

**A STUDY ON EFFECT OF MATERIAL HANDLING IN THE  
PROFITABILITY OF SRI LAKSHMI SARASWATHI TEXTILES [ARNI]  
LTD.”**

This report submitted to Adhiparasakthi college of arts and science in partial  
Fulfillment of the requirements for the Degree of Master of Business Administration.

Submitted by

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**MARCH- 2021**

## **CERTIFICATE**

This is to certify that the project work entitled “**A STUDY ON EFFECT OF MATERIAL HANDLING IN THE PROFITABILITY OF SRI LAKSHMI SARASWATHI TEXTILES [ARNI] LTD.**” is a bonafide work done by **SANTHOSH S (Reg. No: 30118U08035)** in partial fulfillment of the requirement for the award of Bachelor of Business Administration by Adhiparasakthi college of Arts and science during the academic year 2023 – 2024.

**Signature of the Guide**

**Signature of the HOD**

**Signature of the Principal**

Submitted for BBA degree Viva-Voce Examination held on\_\_\_\_\_ at the Department of Business Administration, Adhiparasakthi College of Arts and science (Autonomous), G.B. Nagar, Kalavai-632506.

**Signature of Internal Examiner**

**Signature of External Examiner**

**Name of Internal Examiner:**

**Name of External Examiner:**

**DATE:**

**Official Address of External Examiner:**

## **DECLARATION**

I **SANTHOSH S** hereby declare that the project entitled “**A STUDY ON EFFECT OF MATERIAL HANDLING IN THE PROFITABILITY OF SRI LAKSHMI SARASWATHI TEXTILES [ARNI] LTD.**” submitted to the VELLORE INSTITUTE OF TECHNOLOGY (VIT) in partial fulfillment of the requirements for the award of the degree of Bachelor of Business Administration is a record of original project work done by me during 2023-24 under the supervision and the guidance of **Mr. A. ASHOKAN, M.Com., M.Phil, B.Ed.** Department of Business Administration and it has formed the basis for the award of any Degree/Diploma/Associate Ship/Fellow Ship or other similar title to any candidate of any university.

**DATE:**

**Signature of the Candidate**

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## **CHAPTER-I**

### **INTRODUCTION**

This chapter comprised of the background to the study, the problem statement, objectives of the study, research questions, scope of the study, significance of the study, and the definitions of key terms. Textile markets, world over, are rapidly changing. The need for quality yarn is becoming indispensable. One that can meet international standards and the same time gather to specific requirements of a constantly changing world. This study examined the effect of material handling on the profitability of an organization, taking SRI LAKSHMI SARASWATHI TEXTILES [ARNI] LTD as the case study.

The study was guided by the following research objectives; to examine the relationship between materials handling and the profitability of SLST Ltd to examine the types of Materials Handling systems used by SLST Ltd and to examine the factors affecting the profitability of SLST Ltd. Using a sample of 100 respondents, a case study design, involving the use of both qualitative and quantitative methods of data collection was employed to assess the effect of materials handling on the profitability of an organization.

A cross sectional research design which employed both quantitative and qualitative techniques was employed in data collection and analysis purposive and simple random sampling techniques were employed to attain responses from 100 respondents which comprised of the staff of SLST Ltd. The findings revealed that there is a positive relationship between materials handling and the profitability of SLST Ltd 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, eliminates factory hazards, maintains quality of materials, enables optimum usage of space, facilitates materials issues, facilitates better customer care and better quality products and ensures timely production.

It also revealed various forms of material handling systems including conveyors, cranes, industrial trucks, positioning equipment, unit load formation equipment and storage equipment. The study however noted that there are other factors that affect the profitability of the organization such as the level of competition, demand trends, economic situation, level of advertisement,

relative costs of operation, economies of scale, level of production and management efficiency, firm's objectives and price discrimination among others.

The study recommended that organizations should invest in material handling equipment like cranes, conveyors, industrial tracks and others to enhance operational efficiency. The study also 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.

## **Material handling systems**

In the earlier years, materials handling 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. 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 materials handling whereby companies are no longer compromising on efficiency of the material handling function in the organization.

Understanding that the primary goal of organizations is to make profits; the researcher is intrigued by recent emphasis on materials handling by organization; compelling her to investigate the effect of materials handling on the profitability of an organization.

No organization can operate without material input. The efficiency of any activity for production of goods and services depends to a great extent, on the supply of materials equipment and manpower made available in their right proportions. Therefore, in order to meet the needs of the customer while meeting the set objectives there is a great need for continuous production schedule which is only made possible by holding of the aforementioned ingredients in form of stock. Materials handling is that aspect of business activity that deals with planning for purchasing, receiving, handling, storing, and releasing of materials for use in production with effective control measures. Also, materials are industrial goods that will become part of another physical product.

Classified materials for use in manufacture can be classified as;

Raw materials primarily from agriculture and the various extractive industries e.g. mineral resources, fruits, and vegetables sold to processor. Semi-finished goods and processed materials to which some work has been applied or value added e.g. rods, wires, paper, chemicals, etc.

Component parts and assemblies that are completely finished products of one manufacture, which can be used as part of more complex product by another manufacturer.

Managing of these materials is referred to as materials handling. Thus, materials handling has been defined by Lee and Nobler as the total of all those tasks, functions and routines which are concerned with the transfer of external materials and services into the organization and the administration of same until they are consumed or used up in the process of production, operation or sales. Materials handling includes all the activities relating to the acquisition, handling and control, and movement of materials and supplies used in the production for a firm's final product.

Materials handling is a tool to optimize performance in meeting customer service requirements at the same time adding to profitability by minimizing costs and making the best use of available resources. The basic objective of materials handling as explained by Ban Joko and Jacobs, Chase, and Aquiline is to ensure that the right item is bought and made available to the manufacturing operations at the right time, at the right place and at the lowest possible cost. They stressed that without adequate planning for material resources, the overall performance of an organization may be crippled. Barker articulated that improvement in continuity of supplies with reduced lead times, reduction in inventories with reduced obsolescence and surplus, improvement in cooperation and communications with reduced duplication of effort, reduction in materials costs, improvement in quality control, improvement in status control, and quicker identification of problems are the main benefits of materials handling in organization.



## **OBJECTIVES OF THE STUDY**

### **PRIMARY OBJECTIVES:**

- ❖ The purpose of the study was to examine the effect of materials handling on the profitability of SRI LAKSHMI SARASWATHI TEXTILES [ARNI] LTD.

### **SECONDARY OBJECTIVES:**

- ❖ To examine the level of material handling systems in SLST Ltd.
- ❖ To know how to improve the material management.
- ❖ To investigate the relationship between the material handling and profitability of an organization.
- ❖ To examine the approach of various type of material handling systems in an organization.

## SCOPE OF THE STUDY

- ❖ This study focused on examining the relationship between materials handling and the profitability of an organization; the types of materials handling and the factors that affect the profitability of an organization besides materials handling. This research study was conducted at located at Raghunathapuram, Arni, Tiruvannamalai, Tamil Nadu – 632 316.
- ❖ The study examined facts over a period from 18.12.2020 to 31.01.2021. This was because in this period, there was great emphasis on materials handling and organizational profitability amidst the stiff competition on the international market. In this period, organizations like **SRI LAKSHMI SARASWATHI TEXTILES [ARNI] LTD** were compelled to adopt international process to keep abreast the world economic conditions in the market place.
- ❖ This study may reveal the best material handling types used organization that apply international standards in their operations
- ❖ The study may highlight the significance of having an efficient materials handling function in the organization thus helping organizations to streamline their operations towards attaining efficiency in the organization.
- ❖ The study may also highlight the other factors that are essential for the profitability of an organization competing on the international market.

## **LIMITATIONS OF THE STUDY**

- ❖ The result of the study depends upon the information furnished by the employees; hence the information provided is subjected to the personal basis.
- ❖ The study was confined to just one department. So only one department employees were surveyed.
- ❖ Only samples of 100 employees were surveyed.

## **RESEARCH METHODOLOGY**

This chapter presented the research design, study area, study population, sampling procedures, sampling techniques, sources of data, sample size, sources of data, data collection instruments, data collection procedure, data quality control, limitation and delimitations of the study.

## **RESEARCH DESIGN**

A research design is the specification of method and procedure for acquiring the information needed to structure or to solve problem. It is the overall operational pattern of frame work of the project that stipulates procedures.

A research design is therefore defined as “A plan, structure and strategy of investigation conceived so as to obtain answer to research question and control vacancies.”

The study was both Explorative and Descriptive research design.

### **❖ Explorative Research Design**

The design of explorative studies is characterized by a great amount of flexibility and dhow versatility. By definition, the research is involved in investigation an area or subject in which he is not sufficient knowledge to have formulated detailed research question. No clear hypotheses have been developed problem. He is seeking information that will enable him to formulate specific research question or to state hypothesis about the problem.

### **❖ Descriptive Research Design**

Descriptive research is contract to explorative research is marked by the prior formulation of specific research question. The problem, perhaps as a result of an exploratory study, before the project is initiated. He should be able to define clearly what he want to measure and to step appropriate and specific means for measuring it. Descriptive research design includes subways, fact finding and enquiries of different kinds.

This main characterized of this method is that the researcher has no control over the variable. He can only report what has happened or what is happening. Most EX-POST FACTO research projects are used for describe studies in which the research seeks to measure such items. Descriptive researcher will be applicable to the existing problems.

## **Research Area**

This study was conducted at SRI LAKSHMI SARASWATHI TEXTILES Ltd., Ragunathapuram

## **Study Population**

The study population constituted mainly SLST's staff especially those working in the Production and Stores department. According to the Human Resource officer, this population amounts to 500 staff. This population was chosen because it was assumed to have adequate knowledge of the subject under investigation and the research variables under investigation.

## **Sampling Technique**

The researcher employed several techniques to select the appropriate sample for the study. These included both probability and nonprobability sampling techniques in this study a purposive sampling, a non-probability sampling was employed in selecting respondents from the population. This technique enabled the study to give an opportunity to only eligible participants by selecting from each unit within the population of the study. In this case, the researcher ensured that participants from different categories like stores staff, managers and finance department's staff and managers have equal chance to participate.

## **Sampling procedure**

This study employed purposive sampling, cluster sampling and simple random sampling procedures. Purpose sampling was used to identify respondents like the SLST managers who were few and hard to access. Cluster sampling was used to classify the respondents according to the relevant departments like store, production and purchase and dispatch. Then simple random sampling was used to identify respondents in the different clusters thus the production department and stores department.

## Sample Size and Composition

The sample size was 100 respondents of which 50 were production staff, 25 were store staff and 25 were purchase & dispatch of SLST ltd.

Category	Population	Sample Size	Percentage (%)	Method of selection
Production	250	50	50	Purposive
Stores	150	25	25	Cluster and simple random
Purchase & Dispatch	100	25	25	Cluster and simple random
Total	500	100	100	

**Technique** Purposive, Cluster and Simple Random Sampling

## DATA SOURCE:

Data was obtained from both primary and secondary sources

### PRIMARY DATA:

This included the data obtained directly from the respondents including the production, Stores, packing & dispatch department and managers. This data was obtained through interviews, questionnaires and or by observation.

### SECONDARY DATA:

This included the data obtained from written literature and records for example from the organization's finance and cost center records related to materials handling and the profitability of the organization

## **TOOLS FOR DATA COLLECTION:**

### **Questionnaires**

This research used self-administered questionnaires for the respondents. These were distributed among the staff in their respective departments. The justification for using this instrument was that questionnaires were easy to quantify and analyze. In addition, the questionnaires were used because the study focused on opinions, attitudes, feelings and perceptions of the respondents.

### **Percentage Analysis**

Simple percentage analysis is used for analysis of the data that is collected for research work, simple percentages are often used in data presentation for simplify, numbers through the use of percentage, the data are reduce in standard from with base equal to which facilities the relative comparison.

$$\text{Percentage} = \frac{\text{Number of respondents favourable}}{\text{Total number of respondents}} \times 100$$

# **CHAPTER – II**

## **COMPANY PROFILE**



## **CHAPTER – II**

### **COMPANY PROFILE**

SRI LAKSHMI SARASWATHI TEXTILES (ARNI) LTD, a listed company was promoted by late Sri B.Rajagopal, Naidu and his son Sri.R.Srihari. SLST set up its first spinning unit at Raghunathapuram in arni taluk in Thiruvannamalai district in Tamilnadu. Commercial production was commenced in the arni unit in 1966 – 67 with installed capacity of 11,592 spindles and 336 rotors.

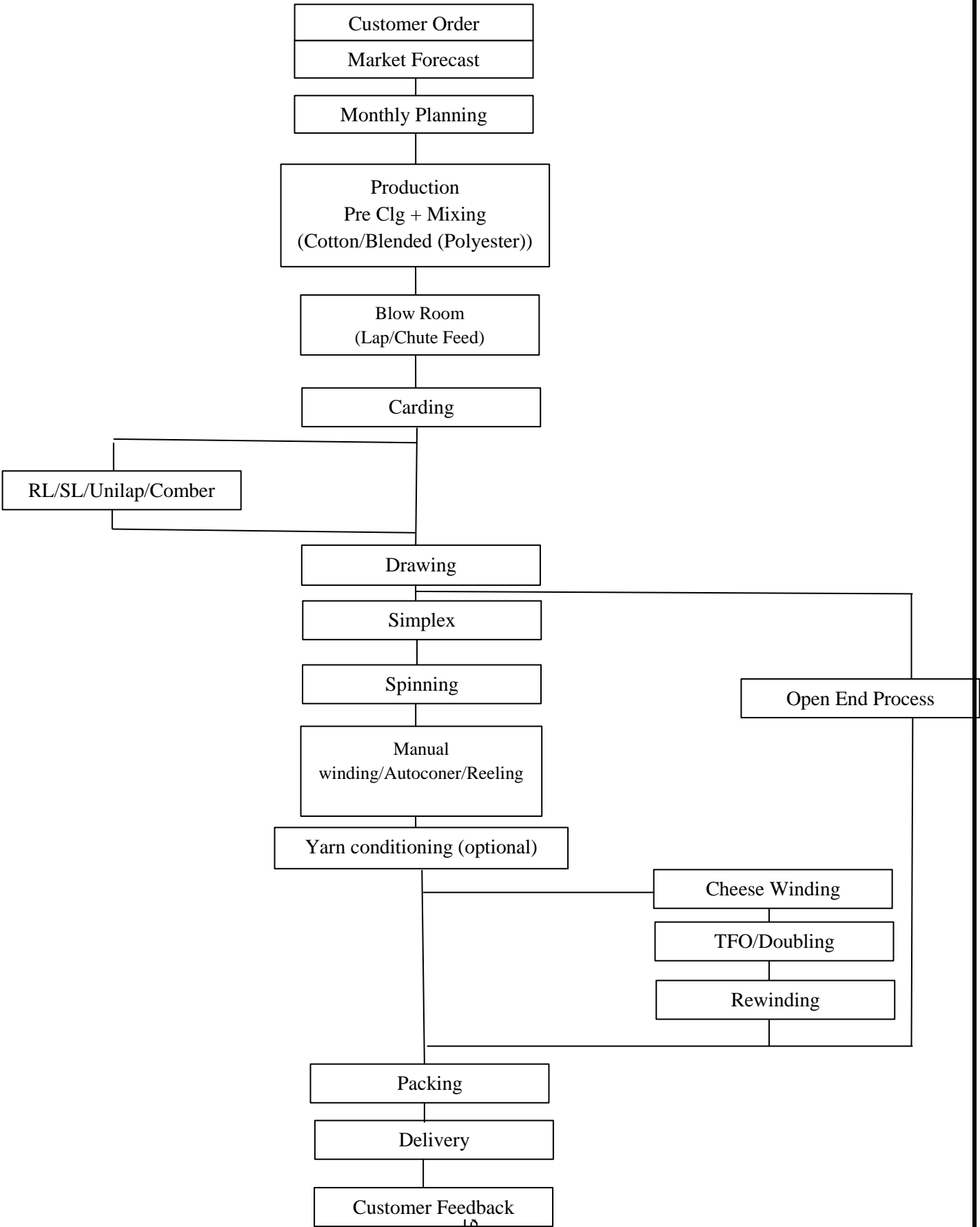
SLST exports about 65% of its production and it is a recognized export House for more than 6 years. SLST exports to various countries like Belgium, Italy, Switzerland, Spain, Portugal, U.S.A, Korea, Israel and Bangladesh. Its product mix consists of all varieties of combed and carded spun cotton yarn, OE cotton yarn and polyester and cotton blended yarn. Its prime counts are combed cotton yarn of 94s, 82s, 74s, 40s, 56s, 60s and 10s OE carded cotton yarn and polyester and cotton blended yarn of 24s, 30s, 36s, 40s, 2/30s and 2/60s.

#### **MODERNISATION:**

SLST is consistently modernizing its spinning its spinning unit. During 2002-03, SLST took up a modernization scheme at an estimated cost of Rs600 lakhs for which IOB has sanctioned two term loans aggregating Rs.450 lakhs under Technology Up gradation Fund Scheme (TUFS). This proposal envisaged addition of 3 Numbers Schalfhorst Auto cones, 2Nos. Reiter Auto leveler draw frames, 1 No, Reiter comers, 9 Nos. TFO Machines and one Yarn conditioning plant. Since this scheme was completed in 2003-04 full benefit of this modernization is realized from that year onwards. We have Implemented ISO 9001:2000 Quality Management System and our company has accredited as ISO 9001:2000 companies by BVQI, UK.

Installed Additional Auto cones 3 Numbers for a 100% Auto coned facility and Vital Scan in “B” unit. As a part of cost minimization we have started VRS and a part is completed and for renaming it is under progress. We also had a joint venture with M/s MMS Steel and Power P ltd for Gas Turbine Unit at Narimanam, Nagapattinam District for Purchasing Electrical Power at reduced cost. For Harnessing Non-Conventional Energy, we have installed one wind Mill 1.25 MW at Tirunelveli District. As a part of developing new products, we have developed Industrial yarn of High RKM and PIMA variety caters to value addition.

Production Process Flow Chart:



Sri Lakshmi Saraswathi Textiles (Arni) limited was started in 1967 with installed capacity of 11,592 spindles spinning carded yarn. The factory is located 100 miles away from Chennai. The nearest port is Chennai. This industry has gone the latest machine like Lakshmi Reiter Blow room with aero feed and user '2' control. Packing is done in sea worthily cartons and T.F.O as well as Doubles.

This industry is having latest equipment for testing. It will be able to maintain a high quality to the almost satisfaction of its customers. SLST have its own capture power plant to the needs of power required. Having employees about 1000 workers, providing houses, medical benefit scheme, gratuity scheme, training programmers etc.,

Capital investments are being made every year, and this dedication to modernization enables them to produce high quality yarn. SLST's yarn is being exported to various textile counters worldwide and knitted/woven into high fashion fabrics. SLST's present turnover exceeds more than ₹ 28.00cr. They are spinners of repute and consistence in quality is their goal. The company has three shifts: - shift 1 – 7 am to 3:30 pm, shift 2 – 3:30 pm to 12:00 am, shift 3 – 12:00 am to 7:00 am. Shift 1 considered as general shift.

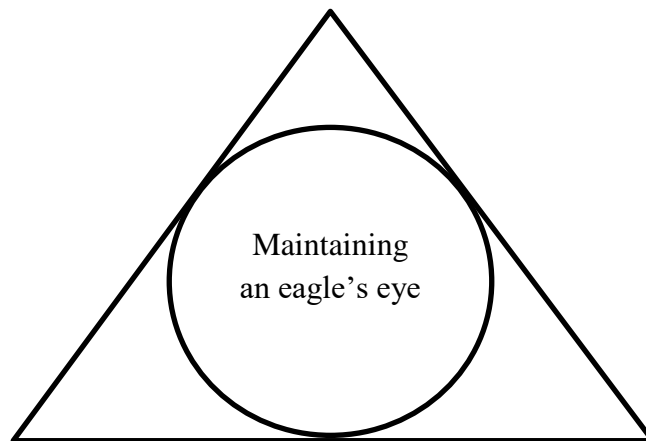
## **ACHIEVEMENT OF THE COMPANY**



Textiles markets, world over are rapidly changing. The need for quality yarn is becoming indispensable one that can meet international standards. And at the same time cater to specific

requirements of a constantly changing world. Sri Lakshmi Sarasvathi Textiles Ltd., has been manufacturing quality yarn for over 26 years. SLST first made its mark by producing top of the line cotton carded yarn.

Today in a world driven by competition, SLST is driven by quality and fired by excellence. It has today emerged, among the leaders in the manufacture of yarn. From an installed capacity of 11,500 spindles SLST now possesses over 60,000 spindles. This has been possible because of SLST's dedication and determination to producing quality yarn.



When quality becomes the buzz word it pays to dedicate, oneself to meet the rigorous standards set by the domestic and international textile industry. At SLST, right from selection of raw materials to the finished product, a skilled quality control team monitors every stop, both manually and mechanically, to ensure the best result.

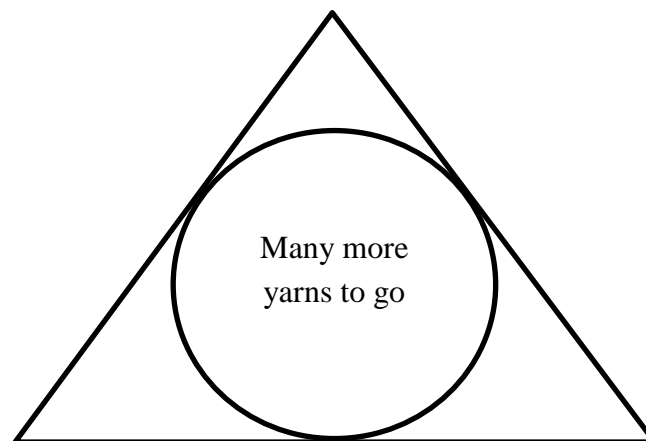
Probably why SLST is yarns ahead, in producing different and distinct kinds of yarn, to meet stringent requirements. Keeping abreast of changes and adapting to these changes has SLST surge ahead in an increasingly competitive world. Changes that has earned SLST an enviable reputation. For giving the customer what he desires and satisfying him, to the extent, that he keeps coming back. At the same time providing the customer with quality yarn at competitive prices.

It is this single minded pursuit OF high standards that has propelled SLST to the forefront. And possess a razor's edge over others. At SLST infrastructure continues to play a dominate role in its progress to the top. SLST today has under its wing a state of the art tab computerized online

systems, and the most advanced Reiter- designed machinery, 2 for 1 twistors, schlathorst 238 & 338 auto corners and Reiter Auto levelers on draw frames and overhead cleaners on all ring frames. And a humidification department to ensure specific atmospheric conditions.

And together with some of the latest testing equipment, SLST is today a force reckon with in the manufacture of quality yarn. Quality coupled with fantastic performance and world class products has won SLST accolades from all quarters. A reflection, that if a product goes through the grind, the results are obvious. A constantly burgeoning clientele in practically every corner of the world.

At SLST, the biggest strength is its people, an efficient team of professionals, drawn from various, quarters, each, skilled, talented and enterprising. Dedicated and devoted to the he has been set to do. It is this that has witnessed SLST traversing new frontiers in the manufacture of quality yarn. And probably why it is a tremendous success story today.



Twenty five years of existence. And twenty five years of phenomenal achievements. One that has come with a lot of struggle. To take on challenges. To channel resources. To contribute to the world effectively. And make the world a better place to live in. there is more to be done more to be achieved. The future has never looked so bright.

# **CHAPTER-III**

## **REVIEW OF LITERATURE**

## **CHAPTER-III**

### **REVIEW OF LITERATURE**

This chapter reviewed the literature written by other scholars concerning the topic of study. The literature review focused on the relationship between materials handling and the profitability of an organization; the types of materials handling systems; and the challenges to the profitability of organization.

According to Ondiek (2009) materials handling refers to the process of moving, controlling, protecting as well as storing materials such as goods, items, etc. for manufacture, disposal, and distribution or even for consumption. This process is very crucial because all the materials should be handled well in order to keep it safe, to reach its destination safely and to maintain their quality and condition. In other words, good materials handling is important. Good materials handling is important because it will help you:

According to Zanto (2008) Materials handling eliminates accidents. If good materials handling is applied, accidents can be prevented and eliminated as this means proper and careful handling is performed. This enhances the profitability of an organization in a sense that its workforce shall attain optimum output and the organization shall not incur expenses on compensating the injured employees since accidents are eliminated (Johnson, 1993)

According to Okpara (2008) materials handling reduces stress and effort. Through good materials handling, stress and effort can be minimized. If you are handling materials the right away and you are eliminating all the factors that would make material handling a risky and challenging such as a non-functional equipment, ineffective workers, etc., then materials handling would be a stress-free process. This will enable the management of the organization to shift their focus on the more pressing needs and objectives of the organization especially its profitability (Adeloye, 2010).

Effective materials handling minimizes time spent on distribution, storage, etc. If you are applying good materials handling, then you are definitely making storage, manufacture, distribution, or consumption of materials and goods less time-consuming.

This is because good materials handling means applying solutions that can help make this process quick and easy (Rihinde, 2008).

According to Johnson (1993) materials handling eliminates redundant work. If there is good material handling, there is no need for you to utilize redundant workers that will only take time and cost extra expenses. When you apply good materials handling, you are also saving money since you are not jeopardizing the quality and condition of the products as well as you are no longer spending a lot to pay extra workers just to ensure that the materials or product are handled well. Cost reduction directly has an impact on the productivity of the organization (Guinea, 2012). Jacobs et al. (2009) emphasizes that there are two essential things needed to apply good materials handling. Expert material handlers; If you are manually handling materials and products for distribution, storage, etc. this refers to utilizing workers who will serve as material handlers. They are the ones who are going to store, distribute, etc. all the goods to their proper destinations. To ensure good material handling, you need effective material handlers who are really trained and excellent when it comes to the task they are to perform. This will ensure you that they are going to perform materials handling well for the safety of other workers and the products (Lyson, 2006).

Materials handling is not a joke. This is especially true if the materials you are moving or storing are larger materials. This process can be the cause of many warehouse accidents and have earned most companies a lot of workers compensation lawsuits already. For this reason, if you want to save yourself from these lawsuits and prevent tragedies inside the warehouse, make sure that you are applying good materials handling process by hiring expert workers and buying efficient storage systems (Lyson, 2006). Therefore for a serious profit oriented organization, materials handling cannot be compromised.

Material handling equipment is mechanical equipment used for the movement, storage, control and protection of materials, goods and products throughout the process of manufacturing, distribution, consumption and disposal. The different types of handling equipment can be classified into four major categories: transport equipment, positioning equipment, unit load formation equipment, and storage equipment (Ondiek, et al 2009).

According to Johnson 2003, transport equipment is used to move material from one location to another (e.g., between workplaces, between a loading dock and a storage area, etc.), while positioning equipment is used to manipulate material at a single location. The major



Sub categories of transport equipment are conveyors, cranes, and industrial trucks. Material can also be transported manually using no equipment.

Conveyors are used when material is to be moved frequently between specific points over a fixed path and when there is a sufficient flow volume to justify the fixed conveyor investment (Okpara, 2008). According to Lyson (2006), there are different types of conveyors can be characterized by the type of product being handled: unit load or bulk load; the conveyor's location: in-floor, on-floor, or overhead, and whether or not loads can accumulate on the conveyor. Accumulation allows intermittent movement of each unit of material transported along the conveyor, while all units move simultaneously on conveyors without accumulation capability. For example, while both the roller and flat-belt are unit-load on-floor conveyors, the roller provides accumulation capability while the flat-belt does not; similarly, both the power-and-free and trolley are unit-load overhead conveyors, with the power-and-free designed to include an extra track in order to provide the accumulation capability lacking in the trolley conveyor (Zantio, 2008). Examples of bulk-handling conveyors include the magnetic-belt, troughed-belt, bucket, and screw conveyors. A sortation conveyor system is used for merging, identifying, inducting, and separating products to be conveyed to specific destinations, and typically consists of flat-belt, roller, and chute conveyor segments together with various moveable arms and/or pop-up wheels and chains that deflect, push, or pull products to different destinations (Adeloye, 2010).

According to Jacobs et al (2009) cranes are used to transport loads over variable (horizontal and vertical) paths within a restricted area and when there is insufficient (or intermittent) flow volume such that the use of a conveyor cannot be justified. Cranes provide more flexibility in movement than conveyors because the loads handled can be more varied with respect to their shape and weight.

Cranes provide less flexibility in movement than industrial trucks because they only can operate within a restricted area, though some can operate on a portable base. Most cranes utilize trolley-and-tracks for horizontal movement and hoists for vertical movement, although manipulators can be used if precise positioning of the load is required. The most common cranes include the jib, bridge, gantry, and stacker cranes (Okpara, 2008).

According to Ademeyi (2010) industrial trucks are trucks that are not licensed to travel on public roads (commercial trucks are licensed to travel on public roads). Industrial trucks are used

to move materials over variable paths and when there is insufficient (or intermittent) flow volume such that the use of a conveyor cannot be justified.

They provide more flexibility in movement than conveyors and cranes because there are no restrictions on the area covered, and they provide vertical movement if the truck has lifting capabilities. Different types of industrial trucks can be characterized by whether or not they have forks for handling pallets, provide powered or require manual lifting and travel capabilities, allow the operator to ride on the truck or require that the operator walk with the truck during travel, provide load stacking capability, and whether or not they can operate in narrow aisles (Ondiek, et al 2009).

According to (Marta, 2008) hand trucks (including carts and dollies), the simplest type of industrial truck, cannot transport or stack pallets, is non-powered, and requires the operator to walk. A pallet jack, which cannot stack a pallet, uses front wheels mounted inside the end of forks that extend to the floor as the pallet is only lifted enough to clear the floor for subsequent travel. A counterbalanced lift truck (sometimes referred to as a forklift truck, but other attachments besides forks can be used) can transport and stack pallets and allows the operator to ride on the truck. The weight of the vehicle (and operator) behind the front wheels of truck counterbalances weight of the load (and weight of vehicle beyond front wheels); the front wheels act as a fulcrum or pivot point. Narrow-aisle trucks usually require that the operator stand-up while riding in order to reduce the truck's turning radius. Reach mechanisms and outrigger arms that straddle and support a load can be used in addition to the just the counterbalance of the truck (Oba, 2008).

On a turret truck, the forks rotate during stacking, eliminating the need for the truck itself to turn in narrow aisles. An order picker allows the operator to be lifted with the load to allow for less-than-pallet-load picking. Automated guided vehicles (AGVs) are industrial trucks that can transport loads without requiring a human operator (Marta, 2008).

Positioning equipment is used to handle material at a single location. It can be used at a workplace to feed, orient, load/unload, or otherwise manipulate materials so that are in the correct position for subsequent handling, machining, transport, or storage (Lee, et al. 2007). As compared to manual handling, the use of positioning equipment can raise the productivity of each worker when the frequency of handling is high, improve product quality and limit damage to materials and equipment when the item handled is heavy or awkward to hold and damage is likely through

human error or inattention, and can reduce fatigue and injuries when the environment is hazardous or inaccessible.

In many cases, positioning equipment is required for and can be justified by the ergonomic requirements of a task (Lee, et al. 2007). Examples of positioning equipment include lift/tilt/turn tables, hoists, balancers, manipulators, and industrial robots. Manipulators act as “muscle multipliers” by counterbalancing the weight of a load so that an operator lifts only a small portion (1%) of the load’s weight, and they fill the gap between hoists and industrial robots: they can be used for a wider range of positioning tasks than hoists and are more flexible than industrial robots due to their use of manual control. They can be powered manually, electrically, or pneumatically, and a manipulator’s end-effector can be equipped with mechanical grippers, vacuum grippers, electromechanical grippers, or other tooling (Hormby, 2005).

According to Hormby (2005) unit load formation equipment is used to restrict materials so that they maintain their integrity when handled a single load during transport and for storage. If materials are self-restraining (e.g., a single part or interlocking parts), then they can be formed into a unit load with no equipment. Examples of unit load formation equipment include pallets, skids, slipsheets, tote pans, bins/baskets, cartons, bags, and crates. A pallet is a platform made of wood (the most common), paper, plastic, rubber, or metal with enough clearance beneath its top surface (or face) to enable the insertion of forks for subsequent lifting purposes.

A slipsheet is a thick piece of paper, corrugated fiber, or plastic upon which a load is placed and has tabs that can be grabbed by special push/pull lift truck attachments. They are used in place of a pallet to reduce weight and volume, but loading/unloading is slower (Lee et al. 2007).

According to Hines (2004) storage equipment is used for holding or buffering materials over a period of time. The design of each type of storage equipment, along with its use in warehouse design, represents a trade-off between minimizing handling costs, by making material easily accessible, and maximizing the utilization of space (or cube). If materials are stacked directly on the floor, then no storage equipment is required, but, on average, each different item in storage will have a stack only half full; to increase cube utilization, storage racks can be used to allow multiple stacks of different items to occupy the same floor space at different levels. Jacobs et al (2009) says that the use of racks becomes preferable to floor storage as the number of

units per item requiring storage decreases. Similarly, the depth at which units of an item are stored affects cube utilization in proportion to the number of units per item requiring storage.

Pallets can be stored using single- and double-deep racks when the number of units per item is small, while pallet-flow and push-back racks are used when the units per item are mid-range, and floor-storage or drive-in racks are used when the number of units per item is large, with drive-in providing support for pallet loads that cannot be stacked on top of each other (Guinea, 2012). Individual cartons can either be picked from pallet loads or can be stored in carton-flow racks, which are designed to allow first-in, first-out (FIFO) carton access. For individual piece storage, bin shelving, storage drawers, carousels, and A-frames can be used. An automatic storage/retrieval system (AS/RS) is an integrated computer-controlled storage system that combines storage medium, transport mechanism, and controls with various levels of automation for fast and accurate random storage of products and materials (Zanto, 2008)

According to (Hines, 2004) If a firm has monopoly power then it has little competition, therefore demand will be more inelastic. This enables the firm to increase profits by increasing the price. For example, very profitable firms, such as Google and Microsoft have developed a degree of monopoly power, with limited competition (Lee et al 2007). However, in theory, government regulation may prevent monopolies abusing their power e.g. the OFT can stop firms colluding (to increase price) Regulators like OFGEM can limit the prices of gas and electricity firms. If the market is very competitive then profit will be lower. This is because consumers would only buy from the cheapest firms. Also important is the idea of contestability. Market contestability is how easy it is for new firms to enter the market. If entry is easy then firms will always face the threat of competition; even if it is just “hit and run competition” – this will reduce profits (Lyson, 2006).

For example demand will be high if the product is fashionable, e.g. mobile phone companies were profitable during the period of rising demand and growth in the market. Products which have falling demand like Spam (tinned meat) will lead to low profit for the company. Some companies, like Apple have successfully carved out strong brand loyalty making customers demand many of the new Apple products (Johnson, 2003). However in recent years profits for mobile phone companies have fallen because the high profit encouraged over supply, negating the increase in demand..

Marta (2008) stresses that if there is economic growth then there will be increased demand for most products especially luxury products with a high income elasticity of demand. For example manufacturers of luxury sports cars will benefit from economic growth but will suffer in times of recession.

According to Adeloye (2008) a successful advertising campaign can increase demand and make the product more inelastic demand, however the increased revenue will need to cover the costs of the advertising. Sometimes the best methods are word of mouth. For example it was not necessary for YouTube to do much advertising.

Oba (2008) says that if there are many substitutes or substitutes are expensive then demand for the product will be higher. Similarly complementary goods will be important for the profits of a company. Rational customers shall opt for a substitute which offers the same satisfaction to the yet at a lower price. Therefore a company with Relative costs.

According to Johnson (2003) an increase in costs will decrease profits, this could include labor costs, raw material costs and cost of rent. For example a devaluation of the exchange rate would increase cost of imports therefore companies who imported raw materials would face an increase in costs. Alternatively if the firm is able to increase productivity by improving technology then profits should increase. If a firm imports raw materials the exchange rate will be important. A depreciation making imports more expensive. However depreciation of the exchange rate is good for exporters who will become more competitive (Zanto, 2008).

A firm with high fixed costs will need to produce a lot to benefit from economies of scale and produce on the minimum efficient scale, otherwise average costs will be too high. For example in the steel industry we have seen a lot of rationalization where medium sized firms have lost their competitiveness and had to merger with others (Okpara, 2008).

Ademeyi et al (2010) if a firm is not dynamically efficient then overtime costs will increase. For example state monopolies often had little incentive to cut costs, e.g. get rid of surplus labour. Therefore before privatization they made little profit, however with the workings and incentives of the market they became more efficient leading to higher profitability.

# **CHAPTER IV**

## **DATA ANALYSIS AND INTERPRETATION**

**CHAPTER IV**  
**DATA ANALYSIS AND INTERPRETATION**

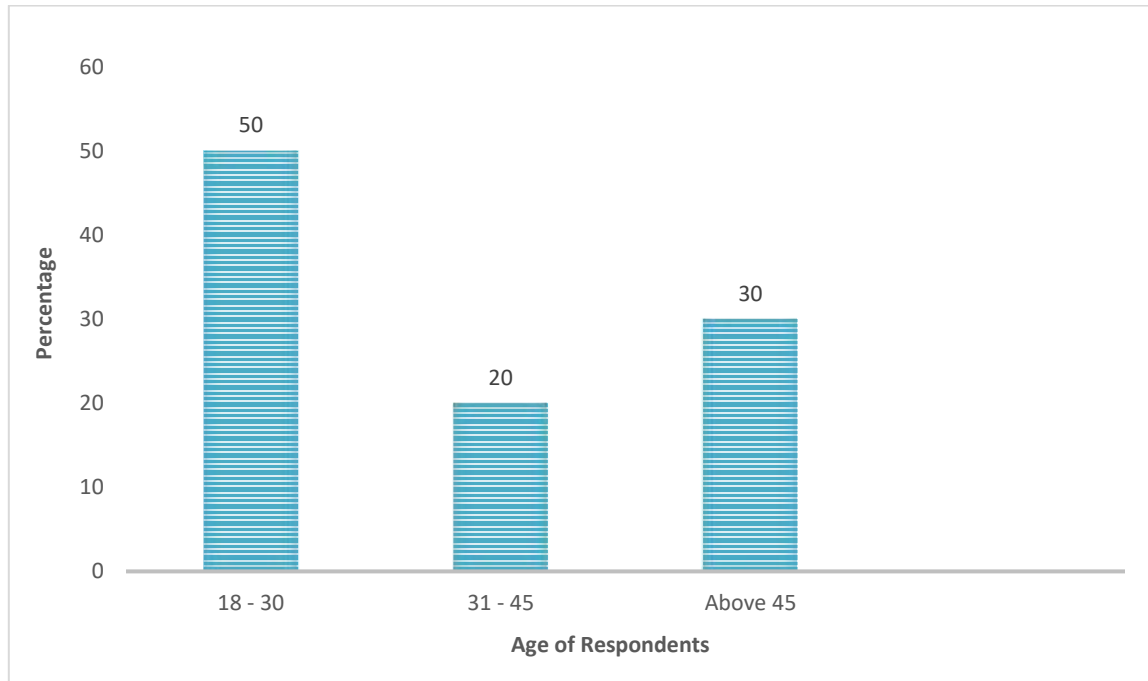
**TABLE 4.1**  
**AGE OF THE RESPONDENTS**

<b>SL. NO</b>	<b>AGE GROUP</b>	<b>RESPONDENTS OPINION</b>	<b>PERCENTAGE (%)</b>
1	18 – 30	50	50
2	31-45	20	20
3	Above 45	30	30
	<b>Total</b>	<b>100</b>	<b>100</b>

**INFERENCE:**

The findings in the table 4.1 above show that 50 (50%) of the sample were in the age bracket of 18 – 30 years, 20 (20%) in the age bracket of 31 – 45 and 30 (30%) in the age bracket of 45 years and above. This implies that most of the employees of SLST Ltd were in the age bracket of 31 – 45 years.

**CHART 4.1**  
**AGE GROUP OF THE RESPONDENT**





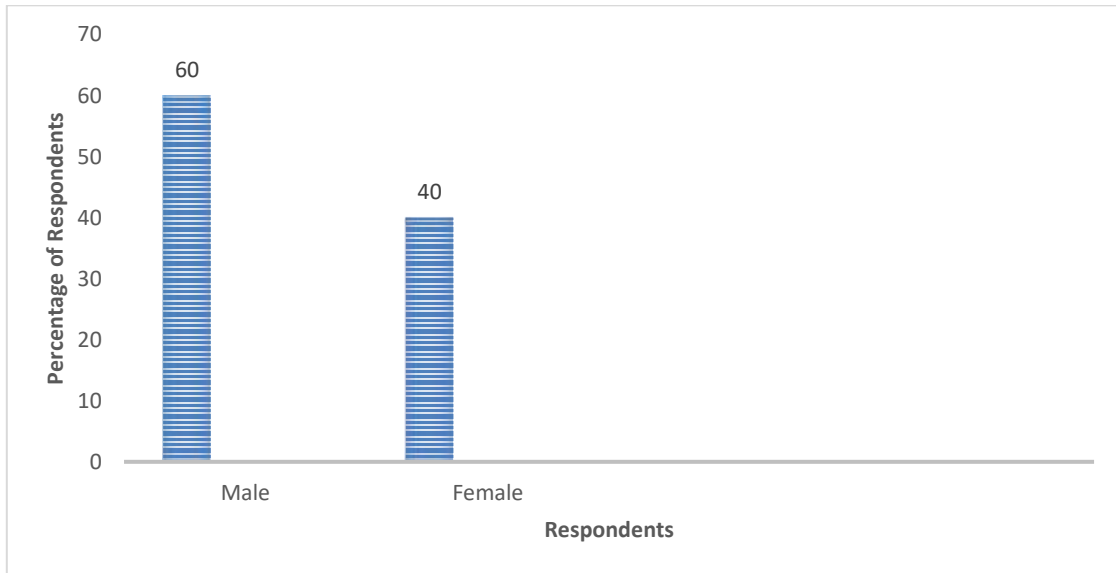
**TABLE 4.2**  
**GENDER OF THE RESPONDENTS**

<b>SL. NO.</b>	<b>RESPONDENTS GENDER</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
1	Male	60	60
2	Female	40	40
	<b>Total</b>	<b>100</b>	<b>100</b>

**INFERENCE:**

From table 4.2 above, response indicated that the majority of respondents were male who accounted for 60 (60%) and female respondents accounted for 40 (40%). This implies there is a marginal majority of males over the females among the staff of SLST Ltd.

**CHART 4.2**  
**GENDER OF THE RESPONDENTS**



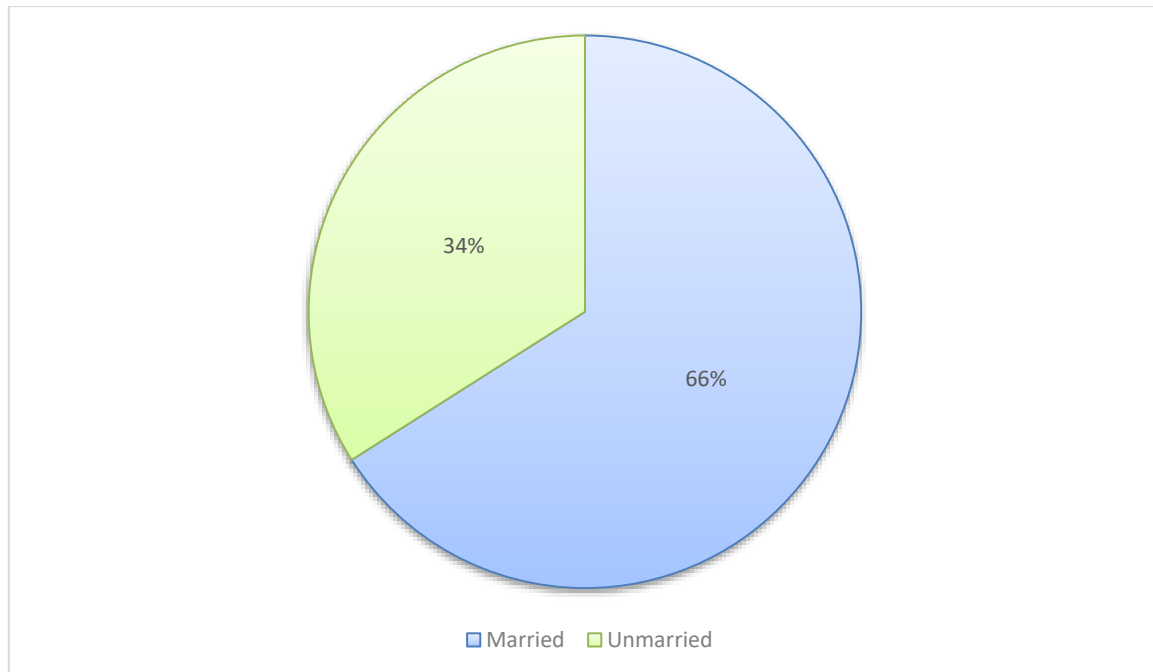
**TABLE 4.3**  
**MARITAL STATUS OF THE RESPONDENTS**

<b>S.NO</b>	<b>GENDER</b>	<b>NO. OF RESPONDENT</b>	<b>PERCENTAGE</b>
1	Married	66	66 %
2	Unmarried	34	34 %
	<b>Total</b>	<b>100</b>	<b>100 %</b>

**INFERENCE:**

From table 4.2 above, response indicated that the majority of respondents were married who accounted for 66 (66%) and unmarried respondents accounted for 34 (34%). This implies there is a marginal majority of males over the females among the staff of SLST Ltd.

**CHART 4.3**  
**MARITAL STATUS OF THE RESPONDENTS**



**TABLE 4.4**  
**EXPERIENCE OF THE RESPONDENTS**

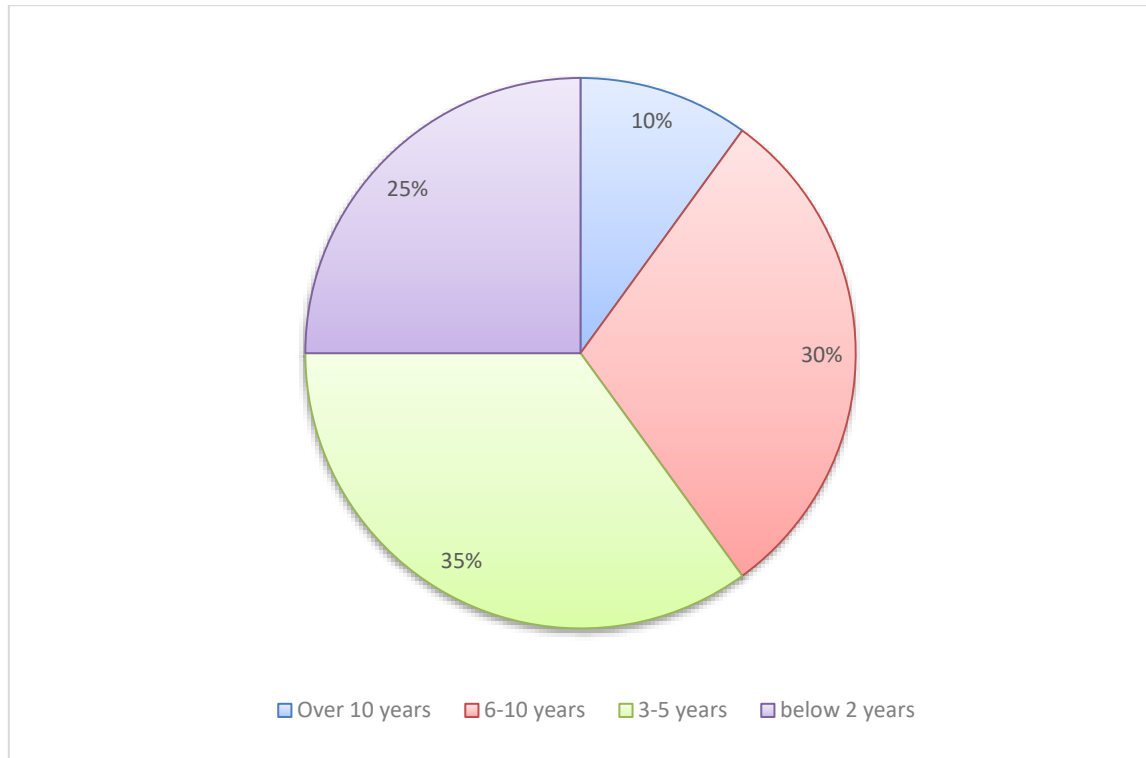
<b>Sl. No</b>	<b>RESPONDENTS EXPERIENCE</b>	<b>NO.OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Over 10 yrs.	10	10%
2	6 – 10 yrs.	30	30%
3	3 – 5 yrs.	35	35%
4	Less than 2 yrs.	25	25%
	<b>Total</b>	<b>100</b>	<b>100</b>

**INFERENCE:**

From the above Table 4.4 shows that 10 (10%) of the respondents had spent over 10 years and 30 (75%) had spent between 6 - 10 years working in SLST Ltd, 35 (10%) had worked with SLST Ltd for 3 – 5 years and 25 (5%) had been in SLST Ltd for less than 2 years.

## CHART 4.4

### WORKING EXPERIENCE OF THE RESPONDENTS



**TABLE 4.5**  
**EDUCATION QUALIFICATION**

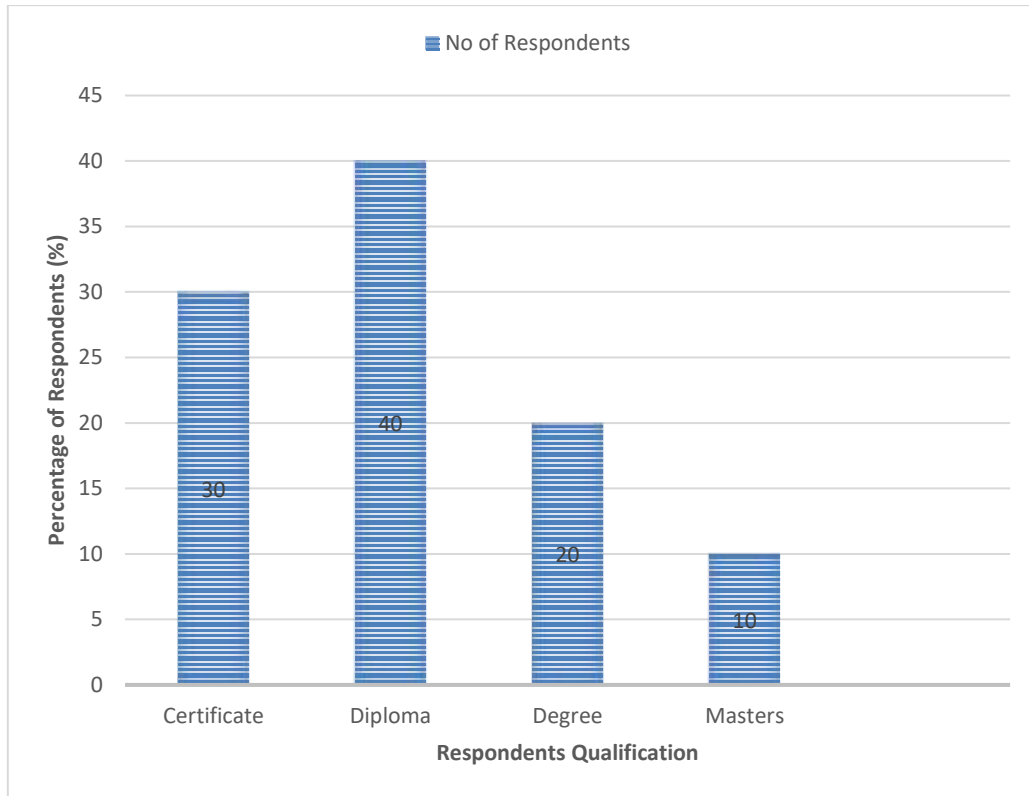
<b>Sl. No</b>	<b>RESPONDENTS QUALIFICATION</b>	<b>NO.OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
1	Certificate	30	30
2	Diploma	40	40
3	Bachelor's Degree	20	20
4	Masters	10	10
	<b>Total</b>	<b>100</b>	<b>100</b>

**INFERENCE:**

From the above table 4.5, it can be observed that 30 (30%) of the sample were certificate holders, 40 (40%) were Diploma holders, 20 (20%) were Bachelor's degree graduates and lastly 10 (10%) were Masters Holders.

**CHART 4.5**

**EDUCATION LEVEL OF THE RESPONDENTS**





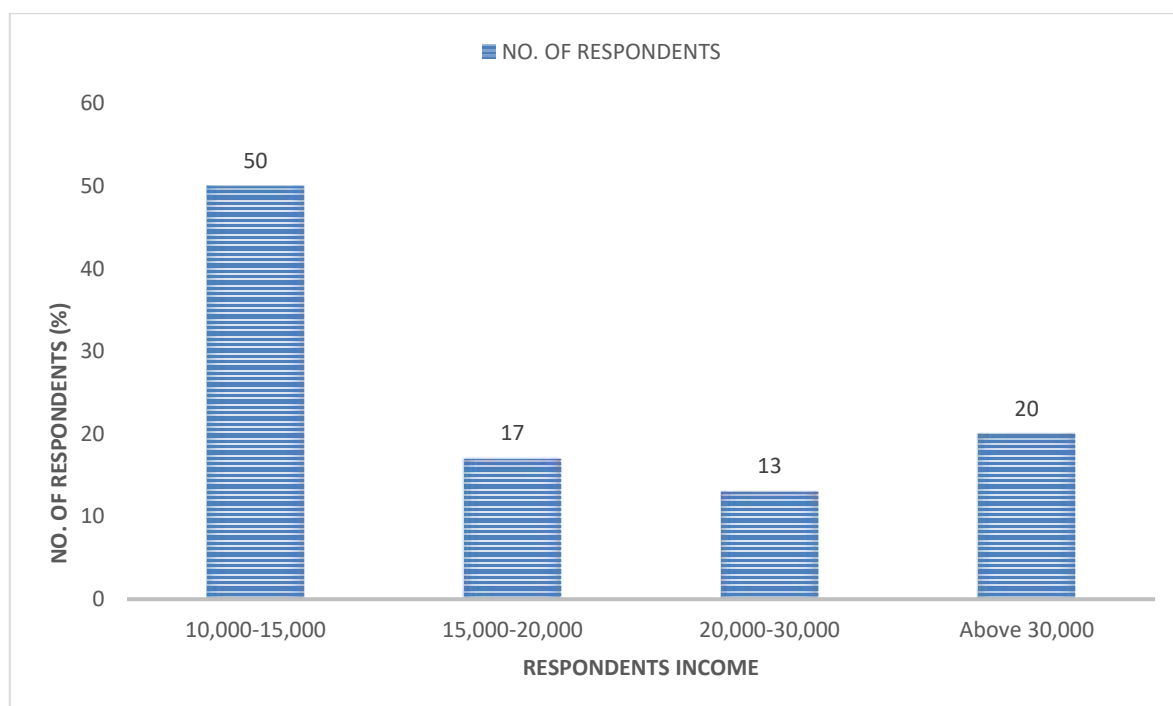
**TABLE 4.6**  
**LEVEL OF INCOME**

<b>S.NO</b>	<b>RESPONDENTS INCOME</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	10,000-15,000	50	50%
2	15,000-20,000	17	17%
3	20,000-30,000	13	13%
4	Above 30,000	20	20%
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

The above table reveals that 50% of respondents are 10,000-15,000 employees income, 20% respondents are above 30,000 employees income, 17% of respondents are 15,000-20,000 employees income, 13% of respondents are 20,000-30,000 employees income.

**CHART 4.6**  
**LEVEL OF INCOME**



**TABLE 4.7**  
**MATERIAL HANDLING FACILITATES A SHORTER OPERATING CYCLE**

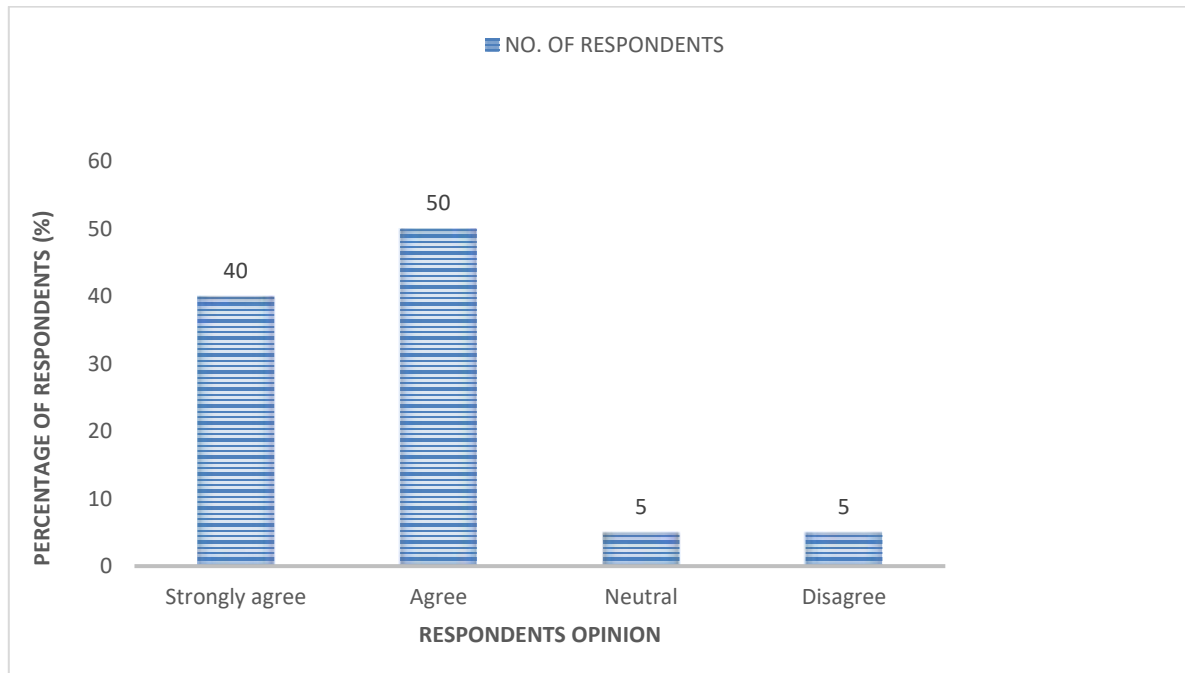
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	40	40%
2	Agree	50	50%
3	Neutral	05	05%
4	Disagree	05	05%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the table 4.7, it can be observed that 40 (40%) of the respondents strongly agreed to the fact that material handling facilitates a shorter operating cycle, 50 (50%) agreed, 05 (05%) were not sure and 05 (5%) disagreed.

**CHART 4.7**

**MATERIAL HANDLING FACILITATES A SHORTER OPERATING CYCLE**



**TABLE 4.8**

**MATERIAL HANDLING REDUCES IN HANDLING COST**

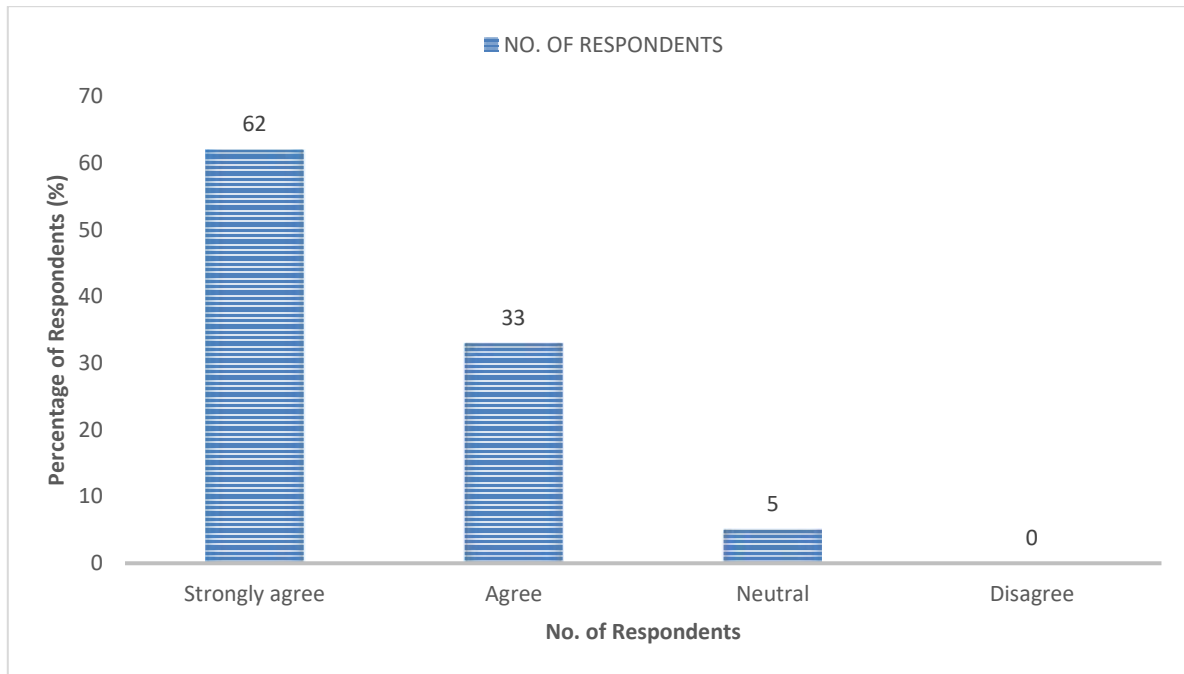
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	62	62%
2	Agree	33	33%
3	Neutral	05	05%
4	Disagree	-	-
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the above table 4.8. 62% of respondents are strongly agreed to the assertion that material handling reduces on handling costs, 33% agreed and 5% were not sure.

**CHART 4.8**

**MATERIAL HANDLING REDUCES IN HANDLING COST**



**TABLE 4.9**

**MATERIAL HANDLING ELIMINATES UNPRODUCTIVE HANDLING  
OF MATERIALS**

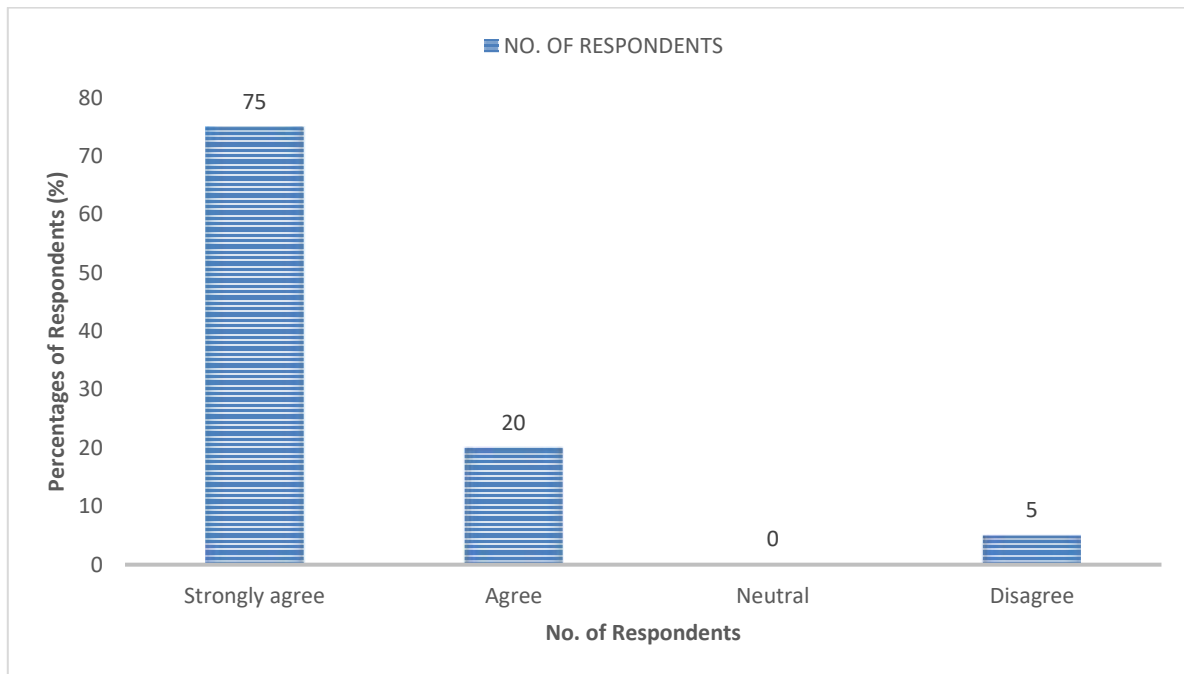
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	75	75%
2	Agree	20	20%
3	Neutral	-	-
4	Disagree	05	05%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the above table 4.9 it can also be observed that 75% of the sample strongly agreed that material handling eliminates unproductive handling of materials, 20% agreed to the assertion and 5% were disagreed.

**CHART 4.9**

**MATERIAL HANDLING ELIMINATES UNPRODUCTIVE HANDLING  
OF MATERIALS**





**TABLE 4.10**

**MATERIAL HANDLING REDUCES IDLE MACHINE CAPACITY**

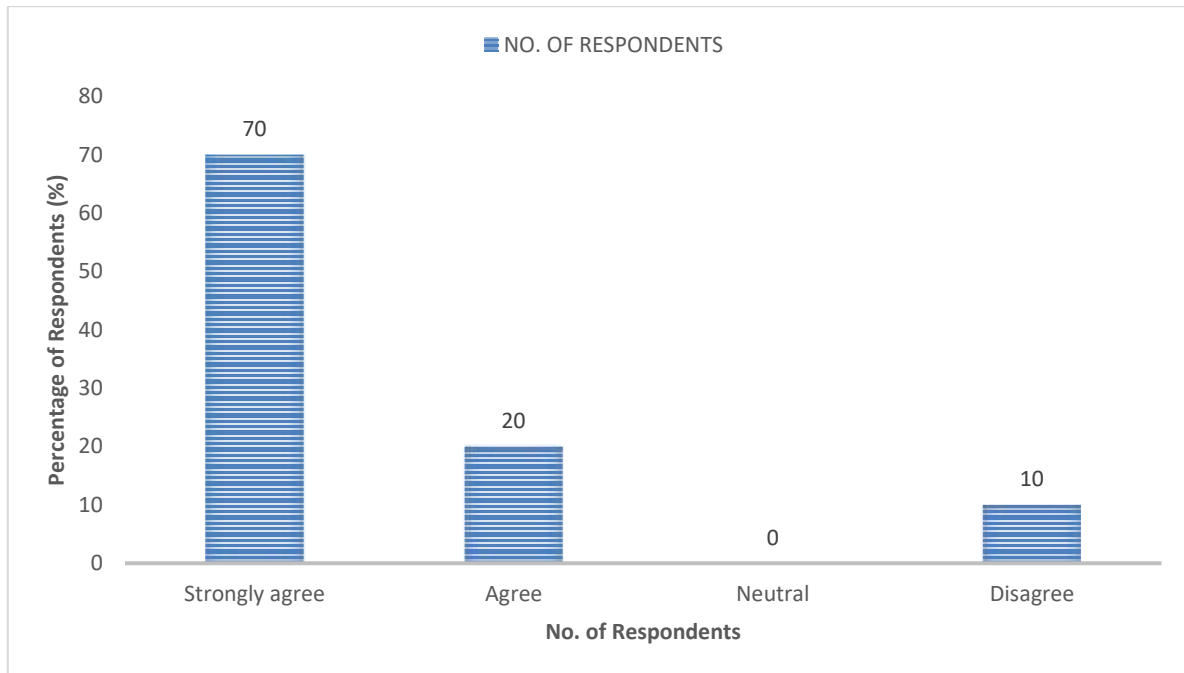
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	70	70%
2	Agree	20	20%
3	Neutral	-	-
4	Disagree	10	10%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the above table 4.10, 70% strongly agreed that materials handling reduces idle machine capacity, 20% agreed while 10% disagreed to the assertion. This implies that indeed materials handling reduces idle machine capacity.

**CHART 4.10**

**MATERIAL HANDLING REDUCES IDLE MACHINE CAPACITY**



**TABLE 4.11**

**MATERIAL HANDLING REDUCES IDLE TIME FOR LABOUR**

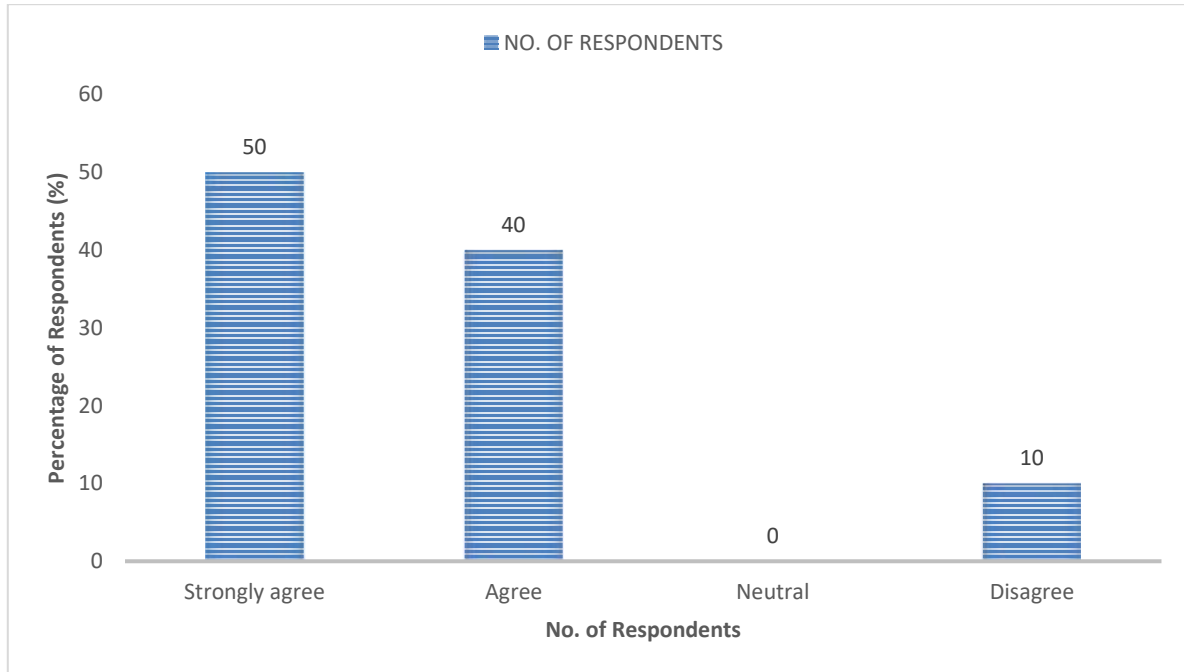
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	50	50%
2	Agree	40	40%
3	Neutral	-	-
4	Disagree	10	10%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the above table 50% of the sample strongly agreed that material handling reduces idle time for labor, 40% agreed to the assertion and 10% disagreed to the assertion. It can conclusively be stated that material handling reduces idle time for labor.

**CHART 4.11**

**MATERIAL HANDLING REDUCES IDLE TIME FOR LABOUR**



**TABLE 4.12**

**MATERIAL HANDLING ELIMINATES FACTORY HAZARDS**

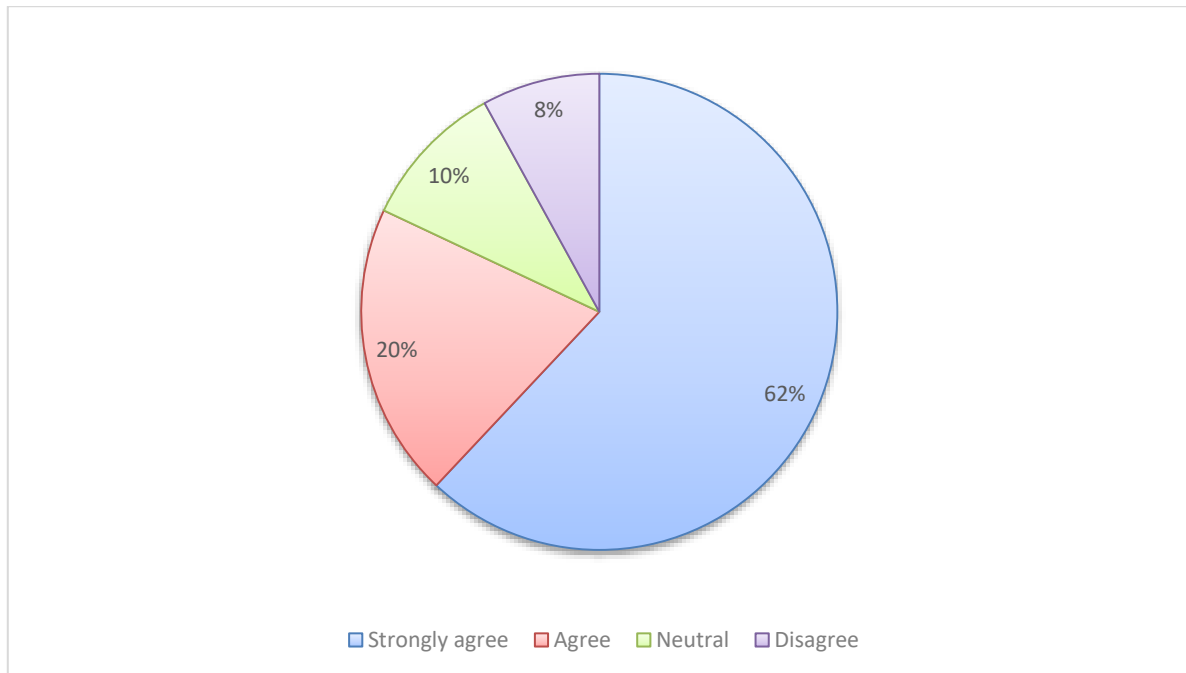
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	62	62%
2	Agree	20	20%
3	Neutral	10	10%
4	Disagree	08	08%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

Therefore from the above table 4.12, 62% strongly agreed that materials handling eliminates factory hazards, 20%, 10% were not sure and 8% disagreed. It can therefore be stated that materials handling eliminates factory hazards.

**CHART 4.12**

**MATERIAL HANDLING ELIMINATES FACTORY HAZARDS**



**TABLE 4.13**

**MATERIAL HANDLING MAINTAINS QUALITY OF MATERIALS**

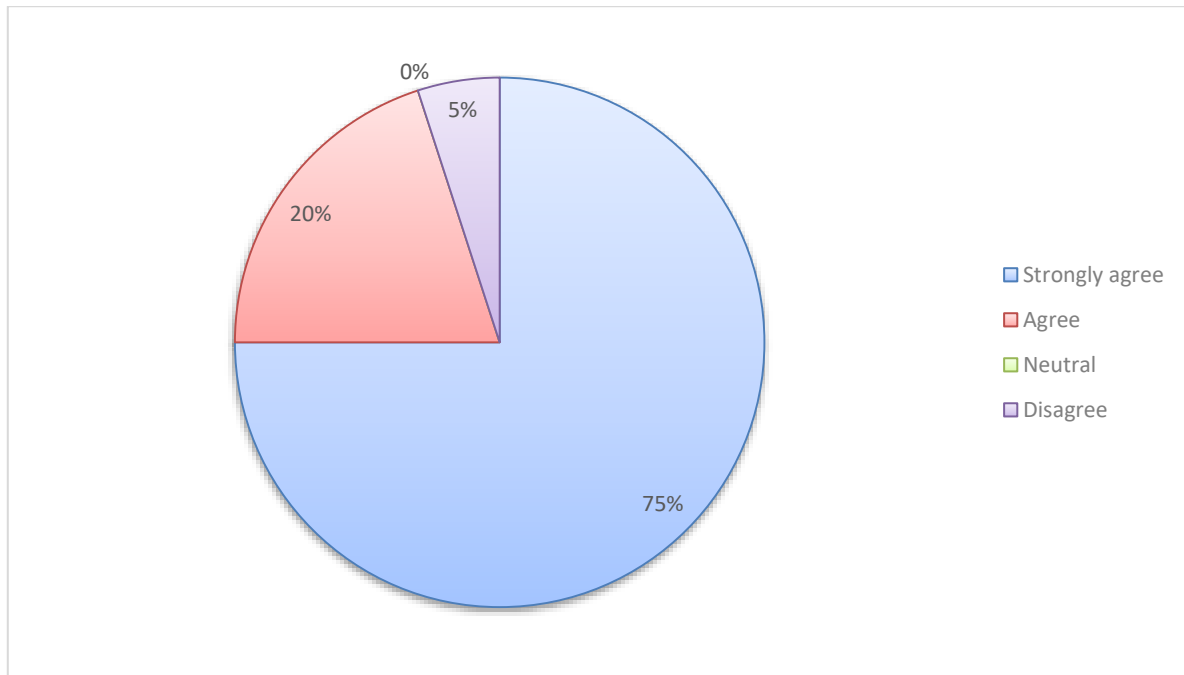
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	75	75%
2	Agree	20	20%
3	Neutral	-	-
4	Disagree	05	05%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the above table 4.13, 75% of the respondents strongly agreed that material handling maintains quality of materials. 20% agreed and 5% disagreed to the assertion.

**CHART 4.13**

**MATERIAL HANDLING MAINTAINS QUALITY OF MATERIALS**





**TABLE 4.14**

**MATERIAL HANDLING ENABLES OPTIMUM USAGE OF SPACE**

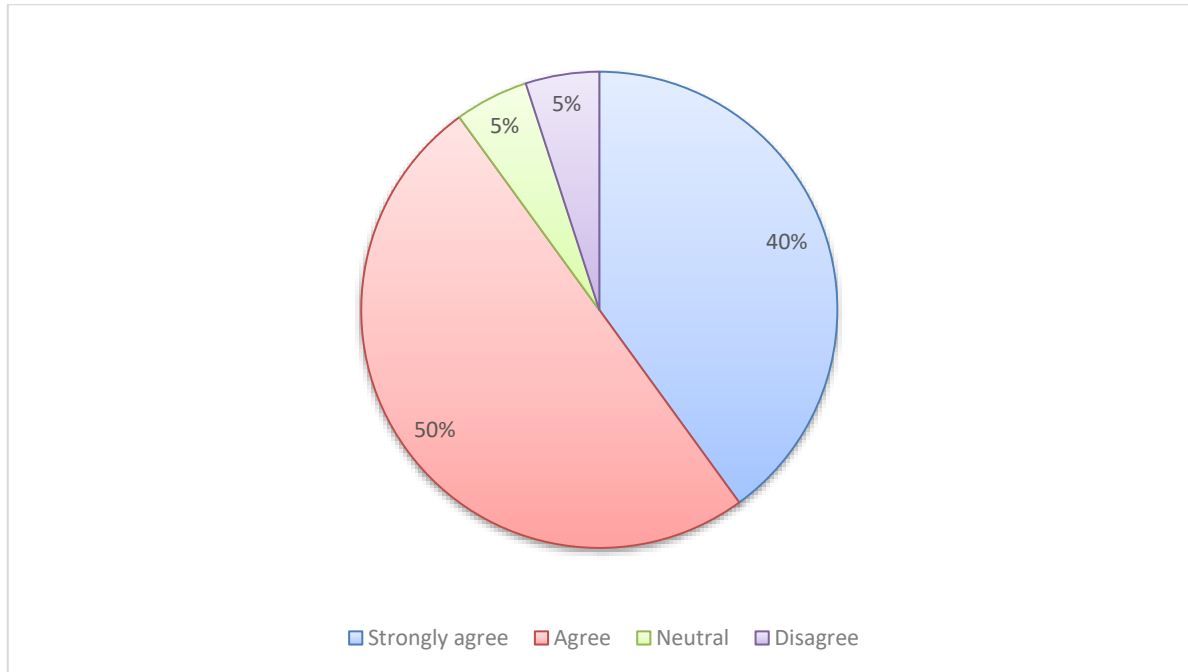
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	40	40%
2	Agree	50	50%
3	Neutral	05	05%
4	Disagree	05	05%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the table it can also be observed that 40% of the respondents strongly agreed that materials handling enables optimum usage of space; 50% agreed, 5% were not sure and 5% disagreed.

**CHART 4.14**

**MATERIAL HANDLING ENABLES OPTIMUM USAGE OF SPACE**



**TABLE 4.15**

**MATERIAL HANDLING FACILITATES MATERIALS ISSUES**

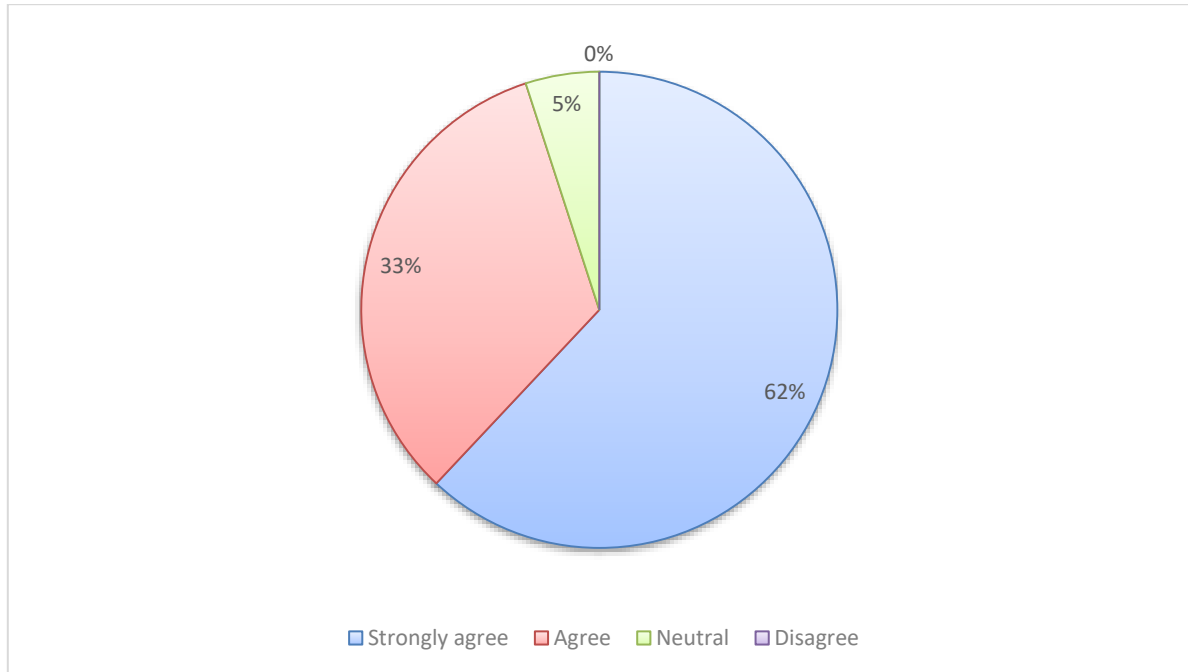
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	62	62%
2	Agree	33	33%
3	Neutral	05	05%
4	Disagree	-	-
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the above table shows that 62% of the respondents are strongly agreed that materials handling facilitates materials issues; 33% agreed but 5% were not sure of that assertion. This implies that indeed materials handling facilitates materials issues.

**CHART 4.15**

**MATERIAL HANDLING FACILITATES MATERIALS ISSUES**



**TABLE 4.16**

**MATERIAL HANDLING FACILITATES BETTER CUSTOMER CARE**

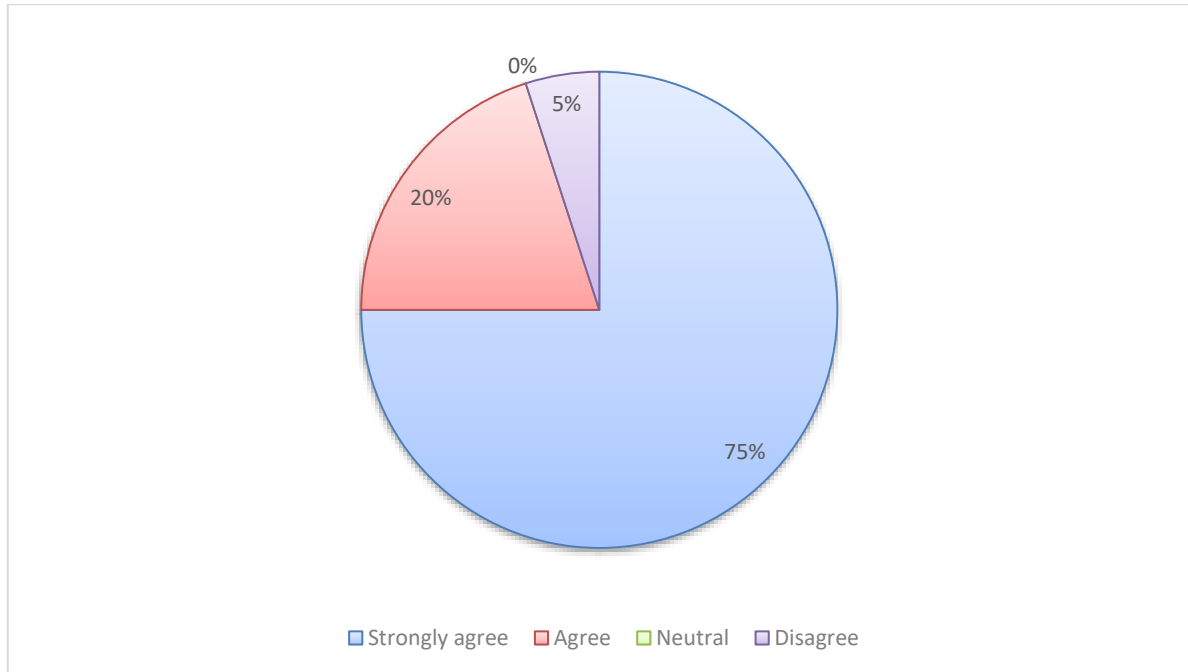
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	75	75%
2	Agree	20	20%
3	Neutral	-	-
4	Disagree	05	05%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

Furthermore the above table 4.16 shows that, 75% of the respondents strongly agreed that material handling facilitates better customer care; 20% agreed, and 5% disagreed, implying that indeed material handling facilitates better customer care since it enhances quick processing of orders and dispatches.

**CHART 4.16**

**MATERIAL HANDLING FACILITATES BETTER CUSTOMER CARE**



**TABLE 4.17**

**MATERIAL HANDLING FACILITATES BETTER QUALITY OF PRODUCTS**

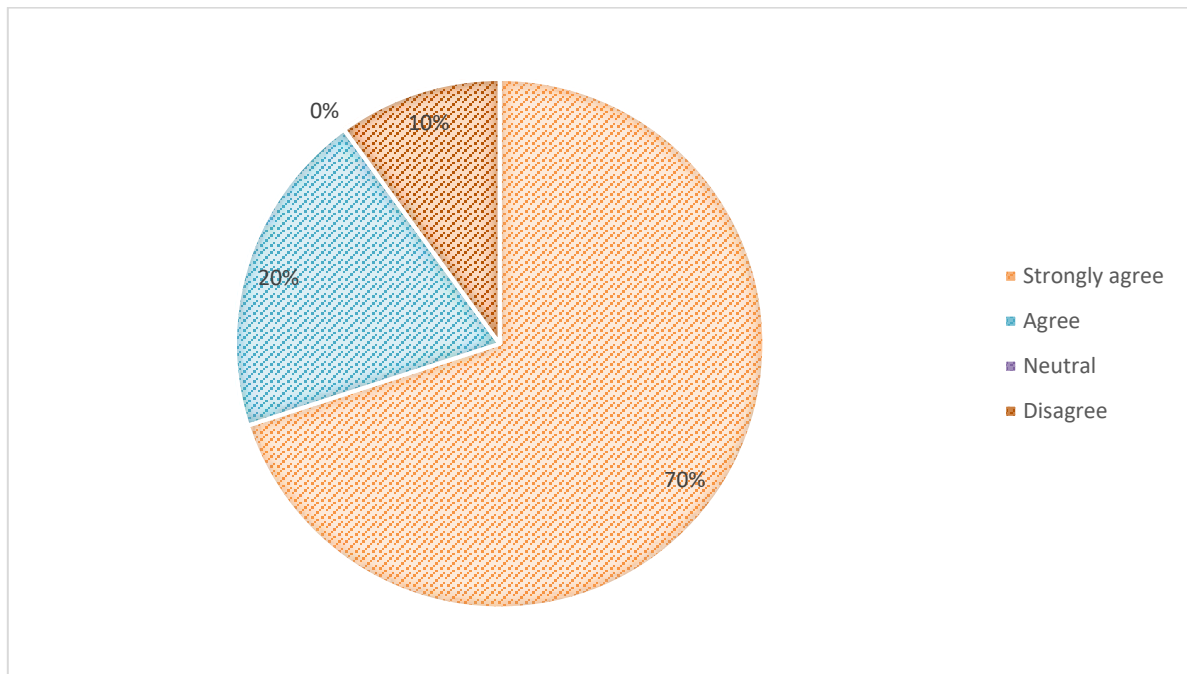
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	70	70%
2	Agree	20	20%
3	Neutral	-	-
4	Disagree	10	10%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the above table 4.17, 70% strongly agreed that material handling facilitates better quality products; 20% agreed to the assertion while 10% disagreed to this assertion. This implies that materials handling facilitates better quality of products since damages and wastage is minimized.

**CHART 4.17**

**MATERIAL HANDLING FACILITATES BETTER QUALITY OF PRODUCTS**





**TABLE 4.18**

**MATERIAL HANDLING FACILITATES TIMELY PRODUCTION**

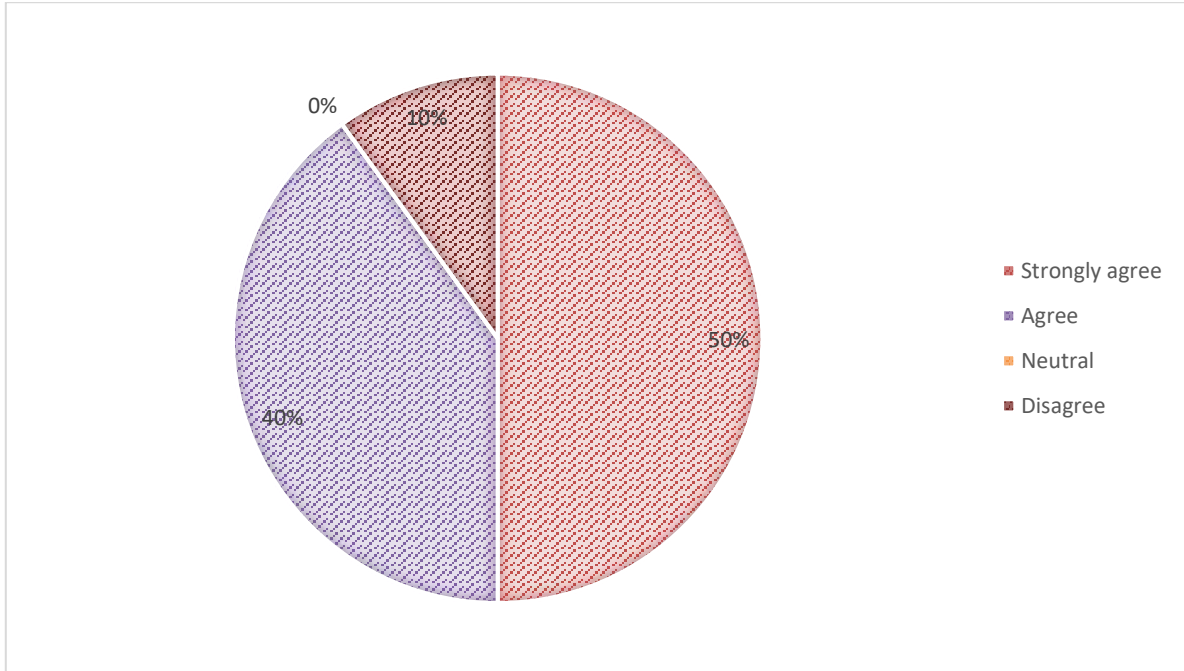
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	50	50%
2	Agree	40	40%
3	Neutral	-	-
4	Disagree	10	10%
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

Finally from the table 4.18, 50% strongly agreed to the assertion that materials handling facilitates timely production, 40% agreed while 10% disagreed to the assertion. This therefore implies that materials handling facilitates timely production since materials are assured to be in the right place at the right time hence facilitating timely production.

**CHART 4.18**

**MATERIAL HANDLING FACILITATES TIMELY PRODUCTION**



**TABLE 4.19**  
**MATERIAL HANDLING SYSTEM (CONVEYORS)**

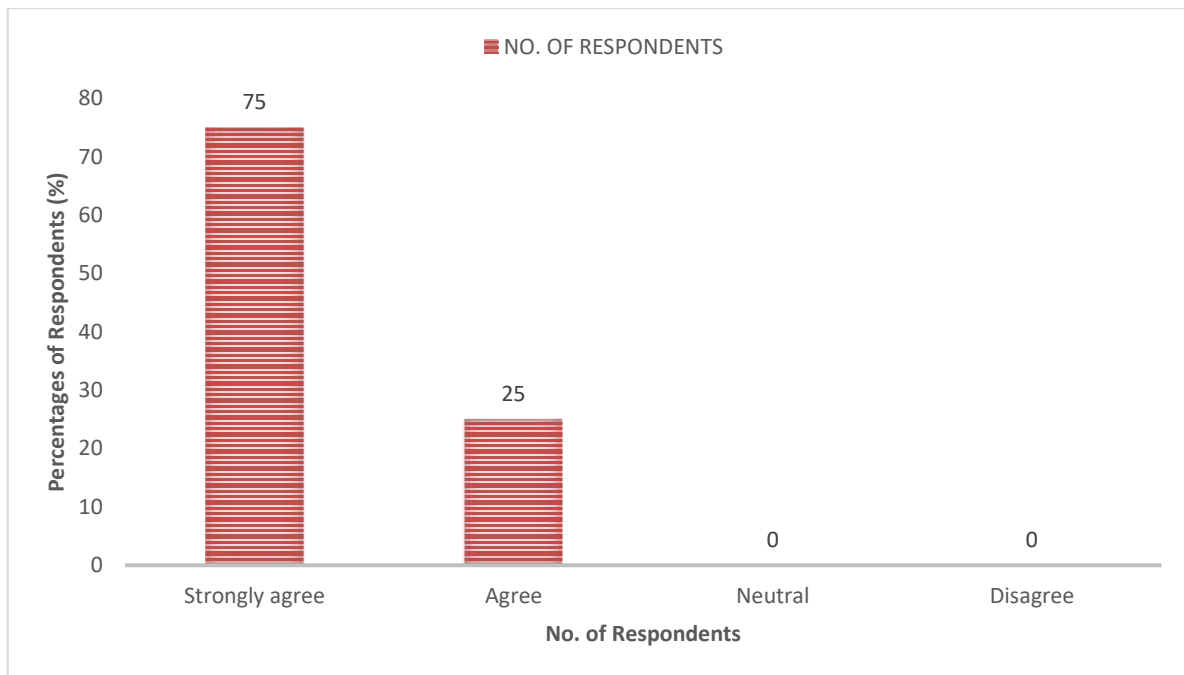
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	75	75%
2	Agree	25	25%
3	Neutral	-	-
4	Disagree	-	-
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

The above Table 4.19 shows that 75% of the respondents strongly agreed to the fact that SLST Ltd uses conveyors, while 25% agreed that SLST Ltd uses conveyors.

**CHART 4.19**

**MATERIAL HANDLING SYSTEM (CONVEYORS)**



**TABLE 4.20**

**MATERIAL HANDLING SYSTEM (POSITIONING EQUIPMENT)**

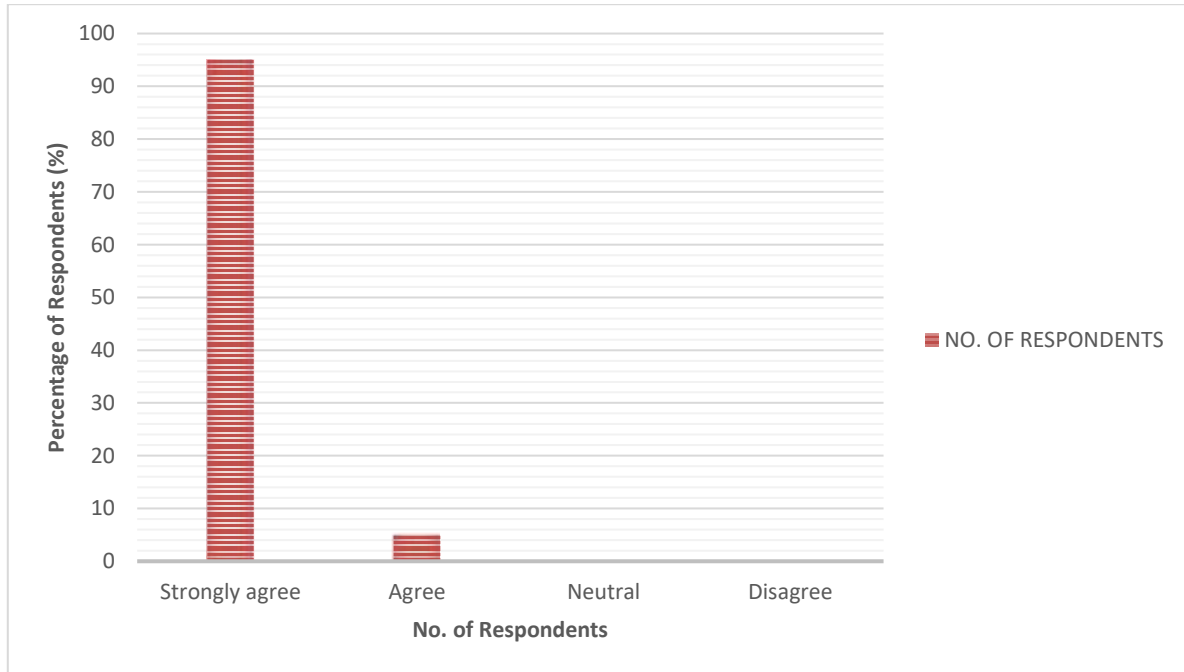
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	95	95%
2	Agree	05	05%
3	Neutral	-	-
4	Disagree	-	-
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the above table 4.20, 95% of the respondents strongly agreed to the use of positioning equipment as one of the material handling systems used by SLST Ltd while 5% of the respondents agreed to the use of positioning equipment.

**CHART 4.20**

**MATERIAL HANDLING SYSTEM (POSITIONING EQUIPMENT)**



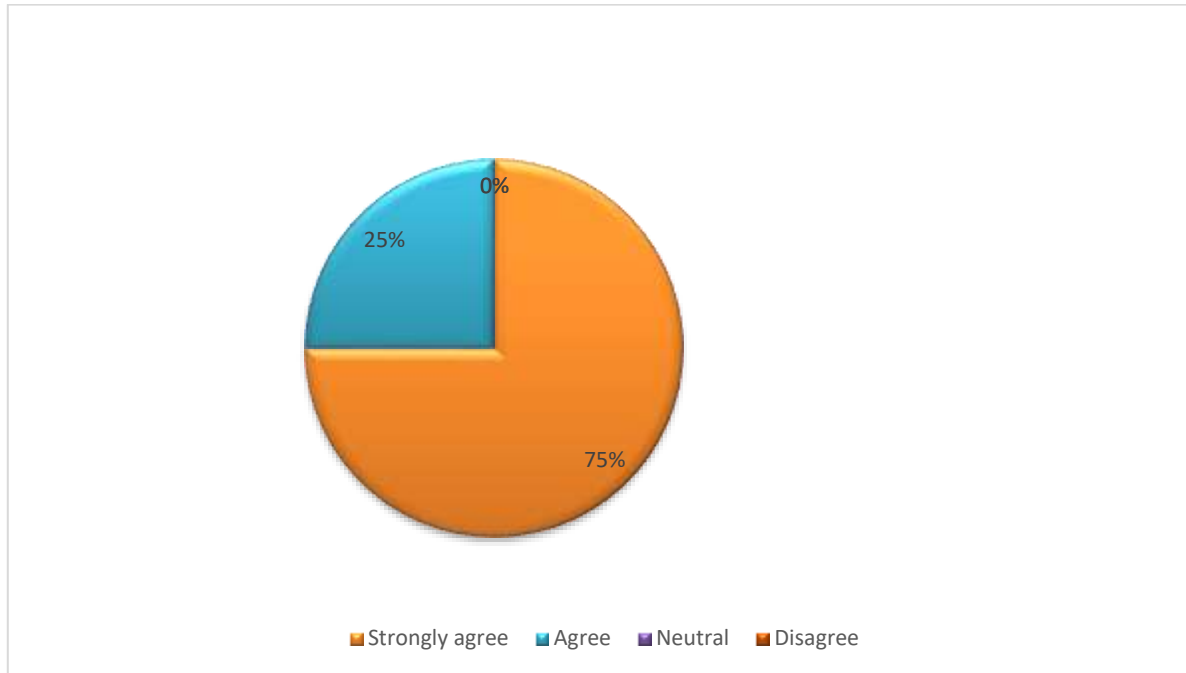
**TABLE 4.21**  
**MATERIAL HANDLING SYSTEM (UNIT LOAD FORMATION EQUIPMENT)**

<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	75	75%
2	Agree	25	25%
3	Neutral	-	-
4	Disagree	-	-
5	Strongly disagree	-	-
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

From the table 4.21, 75% strongly agreed to the use of unit load formation equipment while 25% of the respondents agreed to the use of unit load formation equipment.

**CHART 4.21**  
**MATERIAL HANDLING SYSTEM (UNIT LOAD FORMATION EQUIPMENT)**





**TABLE 4.22**

**MATERIAL HANDLING SYSTEM (STORAGE EQUIPMENT)**

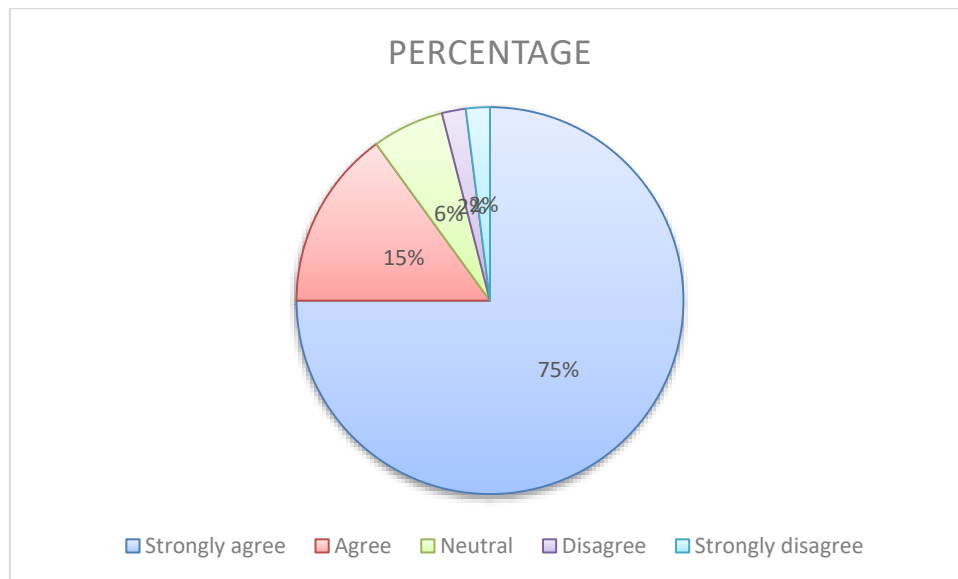
<b>S.NO</b>	<b>RESPONDENTS OPINION</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
1	Strongly agree	75	75%
2	Agree	15	15%
3	Neutral	6	6%
4	Disagree	2	2%
5	Strongly disagree	2	2%
	<b>Total</b>	<b>100</b>	<b>100%</b>

**INFERENCE:**

Finally from the table, 75% of the respondents strongly agreed to the use of storage equipment, 15%, 6%, 2% and 2% of the respondents becomes agreed, neutral, disagreed and strongly disagreed respectively. It can therefore be stated that companies use storage equipment as one of the material handling system. It can be observed that all the respondents agreed to the material handling system.

**CHART 4.22**

**MATERIAL HANDLING SYSTEM (STORAGE EQUIPMENT)**



# **CHAPTER-V**

## **FINDINGS**

## **CHAPTER-V**

### **FINDINGS**

- ❖ From the table reveals that 50% of the respondents were belongs to age group of 18-30 of the organization.
- ❖ The above table reveals that 60% respondents were Male and 40% of the respondents were Female.
- ❖ The above table reveals that 66% respondents were married and 34% of the respondents were unmarried.
- ❖ From the above table reveals that 35% of the respondents were having 3 – 5 years experiences in the organization.
- ❖ The above table reveals that 40% of the respondent educational qualification was degree in the organization.
- ❖ From the table reveals that 50% of the respondents were having 10,000-15,000 Rupees as their income per month in the organization.
- ❖ The maximum respondents were 50% agreed to the material handling facilities a shorter operating cycle.
- ❖ The maximum respondents were 62% strongly agreed to the material handling reduces in cost in the organization.
- ❖ The maximum respondents were 75% strongly agreed to the material handling eliminates unproductive handling of materials.
- ❖ The maximum respondents were 70% strongly agreed to the material handling reduces machine capacity.
- ❖ The maximum respondents were 50% strongly agreed to the reduces idle time for labour in material handling department.
- ❖ The maximum number of respondents were 62% strongly agreed to the eliminates factory hazard in material handling in the organization.
- ❖ The maximum respondents were 75% that strongly agreed in the material handling maintains quality department of the organization.
- ❖ The maximum respondents were 50% agreed to the material handling enables optimum usage of space.
- ❖ The maximum respondents were 62% strongly agreed to the material issues in material handling of the organization.

- ❖ The maximum respondents were 75% strongly agreed for the better customer care in the organization.
- ❖ The maximum respondents were 70% strongly agreed for the better quality products in material handling facilities of the organization.
- ❖ The maximum respondents were 50% strongly agreed for the material handling facilities timely production.
- ❖ The maximum respondents were 75% strongly agreed for the conveyors in material handling facilities of the organization.
- ❖ The maximum respondents were 95% strongly agreed for the positioning equipment in material handling facilities.
- ❖ The maximum respondents were 75% strongly agreed for the unit load formation equipment in material handling facilities of the organization.
- ❖ The maximum respondents were 75% strongly agreed for the storage equipment in material handling facilities of the organization.

# **SUGGESTIONS**

## **SUGGESTIONS**

- ❖ The researcher recommends that organizations should invest in material handling equipment like cranes, conveyors, industrial trucks and others so as to enhance operational efficiency. This will lead to profitability
- ❖ The researcher also recommends that organizations should prioritize the material handling function since it is a very vital cost center
- ❖ The researcher further organizations should ensure prudent management of materials to minimize wastage of materials.
- ❖ Material supply should be optimum to avoid "stock outs" while work in process.
- ❖ Organizations should always take into cognizance the cost of production or price of raw materials before arriving at selling price
- ❖ There should be good record system of materials for the operations of the organization particularly as it affects production.
- ❖ Rate of spoilage and wastages should be minimized as much as possible and ensure that products pass quality control.
- ❖ There is the need to train staff in the area of material management to further enhance the knowledge of the job.
- ❖ Organizations should computerize their material management system in line with the global changes in order to be able to track the movement of materials in the store.
- ❖ Training and development on the efficiency of materials handling.
- ❖ Materials handling on the customer service delivery of an organization.

# CONCLUSION



## **CONCLUSION**

I successfully finished my project on study of Material handling in the profitability of an organization in Sri Lakshmi Sarasvathi Textiles Ltd., This study further concludes that a company can use a number of materials handling systems available in the industry. These include conveyors, positioning equipment, unit load formation equipment and storage equipment among others. These can be used depending on the capital investment of the organisation in the mechanisation of the materials handling function.

**TO STUDY ON EFFECT OF MATERIAL HANDLING IN THE  
PROFITABILITY OF  
SRI LAKSHMI SARASWATHI TEXTILES [ARNI] LTD**

**Dear Sir/Madam,**

I am a student of BBA. Final year in Adhiparasakthi College of Arts and Science, Kalavai as a part of my academic requirement this project entitled A Study on Effect of Material Handling in the Profitability of an Organization in Sri Lakshmi Saraswathi Textile, Arni. I request you to respond the below mentioned question through this will be kept confidential and for academic purpose only.

NAME:

REG NO:

**QUESTIONNAIRE**

1. Gender

(a) Male

(b) Female

2. Age bracket (years)

a) 18 – 25

b) 26 – 35

c) 36 – 45

d) 46 – above

3. What is your highest level of education?

a) PHD

b) Master Degree

c) Bachelor's Degree

d) Diploma

e) Certificate

Others (Specify) .....

4. What is your employment status / category / department?

a) Manager

b) Finance Department

c) Stores Department

5. Duration of employment with the organization;

a) Below 2 years

b) 3 – 5 years

c) 6 - 10 years

d) Above 10 years

6. Material Handling facilitates a shorter operating cycle

a) Strongly agree

b) Agree

c) Neutral

d) disagree

e) Strongly disagree

7. Material Handling reduces in handling cost

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

8. Material Handling eliminates unproductive handling of materials

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

9. Material Handling reduces idle machine capacity

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

10. Material Handling reduces idle time for labour

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

11. Material Handling eliminates factory hazards

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

12. Material Handling maintains quality of materials

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

13. Material Handling enables optimum usage of space

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

14. Material Handling facilitates Materials issues

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

15. Material Handling facilitates better customer care

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

16. Material Handling facilitates better quality of products

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

17. Material Handling facilitates Timely production

a) Strongly agree   b) Agree   c) Neutral   d) disagree   e) strongly disagree

18. Does availability of necessary protected data

a) Yes   b) No

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- ❖ [www.businessbookmall.com](http://www.businessbookmall.com)