

# **A STUDY ON OPERATION AND ITS IMPLEMENTATION TOWARDS KALEESUWARI REFINERY PRIVATE LIMITED IN CHENNAI**

Submitted in partial fulfillment of the requirements for the award of Degree in

**MASTER OF BUSINESS ADMINISTRATION**

by

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**Register No.41410272**



**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 - 600 119**

**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 **SANTHOSH.L 41410272** who carried out the project entitled "**A Study on operation and its implementation towards kaleesuwari refinery private limited of chennai**" under my supervision from January 2022 to March 2022.



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## DECLARATION

I **SANTHOSH.L (41410272)** hereby declare that the Project Report entitled “**A Study on operation and its implementation towards kaleesuwari refinery private limited of chennai**” done by me under the guidance of **Dr.SANTHANALAKSHMI** is submitted in partial fulfillment of the requirements for the award of Master of Business Administration degree.

**DATE: 06.05.2023**

**PLACE:CHENNAI**

*Santhosh*  
**SANTHOSH.L**

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**SANTHOSH.L**

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# **A STUDY ON OPERATION STRATEGY AND ITS IMPLEMENTATION TOWARDS KALEESUWARI REFINERY PRIVATE LIMITED., CHENNAI**

## **ABSTRACT**

An operations strategy refers to the system an organization implements to achieve its long-term goals and mission. It involves decisions based on multiple factors, including product management, supply chain, inventory, forecasting, scheduling, quality, and facilities planning and management. The objective of the study is to analyse the study on operation strategy and its implementation towards Kaleesuwari Refinery Private Limited., Chennai. The study based only on the opinion and expectation of customers. Total number of sample taken for the study is 120 respondents. Descriptive research design and Convenience sampling techniques were used for the study. Primary data and secondary data have been used in the study. Simple percentage analysis, chi square analysis and correlation analysis have been applied in this study to reach the finding of the study. It is found that 49.2% of the respondents said that agree towards adoption and implementing high quality technology. It is suggested that the company has to adopt and implement the high quality technology to manufacture the quality products. In conclusion, a well-designed and executed operational strategy can serve as a key driver of success for businesses, enabling them to achieve sustainable growth and profitability.

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## **CHAPTER I**

### **1.1 INTRODUCTION OF THE STUDY**

An operations strategy is a set of decisions an organization makes regarding the production and delivery of its goods. Organizations may consider each step they take toward manufacturing or delivering a product an operation, and all decisions regarding these various operations are the operations strategy. An organization's operations strategy works in tandem with its overall business strategy, helping the organization to achieve its long-term goals and improve competitiveness in the marketplace.

An operations strategy refers to the system an organization implements to achieve its long-term goals and mission. It involves decisions based on multiple factors, including product management, supply chain, inventory, forecasting, scheduling, quality, and facilities planning and management. For service providers, operations strategy concerns financing, marketing, human resources, and service that matches the company's goal and mission

#### **Benefits of having an operations strategy**

##### **Employee efficiency**

Operations strategies define the goals of different departments, which lets team managers and employees know what they are working toward. An operations strategy can help to ensure any employee that contributes to an operation uses their time and skills efficiently. In addition, organization leaders can learn which departments are operating efficiently and which may need improvement.

##### **Resource management**

Organizations often have a finite amount of resources, making it essential that they use them efficiently. Operations strategies can help leaders determine which areas of the organization need the most resources and how to best deliver those resources. By developing an operations strategy, leaders can learn more about the costs of running different departments. They can then analyze these costs and see if they are in line with the organization's overall goals.

## **Department cooperation**

An operations strategy details how multiple departments within an organization work together. By outlining this coordination, each department knows how it relates to the others. They can also see how their individual department's goals are helping to achieve the overall goals of the organization alongside the other departments. This is useful for improving decision-making and helping employees in different departments feel like they are on the same team.

## **Elements of an operations strategy**

### **Products and assembly**

Product operations managers look to streamline processes, such as team communication or product assembly. They also analyze data regarding their products and use it to prioritize tasks. For example, they may help product managers decide which elements of a product to build first. Product operations teams work with departments such as manufacturing, customer support and sales to help optimize the process consumers go through with the product, from researching to becoming repeat customers.

### **Delivering and storing inventory**

An inventory operations strategy is one that helps businesses decide how to order, maintain and process their inventory. It looks for more efficient ways to deliver or store inventory, with the goal of reducing costs and waste. An inventory operations strategy also aims to order the optimal number of goods, maximizing storage capacity without wasting resources.

### **Supply chain optimization**

The supply chain element of an operations strategy looks for ways to optimize the movement of products from suppliers to distributors. It may do this in several ways, for example, implementing faster communication technology or optimizing shipping amounts. In a supply chain operations strategy, leaders decide on the structure of the supply chain and the activities of each stage. They also decide where to make products and where to store them.

## **Quality of the final product**

Quality operations aim to produce a satisfactory final product. This includes product testing and analyzing customer feedback. They also check for consistency so their customers all receive the same level of quality. In addition, quality operations managers analyze the operations that contribute to production. For example, they ensure the organization is using the best materials for a high-quality finished product. They constantly monitor the production process to ensure it is leading to their desired quality outcomes.

## **Scheduling use of resources**

Scheduling is the timing and use of resources, and this means ensuring the organization is using its resources at the best possible time. This may include the best time to send out shipments of products or which activities employees should focus on first. A common challenge for those working in scheduling operations is finding a compromise between competing goals in terms of shared resources. For example, both the product development and customer satisfaction teams may want to conduct a focus group, but your organization only has the resources to host one at a time. Within your operations plan, you would determine the optimal scheduling for these two departments.

## **Facilities management**

Facilities planning and management is the analysis of how the organization's current facilities factor into the organization's goals. This part of your operations strategy determines if your current facilities are performing as needed. In addition, it also discovers if your organization needs new facilities and if so, it conducts a search to find the right ones.

## **Forecasting for planning**

Forecasting operations is where an organization makes plans for the future. It uses data to make assumptions about the future of the organization. For example, it may study current sales trends to determine profits in a year. It then implements changes within the organization to ensure it is always moving toward its goals. For example, if a forecaster determines a drop in sales because of economic factors that may happen in six months, they may look for ways to reduce costs now to prepare them for this situation.

## **The Role and Purpose of Operations Strategy**

Operational strategy is just one aspect of the overall company or corporate strategy, but competitiveness and performance are critical. Companies struggle to keep up with evolving markets without a clear operating plan and lose out to more strategic rivals. Many enterprises, large and small, have struggled with business strategies, sometimes failing in comparison to technologically savvy rivals. Amazon, for instance, has driven aside countless brick-and-mortar stores while continually evolving technologies such as drones for distribution.

Both aspects of a business must work together to be successful and competitive. All departments should contribute to the mission of the organization and have strategies that underlie the overall business/corporate strategy. They should also have functional field strategies in finance, IT, sales, marketing, human resources, and probably other departments, in addition to providing an organizational plan, depending on the type of sector.

An operational strategy should drive the structural decisions and the evolution of organizational capabilities required to achieve the organization's desired competitive position as a whole. It's not enough these days, however, to simply follow best practices. Companies need to reinvent, not just catch-up to rivals' already mastered activities.

## **Types Of Operations Strategy**

Organizations can examine and implement efficient and effective systems for using work processes, personnel and resources. Here are a few common types of operations strategy:

### **Customer-Driven Strategy**

To meet the desires and needs of the target customers, an operations strategy must include customer-driven approaches. Organizations must continuously evaluate the changing business environment and adapt to it. This helps them enhance core competencies and develop new strengths regularly. Organizations must also monitor industry trends to avoid threats as well as create new opportunities. Good customer-driven strategies ensure more clients by improving the system of new and repeat customers by building loyalty and referral.

### **Product Strategy**

A strategy for product development must aim to deliver a compelling product or service that resonates with customers. But the job involves more than releasing new products. Organizations also need to maintain and upgrade their existing products for those who won't buy the new ones. For example, even though smartphone brands release new models every year, they continue to provide low-cost upgrades and free patches to improve their existing models.

### **Market Penetration Strategy**

Market penetration is an operational level strategy that focuses on capturing a larger share of the target customer base in an industry. Managers can choose strategies to target new users who have no experience with the brand or lure customers away from industry rivals. They may use multiple geographical locations to target a demographic. Adding value to existing customers is also a great way to increase spending on products or on service upgrades.

### **Supply Chain Strategy**

This operations strategy deals with the process of building superior delivery capabilities to create excellence. Organizations can take many paths, such as minimizing product costs by making bulk purchases or increasing customer value by offering product customizations while delivering goods more efficiently. Improving the efficiency of delivery operations can involve changing warehouse layout to reduce time and effort in fulfilling orders. For example, a warehouse manager may decide to bring all frequently bought products to the front and nearer the loading dock. This saves time for both customers and employees and saves on labor by expediting the process. Service-oriented organizations use basic operations strategy to create an efficient management team and link short- and long-term corporate decisions.

## **1.2 STATEMENT OF THE PROBLEM**

The role of operations strategy is to provide a plan for the operations function so that it can make the best use of its resources. Operations strategy specifies the policies and plans for using the organization's resources to support its long-term competitive strategy. The formulation of suitable operation strategy for the firm is easy but the implementation is difficult

task. Though it is implemented with proper care, the impact and efficiency are to be evaluated. Various concerns have been taking efforts through investing huge funds for implementation of the operational strategies. But the impact and efficiency must be fruitful to the concern to achieve its organisational goals. Kaleesuwari Refinery Private Limited., Chennai is also not an exception, has spent its contribution for implementation of operation strategy. It is in the intention to evaluate its impact and efficiency in various aspects. Hence the study is taken to analyse operation strategy and its implementation towards Kaleesuwari Refinery Private Limited., Chennai.

### **1.3 NEED OF THE STUDY**

The role of operations strategy is to provide a plan for the operations function so that it can make the best use of its resources. Operations strategy specifies the policies and plans for using the organization's resources to support its long-term competitive strategy. Operations strategy helps the management determine specific areas in the organization that need the most resources and how best to deliver those resources. Kaleesuwari Refinery Private Limited., Chennai has been taking various operational strategies in order to sustain its business operation. It needs to evaluate its effectiveness of operation strategies in various aspects such as cost, less serving time, high quality performance and flexibility level in the company. Hence the study is carried out to analyse the operation strategy and its implementation towards Kaleesuwari Refinery Private Limited., Chennai. The study helps to understand the organisation to effectiveness of cost reduction by the operation strategy as well as impact of operation strategy in less serving time in the company. It also helps to the researcher to know the high quality performance by implementing operation strategy in the company.

## **1.4 OBJECTIVE OF THE STUDY**

### **Primary objective**

- To study on operation strategy and its implementation towards Kaleesuwari Refinery Private Limited., Chennai

### **Secondary objectives**

- To understand effectiveness of cost reduction by the operation strategy
- To evaluate the impact of operation strategy in less serving time in the company
- To know the high quality performance by implementing operation strategy in the company
- To analyse the flexibility level in the company by implementing operation strategy
- To obtain suggestions from the respondents to implement the successful operational strategy for the company

### **1.5 SCOPE OF THE STUDY**

The study is confined to Kaleesuwari Refinery Private Limited., Chennai. It analysis the operation strategy and its implementation towards the company. The sample of the study is 120. The survey is taken with the employees of Kaleesuwari Refinery Private Limited., Chennai. The study throws lights on to understand the effectiveness of cost reduction by the operation strategy. It helps to understand the impact of operation strategy in less serving time in the company.

## **1.6 LIMITATIONS OF THE STUDY**

- Due to the time constraints, only specific sample size from the entire segment has been considered for the study.
- Whatever the data had been gathered is based on suggestive study but not exhaustive study.
- The researcher found it difficult to collect the questionnaire, since some of the respondents did not give proper response.
- The sample taken for this study is 120 only.

## **1.7 RESEARCH METHODOLOGY**

The process of deciding how to systematically design research and conduct it is called Research Methodology. To conduct a market or social research, researcher has to plan out every step from which questions to ask to what analysis method to use, to ensure that researcher gather valid and reliable results from the research.

### **RESEARCH DESIGN**

Research design refers to the overall strategy utilized to carry out research that defines a succinct and logical plan to tackle established research question(s) through the collection, interpretation, analysis, and discussion of data. Hence descriptive research study is used. Descriptive research can only report what has happened and what is happening.

### **DATA SOURCES**

The study basically uses primary and secondary data. The study depends mainly on the primary data and secondary data namely the text books, journals, newspapers, magazines and internet.

#### **1. Primary data**

Primary data sources can be described as those sources that are closest to the origin of the information. They contain raw information and thus, must be interpreted by researchers. Secondary sources are closely related to primary sources and often interpret them. Examples of primary sources include manuscripts, newspapers, speeches, cartoons, photographs, video, and artefacts. Primary sources can be described as those sources that are closest to the origin of the information. They contain raw information and thus, must be interpreted by researchers. Well structured questionnaire has been used for the collection of primary data from the respondents.

#### **2. .Secondary data**

Secondary sources are closely related to primary sources and often interpret them. These sources are documents that relate to information that originated elsewhere. Secondary sources often use generalizations, analysis, interpretation, and synthesis of primary sources. Examples of secondary sources include textbooks, articles, and reference books.

## **SAMPLING**

### **Population**

The aggregate elementary units in the survey are referred to as the population. Here it covers the entire employees in the company Kaleesuwari Refinery Private Limited., Chennai.

### **Sample Size**

The study based only on the opinion and expectation of employees. Total number of sample taken for the study is 120 respondents.

### **Sampling Unit:**

Sampling unit is Kaleesuwari Refinery Private Limited., Chennai.

### **Sample design**

Random sampling techniques were used for the study. Random sampling, or probability sampling, is a sampling method that allows for the randomization of sample selection, i.e., each sample has the same probability as other samples to be selected to serve as a representation of an entire population.

### **Sampling Unit**

Sampling Unit of this study is Kaleesuwari Refinery Private Limited., Chennai.

## **TOOLS USED**

The commonly used statistical tools for analysis of collected data are:

1. Percentage analysis
2. Chi Square.
3. Correlation

### **Percentage analysis**

This method is used to compare two or more series of data, to describe the relationship or the distribution of two or more series of data. Percentage analysis test is done to find out the

percentage of the response of the response of the respondent. In this tool various percentage are identified in the analysis and they are presented by the way of Bar Diagrams in order to have better understanding of the analysis.

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

### **Chi-square Analysis**

A chi-squared test (symbolically represented as  $\chi^2$ ) 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.

The chi-square test is used to estimate how likely the observations that are made would be, by considering the assumption of the null hypothesis as true. A hypothesis is a consideration that a given condition or statement might be true, which we can test afterwards. Chi-squared tests are usually created from a sum of squared falsities or errors over the sample variance.

### **Formula**

The chi-squared test is done to check if there is any difference between the observed value and expected value. The formula for chi-square can be written as;

$$\chi^2 = \sum (O_i - E_i)^2 / E_i$$

where  $O_i$  is the observed value and  $E_i$  is the expected value.

### **Correlation Analysis**

Correlation Analysis is statistical method that is used to discover if there is a relationship between two variables/datasets, and how strong that relationship may be.

### **Correlation Coefficients**

There are usually three different ways of ranking statistical correlation according to Spearman, Kendall, and Pearson. Each coefficient will represent the end result as 'r'. Spearman's Rank and Pearson's Coefficient are the two most widely used analytical formulae depending on the types of data researchers have to hand:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}$$

Here,

n = Number of values or elements

$\sum x$  = Sum of 1st values list

$\sum y$  = Sum of 2nd values list

$\sum xy$  = Sum of the product of 1st and 2nd values

$\sum x^2$  = Sum of squares of 1<sup>st</sup> values

$\sum y^2$  = Sum of squares of 2<sup>nd</sup> values

## **CHAPTER II**

### **2.1 INDUSTRY PROFILE**

#### **Oil Industry**

Sunflower oil market in India has been growing magnificently owing to high growth of income levels, increasing trend towards spending, better living standards and growing health consciousness among Indian consumers. In the year 2011-12, sunflower oil market in India was more than INR 150 Billion which is expected to grow with a CAGR of around 9.5% during 2013-14 to 2016-17.

Growing population, economic growth and rising disposable income will drive India's vegetable oil consumption growth, which is expected to grow by three per cent annually to exceed 34 million tonnes by 2030, according to a report. "Increasing income, urbanisation, changing food habits and deeper penetration of processed foods will be key drivers of future consumption growth of edible oil in the country," Rabo Research report 'The Future of India's Edible Oil Industry: How Will India's Vegetable Oil Demand Shape Up by 2030'

The country's vegetable oil consumption was at 23 million tonne in 2017, it added. Because of current stagnant domestic vegetable oil supplies, import volumes will continue to fill the majority of the supply-and-demand gap over the next decade, it added. Palm oil, soy oil and sunflower oil are expected to penetrate regional markets further in the future, with the packaged edible oil segment leading the way for future growth of the industry, the report said. However, the report said, palm oil will continue to be the largest imported vegetable oil because of its price advantage, the price sensitivity among the low-income population, consumption growth in the fast-moving consumer goods (FMCG) sector, blended vegetable oil segments and increasing out-of-home consumption.

The packaged branded edible oil sector in retail currently, which accounts for 40 per cent of total edible oil consumption, will continue to grow between 6-8 per cent annually over the next five years, it added. The market of Sunflower oil, the fourth most used vegetable oil as cooking medium in the world, is increasing in India in the recent years. More companies are focusing on the production and branding of Sunflower oil with the latest technologies to refine the raw materials. The Sunflower oil market in India is increasing by which the demand and supply gap of the raw material is huge. The raw material production in the country satisfies

only 20% of the manufacturing needs of Indian companies. The remaining 80% of raw material for the country is imported from countries like Argentina and Malaysia, which are the front-runners in Sunflower seed production. The products manufactured with this imported seeds will affect the price of the end product in a considerable way, due to the various expenses in importing, including the changes in the dollar-rupee value.

However, states like Karnataka, Andhra Pradesh, Maharashtra and Haryana are slowly emerging as major hubs for the Sunflower seed production. The first ever venture to develop Sunflower seed has been initiated by ITC Zeneca India, which has changed its name to Advanta India. The company is currently the market leader in Sunflower seed business. South India is considered as the major market for Sunflower oil, where brands like Sundrop, GoldWinner, Gemini, Gold Drop and Crystal, Fortune, Godrej Sunflower Oil and Godrej Shakti have their strong foothold. Major manufacturers like GoldWinner, Agro Tech Foods and Adani Wilmer have already announced their plans to explore more into south Indian states because of the increased market size and the availability of raw materials from states like Karnataka and Andhra Pradesh.

The technologies introduced by foreign machinery manufacturers, like Alpha level refining technology and Belgian technology are widely used by the Indian companies in Sunflower oil refining. The Alpha level continuous refinery technology, which is designed to handle the refining process from Neutralisation, Bleaching, Deodourisation and De-waxing to Packing, can reduce the time for processing considerably.

### **Agro & Food Processing Sector- Overview**

Global Food and Beverage industry has been valued at US \$ 3668.3 billion in the year 2005. In the Global food processing industry Asia-Pacific is accounting for 31.10 % of global market. India is the World's second largest producer of food, next to China and has potential to be number one.

### **Growth Of Food Industry In India**

India is the world's second largest producer of food next to China, and has the potential of being the biggest with the food and agricultural sector. The total food production in India is likely to double in the next ten years and there is an opportunity for large investments in food and food processing technologies, skills and equipment, especially in areas of Canning, Dairy

and Food Processing, Specialty Processing, Packaging, Frozen Food/Refrigeration and Thermo Processing. Fruits & Vegetables, Fisheries, Milk & Milk Products, Meat & Poultry, Packaged/Convenience Foods, Alcoholic Beverages & Soft Drinks and Grains are important sub-sectors of the food processing industry. Health food and health food supplements is another rapidly rising segment of this industry which is gaining vast popularity amongst the health conscious.

India is one of the worlds major food producers but accounts for less than 1.5 per cent of international food trade. This indicates vast scope for both investors and exporters. Food exports in 1998 stood at US \$5.8 billion whereas the world total was US \$438 billion. The Indian food industries sales turnover is Rs 140,000 crore (1 crore = 10 million) annually as at the start of year 2000. The industry has the highest number of plants approved by the US Food and Drug Administration (FDA) outside the USA.

India's food processing sector covers fruit and vegetables; meat and poultry; milk and milk products, alcoholic beverages, fisheries, plantation, grain processing and other consumer product groups like confectionery, chocolates and cocoa products, Soya-based products, mineral water, high protein foods etc. We cover an exhaustive database of an array of suppliers, manufacturers, exporters and importers widely dealing in sectors like the -Food Industry, Dairy processing, Indian beverage industry etc. We also cover sectors like dairy plants, canning, bottling plants, packaging industries, process machinery etc.

The most promising sub-sectors includes -Soft-drink bottling, Confectionery manufacture, Fishing, aquaculture, Grain-milling and grain-based products, Meat and poultry processing, Alcoholic beverages, Milk processing, Tomato paste, Fast-food, Ready-to-eat breakfast cereals, Food additives, flavors etc.

### **Major Players In The Sector:**

- National Dairy Development Board, Anand
- ITC Agro-Tech, Secunderabad
- Marico Industries, Mumbai
- Ahmed Mills. Mumbai

- PBS oil refineries Ltd, Chattisgarh
- Green Agro Foods, Maharashtra
- Pentagon overseas, Karnataka
- Murali Industries Ltd, Maharastra
- Krishi Oils Ltd, Madhya Pradesh
- Vijay Solvex Limited ,Rajasthan
- Sree Annapurna Agro Foods, Erode
- Vama Oil Private Limited, Coimbatore
- Sri Venkateshwaraa Agro Foods, Erode
- Padmashri Oil Refineries, Vellore
- SSD Oil Mills Ltd, Chennai
- Ruchi Soya Industries LTD, Chennai
- Tamilnadu Edible Oils Ltd, Chennai

### **Competitors Trends:**

The Indian edible oil industry is highly fragmented, with the presence of a large number of participants in the organised and unorganised sectors. This has resulted in severe competition and inherently thin profitability margins. Further, the profitability of market participants has also been vulnerable to risks emanating from weak harvests; commodity price volatility and forex movements. The players operating in the market also face challenges which are impeding their development and growth. Rising edible oil prices has emerged as a major challenge hindering the market growth. Low yield per hectare and inadequate capacity utilization are also expected to have an unfavorable impact on the growth of the Indian edible oil market.

The competition section begins with the Porter's Five Forces analysis for the edible market. It outlays the competitive landscape of the edible oil market in India briefing about the domestic and foreign players existing in the market.

## **Market Share And Strengths:**

The demand for edible oils in India has shown a steady growth at a CAGR of 4.43% over the period from 2001 to 2011. The growth has been driven by improvement in per capita consumption, which in turn is attributable to rising income levels and living standards. However, the current per capita consumption levels of India (at 13.3 Kg/year for 2009-10) are lower than global averages (24 kg/year).<sup>1</sup> The Indian edible oils market continues to be underpenetrated and given the positive macro and demographic fundamentals it has a favourable demand growth outlook over the medium-to-long term.

In terms of volumes, palm oil, soyabean oil and mustard oil are the three largest consumed edible oils in India, with respective shares of 46%, 16% and 14% in total oil consumption in 2010. Given the high price consciousness and varied taste preferences of Indian consumers, ICRA expects these three oils to continue to account for the bulk of edible oil consumption in the country. ICRA notes that while the share of branded oils segment has remained low over the years, it is poised for growth in view of rising income levels; uptrend in urbanisation and increasing quality consciousness of Indian consumers.

Edible oils constitute an important component of food expenditure in Indian households. Historically, India has been a major importer of edible oils with almost 30-40% of its requirements being imported till 1980s. In 1986, the Government of India established the Technology Mission on Oilseeds and Pulses (TMOP) in order to enhance the production of oilseeds in the country. The TMOP launched special initiatives on several critical fronts such as improvement of oilseed production and processing technology; additional support to oilseed farmers and processors besides enhanced customs duty on the import of edible oils.

Consequently, there was a significant increase in oilseeds area, production, and yields until the late-1990s. However, in order to fulfill its obligations towards various international trade agreements and also meet the increasing demand-supply deficits, India began to reduce import restrictions on edible oils in the late 1990s; and it was gradually brought under Open General License. This led to a significant slump in the domestic oil seeds market, as edible oil prices fell sharply in line with the low international prices prevailing at that time.

## **2.2 COMPANY PROFILE**

### **Gold Winner Oil Brand - Kaleesuwari Refinery Private Limited**

Kaleesuwari Refinery Private Limited, ever since its foundation in the year 1993 has harnessed its experience in the consumer goods industry to focus on long-term relationships with its consumers by providing high quality, contemporary, technology based and cost-effective products.

The organization has embraced a tradition of creating, developing and marketing high-quality consumer products for nearly 3 decades. Kaleesuwari is at the pole position in the Edible Oil and Dhal segments. Having three manufacturing plants with well-equipped state-of-the-art facilities and machineries located near the major cities of Chennai, Coimbatore and Bangalore, Kaleesuwari is one among India's primary producers of refined sunflower oil under the flagship brand "Gold Winner".

Kaleesuwari has evolved multiple brands. To begin with the most celebrated brand – “Gold Winner”. It offers edible oils including refined Sunflower Oil, Vanaspathi and refined Groundnut Oil. Under the brands of “Gold Choice”, “Orysa”, “Koda” and “Paalm Super”, Kaleesuwari offers refined Soya Bean Oil, refined Rice Bran Oil, pure Coconut Oil and refined Palmolien Oil.

#### **Mission:**

It is responsible for the development of the new products, which could be sold in India and is also responsible for contracting with the national suppliers.

#### **Vision:**

With new management in place, new targets are being framed.

#### **The Heritage**

From the day Kaleesuwari was founded, the vision to spread the delight of healthy life was the pathfinder to the company. This was the driving force behind every new venture they stepped into.

1994

- The Flagship brand Gold Winner RSF was launched

2005

- Kaleesuwari entered another new product category in the month of September by launching Sree Gold Dhal

2007

- Kaleesuwari introduces its Olive Oil brand - Cardia Health Olive Oil

2008

- Kaleesuwari receives its ISO 2000:9001 certification for the maintenance of impeccable quality standards
- Kaleesuwari receives the HACCP certificate on Hazard Analysis and Critical Control Practices

2010

- Kaleesuwari creates a new health-bound oil blend of Olive & Corn Oil by the name Cardia Life in October

### **Awards & Recognition**

Awards, certifications and recognitions are the best ways to understand Kaleesuwari's persistence in adding value to its customers from every dimension. Kaleesuwari has raised the bar even when it comes to making a difference in the life of its customers. Given below are some of the recognitions received by Kaleesuwari through its brands for excellence in business development and product quality.

- A report published by The Economic Times Brand Equity on April 21, 2004 recognized Gold Winner to be ranked 63rd among India's top hundred Fast Moving Consumer Goods (FMCG) brands by A.C. Nielsen Retail Audit.

- An ORG-MARG survey had rated Gold Winner as "Number One" in the FMCG (edible oils) category in South India.
- Gold Winner is a well-recognized member of the US based National Sunflower Association (NSA), whose aim is to promote quality sunflower products across the globe keeping the health of the people in mind.
- Gold Winner crossed another milestone in September 2005 by receiving ISO 9001:2000 & HACCP Certifications.
- The HACCP (Hazard Analysis and Critical Control Point) Certification confirms that the edible oil processing followed at Kaleesuwari is free from physical, chemical and biological contamination thereby assuring complete food safety.

### **The Infrastructure**

Kaleesuwari has three manufacturing plants with well-resourced state-of-the-art facilities and dexterous professionals located near the major cities of Chennai, Coimbatore and Bangalore. The manufacturing plants use “Continuously Automated Technology “ for processing to maintain the highest standards of hygiene.

The major share of refinery processing equipments is supplied by the world renowned equipment supplier, Desmet Ballestra from Belgium. Stringent quality control standards are employed in the inspection and testing of incoming raw materials, packaging materials, refining – via continuous in-process testing, as well as all finished goods. Kaleesuwari’s quality control laboratories house high-tech testing equipments and follow Good Laboratory Practices to ensure quality and repeatability of all testing procedures.

Kaleesuwari is the foremost edible oil company in India to put an enterprise-resource-planning (ERP) system using SAP into practice. It streamlines the operations by systematic monitoring and analyses of all the business processes.

### **Social Responsibility**

The Social Responsibility programs of Kaleesuwari are designed to provide enduring benefits to its employees, clients, shareholders, partners and individuals of the surrounding within which it operates. Kaleesuwari understands its responsibility of being a part of the

community. These responsibilities go further than just producing the products and keeping the customers surrounded by happiness and good health. Kaleesuwari understands its obligation to lend a helping hand as an employer and as a part of the community at large.

## **PRODUCT PROFILE**

### **Gold Winner - Refined Sunflower Oil**

Gold Winner Refined Sunflower Oil is the flagship brand of Kaleesuwari. Gold Winner finds a place in every discerning home. Thanks to the highly sophisticated and rigorous processes adopted to refine crude Sunflower Oil. A unique distribution network ensures that the end-consumer is enriched by good health and happiness. Gold Winner is now available in Singapore, Malaysia, Brunei, Kuwait, Dubai, Australia, UK and Sri Lanka. Every drop of Gold Winner not only glistens with quality and hygiene but also assures gourmet's delight.

### **Gold Winner - Refined Groundnut Oil**

Gold Winner Refined Groundnut Oil contains the wholesome nutrition of groundnuts. It has a unique property to enhance the flavor of the food. The superior quality of the raw materials and state-of-the-art refining processes ensure that Gold Winner Refined Groundnut Oil is of the finest quality.

### **Cardia Life - Blend Of Olive & Corn Oil**

Cardia Life olive and corn blended refined oil is made from two healthy & diverse ingredients that combine good health with great taste. Cardia Life is versatile oil suitable for all cooking methods and for use in many types of dishes. It ensures excellent flavor stability and enhances the taste of food. All these merits turn Cardia Life into an ideal choice.

### **Paalm Super - RBD Palmolein**

Palm Super is a refined, bleached and deodorized form of palm oil which is extracted after crushing the palm fruit which is rich in Vitamin E (Tocopherols & Tocotrienols) and is a powerful anti-oxidant. The RBD Palmolein has a property of reducing the risks of certain chronic diseases and delays the body's ageing process.

### **Dheepam Lamp Oil**

Dheepam lamp oil is a unique blend of five pure oil (pancha deepam ennai) and Sugandha Dravyas / Fragrances to enhance divine experience. Worshiping with Dheepam can elevate mood and provide a feeling of serenity and peace that is associated with divine interventions. Dheepam brings together a unique combination of oils that are said to have been used since time immemorial with exclusive significance to light up life.

### **Eldia Pure Coconut Oil**

100% pure coconut oil is not something that can be claimed by just any coconut oil. In fact, to claim it, every stage of the oil making process has to be pure in its ingredients and skill. Eldia pure coconut oil is the result of handpicked and finest of copra's crushed in the most hygienic of environments and packed with utmost care. The unadulterated natural aroma of Eldia is a testimony to its quality. No wonder, Eldia pure coconut hair oil is widely used from infants to elders and in cities to suburbs, not just for their hair, but also for dry skin, body massage, etc. Reach out to 100% pure for your head to toe. Reach out for Eldia.

### **Orysa - Refined Rice Bran Oil**

Orysa is the premium quality Refined Rice Bran Oil that protects the consumer's heart with Gamma Oryzanol protection. Gamma Oryzanol is a natural anti-oxidant that is known to significantly reduce the absorption and deposition of LDL and VLDL (bad) serum cholesterol and thereby offer superior protection to the entire cardio-vascular system. The prolific presence of the naturally occurring anti-oxidants and the well-balanced ratio of Omega 6 to 3 in Orysa ensure that the oil has superior oxidative stability and enhanced friability than most other oils. Orysa is rich in Squalene and Trienols that are well known to have anti-cancer effects.

## **CHAPTER III**

### **REVIEW OF LITERATURE**

**John C. Anderson (2002)**, Competitive pressures on American business have created the need for improved understanding and practice of operations strategy. Over the past 20 years some 80 articles and several books have been written on the subject. These writings, while

diverse in nature and placement, serve to shape what we know about operations strategy and the opportunities for improved practice and meaningful research. This paper examines an underlying argument that exists within the literature that proper strategic positioning or aligning of operations capabilities can significantly impact competitive strength and business performance of an organization. The discussion is organized around four related premises: that there exists a strategic, as opposed to a tactical, view of operations, that there must be some synergistic process of integrating business and operations strategic issues, that there are operations decision or policy areas which demonstrate strategic opportunities, and that conceptual structures exist by which to target and focus operations strategy. The paper concludes that the literature and emerging research support each of these premises to varying degrees. The authors believe that further understanding of these premises could be benefited by more careful and consistent definition of operations strategy concepts and terminology, by more attention being placed on the content and process of operations strategy, by more empirical study, and finally by more emphasis being placed on service operations strategy.

John C. Anderson (2002), "Operations strategy: A literature review", Elsevier- Journal of Operations Management, Volume 8, Issue 2, April 1989, Pages 133-158.

**Sabrina Lohmann (2019)**, This study proposes an alternative way to access customer priority information on competitive criteria that a food industry company needs to take into account. Based on this approach, it is possible to identify a consistent set of information that assists in the decision-making process at an operational strategy level, such as investments in dedicated or shared production lines, quality programs, and cost reduction. This study is a single embedded case study. Data were collected through interviews with ten customers of each business unit (BU). Descriptive statistics of the results were performed to analyze data: mean central tendency, standard deviation, and coincident of variation. The Fleiss Kappa Index was then used to analyze the agreement between respondents' answers. Finally, a new statistical analysis was performed. This analysis was weighted considering the representativeness of each customer in the company's billing. The results show that there are differences among competitive priorities of each BU. In addition, the proportionality of participation of each BU in the company influences the order of preference of competitive criteria.

Lohmann, S., Lacerda, D. P., Camargo, L. F. R. & Dresch, A. (2019). Operations strategy and analysis of competitive criteria: a case study of a food business. *Gestão & Produção*, 26(3), e2290. <https://doi.org/10.1590/0104-530X2290-1>.

**Peterson Obara Magutu (2010)**, the major purpose of this study was to document the operations strategy used in solid waste management, alongside the challenges facing implementation. This was a case study. Data was collected from fifty- (50) members and managers from the City Council of Nairobi and analyzed using descriptive statistics. The data was then summarized and presented in the form of proportions, tables and percentages. The findings arrive at: First, the CEO and the employees do the formulation of the operations strategy as part of a planning process that coordinates operational goals with those of the larger organization. The annual objectives on solid waste management are well documented, which is inclusive of improving public health of the people; the environment; and maintain public cleanliness in order to keep public places aesthetically acceptable: by ensuring the proper storage, collection, transportation, safe treatment and disposal of solid waste. Secondly, the heads/managers feel that the current policies adequately support the institutions strategic plan. Thirdly, on the evaluation of the CCN's operations strategies used in solid waste management, it was also found that CCN has not invested on enough time and effort in analyzing environment capabilities and services to develop their operations strategy. On the other hand the CCN has not invested on enough time and effort in implementing its operations strategy. The internal strengths with the highest effect on CCN's competitive advantage, resulting from its operations strategy are: responsive employees in meeting customer needs, highly trained employees and quality control techniques. Lastly, the factors that have strongly limited sound waste management operations strategy implementation are the inability to formulate and implement sound solid waste management policies, inadequate treatment and disposal of solid waste and inadequate landfill disposal. The results have further used to come up with a model which exposes the integration of the operation strategies in solid waste management.

Peterson Obara Magutu (2010), “Formulation and Implementation of Operation Strategies Used in Solid Waste Management: Case Study of City Council of Nairobi”, *Journal of African Research in Business & Technology*. Volume 8, Issue 3, April 2010, Pages 122-137  
<http://www.ibimapublishing.com/journals/JARBT/jarbt.html> Vol. 2010 (2010), Article ID 842702, 21 pages.

**Reinaldo Pacheco da Costa (2005)**, in the globalized world, companies seek for new operations strategies to ensure world corporate success. This article analyzes how the cost management models – both traditional and activitybased -, aid the planning and management of corporate globalized operations. The efficacy of the models application depends on their

alignment with the competitive strategy. Companies must evaluate the nature of the competition and its competitive priorities; they should then define the necessary and sufficient dependence level on costs information. In this article, three dependence levels are presented: operational, decision support and strategic control. The result of the research shows the importance of alignment between the cost management model and the competitive strategy for corporate success, and confirms the adequacy of the activity-based costing model as a supporting tool for decision taking in a global strategy. Case studies in world class companies in Brazil are presented.

Reinaldo Pacheco da Costa (2005), "Operations Strategy and Cost Management", Journal of Information Systems and Technology Management Vol. 2, No. 3, 2005, pp. 291-303 ISSN online: 1807-1775.

**Díaz-Garrido, E. (2008)**, this paper aims to review state-of-the-art literature on typologies and taxonomies of operations strategy in order to propose generic operations strategies in industrial companies from a theoretical viewpoint. Typologies and taxonomies are defined and characterised; both concepts delimit the generic configurations model. Then examine the state of the research on configuration analysis relating to operations strategy is examined. For this purpose articles published in 17 important journals in the field of production and operations management from the 1980s to the year 2006 are analysed. This review allows one to identify three generic operations strategies commonly accepted in the literature. This research deserves much more attention, both theoretical and empirical, in order to analyse the existing classifications and develop new classifications of operations strategy. Despite considerable interest in research on configurations in the study of organisation and business strategy there has not been much effort to examine the current state or even the future development of generic configurations in the operations strategy field. Luz Martín-Peña, M. and

Díaz-Garrido, E. (2008), "Typologies and taxonomies of operations strategy: a literature review", Management Research News, Vol. 31 No. 3, pp. 200-218.

**Haneen Abdulghani (2021)**, Strategies are designed to analysis and regulate the company's factors in an orderly and appropriate method, which contributes to maintaining the application of management in the best route. The purpose of this research is to examine the relationship between operation strategies and business strategies. IKEA home Furniture

company used as a case study for the current research to identify the types of operations strategies that is being used and the effect of using such a strategy on the firm business strategy in order to minimize the cost and improve planning. This research applied the qualitative and quantitative methodologies in research by intensive literature review, in addition to collecting the data through questionnaire survey among the Staff in IKEA –Saudi Arabia. The results of the statistical analysis of the collected data support the acceptance of the study hypotheses which shows there is a positive effect for the operations strategies on the firm business strategy.

Haneen Abdulghani (2021), “Testing the Effect of Operations Strategy on Business Strategy”, *Testing the Effect of Operations Strategy on Business Strategy Pjaee*, 18 (15) (2021).

**Kenneth K. Boye (2005)**, In this paper, we examine the operations strategy literature in the POMS journal to determine what has been learned and to suggest new directions for further study in this important area of research. Our review of this literature resulted in the selection of thirty-one relevant articles, many of which draw upon multiple theoretical perspectives. We identify eight such theoretical perspectives, and go on to classify these perspectives in terms of the scope of inquiry employed in the research (focused versus aggregated) and the researcher's assumptions about choice processes (behavioral versus rational). In doing so, we show that this body of work is dominated by papers that draw upon theoretical perspectives enabling a more holistic scope of inquiry, with a bias towards a view of strategy as a highly rational process. Building on our systematic review and integration of the literature, we suggest multiple areas for future research.

Kenneth K. Boye (2005), “Operations Strategy Research in the POMS Journal”, *Production and Operations Management Society*, Vol. 14, No. 4, winter 2005, pp. 442– 449. ISSN 1059-1478/05/1404442\$1.25.

**Mohamad Amin Kaviani (2014)**, in competitive markets, the operations strategies of companies are normally formulated based on their competitive advantages. An effective operations strategy should maintain and improve competitive advantages based on the capabilities of the corporate operations resources. Considering the market requirements and the operational performance of the rivals is the key for success and survival of a company in the competition. Therefore, recognizing where a company stands in comparison with its rivals and adopting the appropriate operations strategy plays vital roles in the success of companies. This paper proposes a method for comparing and ranking operations strategies of companies based

on the concept of efficient frontier using data envelopment analysis (DEA) in grey environment. In the aforementioned method, DEA is used to evaluate the efficiency of operations strategies of manufacturing firms. Also, grey theory is used to support the uncertainty of the experts' opinions regarding the inputs and outputs of the DEA model. Then the respective units are ranked, and analyses are performed. The proposed approach is applied for the entire nine cement factories of Fars Province in Iran, and the units are ranked, respective analyses are presented regarding the efficient and inefficient units.

Mohamad Amin Kaviani (2014), "Analyzing the operations strategies of manufacturing firms using a hybrid Grey DEA approach – A case of Fars Cement Companies in Iran", IJSOM November 2014, Volume 1, Issue 3, pp. 371-391 ISSN-Print: 2383-1359 ISSN-Online: 2383-2525.

**KhatolwaAsman Kiloh (2014)**, the current study aimed to determine operations strategies adopted by cooperative sector in Kenya. This sector has a high level of competition as there are many SACCOS and they all compete to ensure they provide quality products and services to their members who are also their main customers and shareholders. The study was anchored on Resource-Based Theory and Theory of Competitive Advantage. The study adopted descriptive research design. The target population of this study was 64 licensed SACCOs by SASRA and operates within Nairobi metropolitan. Purposive random sampling technique was adopted to sample either operation or strategic staff in each company. The study adopted primary data where data was collected using a questionnaire. Regression analysis was also conducted to establish the relationship between dependent and independent variables. The study established that organization considers the capital to devote to particular businesses and in order for an organization to increase its total shareholder's return requires Sacco's to align its business, financial and investor strategies. The study also found that implementation of enterprise competition strategy is based on the exploitation of volume and scale. Based on the findings of the study, the study recommends that firms should screen the environment in which they are operating in order to come up with imitable operation strategies that can enhance their competitiveness. This will help them to develop strategies that are in line with the products and services they offer which will eventually enhance organization strategies and competitiveness.

KhatolwaAsman Kiloh (2014), "Operations Strategies And Competitiveness Of Kenyan Cooperative Sector", Noble International Journal of Social Sciences Research ISSN (e): 2519-9722 ISSN(p): 2522-6789 Vol. 05 No. 03, pp: 22-33, 2020.

**Barney (2000)**, Competitive operations strategy development calls for research and improvement of operations processes on continuous basis and also monitoring of developments in competitor organizations. Benchmarking needs to be done periodically to understand the progress made by others and to initiate actions to catch up on parameters where there is a gap. Cost, product scope, product quality, delivery speed, delivery reliability, new product introductions are some of the operations related parameters in which competitors try to improve and gain competitive advantage. The interface between marketing and operations is necessary to provide a business with an understanding of its markets from both perspectives. Operations strategy must be linked vertically to the customer and horizontally to other parts of the enterprise. Productivity is an important dimension of operations. Productivity measures include partial measures, multifactor measures, and total measures of productivity. These measures provide benchmarks to indicate how well the company is doing and are used to measure improvement.

Barney, J. B. (1991), Firm resources and sustained competitive advantage, *Journal of Management*, 17(1): 99-120.

**Hatten (2008)**, Cost driven operation strategies: These are created by ensuring that products and services are provided with a mindset to receive higher profits but at lower costs compared to their rivals. There are products that are basic to consumers and they purchase them strictly on their price without considering their brand. Strategies on cost reduction can be achieved by use of available resources and implementation of effective strategies.

Hatten (2008), “Small business management: entrepreneurship and beyond”, (5thed), Mason, OH: South-Western Pub.

**Kenneth K. Boyer (2009)**, in this paper, we examine the operations strategy literature in the POMS journal to determine what has been learned and to suggest new directions for further study in this important area of research. Our review of this literature resulted in the selection of thirty-one relevant articles, many of which draw upon multiple theoretical perspectives. We identify eight such theoretical perspectives, and go on to classify these perspectives in terms of the scope of inquiry employed in the research (focused versus aggregated) and the researcher's assumptions about choice processes (behavioural versus rational). In doing so, we show that this body of work is dominated by papers that draw upon theoretical perspectives enabling a more holistic scope of inquiry, with a bias towards a view

of strategy as a highly rational process. Building on our systematic review and integration of the literature, we suggest multiple areas for future research.

Kenneth K. Boyer (2009), “Operations Strategy Research”, POMS Journal

**Jasmine Siu Lee Lam (2019)**, Many ports and terminals endeavour to enhance energy efficiency as energy prices have increased through years and climate change mitigation is a key target for the port industry. Stricter environmental regulations are adopted by authorities to limit pollutants and GHG emissions arising from energy consumption. Increasingly, port operational strategies and energy usage patterns are under scrutiny. To ingrain sustainability and environmental protection of ports, the use of innovative technology appears as a critical conduit in achieving a transition from a carbon-intensive port industry (dependent on fossil fuels) to a low-carbon port model by harnessing renewable energy, alternative fuels (e.g. LNG, hydrogen, bio fuel), smarter power distribution systems, energy consumption measurement systems. In this context, this paper conducts a systematic literature review to analyze operational strategies (e.g. peak shaving, operations optimization), technology usage (e.g. electrification of equipment, cold-ironing, energy storage systems), renewable energy, alternative fuels and energy management systems (e.g. smart grid with renewable energy) for improving the energy efficiency and environmental performance of ports and terminals. Research gaps and future research directions are identified. Analysis shows that there is a great potential for ports to achieve further energy efficiency and researchers have many impactful research opportunities.

Jasmine Siu Lee Lam (2019),” A review of energy efficiency in ports: Operational strategies, technologies and energy management systems”, Elsevier, Volume 112, September 2019, Pages 170-182.

**Gabriela Lobo Veiga (2019)**, the efficiency frontier is a function that indicates the maximum level of attainable performance result by a given set of inputs. The frontier is estimated based on the observation population of companies’ inputs and outputs, considering a representative sample. On the operations strategy context, inputs can be understood as the competitive priorities, with should be managed to lead through a superior organizational performance. Some methods for calculating technical efficiency are proposed in literature and all of them requires inputting and output variables. This paper presents a process for defining variables based on statically analysis of the round 4 of High-Performance Manufacturing

(HPM) data. The HPM project seeks to identify the practices adopted by high performance organizations and applies a survey with companies in 18 countries. The survey includes 1597 questions in 12 categories, culminating in a huge set of variables. Multivariate Data Analysis techniques are performed to establish a representative set of variables. As a result, we present the constructs to evaluate each input and output performance. This is an important contribution for the development of a Decision Support Systems for Manufacturing based on the frontier estimation techniques, which could be seen as a representative innovation to operations management and production research.

Gabriela Lobo Veiga (2019),” Efficiency Frontier Identification on the Context of Operations Strategy – A Study on Representative Constructs and Variables”, Elsevier, Volume 39, 2019, Pages 745-755.

## **CHAPTER IV**

### **DATA ANALYSIS AND INTERPRETATION**

**TABLE NO: 4.1**

#### **GENDER OF THE RESPONDENTS**

| <b>Gender</b> | <b>No. of the respondents</b> | <b>Percent</b> |
|---------------|-------------------------------|----------------|
| Male          | 76                            | 63.3           |
| Female        | 44                            | 36.7           |
| Total         | 120                           | 100.0          |

Source: Primary data

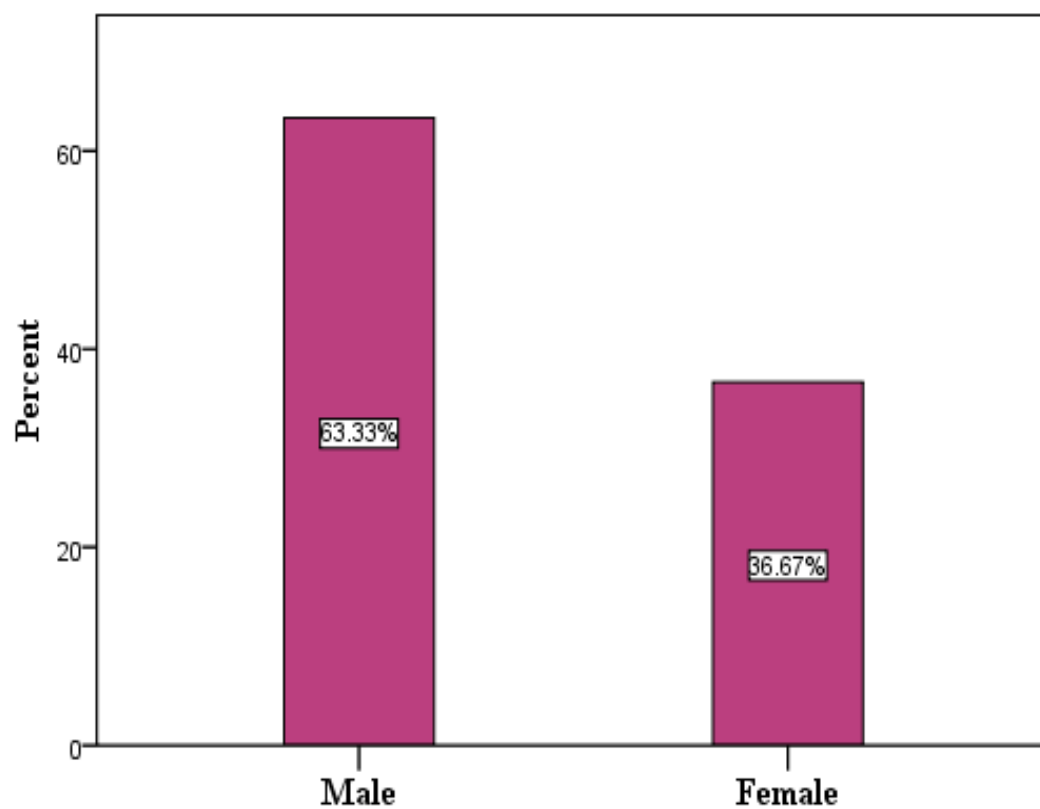
### **INTERPRETATION**

The above table shows that 63.3% of the respondents are male and 36.7% of the respondents are female.

Thus the majority of the respondents are male.

### **CHART: 4.1**

#### **GENDER OF THE RESPONDENTS**



**TABLE NO: 4.2**

**AGE OF THE RESPONDENTS**

| <b>Age</b> | <b>No. of the respondents</b> | <b>Percent</b> |
|------------|-------------------------------|----------------|
| Below 20   | 24                            | 20.0           |
| 21-30      | 41                            | 34.2           |
| 31-40      | 20                            | 16.7           |
| 41-50      | 17                            | 14.2           |
| Above 50   | 18                            | 15.0           |
| Total      | 120                           | 100.0          |

Source: Primary data

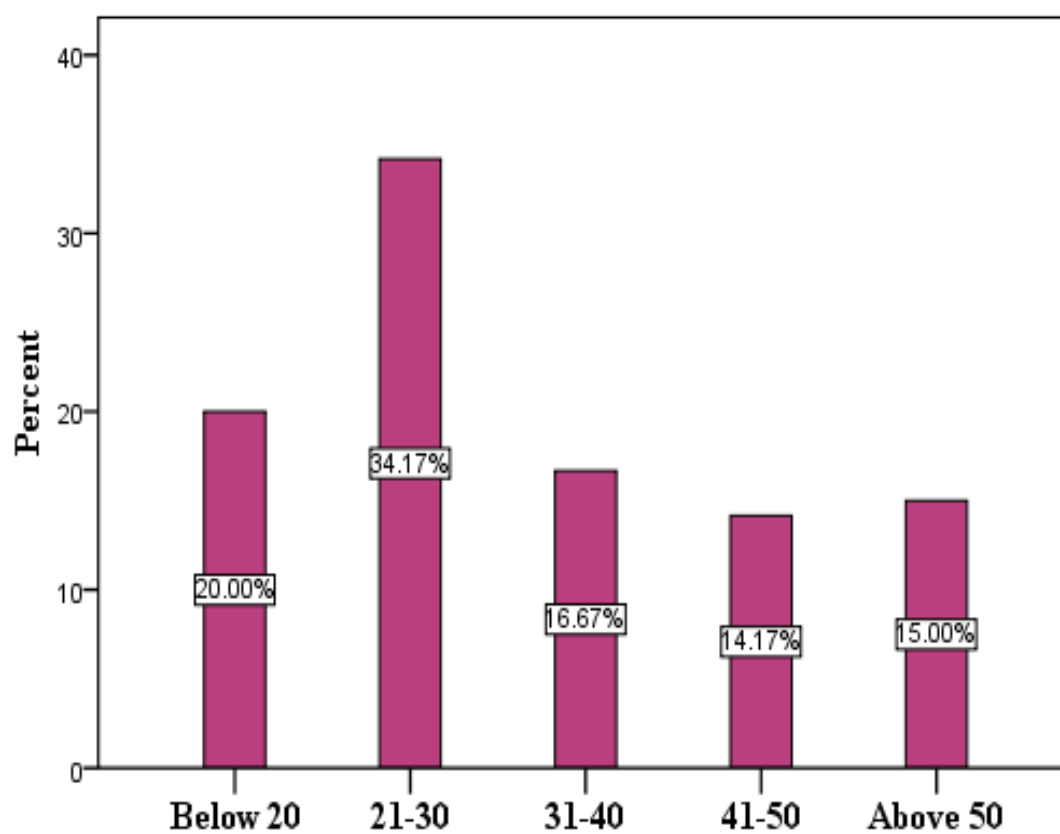
### **INTERPRETATION**

The above table shows that 20.0% of the respondents are in the age group of below 20 years, 34.2% of the respondents are in the age group of 21-30 years, 16.7% of the respondents are in the age group of 31-40 years, 14.2% of the respondents are in the age group of 41-50 years and 15.0% of the respondents are in the age group of above 50 years.

Thus the majority of the respondents are in the age group of 21-30 years.

### **CHART: 4.2**

#### **AGE OF THE RESPONDENTS**



**TABLE NO: 4.3**

**EDUCATIONAL QUALIFICATION OF THE RESPONDENTS**

| <b>Educational Qualification</b> | <b>No. of the respondents</b> | <b>Percent</b> |
|----------------------------------|-------------------------------|----------------|
| Up to Higher Secondary           | 34                            | 28.3           |
| Graduate                         | 26                            | 21.7           |
| Post Graduate                    | 36                            | 30.0           |
| Diploma                          | 12                            | 10.0           |
| Others                           | 12                            | 10.0           |
| Total                            | 120                           | 100.0          |

Source: Primary data

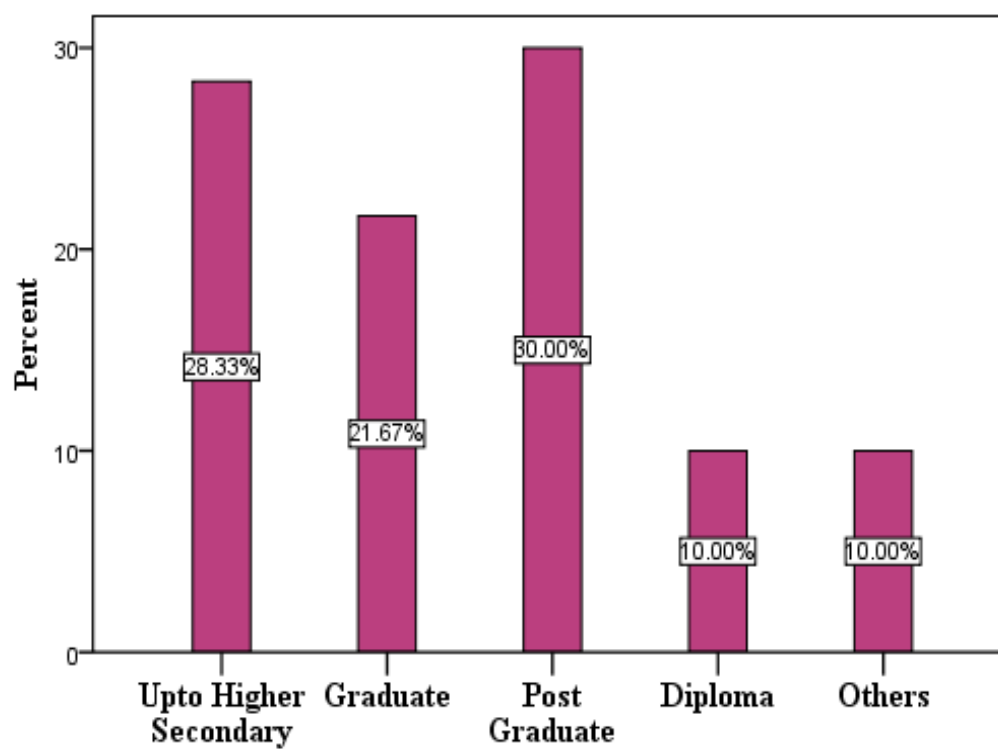
### **INTERPRETATION**

The above table shows that 28.3% of the respondents have completed up to Higher Secondary, 21.7% of the respondents have completed Graduate degree, 30% of the respondents have completed PG degree, 10.0% of the respondents have completed Diploma and 10% of the respondents have completed others educational qualification.

Thus the majority of the respondents have completed Post Graduate.

### **CHART: 4.3**

#### **EDUCATIONAL QUALIFICATION OF THE RESPONDENTS**



**TABLE NO: 4.4**

**SALARY OF THE RESPONDENTS**

| <b>Salary</b>    | <b>No. of the respondents</b> | <b>Percent</b> |
|------------------|-------------------------------|----------------|
| Below 10, 000/-  | 28                            | 23.3           |
| 10,000-20,000/-  | 49                            | 40.8           |
| 20,001- 30,000/- | 22                            | 18.3           |
| Above 30,000/-   | 21                            | 17.5           |
| Total            | 120                           | 100.0          |

Source: Primary data

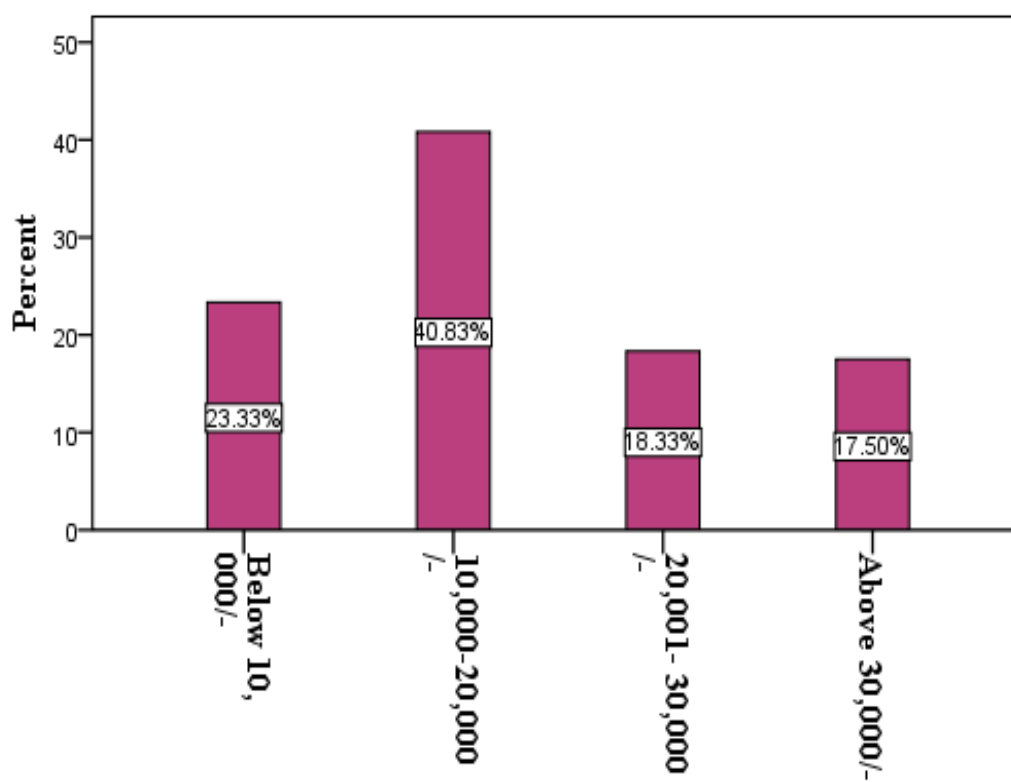
### **INTERPRETATION**

The above table shows that 23.3% of the respondents have below Rs.10, 000, 40.8% of the respondents have Rs. 10,000-20,000/-, 18.3% of the respondents have Rs.20,001-30,000 and 17.5% of the respondents have above Rs.30,000 as their income level.

Thus the majority of the respondents have Rs. 10,000-20,000/- as their income level.

### **CHART NO: 4.4**

### **SALARY OF THE RESPONDENTS**



**TABLE NO: 4.5**

**EXPERIENCE OF THE RESPONDENTS**

| <b>Experience</b> | <b>No. of the respondents</b> | <b>Percent</b> |
|-------------------|-------------------------------|----------------|
| Below 1 year      | 28                            | 23.3           |
| 1-3 years         | 39                            | 32.5           |
| 4-6 years         | 31                            | 25.8           |
| Above 6 years     | 22                            | 18.3           |
| Total             | 120                           | 100.0          |

Source: Primary data

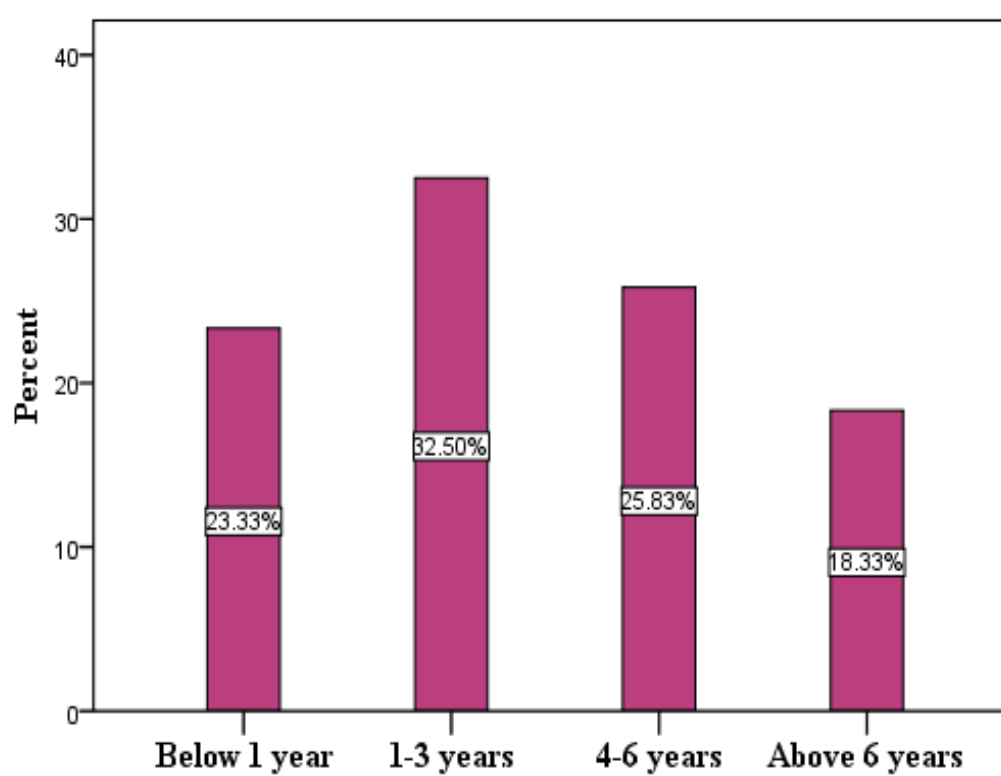
### **INTERPRETATION**

The above table shows that 23.3% of the respondents have below 1 years, 32.5% of the respondents have 1-3 years, 25.8% of the respondents have 4-6 years and 18.3 % of the respondents have above 6 years experience.

Thus the majority of the respondents have below 1-3 years experience.

### **CHART NO: 4.5**

### EXPERIENCE OF THE RESPONDENTS



**TABLE NO: 4.6**

### USE OF EFFICIENT EQUIPMENT

| Particulars                | No. of the respondents | Percent |
|----------------------------|------------------------|---------|
| Strongly agree             | 25                     | 20.8    |
| Agree                      | 37                     | 30.8    |
| Neither agree nor disagree | 27                     | 22.5    |
| Disagree                   | 19                     | 15.8    |
| Strongly disagree          | 12                     | 10.0    |
| Total                      | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 20.8% of the respondents said that strongly agree, 30.8% of the respondents said that agree, 22.5% of the respondents said that neither agree nor disagree, 15.8% of the respondents said that disagree and 10.0% of the respondents said that strongly disagree towards use of efficient equipment.

Thus the majority of the respondents said that agree towards use of efficient equipment.

### CHART NO: 4.6

### USE OF EFFICIENT EQUIPMENT

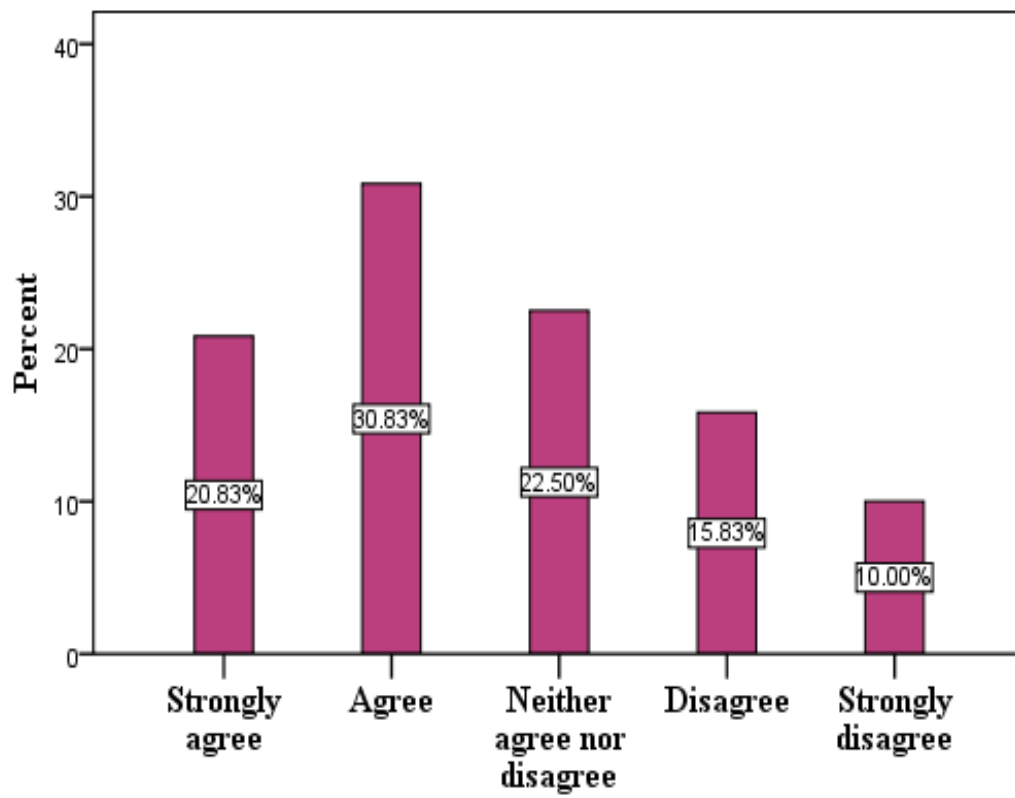


TABLE NO: 4.7

### **DIRECT PURCHASE FROM MANUFACTURER**

| <b>Particulars</b>         | <b>No. of the respondents</b> | <b>Percent</b> |
|----------------------------|-------------------------------|----------------|
| Strongly agree             | 20                            | 16.7           |
| Agree                      | 45                            | 37.5           |
| Neither agree nor disagree | 25                            | 20.8           |
| Disagree                   | 14                            | 11.7           |
| Strongly disagree          | 16                            | 13.3           |
| Total                      | 120                           | 100.0          |

Source: Primary data

### **INTERPRETATION**

The above table shows that 16.7% of the respondents said that strongly agree, 37.5% of the respondents said that agree, 20.8% of the respondents said that neither agree nor disagree, 11.7% of the respondents said that disagree and 13.3% of the respondents said that strongly disagree towards direct purchase from manufacturer.

Thus the majority of the respondents said that agree towards direct purchase from manufacturer.

### **CHART NO: 4.7**

### DIRECT PURCHASE FROM MANUFACTURER

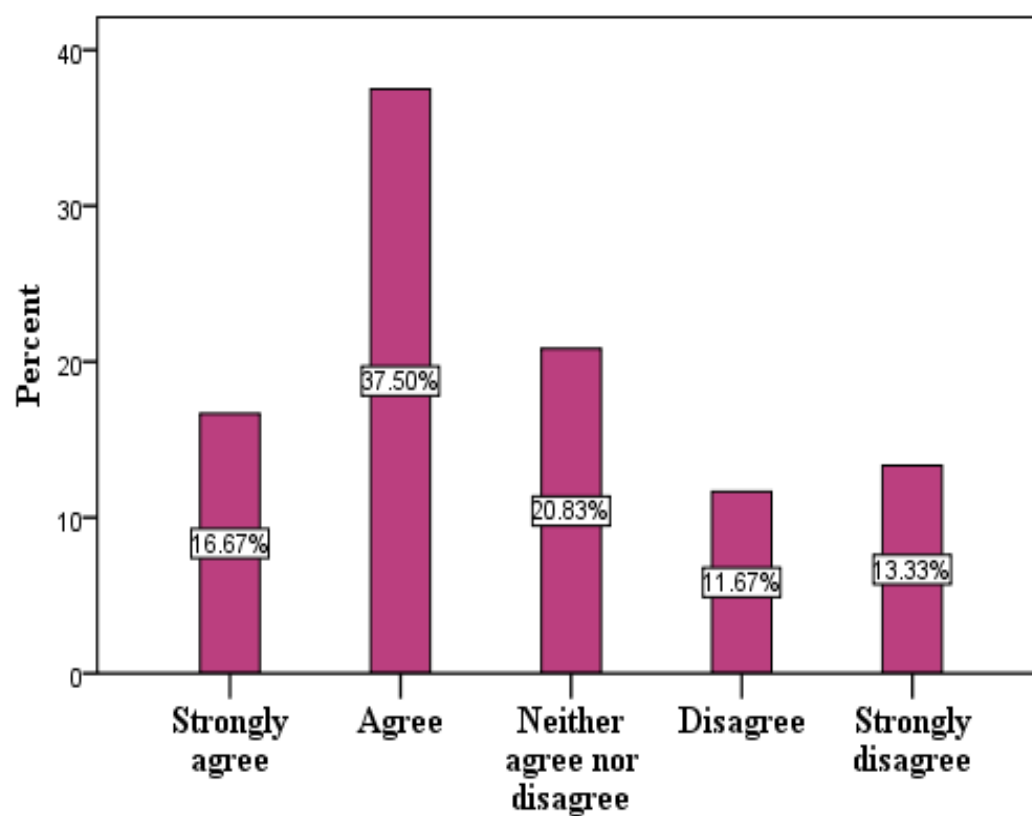


TABLE NO: 4.8

### LOW COST SUPPLY CHAIN

| Particulars                | No. of the respondents | Percent |
|----------------------------|------------------------|---------|
| Strongly agree             | 33                     | 27.5    |
| Agree                      | 24                     | 20.0    |
| Neither agree nor disagree | 30                     | 25.0    |
| Disagree                   | 3                      | 2.5     |
| Strongly disagree          | 30                     | 25.0    |
| Total                      | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 27.5% of the respondents said that strongly agree, 20.0% of the respondents said that agree, 25.0% of the respondents said that neither agree nor disagree, 2.5% of the respondents said that disagree and 25.0% of the respondents said that strongly disagree towards low cost supply chain.

Thus the majority of the respondents said that strongly agree towards low cost supply chain.

### CHART NO: 4.8

### LOW COST SUPPLY CHAIN

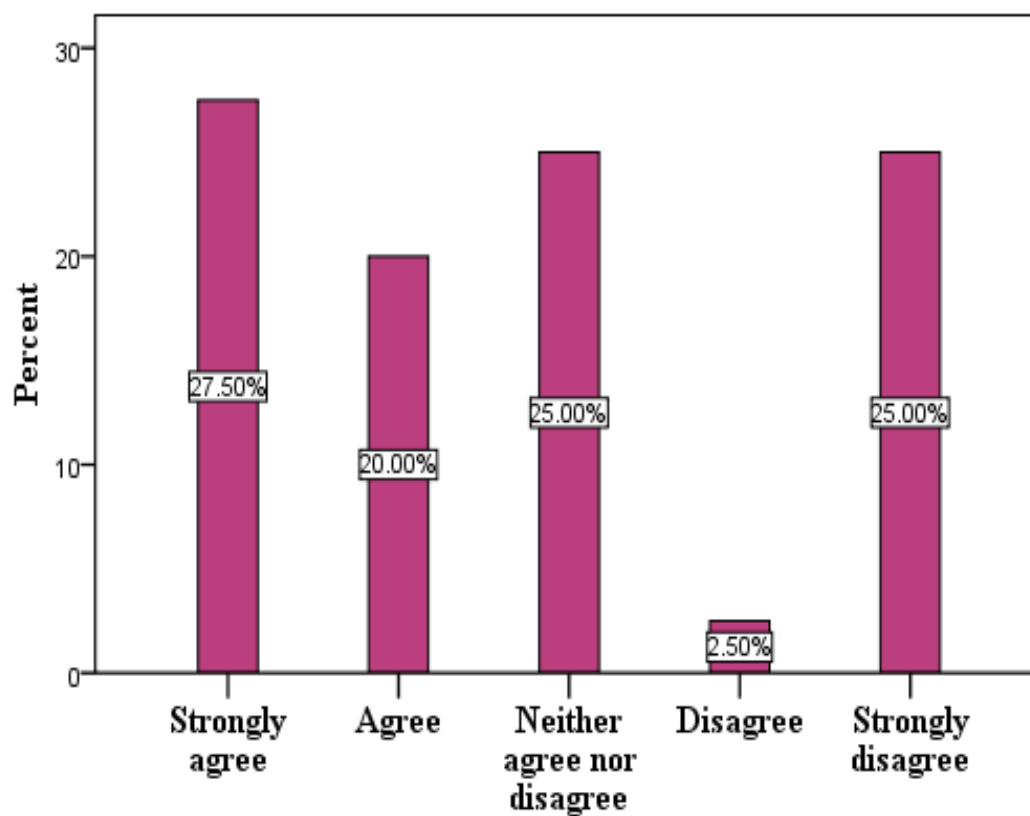


TABLE NO: 4.9

### JUST-IN-TIME STRATEGY

| Particulars                | No. of the respondents | Percent |
|----------------------------|------------------------|---------|
| Strongly agree             | 32                     | 26.7    |
| Agree                      | 40                     | 33.3    |
| Neither agree nor disagree | 32                     | 26.7    |
| Disagree                   | 3                      | 2.5     |
| Strongly disagree          | 13                     | 10.8    |
| Total                      | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 26.7% of the respondents said that strongly agree, 33.3% of the respondents said that agree, 26.7% of the respondents said that neither agree nor disagree, 2.5% of the respondents said that disagree and 10.8% of the respondents said that strongly disagree towards just-in-time strategy.

Thus the majority of the respondents said that agree towards just-in-time strategy.

### CHART NO: 4.9

### JUST-IN-TIME STRATEGY

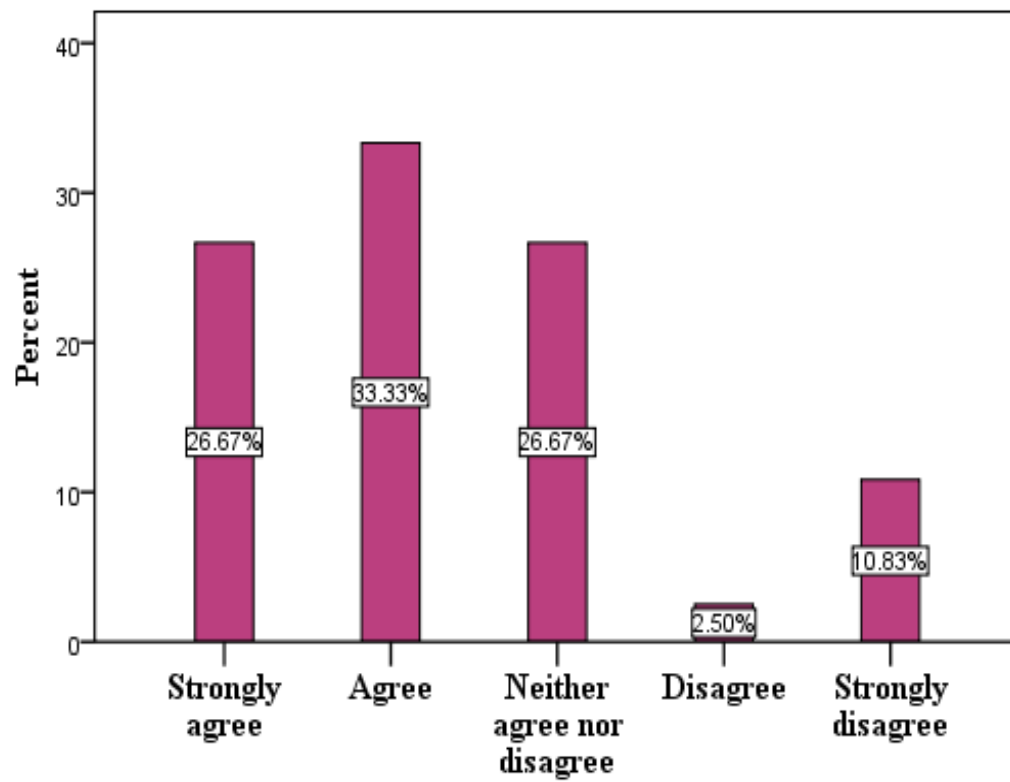


TABLE NO: 4.10

### **FOLLOWING COST LEADERSHIP STRATEGY**

| <b>Particulars</b>         | <b>No. of the respondents</b> | <b>Percent</b> |
|----------------------------|-------------------------------|----------------|
| Strongly agree             | 27                            | 22.5           |
| Agree                      | 47                            | 39.2           |
| Neither agree nor disagree | 24                            | 20.0           |
| Disagree                   | 2                             | 1.7            |
| Strongly disagree          | 20                            | 16.7           |
| Total                      | 120                           | 100.0          |

Source: Primary data

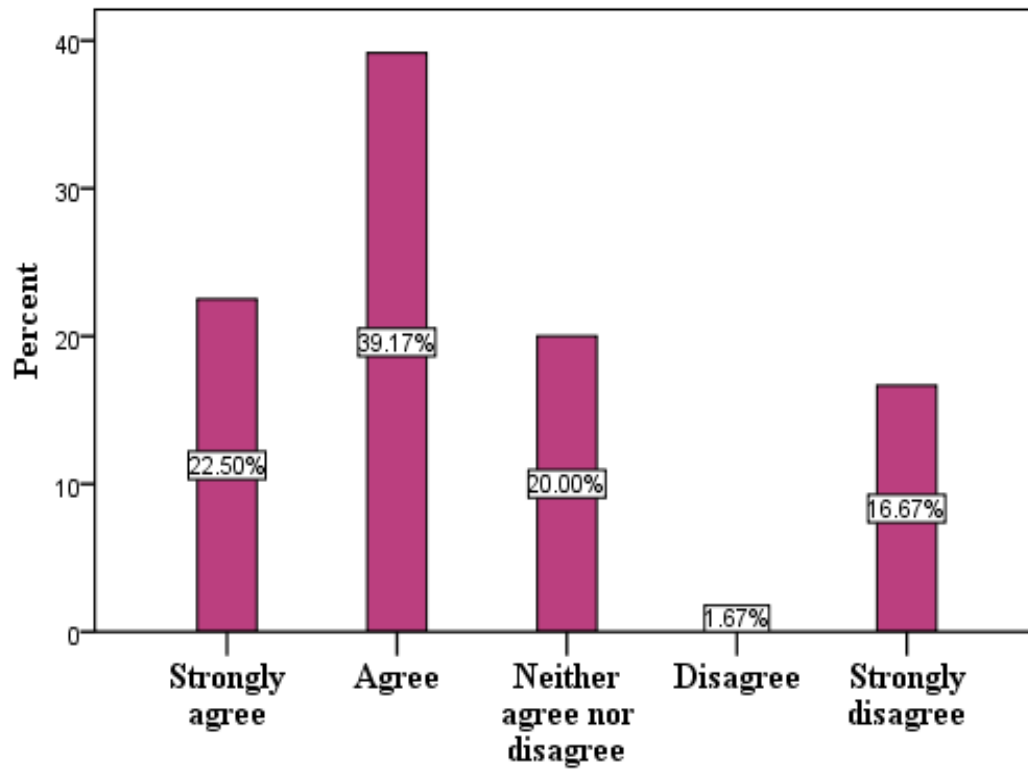
### **INTERPRETATION**

The above table shows that 22.5% of the respondents said that strongly agree, 39.2% of the respondents said that agree, 20.0% of the respondents said that neither agree nor disagree, 1.7% of the respondents said that disagree and 16.7% of the respondents said that strongly disagree towards following cost leadership strategy.

Thus the majority of the respondents said that agree towards following cost leadership strategy.

### **CHART NO: 4.10**

### **FOLLOWING COST LEADERSHIP STRATEGY**



**TABLE NO: 4.11**

### FASTER PRODUCTION RATES

| Particulars | No. of the respondents | Percent |
|-------------|------------------------|---------|
| Excellent   | 31                     | 25.8    |
| Good        | 20                     | 16.7    |
| Average     | 20                     | 16.7    |
| Bad         | 2                      | 1.7     |
| Poor        | 47                     | 39.2    |
| Total       | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 25.8% of the respondents said that excellent, 16.7% of the respondents said that good, 16.7% of the respondents said that average, 1.7% of the respondents said that bad and 39.2% of the respondents said that poor towards faster production rates.

Thus the majority of the respondents said that poor towards faster production rates.

### CHART NO: 4.11

### FASTER PRODUCTION RATES

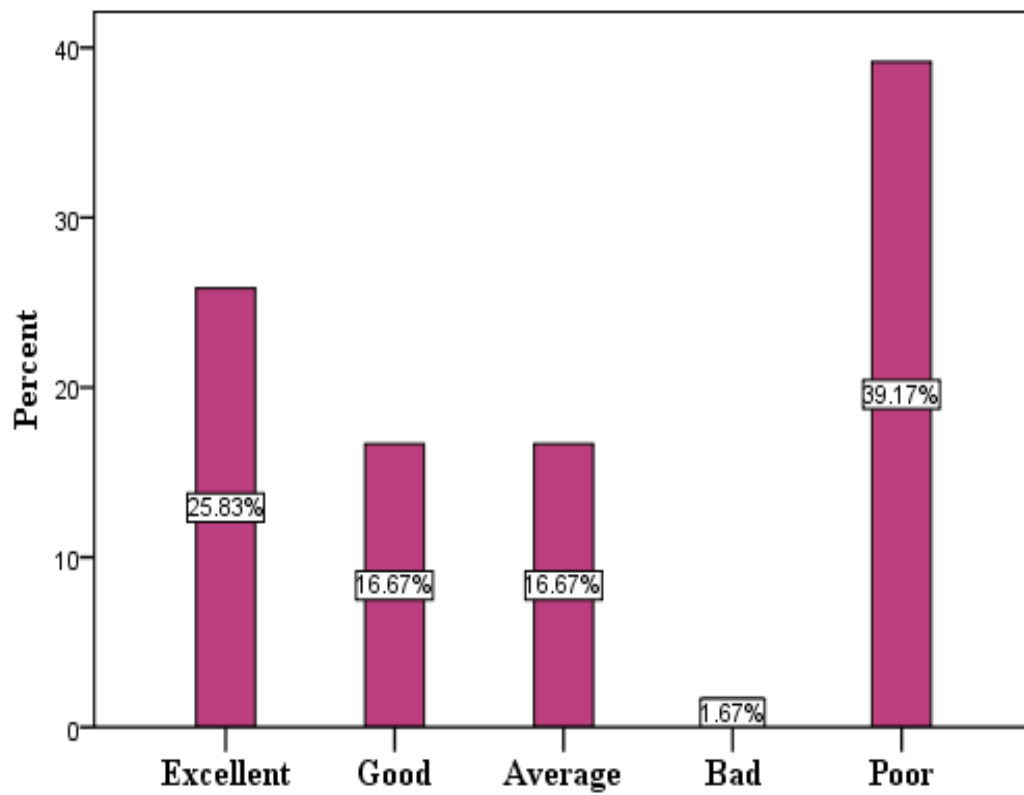


TABLE NO: 4.12

### ERROR FREE SERVICES

| Particulars | No. of the respondents | Percent |
|-------------|------------------------|---------|
| Excellent   | 37                     | 30.8    |
| Good        | 32                     | 26.7    |
| Average     | 20                     | 16.7    |
| Bad         | 12                     | 10.0    |
| Poor        | 19                     | 15.8    |
| Total       | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 30.8% of the respondents said that excellent, 26.7% of the respondents said that good, 16.7% of the respondents said that average, 10.0% of the respondents said that bad and 15.8% of the respondents said that poor towards error free services.

Thus the majority of the respondents said that excellent towards error free services.

### CHART NO: 4.12

### ERROR FREE SERVICES

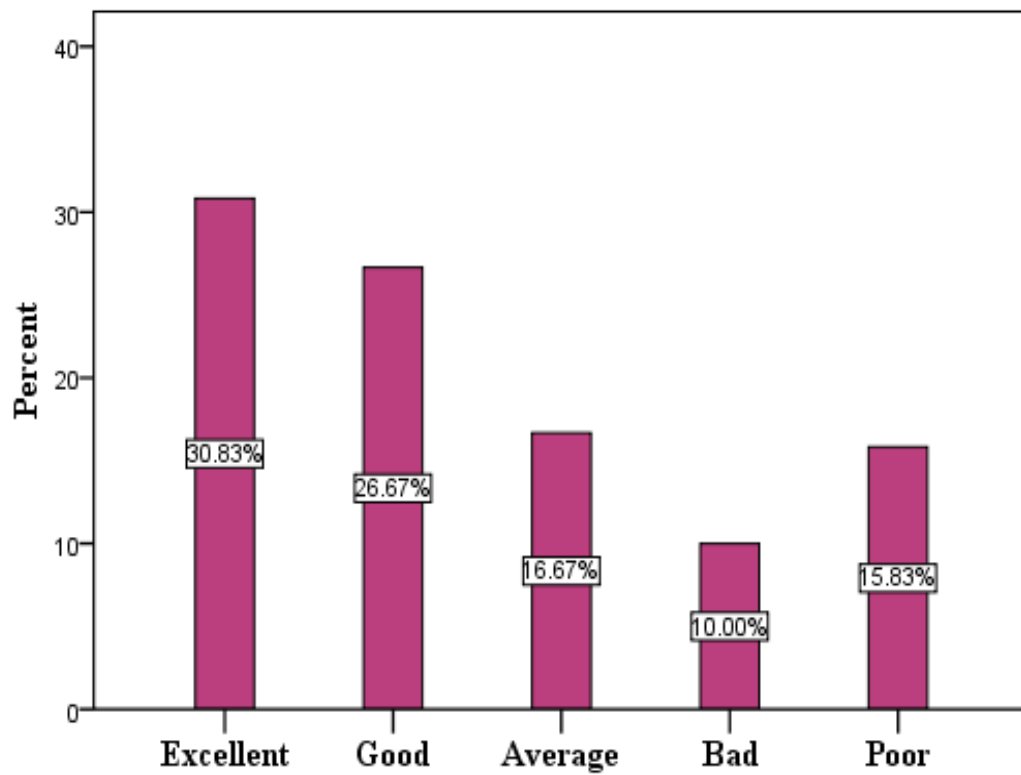


TABLE NO: 4.13

### QUICKER TRANSPORT METHODS

| Particulars | No. of the respondents | Percent |
|-------------|------------------------|---------|
| Excellent   | 24                     | 20.0    |
| Good        | 45                     | 37.5    |
| Average     | 31                     | 25.8    |
| Bad         | 3                      | 2.5     |
| Poor        | 17                     | 14.2    |
| Total       | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 20.0% of the respondents said that excellent, 37.5% of the respondents said that good, 25.8% of the respondents said that average, 2.5% of the respondents said that bad and 14.2% of the respondents said that poor towards quicker transport methods.

Thus the majority of the respondents said that good towards quicker transport methods.

### CHART NO: 4.13

### QUICKER TRANSPORT METHODS

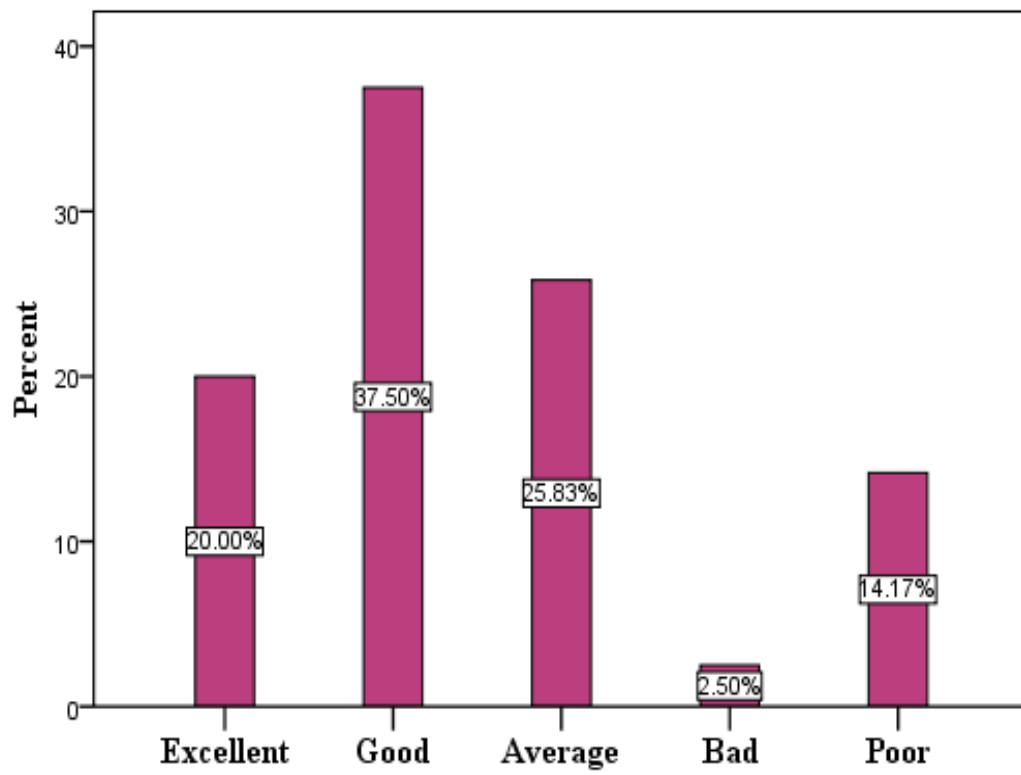


TABLE NO: 4.14

**LARGER FINISHED-GOODS INVENTORIES FOR SERVING AT PROMISED  
TIME**

| <b>Particulars</b> | <b>No. of the respondents</b> | <b>Percent</b> |
|--------------------|-------------------------------|----------------|
| Excellent          | 37                            | 30.8           |
| Good               | 29                            | 24.2           |
| Average            | 14                            | 11.7           |
| Bad                | 17                            | 14.2           |
| Poor               | 23                            | 19.2           |
| Total              | 120                           | 100.0          |

Source: Primary data

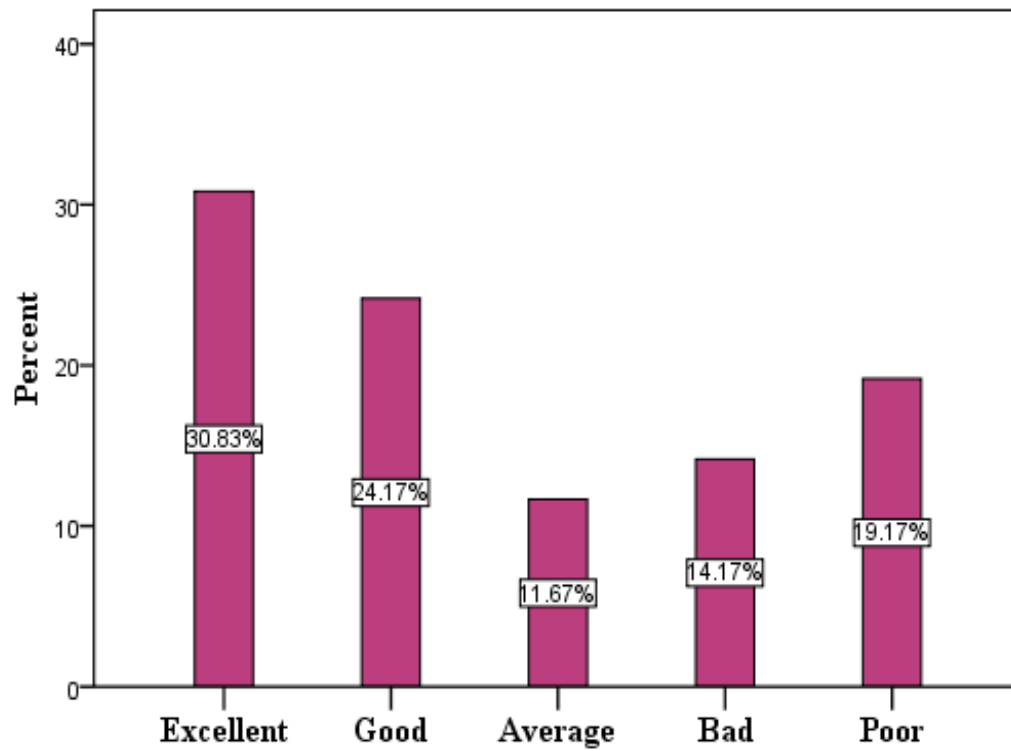
**INTERPRETATION**

The above table shows that 30.8% of the respondents said that excellent, 24.2% of the respondents said that good, 11.7% of the respondents said that average, 14.2% of the respondents said that bad and 19.2% of the respondents said that poor towards larger finished-goods inventories for serving at promised time.

Thus the majority of the respondents said that excellent towards larger finished-goods inventories for serving at promised time.

**CHART NO: 4.14**

**LARGER FINISHED-GOODS INVENTORIES FOR SERVING AT PROMISED  
TIME**



**TABLE NO: 4.15**

### **BETTER CONTROL OF PRODUCTION OF ORDERS**

| <b>Particulars</b> | <b>No. of the respondents</b> | <b>Percent</b> |
|--------------------|-------------------------------|----------------|
| Excellent          | 30                            | 25.0           |
| Good               | 31                            | 25.8           |
| Average            | 36                            | 30.0           |
| Bad                | 7                             | 5.8            |
| Poor               | 16                            | 13.3           |
| Total              | 120                           | 100.0          |

Source: Primary data

### **INTERPRETATION**

The above table shows that 25.0% of the respondents said that excellent, 25.8% of the respondents said that good, 30.0% of the respondents said that average, 5.8% of the respondents said that bad and 13.3% of the respondents said that poor towards better control of production of orders.

Thus the majority of the respondents said that average towards better control of production of orders.

### **CHART NO: 4.15**

### BETTER CONTROL OF PRODUCTION OF ORDERS

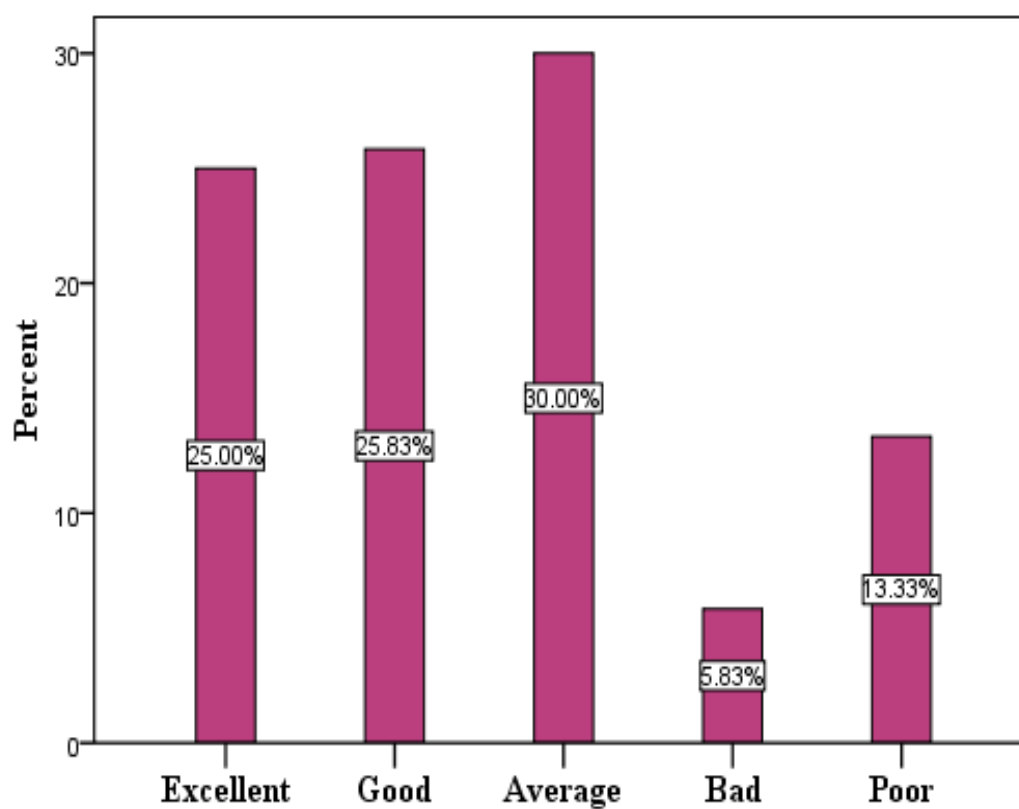


TABLE NO: 4.16

### HIGH QUALITY IN PRODUCT ATTRIBUTES

| Particulars                | No. of the respondents | Percent |
|----------------------------|------------------------|---------|
| Strongly agree             | 49                     | 40.8    |
| Agree                      | 37                     | 30.8    |
| Neither agree nor disagree | 13                     | 10.8    |
| Disagree                   | 20                     | 16.7    |
| Strongly disagree          | 1                      | 0.8     |
| Total                      | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 40.8% of the respondents said that strongly agree, 30.8% of the respondents said that agree, 10.8% of the respondents said that neither agree nor disagree, 16.7% of the respondents said that disagree and 0.8% of the respondents said that strongly disagree towards high quality in product attributes.

Thus the majority of the respondents said that strongly agree towards high quality in product attributes.

### CHART NO: 4.16

### HIGH QUALITY IN PRODUCT ATTRIBUTES

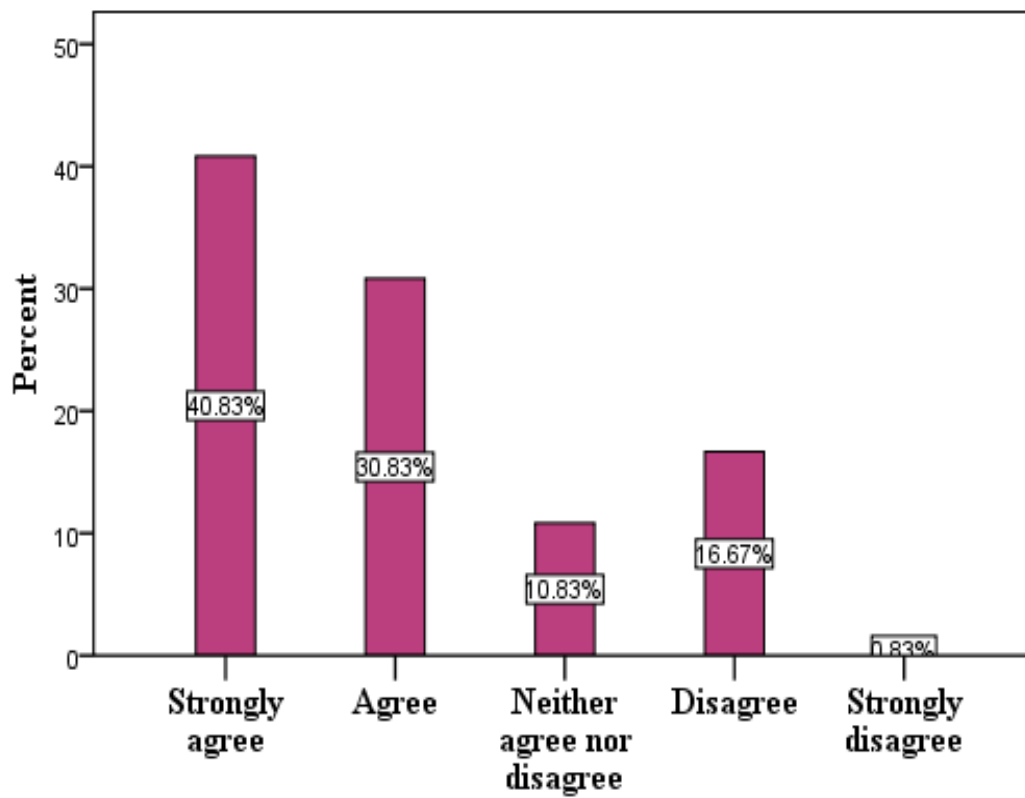


TABLE NO: 4.17

### **ADOPTION AND IMPLEMENTING HIGH QUALITY TECHNOLOGY**

| <b>Particulars</b>         | <b>No. of the respondents</b> | <b>Percent</b> |
|----------------------------|-------------------------------|----------------|
| Strongly agree             | 24                            | 20.0           |
| Agree                      | 59                            | 49.2           |
| Neither agree nor disagree | 18                            | 15.0           |
| Disagree                   | 18                            | 15.0           |
| Strongly disagree          | 1                             | 0.8            |
| Total                      | 120                           | 100.0          |

Source: Primary data

### **INTERPRETATION**

The above table shows that 20.0% of the respondents said that strongly agree, 49.2% of the respondents said that agree, 15.0% of the respondents said that neither agree nor disagree, 15.0% of the respondents said that disagree and 0.8% of the respondents said that strongly disagree towards adoption and implementing high quality technology.

Thus the majority of the respondents said that agree towards adoption and implementing high quality technology.

### **CHART NO: 4.17**

## ADOPTION AND IMPLEMENTING HIGH QUALITY TECHNOLOGY

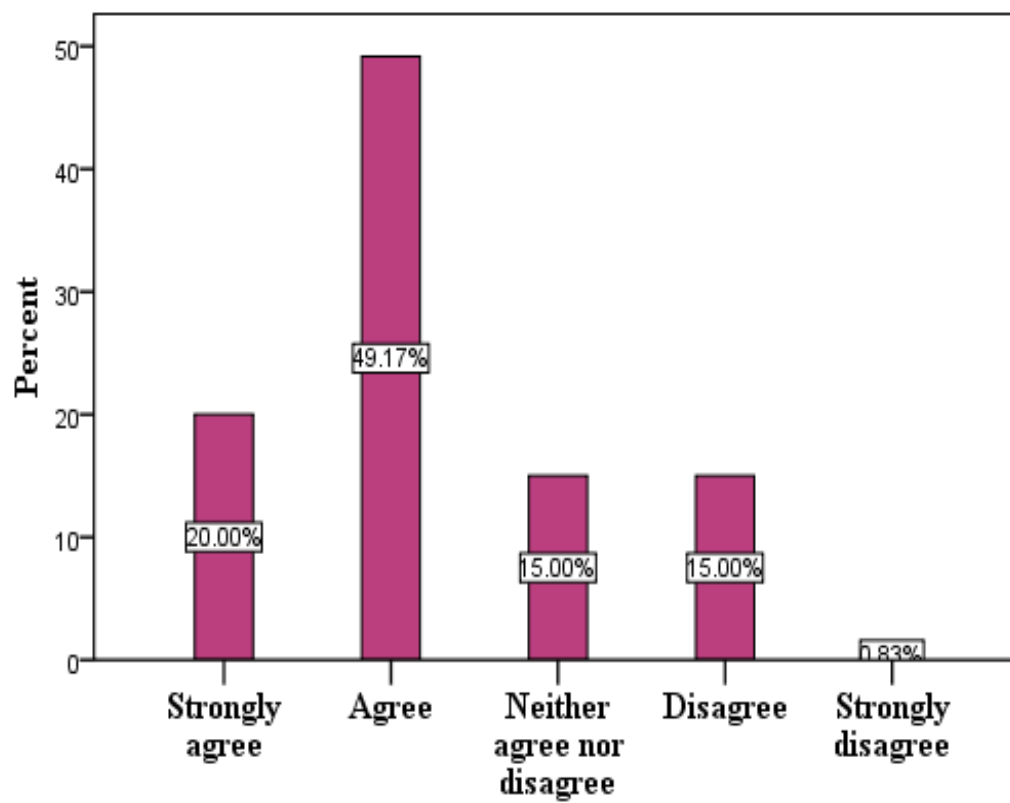


TABLE NO: 4.18

### QUALITY OPERATIONAL PERFORMANCE IN EACH PHASES

| Particulars                | No. of the respondents | Percent |
|----------------------------|------------------------|---------|
| Strongly agree             | 36                     | 30.0    |
| Agree                      | 31                     | 25.8    |
| Neither agree nor disagree | 22                     | 18.3    |
| Disagree                   | 10                     | 8.3     |
| Strongly disagree          | 21                     | 17.5    |
| Total                      | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 30.0% of the respondents said that strongly agree, 25.8% of the respondents said that agree, 18.3% of the respondents said that neither agree nor disagree, 8.3% of the respondents said that disagree and 17.5% of the respondents said that strongly disagree towards quality operational performance in each phases.

Thus the majority of the respondents said that strongly agree towards quality operational performance in each phases.

### CHART NO: 4.18

### QUALITY OPERATIONAL PERFORMANCE IN EACH PHASES

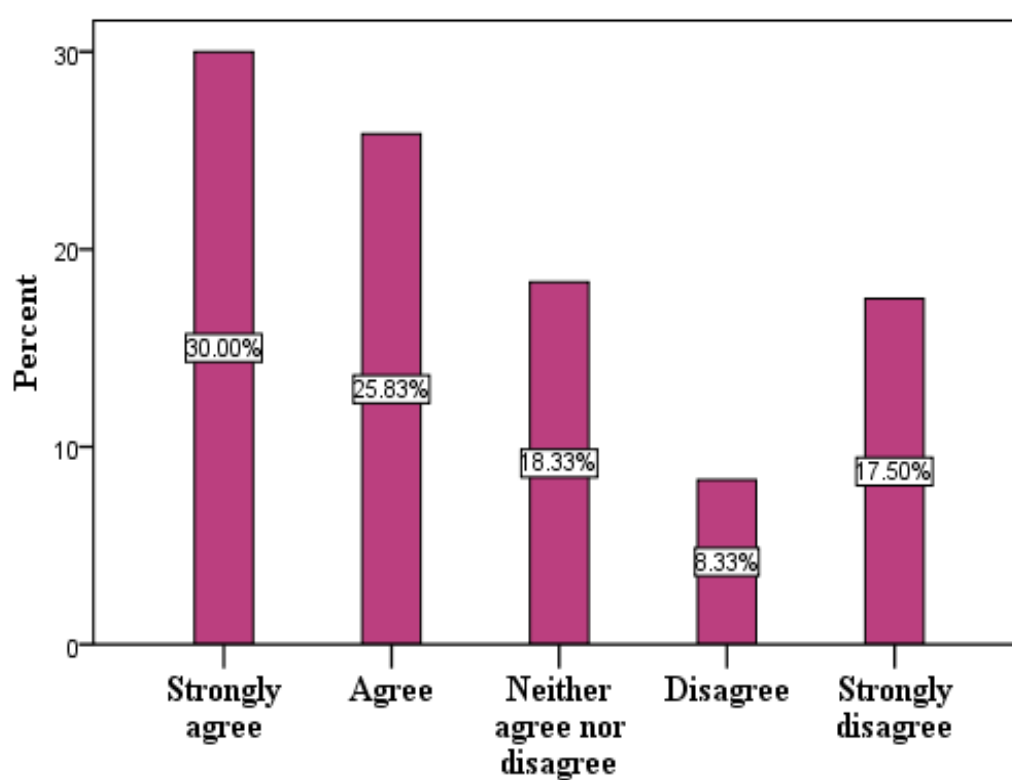


TABLE NO: 4.19

### LOCATING FOR CONVENIENT PLACE FOR TRANSPORTATION

| Particulars                | No. of the respondents | Percent |
|----------------------------|------------------------|---------|
| Strongly agree             | 25                     | 20.8    |
| Agree                      | 52                     | 43.3    |
| Neither agree nor disagree | 19                     | 15.8    |
| Disagree                   | 10                     | 8.3     |
| Strongly disagree          | 14                     | 11.7    |
| Total                      | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 20.8% of the respondents said that strongly agree, 43.3% of the respondents said that agree, 15.8% of the respondents said that neither agree nor disagree, 8.3% of the respondents said that disagree and 11.7% of the respondents said that strongly disagree towards locating for convenient place for transportation.

Thus the majority of the respondents said that agree towards locating for convenient place for transportation.

### CHART NO: 4.19

# LOCATING FOR CONVENIENT PLACE FOR TRANSPORTATION

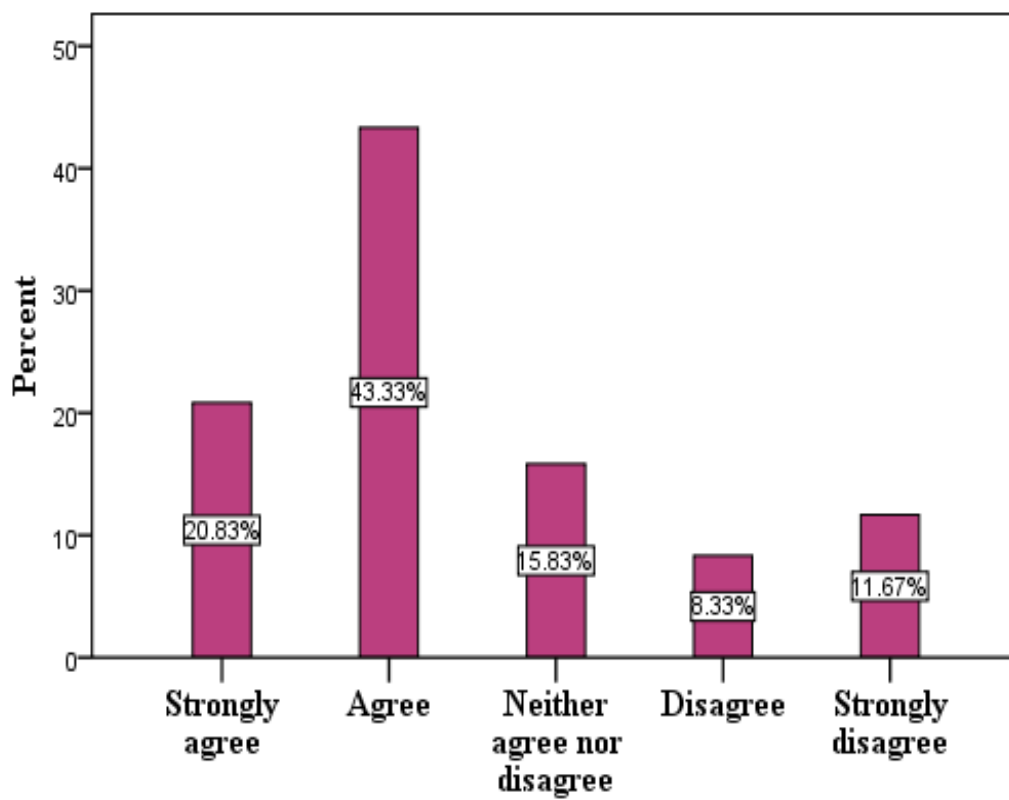


TABLE NO: 4.20

### QUALITY PROFESSIONAL TO CONTROL QUALITY PRODUCTION

| Particulars                | No. of the respondents | Percent |
|----------------------------|------------------------|---------|
| Strongly agree             | 44                     | 36.7    |
| Agree                      | 34                     | 28.3    |
| Neither agree nor disagree | 12                     | 10.0    |
| Disagree                   | 7                      | 5.8     |
| Strongly disagree          | 23                     | 19.2    |
| Total                      | 120                    | 100.0   |

Source: Primary data

#### INTERPRETATION

The above table shows that 36.7% of the respondents said that strongly agree, 28.3% of the respondents said that agree, 10.0% of the respondents said that neither agree nor disagree, 5.8% of the respondents said that disagree and 19.2% of the respondents said that strongly disagree towards quality professional to control quality production.

Thus the majority of the respondents said that strongly agree towards quality professional to control quality production.

#### CHART NO: 4.20

# QUALITY PROFESSIONAL TO CONTROL QUALITY PRODUCTION

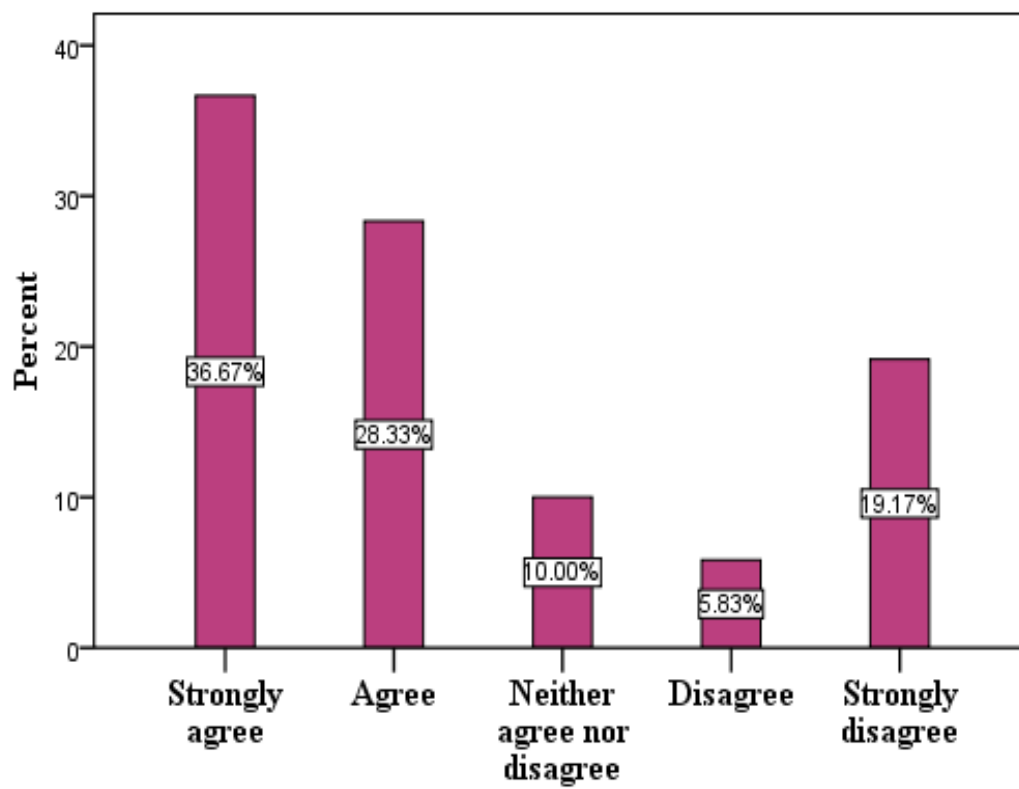


TABLE NO: 4.21

### MANUFACTURING A BROAD RANGE OF PRODUCTS

| Particulars                | No. of the respondents | Percent |
|----------------------------|------------------------|---------|
| Strongly agree             | 23                     | 19.2    |
| Agree                      | 57                     | 47.5    |
| Neither agree nor disagree | 14                     | 11.7    |
| Disagree                   | 1                      | .8      |
| Strongly disagree          | 25                     | 20.8    |
| Total                      | 120                    | 100.0   |

Source: Primary data

### INTERPRETATION

The above table shows that 19.2% of the respondents said that strongly agree, 47.5% of the respondents said that agree, 11.7% of the respondents said that neither agree nor disagree, 0.8% of the respondents said that disagree and 20.8% of the respondents said that strongly disagree towards manufacturing a broad range of products.

Thus the majority of the respondents said that agree towards manufacturing a broad range of products.

### CHART NO: 4.21

### MANUFACTURING A BROAD RANGE OF PRODUCTS

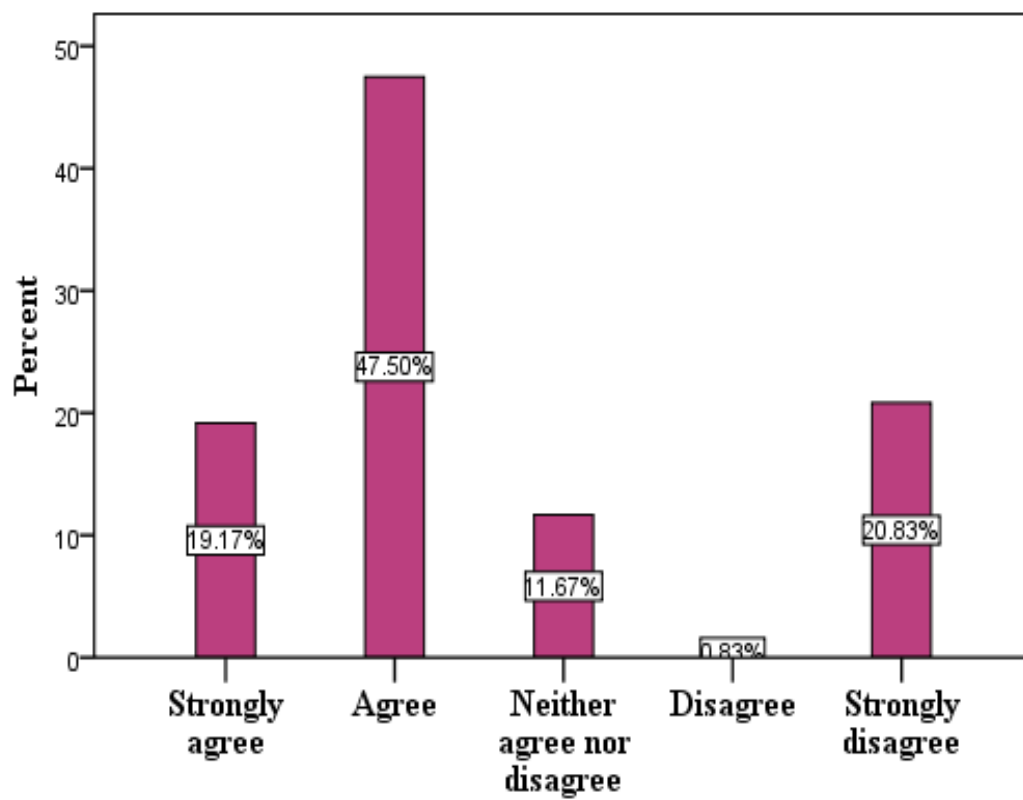


TABLE NO: 4.22

## INTRODUCTION OF NEW PRODUCTS OR PROCESSES FOR CUSTOMER REQUIREMENT

| Particulars                | No. of the respondents | Percent |
|----------------------------|------------------------|---------|
| Strongly agree             | 30                     | 25.0    |
| Agree                      | 29                     | 24.2    |
| Neither agree nor disagree | 38                     | 31.7    |
| Disagree                   | 3                      | 2.5     |
| Strongly disagree          | 20                     | 16.7    |
| Total                      | 120                    | 100.0   |

Source: Primary data

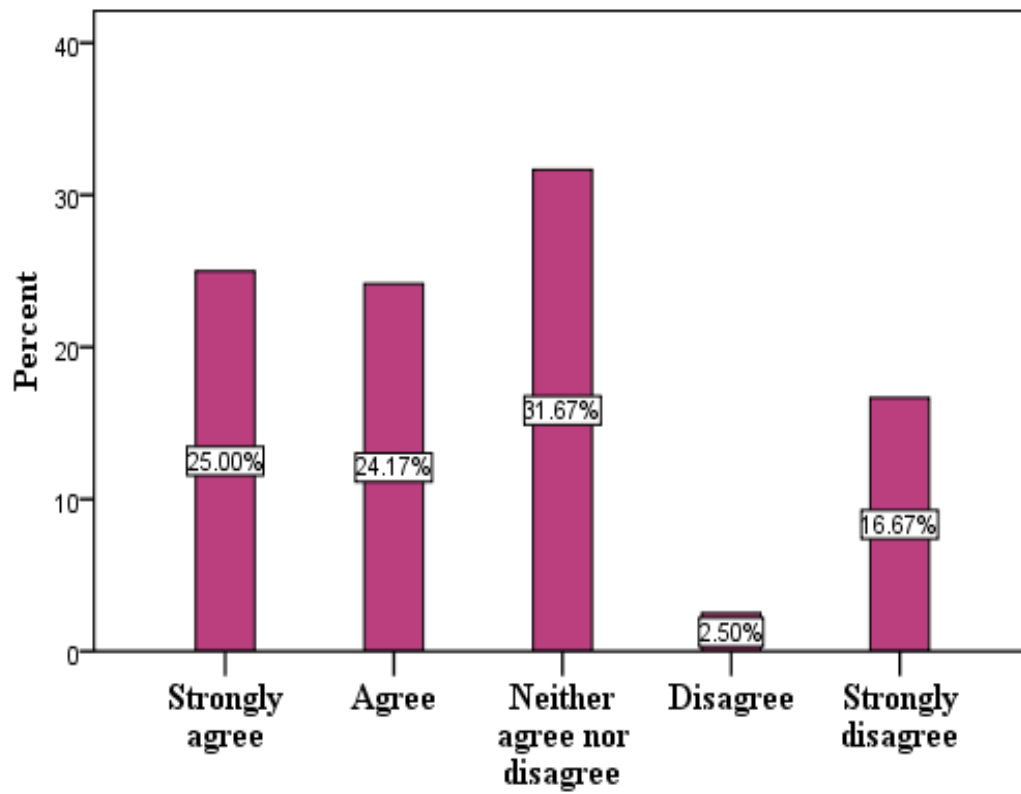
### INTERPRETATION

The above table shows that 25.0% of the respondents said that strongly agree, 24.2% of the respondents said that agree, 31.7% of the respondents said that neither agree nor disagree, 2.5% of the respondents said that disagree and 16.7% of the respondents said that strongly disagree towards introduction of new products or processes for customer requirement.

Thus the majority of the respondents said that neither agree nor disagree towards introduction of new products or processes for customer requirement.

### CHART NO: 4.22

**INTRODUCTION OF NEW PRODUCTS OR PROCESSES FOR CUSTOMER  
REQUIREMENT**



**TABLE NO: 4.23**

### **MULTI-SKILLED WORKERS TO PERFORM THE FLEXIBILITY**

| <b>Particulars</b>         | <b>No. of the respondents</b> | <b>Percent</b> |
|----------------------------|-------------------------------|----------------|
| Strongly agree             | 16                            | 13.3           |
| Agree                      | 39                            | 32.5           |
| Neither agree nor disagree | 15                            | 12.5           |
| Disagree                   | 2                             | 1.7            |
| Strongly disagree          | 48                            | 40.0           |
| Total                      | 120                           | 100.0          |

Source: Primary data

### **INTERPRETATION**

The above table shows that 13.3% of the respondents said that strongly agree, 32.5% of the respondents said that agree, 12.5% of the respondents said that neither agree nor disagree, 1.7% of the respondents said that disagree and 40.0% of the respondents said that strongly disagree towards multi-skilled workers to perform the flexibility.

Thus the majority of the respondents said that strongly disagree towards multi-skilled workers to perform the flexibility.

### **CHART NO: 4.23**

# MULTI-SKILLED WORKERS TO PERFORM THE FLEXIBILITY

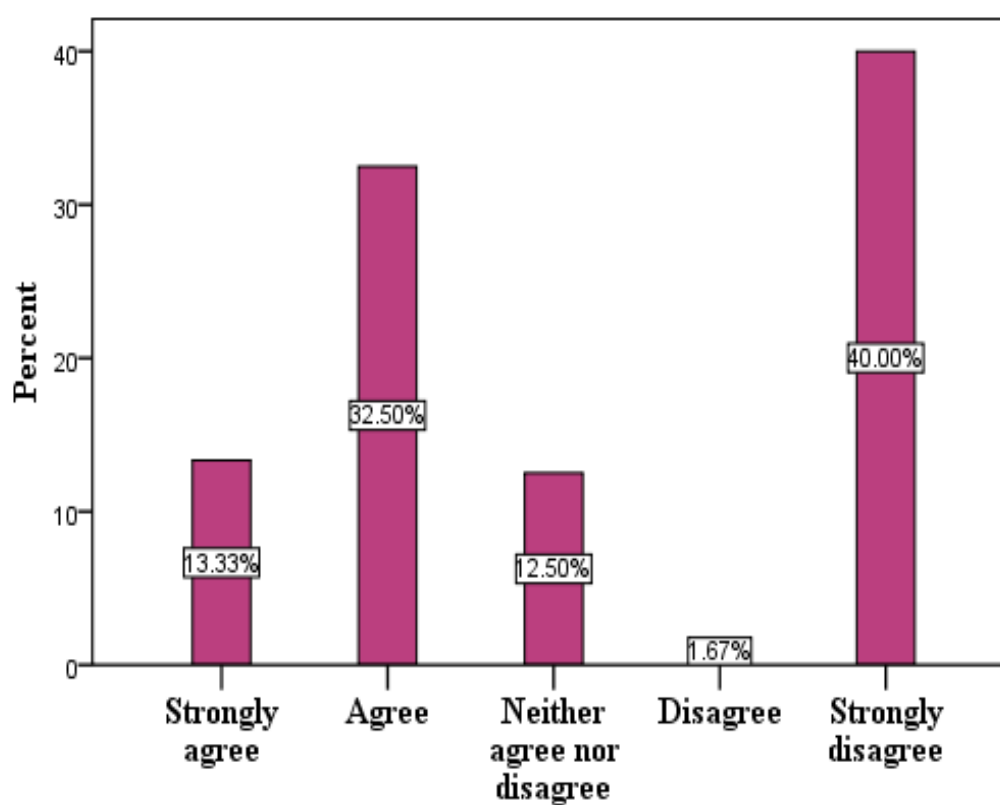


TABLE NO: 4.24

**THE ABILITY OF THE ORGANISATION TO OPERATE AT DIFFERENT  
PRODUCTION OUTPUT LEVELS ECONOMICALLY**

| <b>Particulars</b>         | <b>No. of the respondents</b> | <b>Percent</b> |
|----------------------------|-------------------------------|----------------|
| Strongly agree             | 35                            | 29.2           |
| Agree                      | 32                            | 26.7           |
| Neither agree nor disagree | 29                            | 24.2           |
| Disagree                   | 1                             | .8             |
| Strongly disagree          | 23                            | 19.2           |
| Total                      | 120                           | 100.0          |

Source: Primary data

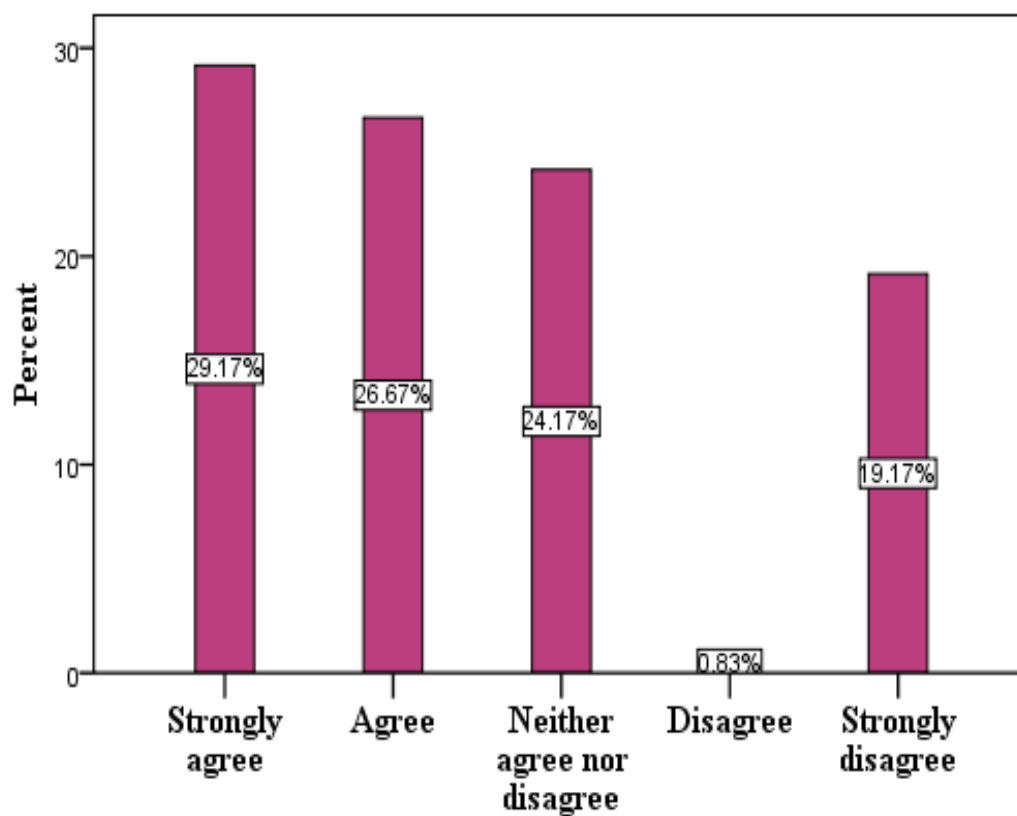
**INTERPRETATION**

The above table shows that 29.2% of the respondents said that strongly agree, 26.7% of the respondents said that agree, 24.2% of the respondents said that neither agree nor disagree, 0.8% of the respondents said that disagree and 19.2% of the respondents said that strongly disagree towards the ability of the organisation to operate at different production output levels economically.

Thus the majority of the respondents said that strongly agree towards the ability of the organisation to operate at different production output levels economically.

**CHART NO: 4.24**

**THE ABILITY OF THE ORGANISATION TO OPERATE AT DIFFERENT  
PRODUCTION OUTPUT LEVELS ECONOMICALLY**



**TABLE NO: 4.25**

**THE ABILITY OF A MANUFACTURING SYSTEM TO SWITCH BETWEEN  
DIFFERENT PRODUCTS IN THE PRODUCT MIX**

| <b>Particulars</b>         | <b>No. of the respondents</b> | <b>Percent</b> |
|----------------------------|-------------------------------|----------------|
| Strongly agree             | 34                            | 28.3           |
| Agree                      | 47                            | 39.2           |
| Neither agree nor disagree | 11                            | 9.2            |
| Disagree                   | 9                             | 7.5            |
| Strongly disagree          | 19                            | 15.8           |
| Total                      | 120                           | 100.0          |

Source: Primary data

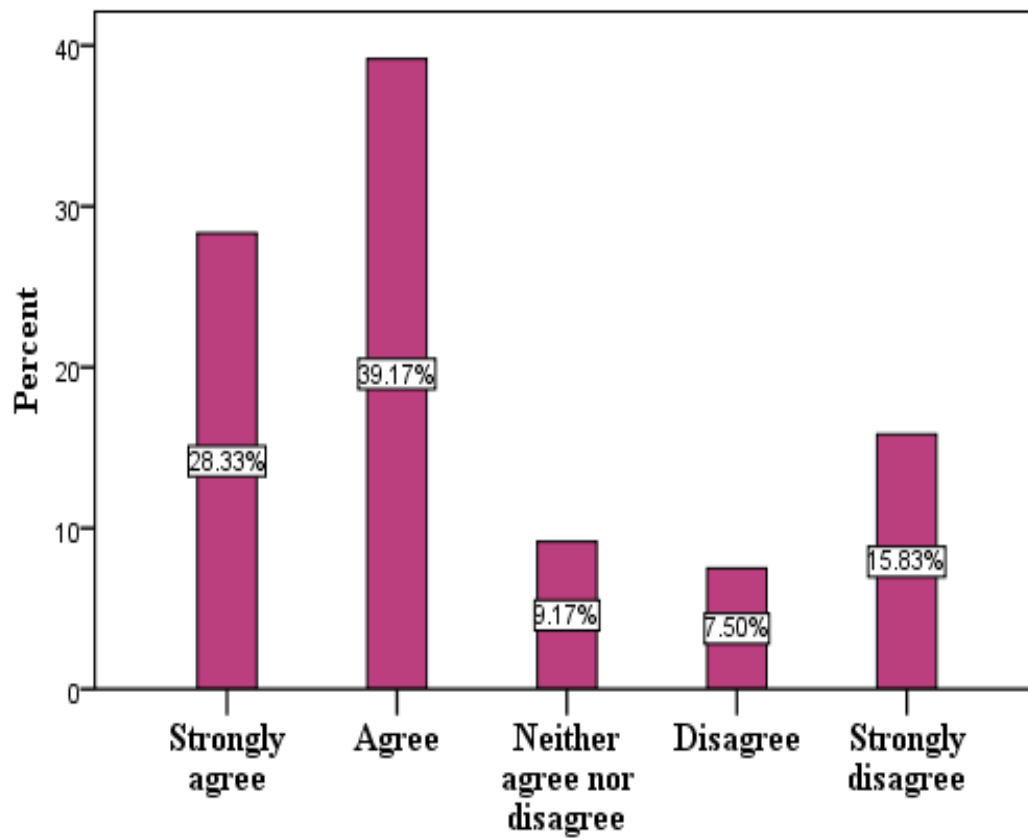
**INTERPRETATION**

The above table shows that 28.3% of the respondents said that strongly agree, 39.2% of the respondents said that agree, 9.2% of the respondents said that neither agree nor disagree, 7.5% of the respondents said that disagree and 15.8% of the respondents said that strongly disagree towards the ability of a manufacturing system to switch between different products in the product mix.

Thus the majority of the respondents said that agree towards the ability of a manufacturing system to switch between different products in the product mix.

**CHART NO: 4.25**

**THE ABILITY OF A MANUFACTURING SYSTEM TO SWITCH BETWEEN  
DIFFERENT PRODUCTS IN THE PRODUCT MIX**



**CHI SQUARE ANALYSIS**

**RELATION BETWEEN THE GENDER OF THE RESPONDENTS AND TO  
UNDERSTAND EFFECTIVENESS OF COST REDUCTION BY THE OPERATION  
STRATEGY**

**Null hypothesis (Ho):**

There is no significance difference between the gender of the respondents and to understand effectiveness of cost reduction by the operation strategy.

**Alternative hypothesis (H1):**

There is some significance difference between the gender of the respondents and to understand effectiveness of cost reduction by the operation strategy.

**Case Processing Summary**

|                                                                                                     | Cases |         |         |         |       |         |
|-----------------------------------------------------------------------------------------------------|-------|---------|---------|---------|-------|---------|
|                                                                                                     | Valid |         | Missing |         | Total |         |
|                                                                                                     | N     | Percent | N       | Percent | N     | Percent |
| GENDER OF THE RESPONDENTS * TO UNDERSTAND EFFECTIVENESS OF COST REDUCTION BY THE OPERATION STRATEGY | 120   | 100.0%  | 0       | .0%     | 120   | 100.0%  |

### Chi-Square Tests

|                              | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square           | 20.264 <sup>a</sup> | 18 | .318                  |
| Likelihood Ratio             | 24.268              | 18 | .146                  |
| Linear-by-Linear Association | 1.988               | 1  | .159                  |
| N of Valid Cases             | 120                 |    |                       |

a. 32 cells (84.2%) have expected count less than 5. The minimum expected count is .37.

### INFERENCE

As per the above table, it is inferred that the P value is 0.318; it is not significant to 5% (0.05) significant level. The minimum expected count is 0.37. Thus alternative hypothesis is rejected and it is found that there is no significant relationship between the gender of the respondents and to understand effectiveness of cost reduction by the operation strategy.

## CORRELATION ANALYSIS

### RELATIONSHIP BETWEEN AGE OF THE RESPONDENTS AND TO ANALYSE THE FLEXIBILITY LEVEL IN THE COMPANY BY IMPLEMENTING OPERATION STRATEGY

**Correlations**

|                                                                                                |                     | AGE OF THE<br>RESPONDENTS | TO ANALYSE<br>THE<br>FLEXIBILITY<br>LEVEL IN THE<br>COMPANY BY<br>IMPLEMENTIN<br>G OPERATION<br>STRATEGY |
|------------------------------------------------------------------------------------------------|---------------------|---------------------------|----------------------------------------------------------------------------------------------------------|
| AGE OF THE<br>RESPONDENTS                                                                      | Pearson Correlation | 1                         | -.014                                                                                                    |
|                                                                                                | Sig. (2-tailed)     |                           | .881                                                                                                     |
|                                                                                                | N                   | 120                       | 120                                                                                                      |
| TO ANALYSE THE<br>FLEXIBILITY LEVEL IN<br>THE COMPANY BY<br>IMPLEMENTING<br>OPERATION STRATEGY | Pearson Correlation | -.014                     | 1                                                                                                        |
|                                                                                                | Sig. (2-tailed)     | .881                      |                                                                                                          |
|                                                                                                | N                   | 120                       | 120                                                                                                      |

#### **Inference:**

The Above table indicates that out of 120 respondents, co-efficient of correlation between age of the respondents and to analyse the flexibility level in the company by implementing operation strategy is -0.014. It is below 1. So there is negative relationship between age of the respondents and to analyse the flexibility level in the company by implementing operation strategy.

## **CHAPTER-V**

### **5.1 FINDINGS**

- 63.3% of the respondents are male.
- 34.2% of the respondents are in the age group of 21-30 years.
- 30.0% of the respondents have completed Post Graduate.
- 40.8% of the respondents have Rs. 10,000-20,000/- as their income level.
- 32.5% of the respondents have below 1-3 years experience.
- 30.8% of the respondents said that agree towards use of efficient equipment.
- 37.5% of the respondents said that agree towards direct purchase from manufacturer.
- 27.5% of the respondents said that strongly agree towards low cost supply chain.
- 33.3% of the respondents said that agree towards just-in-time strategy.
- 39.2% of the respondents said that agree towards following cost leadership strategy.
- 39.2% of the respondents said that poor towards faster production rates.
- 30.8% of the respondents said that excellent towards error free services.
- 37.5% of the respondents said that good towards quicker transport methods.
- 30.8% of the respondents said that excellent towards larger finished-goods inventories for serving at promised time.
- 30.0% of the respondents said that average towards better control of production of orders.
- 40.8% of the respondents said that strongly agree towards high quality in product attributes.
- 49.2% of the respondents said that agree towards adoption and implementing high quality technology.

- 30.0% of the respondents said that strongly agree towards quality operational performance in each phases.
- 43.3% of the respondents said that agree towards locating for convenient place for transportation.
- 36.7% of the respondents said that strongly agree towards quality professional to control quality production.
- 47.5% of the respondents said that agree towards manufacturing a broad range of products.
- 31.7% of the respondents said that neither agree nor disagree towards introduction of new products or processes for customer requirement.
- 40.0% of the respondents said that strongly disagree towards multi-skilled workers to perform the flexibility.
- 29.2% of the respondents said that strongly agree towards the ability of the organisation to operate at different production output levels economically.
- 39.2% of the respondents said that agree towards the ability of a manufacturing system to switch between different products in the product mix.
- There is no significant relationship between the gender of the respondents and to understand effectiveness of cost reduction by the operation strategy.
- There is negative relationship between age of the respondents and to analyse the flexibility level in the company by implementing operation strategy.

### 5.3 SUGGESTIONS

- The company must use the efficient equipments for its operation in order to reduce the cost.
- The company must take all the efforts to purchase the materials directly from the manufacturer in order to reduce the cost.
- There must be low cost supply chain for the cost reduced operation in the company.
- The top level management must contribute their concentration for just in time strategy.
- The company has to focus the cost leadership strategy in all aspects of the operation.
- There must be faster production rate gradually due to successfully implemented operation strategy.
- The company must ensure and maintain error free services in its operation.
- The company must implement quicker transport methods to ensure for less servicing time.
- There must be a practice to maintain larger finished goods for serving for the customers at promised time.
- There must be better control of production of orders in order to meet the demand from the customer side.
- The company has to take all the efforts to maintain high quality product attributes.
- The company has to adopt and implement the high quality technology to manufacture the quality products.
- There must be quality operational performance in each phase to maintain the reputation in the industry.
- The company has to locate its outlet for convenient place for transportation.
- There must trained staff to maintain professional to control quality production.

- The company has to take efforts to manufacture a broad range of products to fulfill the customer requirements.
- There must be frequent introduction of new products or processes for customer requirements.
- The company should arrange to retain multi skilled workers in the work place to perform the flexibility.
- There must be different production output level in order to attain economic benefits.
- There must be the ability of a manufacturing system to switch between different products in the product mix.

### **5.3 CONCLUSION**

The study on operation strategy and its implementation highlights the importance of developing a clear and effective operational strategy for businesses to achieve their goals and objectives. Through proper planning and execution, businesses can streamline their operations, optimize resources, and improve efficiency.

The study also emphasizes the need for a flexible and adaptable approach in implementing operational strategies to address the dynamic nature of the business environment. By continuously monitoring and evaluating the effectiveness of their operational strategies, businesses can identify areas for improvement and make necessary adjustments to remain competitive.

In conclusion, a well-designed and executed operational strategy can serve as a key driver of success for businesses, enabling them to achieve sustainable growth and profitability. Therefore, businesses should invest the necessary time, effort, and resources in developing and implementing effective operational strategies that align with their overall goals and objectives.

## **BIBLIOGRAPHY**

### **TEXT BOOKS**

- Richard Lynch, (2018) "Strategic Management", Pearson Education Limited, 8th Edition, Page Number 167-171.
- Adrian Haberberg and Alison Rieple, (2008) "Strategic Management: Theory and Application", Oxford University Press, Second Edition, Page Number 98-100.
- John A. Pearce II and Richard B. Robinson, (2011) "Strategic Management: Formulation, Implementation, and Control", McGraw-Hill, Twelfth Edition, Page Number 118-122.
- S.N. Murthy, Dr. V. Bhojanna (2008) "Business Research Methods" published by Excel Books, New Delhi, Second Edition, Page number 64-72.
- David J. Collis and Cynthia A. Montgomery, (2017) "Corporate Strategy: A Guide to the Formulation, Implementation and Evaluation of Strategic Management", Wiley, Page Number 76-78.

### **JOURNALS**

- Kenneth K. Boye (2005), "Operations Strategy Research in the POMS Journal", Production and Operations Management Society, Vol. 14, No. 4, winter 2005, pp. 442–449, ISSN 1059-1478, 051404442, \$1.25.
- Mohamad Amin Kaviani (2014), "Analyzing the operations strategies of manufacturing firms using a hybrid Grey DEA approach – A case of Fars Cement Companies in Iran", IJSOM November 2014, Volume 1, Issue 3, pp. 371-391, ISSN-Print: 2383-1359, ISSN-Online: 2383-2525.
- Barney, J. B. (1991), Firm resources and sustained competitive advantage, Journal of Management, 17(1): 99-120.
- Jasmine Siu Lee Lam (2019), "A review of energy efficiency in ports: Operational strategies, technologies and energy management systems", Elsevier, Volume 112, September 2019, Pages 170-182.
- Gabriela Lobo Veiga (2019), "Efficiency Frontier Identification on the Context of Operations Strategy – A Study on Representative Constructs and Variables", Elsevier, Volume 39, 2019, Pages 745-755.

## **WEBSITES**

- [www.kaleesuwarirefinery.com](http://www.kaleesuwarirefinery.com)
- [www.edibleoilindustry.com](http://www.edibleoilindustry.com)
- [www.managementjournal.com](http://www.managementjournal.com)
- [www.kaavpublications.org](http://www.kaavpublications.org)
- [www.allcommercejournal.com](http://www.allcommercejournal.com)

## **ANNEXURE**

### **A STUDY ON OPERATION STRATEGY AND ITS IMPLEMENTATION TOWARDS KALEESUWARI REFINERY PRIVATE LIMITED., CHENNAI**

## QUESTIONNAIRE

1. Name :

2. Gender : a) Male b) Female

3. Age :

- a) Below 20                      b) 21-30                      c) 31-40                      d) 41-50  
e) Above 50

4. Educational Qualification:

- a) Upto Higher Secondary    b) Graduate                      c) Post Graduate    d) Diploma  
e) Others

5. Salary:

- a) Below 10, 000/-    b) 10,000-20,000/-    c) 20,001- 30,000/-  
d) Above 30,000/-

6. Year of Experience

- a) Below 1 year                      b) 1-3 years                      c) 4-6 years                      d) Above 6 years

### **To understand effectiveness of cost reduction by the operation strategy**

|                                        | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
|----------------------------------------|----------------|-------|----------------------------|----------|-------------------|
| 7. Use of efficient equipment          |                |       |                            |          |                   |
| 8. Direct purchase from manufacturer   |                |       |                            |          |                   |
| 9. Low cost supply chain               |                |       |                            |          |                   |
| 10. Just-in-time strategy              |                |       |                            |          |                   |
| 11. Following cost leadership strategy |                |       |                            |          |                   |

### **To evaluate the impact of operation strategy in less serving time in the company**

|  | Excellent | Good | Average | Bad | Poor |
|--|-----------|------|---------|-----|------|
|  |           |      |         |     |      |

|                                                                   |  |  |  |  |  |
|-------------------------------------------------------------------|--|--|--|--|--|
| 12.Faster production rates                                        |  |  |  |  |  |
| 13.Error free services                                            |  |  |  |  |  |
| 14.Quicker transport methods                                      |  |  |  |  |  |
| 15.Larger finished-goods inventories for serving at promised time |  |  |  |  |  |
| 16.Better control of production of orders                         |  |  |  |  |  |

**To know the high quality performance by implementing operation strategy in the company**

|                                                       | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
|-------------------------------------------------------|----------------|-------|----------------------------|----------|-------------------|
| 17.High quality in product attributes                 |                |       |                            |          |                   |
| 18.Adoption and implementing high quality technology  |                |       |                            |          |                   |
| 19.Quality operational performance in each phases     |                |       |                            |          |                   |
| 20.Locating for convenient place for transportation   |                |       |                            |          |                   |
| 21.Quality professional to control quality production |                |       |                            |          |                   |

**To analyse the flexibility level in the company by implementing operation strategy**

|                                            | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
|--------------------------------------------|----------------|-------|----------------------------|----------|-------------------|
| 22.Manufacturing a broad range of products |                |       |                            |          |                   |

|                                                                                                  |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------|--|--|--|--|--|
| 23.Introduction of new products or processes for customer requirement                            |  |  |  |  |  |
| 24.Multi-skilled workers to perform the flexibility                                              |  |  |  |  |  |
| 25.The ability of the organisation to operate at different production output levels economically |  |  |  |  |  |
| 26.The ability of a manufacturing system to switch between different products in the product mix |  |  |  |  |  |
| 27. Suggestions                                                                                  |  |  |  |  |  |

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## **A STUDY ON OPERATION STRATEGY AND ITS IMPLEMENTATION TOWARDS KALEESUWARI REFINERY PRIVATE LIMITED., CHENNAI**

### **CHAPTER I**

#### **1.1 INTRODUCTION OF THE STUDY**

An operations strategy is a set of decisions an organization makes regarding the production and delivery of its goods. Organizations may consider each step they take toward manufacturing or delivering a product an operation, and all decisions regarding these various operations are the operations strategy. An organization's operations strategy works in tandem with its overall business strategy, helping the organization to achieve its long-term goals and improve competitiveness in the marketplace.

An operations strategy refers to the system an organization implements to achieve its long-term goals and mission. It involves decisions based on multiple factors, including product management, supply chain, inventory, forecasting, scheduling, quality, and facilities planning and management. For service providers, operations strategy concerns financing, marketing, human resources, and service that matches the company's goal and mission

#### **Benefits of having an operations strategy**

##### **Employee efficiency**

Operations strategies define the goals of different departments, which lets team managers and employees know what they are working toward. An operations strategy can help to ensure any employee that contributes to an operation uses their time and skills efficiently. In addition, organization leaders can learn which departments are operating efficiently and which may need improvement.

### **Resource management**

Organizations often have a finite amount of resources, making it essential that they use them efficiently. Operations strategies can help leaders determine which areas of the organization need the most resources and how to best deliver those resources. By developing an operations strategy, leaders can learn more about the costs of running different departments. They can then analyze these costs and see if they are in line with the organization's overall goals.

### **Department cooperation**

An operations strategy details how multiple departments within an organization work together. By outlining this coordination, each department knows how it relates to the others. They can also see how their individual department's goals are helping to achieve the overall goals of the organization alongside the other departments. This is useful for improving decision-making and helping employees in different departments feel like they are on the same team.

### **Elements of an operations strategy**

#### **Products and assembly**

Product operations managers look to streamline processes, such as team communication or product assembly. They also analyze data regarding their products and use it to prioritize tasks. For example, they may help product managers decide which elements of a product to build first. Product operations teams work with departments such as manufacturing, customer support and sales to help optimize the process consumers go through with the product, from researching to becoming repeat customers.

#### **Delivering and storing inventory**

An inventory operations strategy is one that helps businesses decide how to order, maintain and process their inventory. It looks for more efficient ways to deliver or store inventory, with the goal of reducing costs and waste. An inventory operations strategy also aims to order the optimal number of goods, maximizing storage capacity without wasting resources.

### **Supply chain optimization**

The supply chain element of an operations strategy looks for ways to optimize the movement of products from suppliers to distributors. It may do this in several ways, for example, implementing faster communication technology or optimizing shipping amounts. In a supply chain operations strategy, leaders decide on the structure of the supply chain and the activities of each stage. They also decide where to make products and where to store them.

### **Quality of the final product**

Quality operations aim to produce a satisfactory final product. This includes product testing and analyzing customer feedback. They also check for consistency so their customers all receive the same level of quality. In addition, quality operations managers analyze the operations that contribute to production. For example, they ensure the organization is using the best materials for a high-quality finished product. They constantly monitor the production process to ensure it is leading to their desired quality outcomes.

### **Scheduling use of resources**

Scheduling is the timing and use of resources, and this means ensuring the organization is using its resources at the best possible time. This may include the best time to send out shipments of products or which activities employees should focus on first. A common challenge for those working in scheduling operations is finding a compromise between competing goals in terms of shared resources. For example, both the product development and customer satisfaction teams may want to conduct a focus group, but your organization only has the resources to host one at a time. Within your

operations plan, you would determine the optimal scheduling for these two departments.

### **Facilities management**

Facilities planning and management is the analysis of how the organization's current facilities factor into the organization's goals. This part of your operations strategy determines if your current facilities are performing as needed. In addition, it also discovers if your organization needs new facilities and if so, it conducts a search to find the right ones.

### **Forecasting for planning**

Forecasting operations is where an organization makes plans for the future. It uses data to make assumptions about the future of the organization. For example, it may study current sales trends to determine profits in a year. It then implements changes within the organization to ensure it is always moving toward its goals. For example, if a forecaster determines a drop in sales because of economic factors that may happen in six months, they may look for ways to reduce costs now to prepare them for this situation.

### **The Role and Purpose of Operations Strategy**

Operational strategy is just one aspect of the overall company or corporate strategy, but competitiveness and performance are critical. Companies struggle to keep up with evolving markets without a clear operating plan and lose out to more strategic rivals. Many enterprises, large and small, have struggled with business strategies, sometimes failing in comparison to technologically savvy rivals. Amazon, for instance, has driven aside countless brick-and-mortar stores while continually evolving technologies such as drones for distribution.

Both aspects of a business must work together to be successful and competitive. All departments should contribute to the mission of the organization and have strategies that underlie the overall business/corporate strategy. They should also have functional field strategies in finance, IT, sales, marketing, human resources, and probably other

departments, in addition to providing an organizational plan, depending on the type of sector.

An operational strategy should drive the structural decisions and the evolution of organizational capabilities required to achieve the organization's desired competitive position as a whole. It's not enough these days, however, to simply follow best practices. Companies need to reinvent, not just catch-up to rivals' already mastered activities.

### **Types Of Operations Strategy**

Organizations can examine and implement efficient and effective systems for using work processes, personnel and resources. Here are a few common types of operations strategy:

#### **Customer-Driven Strategy**

To meet the desires and needs of the target customers, an operations strategy must include customer-driven approaches. Organizations must continuously evaluate the changing business environment and adapt to it. This helps them enhance core competencies and develop new strengths regularly. Organizations must also monitor industry trends to avoid threats as well as create new opportunities. Good customer-driven strategies ensure more clients by improving the system of new and repeat customers by building loyalty and referral.

#### **Product Strategy**

A strategy for product development must aim to deliver a compelling product or service that resonates with customers. But the job involves more than releasing new products. Organizations also need to maintain and upgrade their existing products for those who won't buy the new ones. For example, even though smartphone brands release new models every year, they continue to provide low-cost upgrades and free patches to improve their existing models.

#### **Market Penetration Strategy**

Market penetration is an operational level strategy that focuses on capturing a larger share of the target customer base in an industry. Managers can choose strategies to target new users who have no experience with the brand or lure customers away from industry rivals. They may use multiple geographical locations to target a demographic. Adding value to existing customers is also a great way to increase spending on products or on service upgrades.

### **Supply Chain Strategy**

This operations strategy deals with the process of building superior delivery capabilities to create excellence. Organizations can take many paths, such as minimizing product costs by making bulk purchases or increasing customer value by offering product customizations while delivering goods more efficiently. Improving the efficiency of delivery operations can involve changing warehouse layout to reduce time and effort in fulfilling orders. For example, a warehouse manager may decide to bring all frequently bought products to the front and nearer the loading dock. This saves time for both customers and employees and saves on labor by expediting the process. Service-oriented organizations use basic operations strategy to create an efficient management team and link short- and long-term corporate decisions.

## **1.2 STATEMENT OF THE PROBLEM**

The role of operations strategy is to provide a plan for the operations function so that it can make the best use of its resources. Operations strategy specifies the policies and plans for using the organization's resources to support its long-term competitive strategy. The formulation of suitable operation strategy for the firm is easy but the implementation is difficult task. Though it is implemented with proper care, the impact and efficiency are to be evaluated. Various concerns have been taking efforts through investing huge funds for implementation of the operational strategies. But the impact and efficiency must be fruitful to the concern to achieve its organisational goals.

Kaleesuwari Refinery Private Limited., Chennai is also not an exception, has spent its contribution for implementation of operation strategy. It is in the intention to evaluate its impact and efficiency in various aspects. Hence the study is taken to analyse operation strategy and its implementation towards Kaleesuwari Refinery Private Limited., Chennai.

### **1.3 NEED OF THE STUDY**

The role of operations strategy is to provide a plan for the operations function so that it can make the best use of its resources. Operations strategy specifies the policies and plans for using the organization's resources to support its long-term competitive strategy. Operations strategy helps the management determine specific areas in the organization that need the most resources and how best to deliver those resources. Kaleesuwari Refinery Private Limited., Chennai has been taking various operational strategies in order to sustain its business operation. It needs to evaluate its effectiveness of operation strategies in various aspects such as cost, less serving time, high quality performance and flexibility level in the company. Hence the study is carried out to analyse the operation strategy and its implementation towards Kaleesuwari Refinery Private Limited., Chennai. The study helps to understand the organisation to effectiveness of cost reduction by the operation strategy as well as impact of operation strategy in less serving time in the company. It also helps to the researcher to know the high quality performance by implementing operation strategy in the company.

## **1.4 OBJECTIVE OF THE STUDY**

### **Primary objective**

- To study on operation strategy and its implementation towards Kaleesuwari Refinery Private Limited., Chennai

### **Secondary objectives**

- To understand effectiveness of cost reduction by the operation strategy
- To evaluate the impact of operation strategy in less serving time in the company
- To know the high quality performance by implementing operation strategy in the company
- To analyse the flexibility level in the company by implementing operation strategy
- To obtain suggestions from the respondents to implement the successful operational strategy for the company

### **1.5 SCOPE OF THE STUDY**

The study is confined to Kaleesuwari Refinery Private Limited., Chennai. It analysis the operation strategy and its implementation towards the company. The sample of the study is 120. The survey is taken with the employees of Kaleesuwari Refinery Private Limited., Chennai. The study throws lights on to understand the effectiveness of cost reduction by the operation strategy. It helps to understand the impact of operation strategy in less serving time in the company.

## **1.6 LIMITATIONS OF THE STUDY**

- Due to the time constraints, only specific sample size from the entire segment has been considered for the study.
- Whatever the data had been gathered is based on suggestive study but not exhaustive study.
- The researcher found it difficult to collect the questionnaire, since some of the respondents did not give proper response.
- The sample taken for this study is 120 only.

## **1.7 RESEARCH METHODOLOGY**

The process of deciding how to systematically design research and conduct it is called Research Methodology. To conduct a market or social research, researcher has to plan out every step from which questions to ask to what analysis method to use, to ensure that researcher gather valid and reliable results from the research.

### **RESEARCH DESIGN**

Research design refers to the overall strategy utilized to carry out research that defines a succinct and logical plan to tackle established research question(s) through the collection, interpretation, analysis, and discussion of data. Hence descriptive research study is used. Descriptive research can only report what has happened and what is happening.

### **DATA SOURCES**

The study basically uses primary and secondary data. The study depends mainly on the primary data and secondary data namely the text books, journals, newspapers, magazines and internet.

#### **1. Primary data**

Primary data sources can be described as those sources that are closest to the origin of the information. They contain raw information and thus, must be interpreted by researchers. Secondary sources are closely related to primary sources and often interpret them. Examples of primary sources include manuscripts, newspapers, speeches, cartoons, photographs, video, and artefacts. Primary sources can be described as those sources that are closest to the origin of the information. They contain raw information and thus, must be interpreted by researchers. Well structured questionnaire has been used for the collection of primary data from the respondents.

#### **2. .Secondary data**

Secondary sources are closely related to primary sources and often interpret them. These sources are documents that relate to information that originated elsewhere. Secondary sources often use generalizations, analysis, interpretation, and synthesis of

primary sources. Examples of secondary sources include textbooks, articles, and reference books.

## **SAMPLING**

### **Population**

The aggregate elementary units in the survey are referred to as the population. Here it covers the entire employees in the company Kaleesuwari Refinery Private Limited., Chennai.

### **Sample Size**

The study based only on the opinion and expectation of employees. Total number of sample taken for the study is 120 respondents.

### **Sampling Unit:**

Sampling unit is Kaleesuwari Refinery Private Limited., Chennai.

### **Sample design**

Random sampling techniques were used for the study. Random sampling, or probability sampling, is a sampling method that allows for the randomization of sample selection, i.e., each sample has the same probability as other samples to be selected to serve as a representation of an entire population.

### **Sampling Unit**

Sampling Unit of this study is Kaleesuwari Refinery Private Limited., Chennai.

## **TOOLS USED**

The commonly used statistical tools for analysis of collected data are:

1. Percentage analysis
4. Chi Square.

## 5. Correlation

### Percentage analysis

This method is used to compare two or more series of data, to describe the relationship or the distribution of two or more series of data. Percentage analysis test is done to find out the percentage of the response of the response of the respondent. In this tool various percentage are identified in the analysis and they are presented by the way of Bar Diagrams in order to have better understanding of the analysis.

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

### Chi-square Analysis

A chi-squared test (symbolically represented as  $\chi^2$ ) 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.

The chi-square test is used to estimate how likely the observations that are made would be, by considering the assumption of the null hypothesis as true. A hypothesis is a consideration that a given condition or statement might be true, which we can test afterwards. Chi-squared tests are usually created from a sum of squared falsities or errors over the sample variance.

### Formula

The chi-squared test is done to check if there is any difference between the observed value and expected value. The formula for chi-square can be written as;

$$\chi^2 = \sum (O_i - E_i)^2 / E_i$$

where  $O_i$  is the observed value and  $E_i$  is the expected value.

### Correlation Analysis

Correlation Analysis is statistical method that is used to discover if there is a relationship between two variables/datasets, and how strong that relationship may be.

### Correlation Coefficients

There are usually three different ways of ranking statistical correlation according to Spearman, Kendall, and Pearson. Each coefficient will represent the end result as 'r'. Spearman's Rank and Pearson's Coefficient are the two most widely used analytical formulae depending on the types of data researchers have to hand:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}$$

Here,

n = Number of values or elements

$\sum x$  = Sum of 1st values list

$\sum y$  = Sum of 2nd values list

$\sum xy$  = Sum of the product of 1st and 2nd values

$\sum x^2$  = Sum of squares of 1<sup>st</sup> values

$\sum y^2$  = Sum of squares of 2<sup>nd</sup> values

## **CHAPTER II**

### **2.1 INDUSTRY PROFILE**

#### **Oil Industry**

Sunflower oil market in India has been growing magnificently owing to high growth of income levels, increasing trend towards spending, better living standards and growing health consciousness among Indian consumers. In the year 2011-12, sunflower oil market in India was more than INR 150 Billion which is expected to grow with a CAGR of around 9.5% during 2013-14 to 2016-17.

Growing population, economic growth and rising disposable income will drive India's vegetable oil consumption growth, which is expected to grow by three per cent annually to exceed 34 million tonnes by 2030, according to a report. "Increasing income, urbanisation, changing food habits and deeper penetration of processed foods will be key drivers of future consumption growth of edible oil in the country," Rabo Research report 'The Future of India's Edible Oil Industry: How Will India's Vegetable Oil Demand Shape Up by 2030'

The country's vegetable oil consumption was at 23 million tonne in 2017, it added. Because of current stagnant domestic vegetable oil supplies, import volumes will continue to fill the majority of the supply-and-demand gap over the next decade, it added. Palm oil, soy oil and sunflower oil are expected to penetrate regional markets further in the future, with the packaged edible oil segment leading the way for future growth of the industry, the report said. However, the report said, palm oil will continue to be the largest imported vegetable oil because of its price advantage, the price sensitivity among the low-income population, consumption growth in the fast-moving consumer goods (FMCG) sector, blended vegetable oil segments and increasing out-of-home consumption.

The packaged branded edible oil sector in retail currently, which accounts for 40 per cent of total edible oil consumption, will continue to grow between 6-8 per cent annually over the next five years, it added. The market of Sunflower oil, the fourth most used vegetable oil as cooking medium in the world, is increasing in India in the recent years. More companies are focusing on the production and branding of Sunflower oil with the latest technologies to refine the raw materials. The Sunflower oil market in India is increasing by which the demand and supply gap of the raw material is huge. The raw material production in the country satisfies only 20% of the manufacturing needs of Indian companies. The remaining 80% of raw material for the country is imported from countries like Argentina and Malaysia, which are the front-runners in Sunflower seed production. The products manufactured with this imported seeds will affect the price of the end product in a considerable way, due to the various expenses in importing, including the changes in the dollar-rupee value.

However, states like Karnataka, Andhra Pradesh, Maharashtra and Haryana are slowly emerging as major hubs for the Sunflower seed production. The first ever venture to develop Sunflower seed has been initiated by ITC Zeneca India, which has changed its name to Advanta India. The company is currently the market leader in Sunflower seed business. South India is considered as the major market for Sunflower oil, where brands like Sundrop, GoldWinner, Gemini, Gold Drop and Crystal, Fortune, Godrej Sunflower Oil and Godrej Shakti have their strong foothold. Major manufacturers like GoldWinner, Agro Tech Foods and Adani Wilmer have already announced their plans to explore more into south Indian states because of the increased market size and the availability of raw materials from states like Karnataka and Andhra Pradesh.

The technologies introduced by foreign machinery manufacturers, like Alpha level refining technology and Belgian technology are widely used by the Indian companies in Sunflower oil refining. The Alpha level continuous refinery technology, which is designed to handle the refining process from Neutralisation, Bleaching, Deodourisation and De-waxing to Packing, can reduce the time for processing considerably.

## **Agro & Food Processing Sector- Overview**

Global Food and Beverage industry has been valued at US \$ 3668.3 billion in the year 2005. In the Global food processing industry Asia-Pacific is accounting for 31.10 % of global market. India is the World's second largest producer of food, next to China and has potential to be number one.

### **Growth Of Food Industry In India**

India is the world's second largest producer of food next to China, and has the potential of being the biggest with the food and agricultural sector. The total food production in India is likely to double in the next ten years and there is an opportunity for large investments in food and food processing technologies, skills and equipment, especially in areas of Canning, Dairy and Food Processing, Specialty Processing, Packaging, Frozen Food/Refrigeration and Thermo Processing. Fruits & Vegetables, Fisheries, Milk & Milk Products, Meat & Poultry, Packaged/Convenience Foods, Alcoholic Beverages & Soft Drinks and Grains are important sub-sectors of the food processing industry. Health food and health food supplements is another rapidly rising segment of this industry which is gaining vast popularity amongst the health conscious.

India is one of the world's major food producers but accounts for less than 1.5 per cent of international food trade. This indicates vast scope for both investors and exporters. Food exports in 1998 stood at US \$5.8 billion whereas the world total was US \$438 billion. The Indian food industries sales turnover is Rs 140,000 crore (1 crore = 10 million) annually as at the start of year 2000. The industry has the highest number of plants approved by the US Food and Drug Administration (FDA) outside the USA.

India's food processing sector covers fruit and vegetables; meat and poultry; milk and milk products, alcoholic beverages, fisheries, plantation, grain processing and other consumer product groups like confectionery, chocolates and cocoa products, Soya-based products, mineral water, high protein foods etc. We cover an exhaustive database of an array of suppliers, manufacturers, exporters and importers widely dealing in sectors like the -Food Industry, Dairy processing, Indian beverage industry etc. We also cover sectors like dairy plants, canning, bottling plants, packaging industries, process machinery etc.

The most promising sub-sectors includes -Soft-drink bottling, Confectionery manufacture, Fishing, aquaculture, Grain-milling and grain-based products, Meat and

poultry processing, Alcoholic beverages, Milk processing, Tomato paste, Fast-food, Ready-to-eat breakfast cereals, Food additives, flavors etc.

**Major Players In The Sector:**

- National Dairy Development Board, Anand
- ITC Agro-Tech, Secunderabad
- Marico Industries, Mumbai
- Ahmed Mills. Mumbai
- PBS oil refineries Ltd, Chattisgarh
- Green Agro Foods, Maharashtra
- Pentagon overseas, Karnataka
- Murali Industries Ltd, Maharastra
- Krishi Oils Ltd, Madhya Pradesh
- Vijay Solvex Limited ,Rajasthan
- Sree Annapurna Agro Foods, Erode
- Vama Oil Private Limited, Coimbatore
- Sri Venkateshwaraa Agro Foods, Erode
- Padmashri Oil Refineries, Vellore
- SSD Oil Mills Ltd, Chennai
- Ruchi Soya Industries LTD, Chennai
- Tamilnadu Edible Oils Ltd, Chennai

**Competors Trends:**

The Indian edible oil industry is highly fragmented, with the presence of a large number of participants in the organised and unorganised sectors. This has resulted in severe competition and inherently thin profitability margins. Further, the profitability of market participants has also been vulnerable to risks emanating from weak harvests; commodity price volatility and forex movements. The players operating in the market also face challenges which are impeding their development and growth. Rising edible oil prices has emerged as a major challenge hindering the market growth. Low yield per hectare and inadequate capacity utilization are also expected to have an unfavorable impact on the growth of the Indian edible oil market.

The competition section begins with the Porter's Five Forces analysis for the edible market. It outlays the competitive landscape of the edible oil market in India briefing about the domestic and foreign players existing in the market.

### **Market Share And Strengths:**

The demand for edible oils in India has shown a steady growth at a CAGR of 4.43% over the period from 2001 to 2011. The growth has been driven by improvement in per capita consumption, which in turn is attributable to rising income levels and living standards. However, the current per capita consumption levels of India (at 13.3 Kg/year for 2009-10) are lower than global averages (24 kg/year).<sup>1</sup> The Indian edible oils market continues to be underpenetrated and given the positive macro and demographic fundamentals it has a favourable demand growth outlook over the medium-to-long term.

In terms of volumes, palm oil, soyabean oil and mustard oil are the three largest consumed edible oils in India, with respective shares of 46%, 16% and 14% in total oil consumption in 2010. Given the high price consciousness and varied taste preferences of Indian consumers, ICRA expects these three oils to continue to account for the bulk of edible oil consumption in the country. ICRA notes that while the share of branded oils segment has remained low over the years, it is poised for growth in view of rising income levels; uptrend in urbanisation and increasing quality consciousness of Indian consumers.

Edible oils constitute an important component of food expenditure in Indian households. Historically, India has been a major importer of edible oils with almost 30-

40% of its requirements being imported till 1980s. In 1986, the Government of India established the Technology Mission on Oilseeds and Pulses (TMOP) in order to enhance the production of oilseeds in the country. The TMOP launched special initiatives on several critical fronts such as improvement of oilseed production and processing technology; additional support to oilseed farmers and processors besides enhanced customs duty on the import of edible oils.

Consequently, there was a significant increase in oilseeds area, production, and yields until the late-1990s. However, in order to fulfill its obligations towards various international trade agreements and also meet the increasing demand-supply deficits, India began to reduce import restrictions on edible oils in the late 1990s; and it was gradually brought under Open General License. This led to a significant slump in the domestic oil seeds market, as edible oil prices fell sharply in line with the low international prices prevailing at that time.

## **2.2 COMPANY PROFILE**

### **Gold Winner Oil Brand - Kaleesuwari Refinery Private Limited**

Kaleesuwari Refinery Private Limited, ever since its foundation in the year 1993 has harnessed its experience in the consumer goods industry to focus on long-term relationships with its consumers by providing high quality, contemporary, technology based and cost-effective products.

The organization has embraced a tradition of creating, developing and marketing high-quality consumer products for nearly 3 decades. Kaleesuwari is at the pole position in the Edible Oil and Dhal segments. Having three manufacturing plants with well-equipped state-of-the-art facilities and machineries located near the major cities of Chennai, Coimbatore and Bangalore, Kaleesuwari is one among India's primary producers of refined sunflower oil under the flagship brand "Gold Winner".

Kaleesuwari has evolved multiple brands. To begin with the most celebrated brand – “Gold Winner”. It offers edible oils including refined Sunflower Oil, Vanaspathi and refined Groundnut Oil. Under the brands of “Gold Choice”, “Orysa”, “Koda” and “Paalm Super”, Kaleesuwari offers refined Soya Bean Oil, refined Rice Bran Oil, pure Coconut Oil and refined Palmolive Oil.

**Mission:**

It is responsible for the development of the new products, which could be sold in India and is also responsible for contracting with the national suppliers.

**Vision:**

With new management in place, new targets are being framed.

**The Heritage**

From the day Kaleesuwari was founded, the vision to spread the delight of healthy life was the pathfinder to the company. This was the driving force behind every new venture they stepped into.

1994

- The Flagship brand Gold Winner RSF was launched

2005

- Kaleesuwari entered another new product category in the month of September by launching Sree Gold Dhal

2007

- Kaleesuwari introduces its Olive Oil brand - Cardia Health Olive Oil

2008

- Kaleesuwari receives its ISO 2000:9001 certification for the maintenance of impeccable quality standards
- Kaleesuwari receives the HACCP certificate on Hazard Analysis and Critical Control Practices

2010

- Kaleesuwari creates a new health-bound oil blend of Olive & Corn Oil by the name Cardia Life in October

## **Awards & Recognition**

Awards, certifications and recognitions are the best ways to understand Kaleesuwari's persistence in adding value to its customers from every dimension. Kaleesuwari has raised the bar even when it comes to making a difference in the life of its customers. Given below are some of the recognitions received by Kaleesuwari through its brands for excellence in business development and product quality.

- A report published by The Economic Times Brand Equity on April 21, 2004 recognized Gold Winner to be ranked 63rd among India's top hundred Fast Moving Consumer Goods (FMCG) brands by A.C. Nielsen Retail Audit.
- An ORG-MARG survey had rated Gold Winner as "Number One" in the FMCG (edible oils) category in South India.
- Gold Winner is a well-recognized member of the US based National Sunflower Association (NSA), whose aim is to promote quality sunflower products across the globe keeping the health of the people in mind.
- Gold Winner crossed another milestone in September 2005 by receiving ISO 9001:2000 & HACCP Certifications.
- The HACCP (Hazard Analysis and Critical Control Point) Certification confirms that the edible oil processing followed at Kaleesuwari is free from physical, chemical and biological contamination thereby assuring complete food safety.

## **The Infrastructure**

Kaleesuwari has three manufacturing plants with well-resourced state-of-the-art facilities and dexterous professionals located near the major cities of Chennai, Coimbatore and Bangalore. The manufacturing plants use “Continuously Automated Technology “ for processing to maintain the highest standards of hygiene.

The major share of refinery processing equipments is supplied by the world renowned equipment supplier, Desmet Ballestra from Belgium. Stringent quality

control standards are employed in the inspection and testing of incoming raw materials, packaging materials, refining – via continuous in-process testing, as well as all finished goods. Kaleesuwari's quality control laboratories house high-tech testing equipments and follow Good Laboratory Practices to ensure quality and repeatability of all testing procedures.

Kaleesuwari is the foremost edible oil company in India to put an enterprise-resource-planning (ERP) system using SAP into practice. It streamlines the operations by systematic monitoring and analyses of all the business processes.

### **Social Responsibility**

The Social Responsibility programs of Kaleesuwari are designed to provide enduring benefits to its employees, clients, shareholders, partners and individuals of the surrounding within which it operates. Kaleesuwari understands its responsibility of being a part of the community. These responsibilities go further than just producing the products and keeping the customers surrounded by happiness and good health. Kaleesuwari understands its obligation to lend a helping hand as an employer and as a part of the community at large.

### **PRODUCT PROFILE**

#### **Gold Winner - Refined Sunflower Oil**

Gold Winner Refined Sunflower Oil is the flagship brand of Kaleesuwari. Gold Winner finds a place in every discerning home. Thanks to the highly sophisticated and rigorous processes adopted to refine crude Sunflower Oil. A unique distribution network ensures that the end-consumer is enriched by good health and happiness. Gold Winner is now available in Singapore, Malaysia, Brunei, Kuwait, Dubai, Australia, UK and Sri Lanka. Every drop of Gold Winner not only glistens with quality and hygiene but also assures gourmet's delight.

#### **Gold Winner - Refined Groundnut Oil**

Gold Winner Refined Groundnut Oil contains the wholesome nutrition of groundnuts. It has a unique property to enhance the flavor of the food. The superior

quality of the raw materials and state-of-the-art refining processes ensure that Gold Winner Refined Groundnut Oil is of the finest quality.

### **Cardia Life - Blend Of Olive & Corn Oil**

Cardia Life olive and corn blended refined oil is made from two healthy & diverse ingredients that combine good health with great taste. Cardia Life is versatile oil suitable for all cooking methods and for use in many types of dishes. It ensures excellent flavor stability and enhances the taste of food. All these merits turn Cardia Life into an ideal choice.

### **Paalm Super - RBD Palmolein**

Palm Super is a refined, bleached and deodorized form of palm oil which is extracted after crushing the palm fruit which is rich in Vitamin E (Tocopherols & Tocotrienols) and is a powerful anti-oxidant. The RBD Palmolein has a property of reducing the risks of certain chronic diseases and delays the body's ageing process.

### **Dheepam Lamp Oil**

Dheepam lamp oil is a unique blend of five pure oil(pancha deepam ennai) and Sugandha Dravyas / Fragrances to enhance divine experience. Worshiping with Dheepam can elevates mood and provide a feeling of serenity and peace that is associated with divine interventions. Dheepam brings together an unique combination of oils that are said to have been used since time immemorial with exclusive significance to light up life.

### **Eldia Pure Coconut Oil**

100% pure coconut oil is not something that can be claimed by just any coconut oil. In fact, to claim it, every stage of the oil making process has to be pure in its ingredients and skill. Eldia pure coconut oil is result of handpicked and finest of copraâ€™s crushed in the most hygienic of environments and packed with utmost care. The unadulterated natural aroma of Eldia is a testimony to its quality. No wonder, Eldia pure coconut hair oil is widely used from infants to elders and in cities to suburbs, not

just for their hair, But also for dry skin, body massage, etc.Reach out to 100% pure for your head to toe. Reach out for Eldia.

### **Orysa - Refined Rice Bran Oil**

Orysa is the premium quality Refined Rice Bran Oil that protects the consumers hearts with Gamma Oryzanol protection. Gamma Oryzanol is a natural anti-oxidant that is known to significantly reduce the absorption and deposition of LDL and VLDL (bad) serum cholesterol and thereby offer superior protection to the entire cardiovascular system. The prolific presence of the naturally occurring anti-oxidants and the well balanced ratio of Omega 6 to 3 in Orysa ensure that the oil has superior oxidative stability and enhanced friability than most other oils. Orysa is rich in Squalene and Trienols that are well known to have anti-cancer effects.

## **CHAPTER III**

### **REVIEW OF LITERATURE**

**John C. Anderson (2002)**, Competitive pressures on American business have created the need for improved understanding and practice of operations strategy. Over the past 20 years some 80 articles and several books have been written on the subject. These writings, while diverse in nature and placement, serve to shape what we know about operations strategy and the opportunities for improved practice and meaningful research. This paper examines an underlying argument that exists within the literature that proper strategic positioning or aligning of operations capabilities can significantly impact competitive strength and business performance of an organization. The discussion is organized around four related premises: that there exists a strategic, as opposed to a tactical, view of operations, that there must be some synergistic process of integrating business and operations strategic issues, that there are operations decision or policy areas which demonstrate strategic opportunities, and that conceptual structures exist by which to target and focus operations strategy. The paper concludes that the literature and emerging research support each of these premises to varying

degrees. The authors believe that further understanding of these premises could be benefited by more careful and consistent definition of operations strategy concepts and terminology, by more attention being placed on the content and process of operations strategy, by more empirical study, and finally by more emphasis being placed on service operations strategy.

John C. Anderson (2002), “Operations strategy: A literature review”, Elsevier- Journal of Operations Management, Volume 8, Issue 2, April 1989, Pages 133-158.

**Sabrina Lohmann (2019)**, This study proposes an alternative way to access customer priority information on competitive criteria that a food industry company needs to take into account. Based on this approach, it is possible to identify a consistent set of information that assists in the decision-making process at an operational strategy level, such as investments in dedicated or shared production lines, quality programs, and cost reduction. This study is a single embedded case study. Data were collected through interviews with ten customers of each business unit (BU). Descriptive statistics of the results were performed to analyze data: mean central tendency, standard deviation, and coincident of variation. The Fleiss Kappa Index was then used to analyze the agreement between respondents' answers. Finally, a new statistical analysis was performed. This analysis was weighted considering the representativeness of each customer in the company's billing. The results show that there are differences among competitive priorities of each BU. In addition, the proportionality of participation of each BU in the company influences the order of preference of competitive criteria.

Lohmann, S., Lacerda, D. P., Camargo, L. F. R. & Dresch, A. (2019). Operations strategy and analysis of competitive criteria: a case study of a food business. *Gestão & Produção*, 26(3), e2290. <https://doi.org/10.1590/0104-530X2290-1>.

**Peterson Obara Magutu (2010)**, the major purpose of this study was to document the operations strategy used in solid waste management, alongside the challenges facing implementation. This was a case study. Data was collected from fifty-(50) members and managers from the City Council of Nairobi and analyzed using descriptive statistics. The data was then summarized and presented in the form of proportions, tables and percentages. The findings arrive at: First, the CEO and the employees do the formulation of the operations strategy as part of a planning process

that coordinates operational goals with those of the larger organization. The annual objectives on solid waste management are well documented, which is inclusive of improving public health of the people; the environment; and maintain public cleanliness in order to keep public places aesthetically acceptable: by ensuring the proper storage, collection, transportation, safe treatment and disposal of solid waste. Secondly, the heads/managers feel that the current policies adequately support the institutions strategic plan. Thirdly, on the evaluation of the CCN's operations strategies used in solid waste management, it was also found that CCN has not invested on enough time and effort in analyzing environment capabilities and services to develop their operations strategy. On the other hand the CCN has not invested on enough time and effort in implementing its operations strategy. The internal strengths with the highest effect on CCN's competitive advantage, resulting from its operations strategy are: responsive employees in meeting customer needs, highly trained employees and quality control techniques. Lastly, the factors that have strongly limited sound waste management operations strategy implementation are the inability to formulate and implement sound solid waste management policies, inadequate treatment and disposal of solid waste and inadequate landfill disposal. The results have further used to come up with a model which exposes the integration of the operation strategies in solid waste management.

Peterson Obara Magutu (2010), “Formulation and Implementation of Operation Strategies Used in Solid Waste Management: Case Study of City Council of Nairobi”, *Journal of African Research in Business & Technology*. Volume 8, Issue 3, April 2010, Pages 122-137

<http://www.ibimapublishing.com/journals/JARBT/jarbt.html> Vol. 2010 (2010), Article ID 842702, 21 pages.

**Reinaldo Pacheco da Costa (2005)**, in the globalized world, companies seek for new operations strategies to ensure world corporate success. This article analyzes how the cost management models – both traditional and activitybased –, aid the planning and management of corporate globalized operations. The efficacy of the models application depends on their alignment with the competitive strategy. Companies must evaluate the nature of the competition and its competitive priorities; they should then define the necessary and sufficient dependence level on costs information. In this article, three dependence levels are presented: operational, decision support and

strategic control. The result of the research shows the importance of alignment between the cost management model and the competitive strategy for corporate success, and confirms the adequacy of the activity-based costing model as a supporting tool for decision taking in a global strategy. Case studies in world class companies in Brazil are presented.

Reinaldo Pacheco da Costa (2005), "Operations Strategy and Cost Management", Journal of Information Systems and Technology Management Vol. 2, No. 3, 2005, pp. 291-303 ISSN online: 1807-1775.

**Díaz-Garrido, E. (2008)**, this paper aims to review state-of-the-art literature on typologies and taxonomies of operations strategy in order to propose generic operations strategies in industrial companies from a theoretical viewpoint. Typologies and taxonomies are defined and characterised; both concepts delimit the generic configurations model. Then examine the state of the research on configuration analysis relating to operations strategy is examined. For this purpose articles published in 17 important journals in the field of production and operations management from the 1980s to the year 2006 are analysed. This review allows one to identify three generic operations strategies commonly accepted in the literature. This research deserves much more attention, both theoretical and empirical, in order to analyse the existing classifications and develop new classifications of operations strategy. Despite considerable interest in research on configurations in the study of organisation and business strategy there has not been much effort to examine the current state or even the future development of generic configurations in the operations strategy field. Luz Martín-Peña, M. and

Díaz-Garrido, E. (2008), "Typologies and taxonomies of operations strategy: a literature review", Management Research News, Vol. 31 No. 3, pp. 200-218.

**Haneen Abdulghani (2021)**, Strategies are designed to analysis and regulate the company's factors in an orderly and appropriate method, which contributes to maintaining the application of management in the best route. The purpose of this research is to examine the relationship between operation strategies and business strategies. IKEA home Furniture company used as a case study for the current research to identify the types of operations strategies that is being used and the effect of using

such a strategy on the firm business strategy in order to minimize the cost and improve planning. This research applied the qualitative and quantitative methodologies in research by intensive literature review, in addition to collecting the data through questionnaire survey among the Staff in IKEA –Saudi Arabia. The results of the statistical analysis of the collected data support the acceptance of the study hypotheses which shows there is a positive effect for the operations strategies on the firm business strategy.

Haneen Abdulghani (2021), “Testing the Effect of Operations Strategy on Business Strategy”, *Testing the Effect of Operations Strategy on Business Strategy Pjaee*, 18 (15) (2021).

**Kenneth K. Boye (2005)**, In this paper, we examine the operations strategy literature in the POMS journal to determine what has been learned and to suggest new directions for further study in this important area of research. Our review of this literature resulted in the selection of thirty-one relevant articles, many of which draw upon multiple theoretical perspectives. We identify eight such theoretical perspectives, and go on to classify these perspectives in terms of the scope of inquiry employed in the research (focused versus aggregated) and the researcher's assumptions about choice processes (behavioral versus rational). In doing so, we show that this body of work is dominated by papers that draw upon theoretical perspectives enabling a more holistic scope of inquiry, with a bias towards a view of strategy as a highly rational process. Building on our systematic review and integration of the literature, we suggest multiple areas for future research.

Kenneth K. Boye (2005), “Operations Strategy Research in the POMS Journal”, *Production and Operations Management Society*, Vol. 14, No. 4, winter 2005, pp. 442– 449. issn 1059 1478 051404442 \$1.25.

**Mohamad Amin Kaviani (2014)**, in competitive markets, the operations strategies of companies are normally formulated based on their competitive advantages. An effective operations strategy should maintain and improve competitive advantages based on the capabilities of the corporate operations resources. Considering the market requirements and the operational performance of the rivals is the key for success and survival of a company in the competition. Therefore, recognizing where a company

stands in comparison with its rivals and adopting the appropriate operations strategy plays vital roles in the success of companies. This paper proposes a method for comparing and ranking operations strategies of companies based on the concept of efficient frontier using data envelopment analysis (DEA) in grey environment. In the aforementioned method, DEA is used to evaluate the efficiency of operations strategies of manufacturing firms. Also, grey theory is used to support the uncertainty of the experts' opinions regarding the inputs and outputs of the DEA model. Then the respective units are ranked, and analyses are performed. The proposed approach is applied for the entire nine cement factories of Fars Province in Iran, and the units are ranked, respective analyses are presented regarding the efficient and inefficient units.

Mohamad Amin Kaviani (2014), "Analyzing the operations strategies of manufacturing firms using a hybrid Grey DEA approach – A case of Fars Cement Companies in Iran", IJSOM November 2014, Volume 1, Issue 3, pp. 371-391 ISSN-Print: 2383-1359 ISSN-Online: 2383-2525.

**KhatolwaAsman Kiloh (2014)**, the current study aimed to determine operations strategies adopted by cooperative sector in Kenya. This sector has a high level of competition as there are many SACCOS and they all compete to ensure they provide quality products and services to their members who are also their main customers and shareholders. The study was anchored on Resource-Based Theory and Theory of Competitive Advantage. The study adopted descriptive research design. The target population of this study was 64 licensed SACCOs by SASRA and operates within Nairobi metropolitan. Purposive random sampling technique was adopted to sample either operation or strategic staff in each company. The study adopted primary data where data was collected using a questionnaire. Regression analysis was also conducted to establish the relationship between dependent and independent variables. The study established that organization considers the capital to devote to particular businesses and in order for an organization to increase its total shareholder's return requires Sacco's to align its business, financial and investor strategies. The study also found that implementation of enterprise competition strategy is based on the exploitation of volume and scale. Based on the findings of the study, the study recommends that firms should screen the environment in which they are operating in order to come up with imitable operation strategies that can enhance their competitiveness. This will help

them to develop strategies that are in line with the products and services they offer which will eventually enhance organization strategies and competitiveness.

KhatolwaAsman Kiloh (2014), “Operations Strategies And Competitiveness Of Kenyan Cooperative Sector”, Noble International Journal of Social Sciences Research ISSN (e): 2519-9722 ISSN(p): 2522-6789 Vol. 05 No. 03, pp: 22-33, 2020.

**Barney (2000)**, Competitive operations strategy development calls for research and improvement of operations processes on continuous basis and also monitoring of developments in competitor organizations. Benchmarking needs to be done periodically to understand the progress made by others and to initiate actions to catch up on parameters where there is a gap. Cost, product scope, product quality, delivery speed, delivery reliability, new product introductions are some of the operations related parameters in which competitors try to improve and gain competitive advantage. The interface between marketing and operations is necessary to provide a business with an understanding of its markets from both perspectives. Operations strategy must be linked vertically to the customer and horizontally to other parts of the enterprise. Productivity is an important dimension of operations. Productivity measures include partial measures, multifactor measures, and total measures of productivity. These measures provide benchmarks to indicate how well the company is doing and are used to measure improvement.

Barney, J. B. (1991), Firm resources and sustained competitive advantage, *Journal of Management*, 17(1): 99-120.

**Hatten (2008)**, Cost driven operation strategies: These are created by ensuring that products and services are provided with a mindset to receive higher profits but at lower costs compared to their rivals. There are products that are basic to consumers and they purchase them strictly on their price without considering their brand. Strategies on cost reduction can be achieved by use of available resources and implementation of effective strategies.

Hatten (2008), “Small business management: entrepreneurship and beyond”, (5th ed), Mason, OH: South-Western Pub.

**Kenneth K. Boyer (2009)**, in this paper, we examine the operations strategy literature in the POMS journal to determine what has been learned and to suggest new directions for further study in this important area of research. Our review of this literature resulted in the selection of thirty-one relevant articles, many of which draw upon multiple theoretical perspectives. We identify eight such theoretical perspectives, and go on to classify these perspectives in terms of the scope of inquiry employed in the research (focused versus aggregated) and the researcher's assumptions about choice processes (behavioural versus rational). In doing so, we show that this body of work is dominated by papers that draw upon theoretical perspectives enabling a more holistic scope of inquiry, with a bias towards a view of strategy as a highly rational process. Building on our systematic review and integration of the literature, we suggest multiple areas for future research.

Kenneth K. Boyer (2009),, “ Operations Strategy Research”, POMS Journal

**Jasmine Siu Lee Lam (2019)**, Many ports and terminals endeavour to enhance energy efficiency as energy prices have increased through years and climate change mitigation is a key target for the port industry. Stricter environmental regulations are adopted by authorities to limit pollutants and GHG emissions arising from energy consumption. Increasingly, port operational strategies and energy usage patterns are under scrutiny. To ingrain sustainability and environmental protection of ports, the use of innovative technology appears as a critical conduit in achieving a transition from a carbon-intensive port industry (dependent on fossil fuels) to a low-carbon port model by harnessing renewable energy, alternative fuels (e.g. LNG, hydrogen, bio fuel), smarter power distribution systems, energy consumption measurement systems. In this context, this paper conducts a systematic literature review to analyze operational strategies (e.g. peak shaving, operations optimization), technology usage (e.g. electrification of equipment, cold-ironing, energy storage systems), renewable energy, alternative fuels and energy management systems (e.g. smart grid with renewable energy) for improving the energy efficiency and environmental performance of ports and terminals. Research gaps and future research directions are identified. Analysis shows that there is a great potential for ports to achieve further energy efficiency and researchers have many impactful research opportunities.

Jasmine Siu Lee Lam (2019),” A review of energy efficiency in ports: Operational strategies, technologies and energy management systems”, Elsevier, Volume 112, September 2019, Pages 170-182.

**Gabriela Lobo Veiga (2019)**, the efficiency frontier is a function that indicates the maximum level of attainable performance result by a given set of inputs. The frontier is estimated based on the observation population of companies’ inputs and outputs, considering a representative sample. On the operations strategy context, inputs can be understood as the competitive priorities, with should be managed to lead through a superior organizational performance. Some methods for calculating technical efficiency are proposed in literature and all of them requires inputting and output variables. This paper presents a process for defining variables based on statically analysis of the round 4 of High-Performance Manufacturing (HPM) data. The HPM project seeks to identify the practices adopted by high performance organizations and applies a survey with companies in 18 countries. The survey includes 1597 questions in 12 categories, culminating in a huge set of variables. Multivariate Data Analysis techniques are performed to establish a representative set of variables. As a result, we present the constructs to evaluate each input and output performance. This is an important contribution for the development of a Decision Support Systems for Manufacturing based on the frontier estimation techniques, which could be seen as a representative innovation to operations management and production research.

Gabriela Lobo Veiga (2019),” Efficiency Frontier Identification on the Context of Operations Strategy – A Study on Representative Constructs and Variables”, Elsevier, Volume 39, 2019, Pages 745-755.

**A STUDY ON OPERATION STRATEGY AND ITS IMPLEMENTATION  
TOWARDS KALEESUWARI REFINERY PRIVATE LIMITED., CHENNAI  
QUESTIONNAIRE**

1. Name :

2. Gender : a) Male b) Female

3. Age :

- a) Below 20      b) 21-30      c) 31-40      d) 41-50  
e) Above 50

4. Educational Qualification:

- a) Upto Higher Secondary   b) Graduate   c) Post Graduate   d) Diploma  
e) Others

5. Salary:

- a) Below 10,000/-   b) 10,000-20,000/-   c) 20,001- 30,000/-  
d) Above 30,000/-

6. Year of Experience

- a) Below 1 year      b) 1-3 years      c) 4-6 years      d) Above 6 years

**To understand effectiveness of cost reduction by the operation strategy**

|                                        | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
|----------------------------------------|----------------|-------|----------------------------|----------|-------------------|
| 7. Use of efficient equipment          |                |       |                            |          |                   |
| 8. Direct purchase from manufacturer   |                |       |                            |          |                   |
| 9. Low cost supply chain               |                |       |                            |          |                   |
| 10. Just-in-time strategy              |                |       |                            |          |                   |
| 11. Following cost leadership strategy |                |       |                            |          |                   |

**To evaluate the impact of operation strategy in less serving time in the company**

|                             | Excellent | Good | Average | Bad | Poor |
|-----------------------------|-----------|------|---------|-----|------|
| 12. Faster production rates |           |      |         |     |      |

|                                                                   |  |  |  |  |  |
|-------------------------------------------------------------------|--|--|--|--|--|
| 13.Error free services                                            |  |  |  |  |  |
| 14.Quicker transport methods                                      |  |  |  |  |  |
| 15.Larger finished-goods inventories for serving at promised time |  |  |  |  |  |
| 16.Better control of production of orders                         |  |  |  |  |  |

**To know the high quality performance by implementing operation strategy in the company**

|                                                       | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
|-------------------------------------------------------|----------------|-------|----------------------------|----------|-------------------|
| 17.High quality in product attributes                 |                |       |                            |          |                   |
| 18.Adoption and implementing high quality technology  |                |       |                            |          |                   |
| 19.Quality operational performance in each phases     |                |       |                            |          |                   |
| 20.Locating for convenient place for transportation   |                |       |                            |          |                   |
| 21.Quality professional to control quality production |                |       |                            |          |                   |

**To analyse the flexibility level in the company by implementing operation strategy**

|                                            | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
|--------------------------------------------|----------------|-------|----------------------------|----------|-------------------|
| 22.Manufacturing a broad range of products |                |       |                            |          |                   |

|                                                                                                  |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------|--|--|--|--|--|
| 23.Introduction of new products or processes for customer requirement                            |  |  |  |  |  |
| 24.Multi-skilled workers to perform the flexibility                                              |  |  |  |  |  |
| 25.The ability of the organisation to operate at different production output levels economically |  |  |  |  |  |
| 26.The ability of a manufacturing system to switch between different products in the product mix |  |  |  |  |  |

27. Suggestions