study on Materials Management: A case Study of Bharat Heavy Electricals Limited, Bhopal Unit, (BHEL), has evaluated the existing systems of inventory management. He emphasizes the need for automatic replenishment system in the undertaking offer studying the application of ABC analysis and EOQ technique of inventory control. He also points out the accumulation of surplus stores and non-moving items in the organization and recommends that the surplus and absolute stores which are no longer required should be disposed as early as possible at the best available price. Further, he suggests the preparation of monthly class wise statements on inventories for effective control over them and the introduction of reconciliation system of stores ledgers with account ledgers to avoid misappropriation of stores, and spares for production and operation are above their actual consumption level. The inventories in general are found to be above their routine requirements. The holdings of stores and spares corresponding to two to three years requirements should be considered excess.
- Johanna Smaros, Juha-Matti Lehtonen, Patrik Appdavist And Jan Holmstrom (2006) Information sharing practices such as vendor managed inventory (VMI) give manufactures access to more accurate demand information. In this paper discrete-extent simulation is used to examine how a manufacturer can combine traditional order date available from non-customers with sales data available from VMI customers in its production and inventory control and what impact it has on the manufacturer's operational efficiency. The simulation models based on a real life. VMI implementation and user actual demand and product data marallo.
- Phaniswara Raju(2006) has conducted a research study on materials management in Andhra Pradesh State Road Transport Corporation (APSRTC) in 2006. The study is primarily based on the secondary data collected from the published annual reports of APSRTC, the records of MIS, the reports on performance of National Road Transport Undertakings of CIRT, Pune etc., In addition to the personal discussions held with various officials of the corporation. The study reveals the increasing levels of materials consumption in APSRTC.
- Krishna Swamy(2005)emphasises the need for maintaining good vendor relations.

- Asfaque Ahmed October 12, 2004 He said that a large portion of the assembling organization merchants have arranging and booking item which accept either limitless creation limit for computing amounts of crude material and work in advancement (WIP) necessities or unending amounts of crude material and WIP materials for figuring generation limit. There are numerous issues with this methodology and how to keep away from these by verifying that the item you are purchasing for sure considers limited quantities of obliged materials and additionally limited limits of work focuses in your assembling offices.
- D. Hoopman April 7, 2003 In this article he said that stock advancement perceive that distinctive industry have diverse stock profiles and prerequisites. Exploration has shown that arrangements are estimated in an expansive extent from a huge number of dollars to a large number of dollars. In this corner business sector segment cost is without a doubt not a pointer of the nature of arrangement, ROI and ease of use are principal.
- Silver, Edward A Dec22, 2002 This article considers the setting of a populace of things for which the presumption hidden the EOQ inference holds sensibly well. Then again, as is regularly the trade out the practices there is a total requirement that applies to the populace all in all. Two basic types of requirements are The financial backing's presence to be dispensed among the things' supplies and A buying, generation office having the ability to process at most a sure number of recharging every year. In light of the imperative the individual renewal amounts can't be chosen autonomously.
- Jon Schreibfeder 1992 He said that it is anything but difficult to transform money into stock, the test is to transform stock over into money. In mid 1990"s numerous merchants perceive that they required help controlling and bringing off theirbiggest resource stock. In answer to this need, a few organizations created thorough stock administration modules and frameworks. These new programming frameworks incorporate numerous novel elements intended to help merchants successfully oversaw stockroom stock. When experiencing this numerous wholesalers don't feel that they have picked up authority of their stock.

CHAPTER 3

RESEARCH METHODOLOGY

METHODOLOGY:

Research methodology is mainly needed for the purpose of framing the research process and the designs and tools that are to be used for the project purpose. Research methodology helps to find the impact of inventory management on profitability.

3.1. RESEARCH DESIGN:

Descriptive Research Design

- Descriptive research design is a hypothesis-based method that defines the primary subject matter of the research and tries to analyze it using different assumptions and techniques. This type of research design uses data collection techniques like natural observation, case studies and surveys to derive results. Descriptive data is used to collect basic information about variables in a dataset and to find relationship between variables.
- Qualitative data includes respondents' opinion and ideas. It is also applied in order to describe current conditions or to investigate relationships.

3.2. SOURCES OF DATA:

Data collection is the term used to describe a process of preparing and collecting data.

- Primary Data - Questionnaire given to 95 respondents
- Secondary Data - Websites and online journals, Published reports & Review of literature from published articles.

3.3. STRUCTURE OF QUESTIONNAIRE:

Questionnaire was divided into two sections. First part was designed to know the general information about respondents and the second part contains some questions to know about the relationship between inventory management and profitability and

some more questions are added to find the factors affecting profitability and complications faced in managing the inventory.

3.4.SAMPLE SIZE:

Number of the sampling size selected from population is called the size of the sample. Sample of 95 response were obtained from the population.

3.5. SAMPLING TECHNIQUE:

Convenience sampling method

A convenience sample is one of the main types of non-probability sampling methods. A convenience sample is made up of people who are easy to reach. Convenience sampling is used because it is quick, inexpensive, and convenient. Convenience samples are useful for certain purposes, and they require very little planning.

3.6. PERIOD OF STUDY:

The Study was conducted for the period of three months from January to March.

3.7. TOOLS FOR ANALYSIS:

3.7.1. Percentage analysis

Research questions are always answered with a descriptive statistic: generally, either percentage or mean. Percentage is appropriate when it is important to know how many of the participants gave a particular answer. Generally, percentage is reported when the responses have discrete categories.

3.7.2. Chi- Square

A **chi-squared test** (symbolically represented as χ^2) is basically a data analysis on the basis of observations of a random set of variables. Usually, it is a comparison of two statistical data sets. This test was introduced by **Karl Pearson** in 1900 for categorical data analysis and distribution. So it was mentioned as **Pearson's chi-squared test**.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1. PERCENTAGE ANALYSIS

Table 4.1.1: Age of the respondents

AGE	NO. OF RESPONDENTS	PERCENTAGE
18-30	28	31
31-45	50	56
45 or above	12	13
TOTAL	90	100

INTERPRETATION

From the above table it is interpreted that the number of respondents between 18-30 age are 31 % between 31-45 age of respondents are 56%, 45 or above age of respondents are 13%.

Chart 4.1.1: Chart represents Age of the respondents

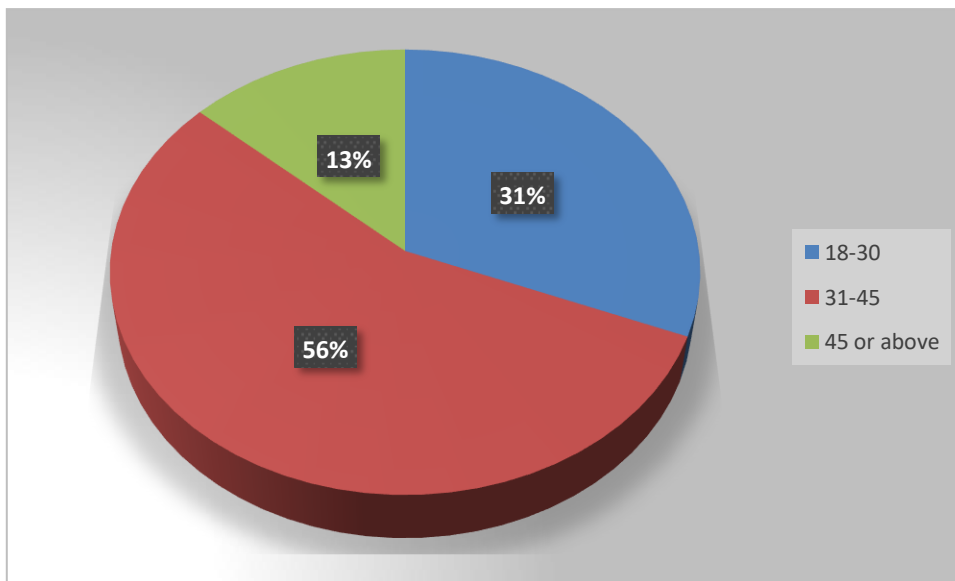


Table 4.1.2: GENDER OF RESPONDENTS

GENDER	NO OF RESPONDENTS	PERCENTAGE
Male	74	82
Female	16	18
	90	100.00

INTERPRETATION

From the above table it is interpreted that the number of male respondents is 74 and female respondent is 16.

Chart 4.1.2: Gender of the respondents

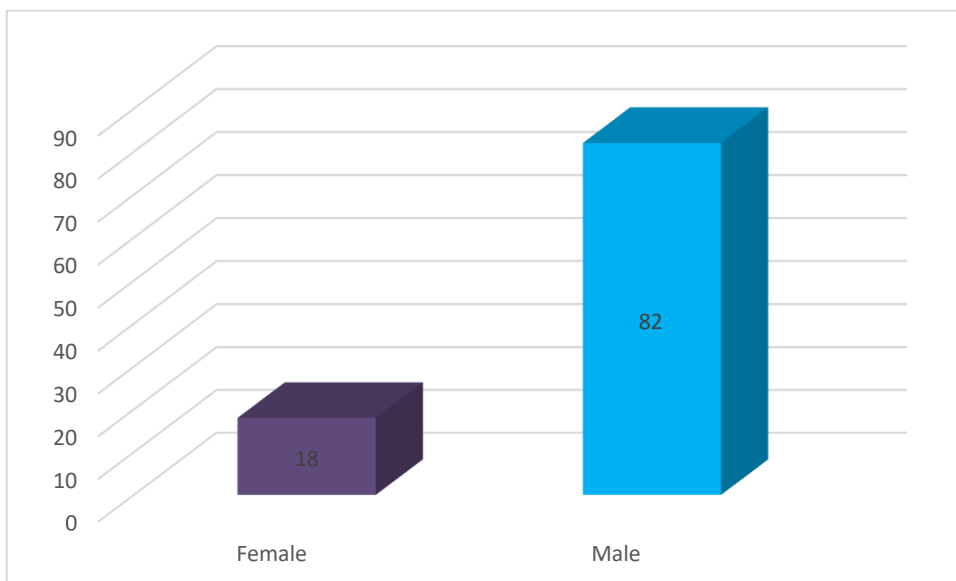


Table 4.1.3: Problem faced frequently in handling the inventory

PROBLEM	NO OF RESPONDENTS	%
Natural calamity	22	24
Shortage in supply of equipment	14	16
Want of Transport	54	60
Total	90	100

INTERPRETATION

- 24% of the respondents have chosen natural calamity as the problem faced frequently in handling the inventory.
- 16% of the respondents have chosen shortage in supply of equipment as the problem faced frequently in handling the inventory.
- 60% of the respondents have chosen want of transport as the problem faced frequently in handling the inventory.

Chart 4.1.3: Problem faced frequently in handling the inventory

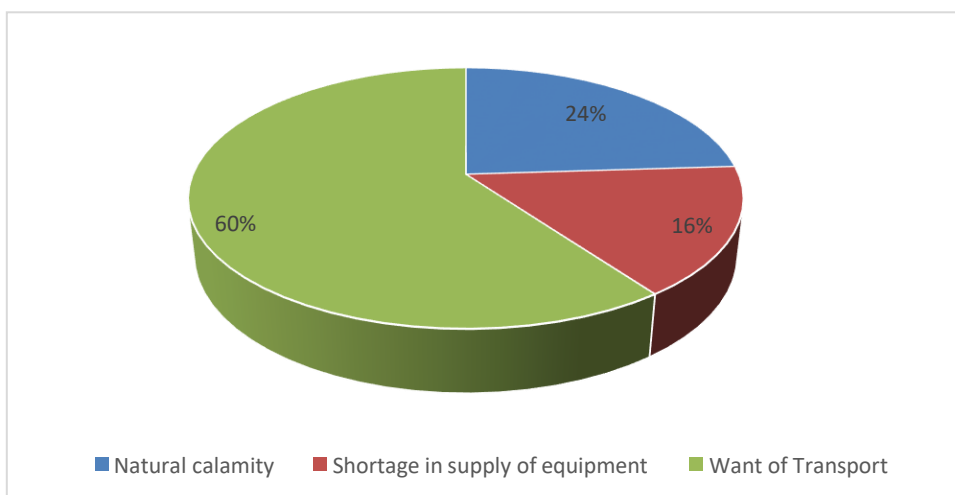


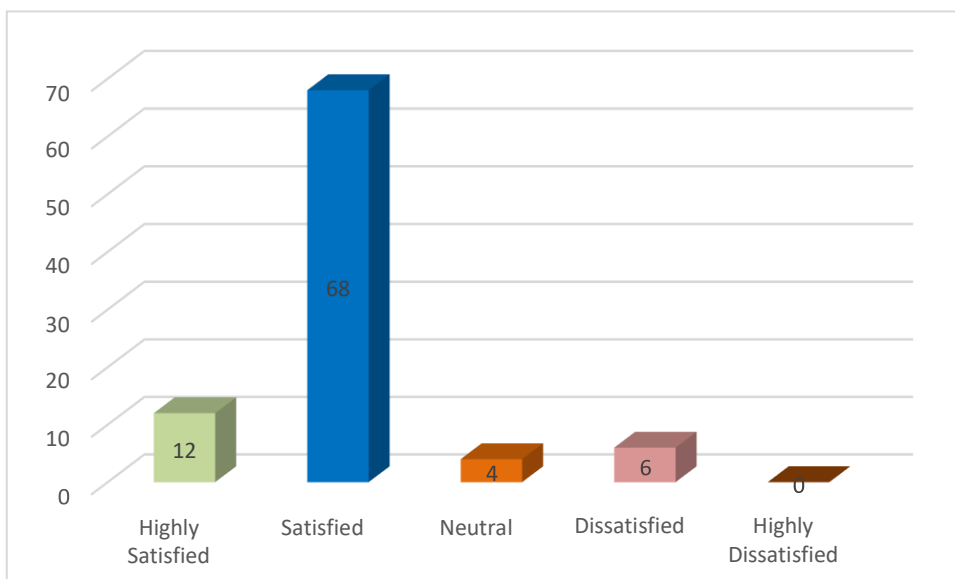
Table 4.1.4 Table Showing satisfaction level of existing methods of inventory:

PARTICULARS	NUMBER OF RESPONDENTS	PERCENTAGE
HIGHLY SATISFIED	12	13
SATISFIED	68	76
NEUTRAL	4	4
DISSATISFIED	6	7
HIGHLY DISSATISFIED	0	0
TOTAL	90	100

INTERPRETATION:

- 13 % of respondents are Highly satisfied with the existing storing method of inventory.
- 76% of respondents are satisfied with the existing storing method of inventory.
- 4 % of respondents are in a neutral state that existing storing method of inventory.
- 7 % of respondents are dissatisfied with the existing storing method of inventory.
- 0 % of respondents are highly dissatisfied that existing storing method of inventory is effective.

Chart 4.1.4: Table Showing satisfaction level of existing methods of inventory:



4.1.5 TABLE SHOWING RELATIONSHIP BETWEEN INVENTORY MANAGEMENT AND PROFITABILITY (SA – STRONGLY AGREE, A- AGREE, N- NEUTRAL, D- DISAGREE, SD- STRONGLY DISAGREE)

	SA	%	A	%	N	%	D	%	SD	%
Inventory management facilitates a shorter operating cycle	28	31%	54	60%	6	7%	0	0	2	2%
Inventory management reduces idle time for labour	50	56%	34	38%	2	2%	4	4%	0	0
Inventory management enables optimum use of space	34	38%	52	58%	2	2%	0	0	2	2%
Inventory management Facilitates timely production	52	58%	34	38%	2	2%	2	2%	0	0

INTERPRETATION

- 31% of respondents have strongly agreed that Inventory management facilitates a shorter operating cycle.
- 60% of respondents have agreed that Inventory management facilitates a shorter operating cycle.
- 7% of respondents are in neutral state that Inventory management facilitates a shorter operating cycle.
- 2% of respondents have strongly disagreed that Inventory management facilitates a shorter operating cycle.
- 56% of respondents have strongly agreed that Inventory management reduces idle time for labor.

- 38% of respondents have agreed that Inventory management reduces idle time for labor.
- 2% of respondents are in neutral state that Inventory management reduces idle time for labor.
- 4% of respondents have disagreed that Inventory management reduces idle time for labor.
- 38% of respondents have strongly agreed that Inventory management enables optimum use of space.
- 58% of respondents have agreed that Inventory management enables optimum use of space.
- 2% of respondents are in neutral state that Inventory management enables optimum use of space.
- 2% of respondents have strongly disagreed that Inventory management enables optimum use of space.
- 58% of respondents have strongly agreed that Inventory management Facilitates timely production.
- 38% of respondents have agreed that Inventory management Facilitates timely production.
- 2% of respondents are in neutral state that Inventory management Facilitates timely production.
- 2% of respondents have disagreed that Inventory management Facilitates timely production.

CHART 4.1.5 CHART SHOWING RELATIONSHIP BETWEEN INVENTORY MANAGEMENT AND PROFITABILITY

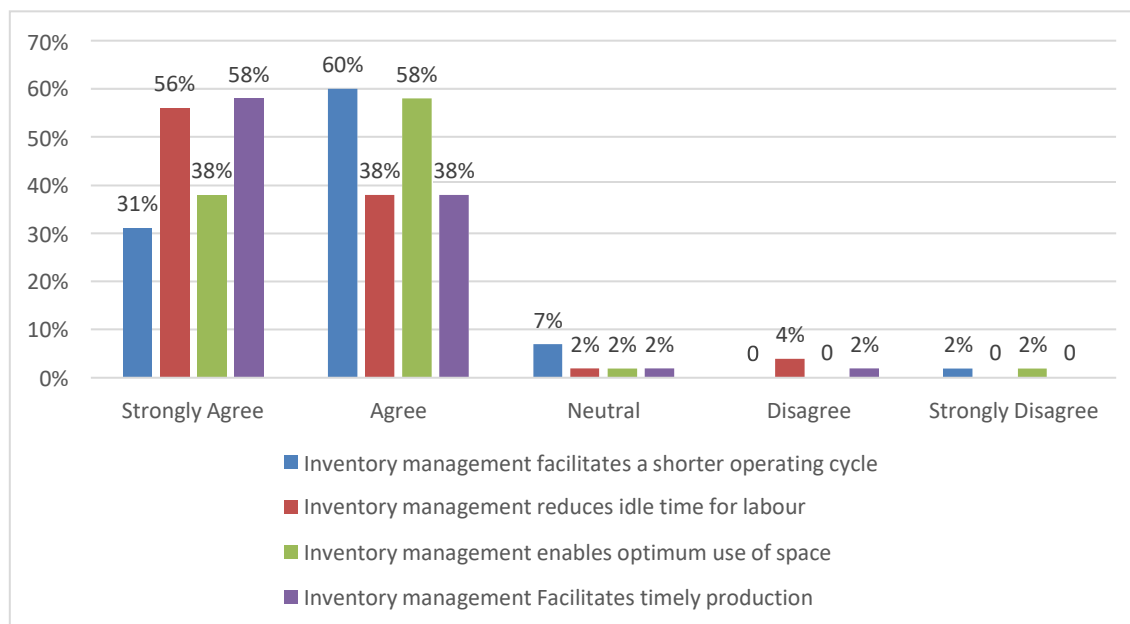


TABLE 4.1.6 FACTORS AFFECTING PROFITABILITY

PARTICULARS	PERCENTAGE
Levels of competition	53%
Demand trends	53%
Level of advertisement	78%
Relative costs of operation	66%
Price discrimination	60%

INTERPRETATION

- 53% of respondents selected Levels of Competition as the factor which affects profitability of the firm.
- 53% of respondents selected Demand Trends as the factor which affects profitability of the firm.
- 78% of respondents selected Level of Advertisement as the factor which affects profitability of the firm.
- 66% of respondents selected Relative cost of operations as the factor which affects profitability of the firm.
- 60% of respondents selected Price Discrimination as the factor which affects profitability of the firm.

CHART 4.1.6 CHART SHOWING FACTORS AFFECTING PROFITABILITY

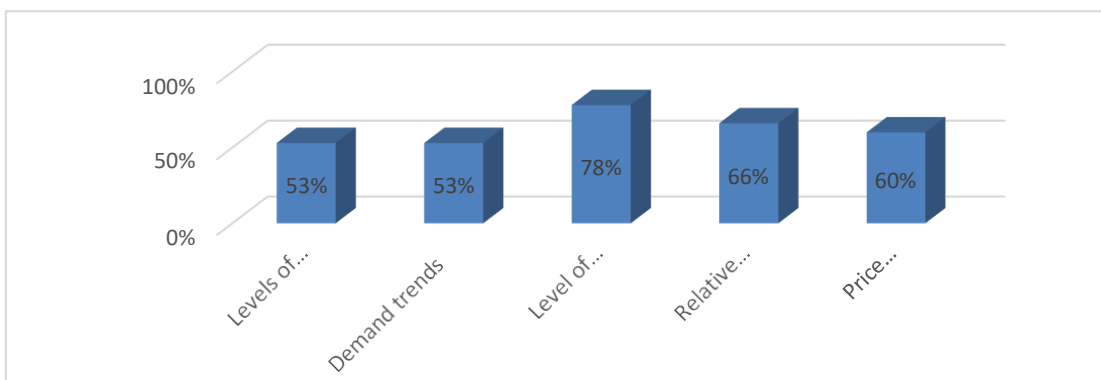


TABLE 4.1.7 EFFICIENCY LEVEL OF INVENTORY MANAGEMENT (SA – STRONGLY AGREE, A- AGREE, N- NEUTRAL, D- DISAGREE, SD- STRONGLY DISAGREE)

PARTICULARS	NUMBER OF RESPONDENTS	PERCENTAGE OF RESPONDENTS
Highly Efficient	36	40%
Efficient	50	56%
Neutral	4	4%
Inefficient	0	0%
Highly Inefficient	0	0%
TOTAL	90	100

INTERPRETATION

- 40% of respondents have said that their company is highly efficient in managing the inventory.
- 56% of respondents have said that their company is efficient in managing the inventory.
- 4% of respondents have said that their company is neutral in managing the inventory.

CHART 4.1.7 EFFICIENCY LEVEL OF INVENTORY MANAGEMENT

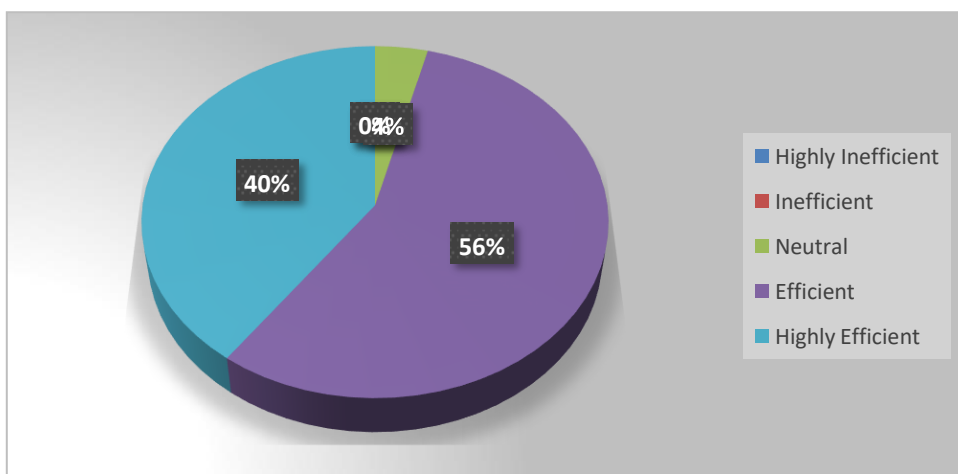


TABLE 4.1.8 COMPLICATIONS FACED BY THE COMPANY DURING INVENTORY MANAGEMENT

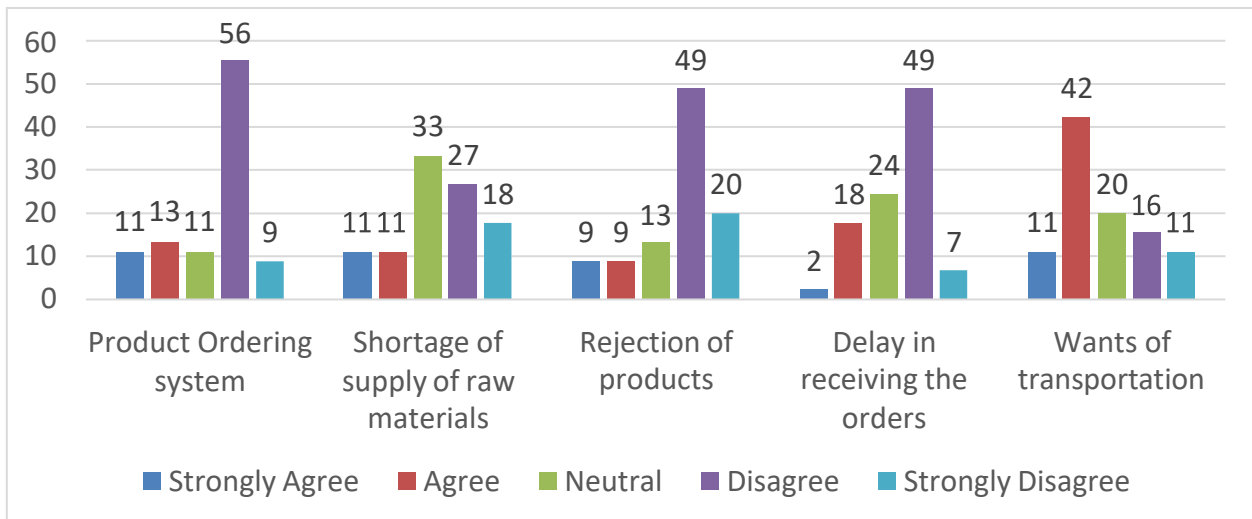
PARTICULARS	SA		A		N		D		SD	
	NOS	%	NOS	%	NOS	%	NOS	%	NOS	%
Product Ordering system	10	11%	12	13%	10	11%	50	56%	8	9%
Shortage of supply of raw materials	10	11%	10	11%	30	33%	24	27%	16	18%
Rejection of products	8	9%	8	9%	12	13%	44	49%	18	20%
Delay in receiving the orders	2	2%	16	18%	22	24%	44	49%	6	7%
Wants of transportation	10	11%	38	42%	18	20%	14	16%	10	11%

- 11% of respondents strongly agreed that Product Ordering System as the complication faced during inventory management
- 13% of respondents agreed Ordering System as the complication faced during inventory management
- 11% of respondents are in a neutral state that Ordering System as the complication faced during inventory management.
- 56% of respondents disagreed Ordering System as the complication faced during inventory management.
- 9% of respondents Strongly disagreed Ordering System as the complication faced during inventory management.
- 11% of respondents strongly agreed that Shortage in supply of raw materials as the complication faced during inventory management
- 11% of respondents agreed that Shortage in supply of raw materials as the complication faced during inventory management
- 33% of respondents are in a neutral state that Shortage in supply of raw materials as the complication faced during inventory management

- 27 % of respondents disagreed that Shortage in supply of raw materials as the complication faced during inventory management
- 18 % of respondents Strongly disagreed that Shortage in supply of raw materials as the complication faced during inventory management
- 9 % of respondents Strongly agreed that rejection of products as the complication faced during inventory management
- 9 % of respondents agreed that rejection of products as the complication faced during inventory management
- 13 % of respondents are in a neutral state that rejection of products as the complication faced during inventory management
- 49% of respondents disagreed that rejection of products as the complication faced during inventory management
- 20 % of respondents Strongly disagreed that rejection of products as the complication faced during inventory management
- 2 % of respondents Strongly agreed that delay in receiving the orders as the complication faced during inventory management
- 18 % of respondents agreed that delay in receiving the orders as the complication faced during inventory management
- 24% of respondents are in a neutral state that delay in receiving the orders as the complication faced during inventory management
- 49 % of respondents disagreed that delay in receiving the orders as the complication faced during inventory management
- 7% of respondents Strongly disagreed that delay in receiving the orders as the complication faced during inventory management
- 11 % of respondents Strongly agreed that wants of transportation as the complication faced during inventory management
- 42 % of respondents agreed that wants of transportation as the complication faced during inventory management
- 20 % of respondents are in neutral state that wants of transportation as the complication faced during inventory management

- 16 % of respondents disagreed that wants of transportation as the complication faced during inventory management
- 11 % of respondents Strongly disagreed that wants of transportation as the complication faced during inventory management.

CHART 4.1.8 COMPLICATIONS FACED BY THE COMPANY DURING INVENTORY MANAGEMENT



STATISTICAL ANALYSIS

Chi-Square

- H0: There is no significant association between the Inventory Management and the profitability in Shiva Logistics
- H1: There is significant association between the Inventory Management and the profitability in Shiva Logistics

TABLE: 4.1.9 ASSOCIATION BETWEEN THE INVENTORY MANAGEMENT AND PROFITABILITY

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.942 ^a	4	.001
Likelihood Ratio	15.124	4	.004
Linear-by-Linear Association	8.781	1	.003
N of Valid Cases	300		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.38.

INTERPRETATION:

The result in the above table shows that there is significant association between the inventory management and profitability as $p = 0.001$ which is less than 0.05. **This finding supports the hypothesis and so there is significant association between the inventory management and profitability.**

CHAPTER 5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1. FINDINGS OF THE STUDY

- Majority (56 %) of the respondents are above 45 years of age.
- Majority (74%) of the respondents are Male.
- Majority (60%) of respondents opted want of transport as the problem faced frequently during inventory management.
- Majority 68 (76%) of respondents have agreed that the existing method of inventory is effective.
- Majority (60%) of the respondents have agreed that Inventory management facilitates shorter operating cycle.
- Majority (78%) of the respondents have selected Level of Advertisement as the main factor which affects the profitability.
- Majority (56%) of the respondents have stated that their company is efficient in managing the inventory.
- Majority (42%) of the respondents have chosen Want of Transportation as the complication faced by the company during inventory management.
- There is significant association between the inventory management and profitability of Shiva Logistics.

5.2 .SUGGESTIONS

- Establish clear inventory goals that align with the overall business strategy. This will help you track progress and ensure that your inventory management results in profitability.
- Invest in an inventory management system that can help you track inventory levels, automate ordering processes, and manage suppliers. This may result in reducing manual errors and save time.

- Use forecasting techniques to predict demand for products and plan inventory levels accordingly. This will result in avoiding, stockouts and overstocking and reduce the need for emergency orders.
- Train employees on inventory management, best practices and procedures. This will help to reduce human errors.

5.3. CONCLUSION:

Finding reveals that there is a positive relationship between materials handling and the profitability of the organization. I, therefore concluding that Inventory Management aids the profitability of an organization in a way that it facilitates a shorter operating cycle, reduces the handling costs, eliminates unproductive handling of materials, reduces idle time for labor, eliminates factory hazards, maintains quality of materials, enables optimum usage of space, facilitates better quality products and timely production. Therefore, for a company to ensure its profitability, it has to take deliberate measures to improve and standardize its Inventory management system through mechanization of this department.

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ANNEXURE I – QUESTIONNAIRE

STUDY ON THE IMPACT OF INVENTORY MANAGEMENT ON PROFITABILITY WITH REGARDS TO SHIVA LOGISTICS

1. Name
2. Gender
 - ◆ Male ◆ Female
3. Income
 - ◆ 10000 to 20000 ◆ 21000 to 30000 ◆ 31000 to 40000 ◆ Above - 40000
4. Age
 - ◆ 18- 30 ◆ 31- 45 ◆ 45 or Above
5. Experience
 - ◆ 0 - 2 years ◆ 3 - 5 years ◆ 6 - 10 years ◆ Above 10 years.
6. Educational Qualification
 - ◆ Diploma ◆ UG ◆ PG
7. Designation:
8. What type of equipment is frequently used in inventory management for various types of materials in your organization?
 - ◆ Cranes ◆ Industrial trucks ◆ forklift
9. Which problem you are facing frequently in handling the inventory?
 - ◆ Shortage in supply of equipment ◆ Wants of transport ◆ Natural calamity ◆ Others
10. The existing methods of storing the materials in your organization are effective.
 - ◆ Strongly agree ◆ Agree ◆ Neutral ◆ Disagree ◆ Strongly disagree
11. Raw materials are delivered as per the schedule.
 - ◆ Strongly agree ◆ Agree ◆ Neutral ◆ Disagree ◆ Strongly disagree

12. Relationship between Inventory management and profitability of an organization:

Relationship Between Inventory management and Profitability of the Organization	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Inventory management facilitates a shorter operating cycle					
Inventory management reduces idle time for labour					
Inventory management enables optimum use of space					
Inventory management					

facilitates timely production					
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13. Factors affecting the profitability of Shiva Logistics (INDIA):

Factors affecting the profitability of Shiva Logistics	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Levels of competition					
Demand trends					
Level of advertisement					
Relative costs of operation					
Price discrimination					

14. What do you consider to be the critical factor in managing the inventory?

♦ Ordering system ♦ Lack of equipment ♦ Trouble in equipment ♦ All the above

15. Inventory management facilitates better quality of product:

A. Strongly agree B. Agree C. Neutral D. Disagree E. Strongly disagree

16. Rate the efficiency in managing the inventory?

a. Highly efficient b. Efficient c. Neutral d. Inefficient e. Highly inefficient

17. Rate the occurrence of electrical shutdown.

a. Never b. Rarely c. Sometimes d. Always e. Often

18. What are the re-order quantities of raw materials?

a)50 pcs b)100 pcs c)150 pcs d) 200 pcs

19. How do you rate the overall inventory management?

a) Excellent b) good c) medium d) bad e) worst

20. Do you face the following problems frequently in managing the inventory?

Particulars	Strongly agree	agree	neutral	disagree	Strongly disagree
Product Ordering system					
Shortage of supply of raw materials					
Rejection of products					
Delay in receiving the orders					
Wants of transportation					

21. Rate the following risks based on frequency of occurrence? (1= never, 2= rarely, 3= sometimes, 4= often, 5=always)

Potential risks	
Insufficient of employees in organisation	
Falling caused by improperly stored materials	
Budget of purchasing raw materials	
Improper handling of lifting equipment	
Human error	

22. According to you what changes or improvements can be made in inventory management in order to increase the efficiency of production?

RESEARCH ARTICLE

A STUDY ON THE IMPACT OF INVENTORY MANAGEMENT ON PROFITABILITY WITH REGARDS TO SHIVA LOGISTICS

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ABSTRACT:

Inventory management is very important as it affects job performance and it will influence the Profitability of the company. Company's quality and profitability depends upon effective inventory management hence, determining the factors that help in the enhancement of quality and performance company to propel them to peak performance. The respondents of the study are the employees of the company "Shiva Logistics". In this survey, Quantitative survey was taken by using a Google Forms. The result of the study shows that there is significant association between the inventory management and the profitability of the company as $p=0.001$ which is less than 0.05. This finding support the hypothesis and so there is significant association between the inventory management and the profitability of the company. There is significant association between the inventory management and the profitability of the company. Once inventory is wisely managed, they turn out to render quality products, increase their performance and results in increase in profitability.

INTRODUCTION:

No company can work efficiently without inventory management. This study aims at analyzing the relationship between inventory management and profitability with regards to shiva logistics. Inventory can be managed in a way that it should contribute something in return to the company in the name of profit. This study is formulated in such a way that it focuses first on the relationship between inventory management and profitability and it also analyzes the factors which affects the profitability which can be used for concluding the relationship between inventory management and profitability. This will also help the company to identify the main factor they should focus on in terms of profit.

OBJECTIVES OF STUDY:

PRIMARY OBJECTIVES

- 1.To study the relationship between inventory management and profitability with regards to Shiva Logistics.

SECONDARY OBJECTIVES:

- 1.To identify the factors affecting the Profitability of Shiva logistics.
2. To ascertain the complications faced by the company during Inventory management.

3. To find the relationship between Inventory management and profitability.
4. To enhance the improvements of Inventory management and its maintenance.

REVIEW OF LITERATURE

Budiharjo & Hadikurniawati (2020) used historical data to process data to be processed further. Both studies have similarities with the previous reference, which using the forecasting method in their research. This research aims to forecast future order demand which can be used to manage the inventory. This method is also believed to be an indicator to measure success in selling and offering the products that the companies researched. Candra (2019) conducted research about inventory problems resulting in overstocks on some goods and shortage of stock in other goods. They used the method which is done by doing forecasts calculations. The purpose of their research is to find available inventory space and to determine the maximum usable inventory. Another research from Nisa (2019) studied hospitals that had problems with expired drugs. Data processing requires several data such as demands, order cost, and storage cost in this study. She uses analyses of the ABC, EOQ, and ROP methods for data processing. This research aims to identify and analyze drug grouping based on the ABC method, the optimum amount of drug ordering using the EOQ method, and the time of reordering medicine using the ROP method. Edwin Sitienei and Florence Memba(2015) Conducted a study on Effect of Inventory Management on profitability of Cement Manufacturing Companies in Kenya. The study concluded that Gross profit margin is negatively correlated with the inventory conversion period, Increase in sales, which denotes the firm size enriches the firm's inventory levels, which pushes profits upwards due to optimal inventory levels. It is also noted that firms inventory systems must maintain an appropriate inventory levels to enhance profitability and reduce the inventory costs associated with holding excessive stock in warehouses.

RESEARCH DESIGN:

DESCRIPTIVE RESEARCH DESIGN: Qualitative data includes respondents' opinions and ideas. It is also applied in order to describe current conditions or to investigate relationships.

SOURCES OF DATA:

- Primary Data – Questionnaire was given to 95 respondents
- Secondary Data – Websites and online journals, Published reports & Review of literature from published articles

HYPOTHESIS:

- H0: There is no significant association between the Inventory Management and the profitability in Shiva Logistics
- H1: There is significant association between the Inventory Management and the profitability in Shiva Logistics

TOOLS FOR ANALYSIS:

Research questions are always answered with a descriptive statistic: generally, either a percentage or mean. The percentage is appropriate when it is important to know how many of the participants gave a particular answer. When the responses have discrete categories, percentage is reported.

CHI-SQUARE

A **chi-squared test** (symbolically represented as χ^2) is basically a data analysis on the basis of observations of a random set of variables. Usually, it is a comparison of two statistical data sets. This test was introduced by **Karl Pearson** in 1900 for categorical data analysis and distribution. So it was mentioned as **Pearson's chi-squared test**.

Table showing factors affecting profitability

PARTICULARS	PERCENTAGE
Levels of competition	53%
Demand trends	53%
Level of advertisement	78%
Relative costs of operation	66%
Price discrimination	60%

- From the above table it can be interpreted that 53% of respondents selected Levels of Competition as the factor which affects profitability of the firm.
- From the above table it can be interpreted that 53% of respondents selected Demand Trends as the factor which affects profitability of the firm.
- From the above table it can be interpreted that 78% of respondents selected Level of Advertisement as the factor which affects profitability of the firm.
- From the above table it can be interpreted that 66% of respondents selected Relative cost of operations as the factor which affects profitability of the firm.
- From the above table it can be interpreted that 60% of respondents selected Price Discrimination as the factor which affects profitability of the firm.

Inference: Majority (78%) of the respondents have selected Level of Advertisement as the main factor which affects the profitability.

Table showing complications faced by the company during inventory management

PARTICULARS	SA		A		N		D		SD	
	NOS	%	NOS	%	NOS	%	NOS	%	NOS	%
Product Ordering system	10	11%	12	13%	10	11%	50	56%	8	9%
Shortage of supply of raw materials	10	11%	10	11%	30	33%	24	27%	16	18%
Rejection of products	8	9%	8	9%	12	13%	44	49%	18	20%
Delay in receiving the orders	2	2%	16	18%	22	24%	44	49%	6	7%
Wants of transportation	10	11%	38	42%	18	20%	14	16%	10	11%

Interpretation:

- 11% of respondents strongly agreed that Product Ordering System as the complication faced during inventory management
- 13% of respondents agreed Ordering System as the complication faced during inventory management
- 11% of respondents are in a neutral state that Ordering System as the complication faced during inventory management.
- 56% of respondents disagreed Ordering System as the complication faced during inventory management.
- 9% of respondents Strongly disagreed Ordering System as the complication faced during inventory management.
- 11% of respondents strongly agreed that Shortage in supply of raw materials as the complication faced during inventory management
- 11% of respondents agreed that Shortage in supply of raw materials as the complication faced during inventory management
- 33% of respondents are in a neutral state that Shortage in supply of raw materials as the complication faced during inventory management
- 27 % of respondents disagreed that Shortage in supply of raw materials as the complication faced during inventory management
- 18 % of respondents Strongly disagreed that Shortage in supply of raw materials as the complication faced during inventory management

- 9 % of respondents Strongly agreed that rejection of products as the complication faced during inventory management
- 9 % of respondents agreed that rejection of products as the complication faced during inventory management
- 13 % of respondents are in a neutral state that rejection of products as the complication faced during inventory management
- 49% of respondents disagreed that rejection of products as the complication faced during inventory management
- 20 % of respondents Strongly disagreed that rejection of products as the complication faced during inventory management
- 2 % of respondents Strongly agreed that delay in receiving the orders as the complication faced during inventory management
- 18 % of respondents agreed that delay in receiving the orders as the complication faced during inventory management
- 24% of respondents are in a neutral state that delay in receiving the orders as the complication faced during inventory management
- 49 % of respondents disagreed that delay in receiving the orders as the complication faced during inventory management
- 7% of respondents Strongly disagreed that delay in receiving the orders as the complication faced during inventory management
- 11 % of respondents Strongly agreed that wants of transportation as the complication faced during inventory management
- 42 % of respondents agreed that wants of transportation as the complication faced during inventory management
- 20 % of respondents are in neutral state that wants of transportation as the complication faced during inventory management
- 16 % of respondents disagreed that wants of transportation as the complication faced during inventory management
- 11 % of respondents Strongly disagreed that wants of transportation as the complication faced during inventory management.

Inference:

Majority (42%) of the respondents have chosen Want of Transportation as the complication faced by the company during inventory management.

STATISTICAL ANALYSIS

Chi-Square

- H0: There is no significant association between the Inventory Management and the profitability in Shiva Logistics
- H1: There is significant association between the Inventory Management and the profitability in Shiva Logistics

TABLE: ASSOCIATION BETWEEN INVENTORY MANAGEMENT AND PROFITABILITY OF SHIVA LOGISTICS.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.942 ^a	4	.001
Likelihood Ratio	15.124	4	.004
Linear-by-Linear Association	8.781	1	.003
N of Valid Cases	300		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.38.

INTERPRETATION:

The result in the above table shows that there is significant association between the inventory management and profitability as $p = 0.001$ which is less than 0.05. **This finding supports the hypothesis and so there is significant association between the inventory management and profitability.**

INFERENCE:

There is significant association between the inventory management and profitability of Shiva Logistics.

FINDINGS, SUGGESTIONS AND CONCLUSION

FINDINGS

- Majority (56 %) of the respondents are above 45 years of age.
- Majority (74%) of the respondents are Male.
- Majority (60%) of respondents opted want of transport as the problem faced frequently during inventory management.
- Majority 68 (76%) of respondents have agreed that the existing method of inventory is effective.

- Majority (60%) of the respondents have agreed that Inventory management facilitates shorter operating cycle.
- Majority (78%) of the respondents have selected Level of Advertisement as the main factor which affects the profitability.
- Majority (56%) of the respondents have stated that their company is efficient in managing the inventory.
- Majority (42%) of the respondents have chosen Want of Transportation as the complication faced by the company during inventory management.
- There is significant association between the inventory management and profitability of Shiva Logistics.

SUGGESTIONS & RECOMMENDATIONS

- Establish clear inventory goals that align with the overall business strategy. This will help you track progress and ensure that your inventory management results in profitability.
- Invest in an inventory management system that can help you track inventory levels, automate ordering processes, and manage suppliers. This may result in reducing manual errors and save time.
- Use forecasting techniques to predict demand for products and plan inventory levels accordingly. This will result in avoiding, stockouts and overstocking and reduce the need for emergency orders.
- Train employees on inventory management, best practices and procedures. This will help to reduce human errors.

LIMITATIONS OF STUDY

- The study is confined to small scale industry only.
- Due to shortage of time and other constraints, the study has been limited to 90 respondents only.
- Lack of transparency is the main limitation to conduct this study.
- As the respondents are closely related to the company the data may not be genuine.

CONCLUSION:

Finding reveals that there is a positive relationship between materials handling and the profitability of the organization. I, therefore concluding that Inventory Management aids the profitability of an organization in a way that it facilitates a shorter operating cycle, reduces the handling costs, eliminates unproductive handling of materials, reduces idle time for labor, eliminates factory hazards, maintains quality of materials, enables optimum usage of space, facilitates better quality products and timely production. Therefore, for a company to ensure its profitability, it has to take deliberate measures to improve and standardize its Inventory management system through mechanization of this department.

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