

A STUDY ON SEA FREIGHT CHALLENGES OF EMPLOYEES IN LOM LOGISTICS INDIA PVT LTD

Submitted in partial fulfillment of the requirements for the award of
Master of Business Administration
by

DHANAMANI P

42410285



SCHOOL OF MANAGEMENT STUDIES

SATHYABAMA

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

CATEGORY-1 UNIVERSITY BY UGC

Accredited with Grade "A++" by NAAC | 12B Status by UGC |

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APRIL - 2024



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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the Bonafide work of **DHANAMANI P (42410285)** who carried out the project training "**A STUDY ON SEA FREIGHT OF CHALLENGES IN LOM LOGISTICS**" under my supervision from January to April 2024.

Ms. S. Dhanalakshmi

Internal Guide

Dr. Palani A

HOD

Dr. Bhuvaneswari G.

Dean

Submitted for Viva voce Examination held on _____

Internal Examiner

(Name in Capital letters with Signature)

External Examiner

(Name in Capital letters with Signature)

LOM LOGISTICS INDIA PVT. LTD.

No.151, Village Road, 7th Floor, "GEE GEE EMERALD Building"
Nungambakkam, Chennai-600 034, India Tel : +91 44 66455902 to 923



Date: 26/04/2024

Place: Chennai

CERTIFICATE OF COMPLETION

TO WHOM IT MAY CONCERN,

This is to certify that Ms. Dhanamani, a student of MBA (Business Administration) at Sathyabama Institute of Science and Technology, has successfully completed an internship in the SEA Export Department under the supervision of Mr. M. Suresh, Manager of Sea Exports, in our organization from February 14, 2024, to April 26, 2024.

Throughout her tenure with us, Ms. Dhanamani exhibited a keen eagerness to learn and approached her assignments with sincere dedication.

We extend our best wishes to her for every success in her future endeavours.

Warm regards,

Thanking You,

For LOM LOGISTICS INDIA PRIVATE LIMITED




S.HEMAKUMAR

HR-Manager

Leader of Market

DECLARATION

I **DHANAMANI P** hereby declare that the Project Report entitled “**(A STUDY ON SEA FREIGHT CHALLENGES OF EMPLOYEES IN LOM LOGISTICS INDIA PVT LTD)**” done by me under the guidance of **Ms. S. Dhanalakshmi** is submitted in partial fulfillment of the requirements for the award of Master of Business Administration / Bachelor of Commerce /Bachelor of Business Administration.

DATE:

PLACE:

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

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I convey my thanks to **Dr. Bhuvaneswari G.**, Dean, School of Management Studies and **Dr. Palani A.**, Head of the Department, for providing me necessary support during the progressive reviews.

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

I wish to express my thanks to all Teaching and Non-teaching staff members of the **School of Management Studies** who were helpful in many ways for the completion of the project.

DHANAMANI P

CHAPTER - I

INTRODUCTION

INTRODUCTION:

Sea freight is a shipping method used by businesses to transport large amounts of goods overseas by sea using cargo ships. Since it's cost-effective, most businesses prefer to use this mode of transportation, when they have to move a huge quantity of goods. Sea freight is distinct from traditional modes of goods transportation as ideally large loads of good, or heavy machinery is shipped through Sea freight. In Sea freight, goods are transported in large metal containers (You must've probably seen one if you have been to a seaport). There are fewer restrictions imposed on sea freight. Sea freight is also used to transport several crucial commodities for a country, like Oil, Defense Equipment, and Aircraft. Like other modes of transportation, sea freight too involves seller (manufacturer), buyer, ocean carriers, freight forwarders, brokerage, port authority, and insurance providers.

The concept of "Motorways of the Sea" is an integrated part of the Commission's 2001 White Paper on European transport policy for 2010. Waterborne freight transport is suggested in the White Paper as a means of coping with road congestion and constraints on railway infrastructure. One way to revive short-sea shipping is to build sea motorways within the framework of the master plan for the Trans-European Transport Network (TEN-T). Sea Motorways are in a list of 29 priority projects for investment, published by the European Commission. Subsidies should help to complement shipping links that are solely based

Sea freight

Sea freight or ocean freight is a method of shipping goods by sea using cargo ships. Around **80% of international trade volume is transported by sea**, and the percentage is even higher for most developing countries.

This sea freight method is often used to transport large quantities of goods due to its large cargo capacity and relatively lower cost compared to air freight.

The Role of Sea Freight in the Trade Sector

Sea freight plays a crucial role in both global and national trade. Here are some roles of sea freight in trade at both the global and national levels

Supporting the growth of global trade: Sea freight enables producers in one country to ship their goods to consumers in another country at a relatively affordable cost

Improving supply chain efficiency: Sea freight can be used to ship large quantities of goods from one location to another. This can help improve supply chain efficiency and reduce logistics costs.

Expanding markets: Sea freight can be used to ship goods from one region to another within a country, which can help expand markets and increase the competitiveness

Types of Sea Freight

There are several types of sea freight, differentiated based on the size and type of goods shipped. The common types of sea freight include:

Full Container Load (FCL)

In FCL, a single shipper fills an entire container with their goods. This method is ideal for a large enough amount of goods to fill an entire container. FCL is usually faster and less risky than LCL because the goods do not need to be rearranged at the consolidation center.

Less Container Load (LCL)

LCL is used when the shipped goods are not sufficient to fill a full container. Goods are shipped along with other goods from different shippers in one container. LCL is often more economical for shipping small quantities of goods but requires more complex handling and consolidation processes.

Bulk Shipping

This method is used for shipping bulk goods, such as grains, coal, iron ore, and oil. These goods are transported in large quantities without specific packaging, directly in the ship's cargo space.

Break Bulk Cargo

Break bulk is a method for goods that cannot be loaded in containers or bulk, such as wood, steel, or large equipment. These goods are transported by being stacked and tied on pallets or in crates.

Roll-on/Roll-off (RoRo)

RoRo is used for vehicles and goods that can move on their own or can be rolled into the ship. Examples include cars, trucks, buses, and heavy equipment.

Refrigerated Shipping

For goods that require temperature control, such as fresh food products or pharmaceuticals, refrigerated containers known as 'reefers' are used.

Tanker Shipping

Used specifically for transporting liquids, such as chemicals, crude oil, and LNG (Liquefied Natural Gas) in special tanks.

Container Types in Sea Freight

There are various types of containers designed to meet the different needs of sea freight shipping. Here are the main types of containers often used:

Standard Container (Dry Storage Container):

The most common type of container, used for shipping dry goods that do not require special temperatures. Usually available in 20-foot and 40-foot sizes

Flat Rack Container:

Has open sides and is very suitable for large or heavy items that do not fit or are unsuitable for standard containers, such as large machines, heavy equipment, and timber.

Open Top Container:

Has a removable roof, facilitating the loading and unloading of large or heavy items from above.

Refrigerated (Reefer) Container:

For shipping goods that require temperature control, such as fresh food products, flowers, or pharmaceuticals. These containers are equipped with a cooling unit to maintain the desired temperature.

Tank Container:

This special container is used for transporting liquids, gases, or chemicals. They are typically made of corrosion-resistant materials like stainless steel.

Ventilated Container:

Equipped with ventilation to allow airflow. Suitable for transporting goods that require air circulation, such as coffee or cocoa.

High Cube Container:

Similar to standard containers but taller, providing additional volume capacity, suitable for lightweight but large items.

Platform Container:

This container is essentially a platform without sides or a roof, suitable for very large or irregularly shaped items that do not fit in other containers

Sea Freight Shipping Process

The process of sea freight, or sea shipping, involves several key steps from start to finish. Here is a brief yet comprehensive overview of that process

Cost of Sea Freight Shipping

The cost of sea freight is influenced by various factors and can vary greatly depending on specific shipping details. Here are the main components that affect

the cost of sea freight:

Type of Service

- Distance and Shipping Route
- Port Fees and Surcharges
- Customs Fees and Taxes
- Shipping Insurance
- Additional Transportation Costs
- Fuel Price Fluctuations
- Additional Service Charges

Advantage and Disadvantage

Advantages Of Sea Freight

- Cost-effective
- Easier to manoeuvre heavy or odd-sized products
- Inexpensive for long distances
- Time-consuming
- Price for small products is unsustainable

Disadvantage of sea freight

- Time-consuming
- Price for small products is unsustainable

Incoterms uses in sea freight

Incoterms

International Commercial Trade Terms, or Incoterms for short, are selling terms buyers and sellers use so they can communicate which party is responsible for the tasks, costs, and risks associated with transferring the goods to the buyer when trading internationally. These are legally binding agreements published by the International Chamber of Commerce (ICC), and followed by virtually all countries.

Every 10 years, the ICC updates the Incoterms to ensure that they stay consistent with the current process of international trade. Incoterms were last on January 1st, 2020, and include 11 unique types.

When buyers are purchasing products internationally, sellers will often include a three-letter abbreviation of one of the 11 Incoterms to define what the terms of the trade shall be. These terms represent various tasks, costs, risks, and logistics of getting goods whether by sea freight, air freight, and land freight.

Types of Incoterms

EXW works or Ex-Warehouse: The seller is responsible for packing the products and making the goods available. The cargo is transferred to the buyer while the freight is still at the seller's site. The buyer is then responsible for exporting, shipping, and importing the cargo to their destination.

FCA – Free Carrier: The seller is responsible for transporting the cargo to a defined destination within the seller's country, usually a shipping terminal. Once the load has arrived at the designated destination, the shipment transfers to the buyer, the buyer then must pay the freight charges and fulfill the importing and delivery process. Depending on the named place, the cargo is either exported by the seller or the buyer.

FAS – Free Alongside Ship: The seller must manage the full export process of the cargo until the goods are alongside the ship or other mode of transport. Once alongside the ship, the risk is transferred to the buyer. The buyer is responsible for loading the cargo onto their desired vessel and shipping the goods to their final destination.

FOB – Free On Board: The seller must manage the full export process of the cargo, and load the products on the ship. Once the cargo has been safely loaded, the products transfer to the buyer. The buyer must pay for the freight costs that transport the goods to their destination and is responsible for all import costs..

CIF – Cost, Insurance & Freight: The seller is responsible for the costs to ship and insure the cargo to the buyers requested port. Once the goods arrive at port, the responsibility of the goods transfers to the buyer. The buyer then must cover the costs to unload, import, and deliver their shipment. CIF requires the seller to purchase freight insurance.

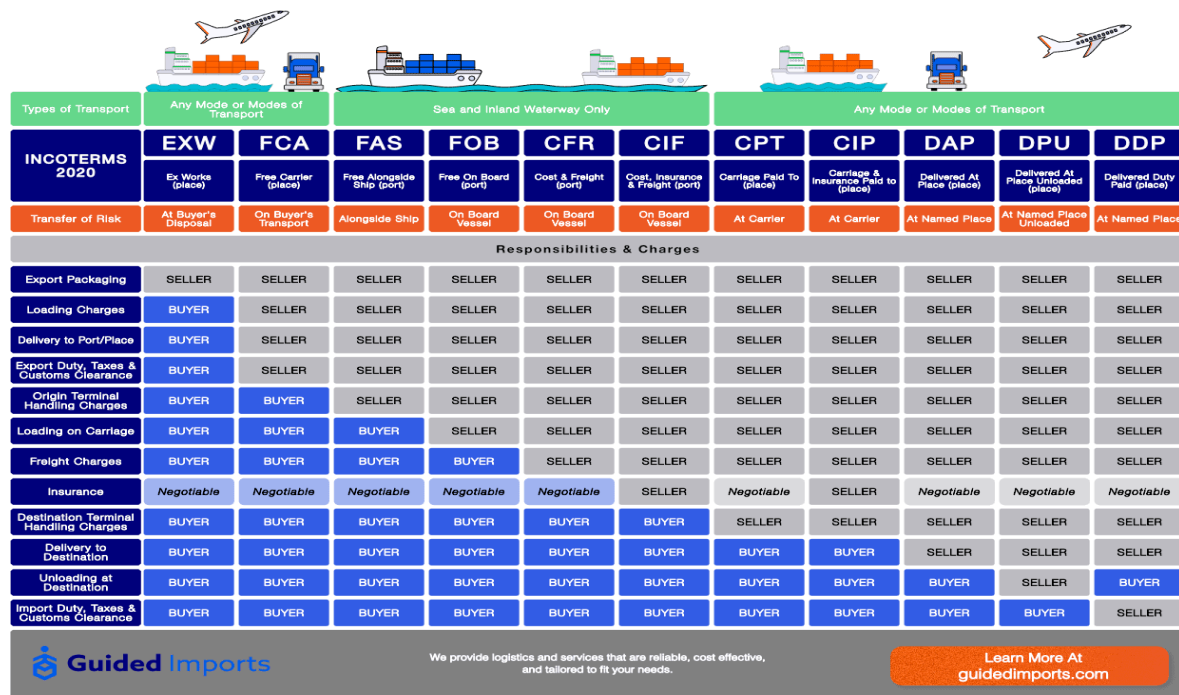
CPT – Carriage Paid To: The seller must ship and unload the cargo from the vessel at the defined place of delivery. Once the goods are unloaded, the cargo transfers to the buyer, who is then responsible for importing and transporting the freight to the final destination.

CIP – Carriage & Insurance Paid: The seller must cover the costs to ship and insure the cargo to the defined place of delivery. The shipment transfers to the buyer after the cargo is unloaded and delivered to the terminal. After the goods are unloaded and delivered to the defined terminal, the shipment transfers to the buyer. The buyer must import and fulfill the remainder of the shipping process to move the goods to the final destination. CIP requires the seller to purchase freight insurance

DAP – Delivered at Place: The seller must deliver the cargo to the final, defined destination. Once delivered the cargo transfers to the buyer. The buyer must unload the shipment from the truck. The buyer is also responsible for import duty, taxes, and customs clearance.

DPU – Delivered at Place Unloaded: The seller must deliver and unload the cargo to the final destination. Once the shipment is successfully unloaded at the buyer's warehouse, the responsibility transfers to the buyer. The buyer is responsible for import duty, taxes, and customs clear

Incoterms chart



Types of Transport	Any Mode or Modes of Transport			Sea and Inland Waterway Only			Any Mode or Modes of Transport				
INCOTERMS 2020	EXW	FCA	FAS	FOB	CFR	CIF	CPT	CIP	DAP	DPU	DDP
Transfer of Risk	At Buyer's Disposal	On Buyer's Transport	Alongside Ship	On Board Vessel	On Board Vessel	On Board Vessel	At Carrier	At Carrier	At Named Place	At Named Place Unloaded	At Named Place
Responsibilities & Charges											
Export Packaging	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER
Loading Charges	BUYER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER
Delivery to Port/Place	BUYER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER
Export Duty, Taxes & Customs Clearance	BUYER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER
Origin Terminal Handling Charges	BUYER	BUYER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER
Loading on Carriage	BUYER	BUYER	BUYER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER
Freight Charges	BUYER	BUYER	BUYER	BUYER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER	SELLER
Insurance	Negotiable	Negotiable	Negotiable	Negotiable	Negotiable	SELLER	Negotiable	SELLER	Negotiable	Negotiable	Negotiable
Destination Terminal Handling Charges	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	SELLER	SELLER	SELLER	SELLER	SELLER
Delivery to Destination	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	SELLER	SELLER	SELLER
Unloading at Destination	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	SELLER	BUYER
Import Duty, Taxes & Customs Clearance	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	BUYER	SELLER

Guided Imports We provide logistics and services that are reliable, cost effective, and tailored to fit your needs. [Learn More At guidedimports.com](https://www.guidedimports.com)

Figure1.1 Incoterms Charts

Challenges of sea freight

Fuel Costs

The raising the heavily affect the shipping industry drayage shipping practices help manage and lower fuel costs by optimizing travel and transport, but fuel accounts for a large portion of the industry overall cost is one of the industry's biggest challenges.

In addition, fuel alternatives are being explored, offering more optimal solutions for the future. Some of these include electric or hydrogen-powered vehicles. However, these alternatives will heavily rely on the infrastructure for electric trucks which may be a few years ahead of us.

Environmental Issues

The shipping industry experiences an array of environmental issues, from fuel emissions to oil spills to wildlife interactions. All transport vehicles rely on burning fuels, mostly diesel, which release a number of harmful chemicals in the air. Because of the volume of such an industry, this produces a lot of pollution. In addition to air pollution, oil spills can affect oceans and wildlife. Maintaining effective and affordable shipping practices that lower pollution is a huge challenge the shipping industry is facing.

Customer Service

The nature of the shipping industry involves a number of different global shipping partners working in tandem to move cargo. This does not always result in the best customer service for the shipper, as a lot can often get lost in translation when dealing with foreign shipping partners.

It is important for freight forwarders to ensure that their partners share with them accurate and timely information in order for them to provide excellent customer service. Good customer service can be quite a differentiating factor between companies. Customers want transparency and shipping companies will constantly be adapting to provide the best

Technology Implementation

The use of technology in the shipping industry is changing rapidly, to accommodate the above considerations and more. The quick rate of change, however, makes it more difficult to incorporate fully into a standardized process.

Freight forwarders use advanced communication, optimization, and tracking tools to manage and move cargo globally. Electric vehicles, advanced tracking systems, and supply chain visibility are some of the issues technology are currently addressing.

Government and International Regulation

When moving cargo between different countries, shipments are subject to local rules, laws, fees, and regulations. However, depending on where the shipment is being processed these rules may not be the same, or easy to understand. They can change day by day, and it's important for freight forwarders to be aware of all current shipping practices.

Global Economy

The global economy is shifting drastically, and freight forwarders must take precautions to work around inflation, rising shipping costs, trade wars, and environmental factors. It is important to guarantee the reliability of the supply chain, even in the face of global change. Freight forwarders and shipping companies are looking ahead to solve such future

1.2. Company profile



VISION:

To be known as the No. 1 company in providing logistics handling & warehousing services.

MISSION:

Our focus is on satisfaction, and to gain this LOM India will be in the process constantly innovating and building a better mechanism to serve to serve our valuable customers.

The services of company

- Air Freight
- Ocean Freight
- Customs Clearance
- Project Cargo
- Relocation Service
- FTWZ

Air freight

LOM will suggest the appropriate air services that is cost effective timely delivery, according to your delivery schedule through support of LOM air freight experts, whether across the region or around the world.

LOM – competitive rates for your desired capacities and needs from the specific leading freight services. LOM provides value added services, Viz., packing, crating etc.

Ocean Freight Services:

LOM reliably move your Ocean Shipments on an average of around 600 containers per month, from many destinations across the globe, from and to India. LOM with strong relationship with ocean carriers can obtain reliable space allocation at competitive rates,

FCL / [Full Container Load]

LCL [Less than Container Load]

Consolidation and Break-Bulk Booking

Customs Clearance:

LOM experts will handle your customs clearance process - quick and effective, to reduce compliance risk and minimize cycle time. Our clearing team will ensure to pay appropriate duties on tariffs.

Warehousing:

LOM sources right kind of warehouse space for your business needs. control your inventory and maximize your distribution potential. Get your preferred and flexible locations and services as your desired needs.

- FTWZ
- ICD
- General warehouse
- Customs Bonded warehouse

LOM with a strong local presence in India, can extend support to expand your supplychain around the globe, now you are with one of the best Logistic service provider in the country.

LOM provides you comprehensive Logistics services within India.

Project Cargo:

LOM Logistics India can be a key to your successful project delivery. Cargo that needs to move from one site, to another place, whether it's locally or globally, is often oversized and out-of-gauge. Transportation of construction equipment, machinery, and other materials are now at your timely reach!!

Yet to stay competitive by taking LOM advantage of its Service and their expertise with their delivery options for your large industrial equipment. Whether you need heavy haul trucking /bulk break shipment, we move anywhere in India we carry your shipment across the world. LOM Logistics India Services has the quality solutions to meet your needs.

Company strength

- Dedicated Service, Team work.
- Our experts in every department are most experienced and responsible staffs to meet the international working standard.
- Solution provider while handling Critical Situation to meet the deadline.
- We are driven by time bound for every subject.

- Excellent relations with Liners and Airlines to obtain best and competitive buying rate for imports and exports.
- Our Rapports with Liners, Airlines and CFS makes us easy faster while Customs clearance to obtain DO and documents required
- On time pre-advise, documents and payments

Company proposition

- Specialized expert team to process documents and to obtain CEPA FTA documentation time for exports.[Generalized System of preference – Certificate of Origin from the Government export inspection agency]
- Our Multi – modal transport, be it Sea, Air and Road, carry and deliver safely on time.
- Customs clearance experts team always meet the situation to comply by the law of the soil, even while handling critical issues, intimate in advance to our customer to submit the documents to be in order, if necessary

1.3.Objectives of the study

PRIMARY OBJECTIVE:

To study and analyze the current employee sea freight challenges of Lom Logistics India Pvt Ltd.

SECONDARY OBJECTIVES:

- To study the functions and work activities of sea freight.
- To Identify the challenges / problems faced by sea freight.
- To study the export producers of Lom Logistics India Pvt Ltd & document required for export.
- To analyze Customer Expectations and Service Quality Challenges.

Scope of the study

- Addressing challenges in navigating complex international regulations governing maritime transportation
- Overcoming hurdles in adopting and utilizing advanced technologies to streamline operations.
- Ensuring the health, safety, and job satisfaction of sea freight employees in demanding maritime environments.
- Promoting sustainable practices and reducing the ecological footprint of sea freightoperation

CHAPTER- 2

REVIEW OF LITERATURE

ALLEN,E. AND THIESSEN, D.(2007).

Said that upgrading infrastructure in advance of the next generation of container ships requires advanced planning and assumption and an analysis of the impact from the next generation of vessels on their infrastructure was conducted, which looked at the marine side requirement for a 12000+ TEU vessel such as channel and berth dimension plus wharf infrastructure. Additionally, landside infrastructure was assessed for needed improvements including terminals size and equipment needs. The resulting recommendations laid out a schedule of additional studies plus design and construction documents to pursue over a 15-year horizon

LEE, D. AND SONG, L.(2004).

Argued that storing container in the yard. Allocation resources in the terminal, and schedules vessels loading and unloading operation are major tasks in a container port. This paper mainly dealt with the allocation of yard resources of the containers. They considered optimizing crane scheduling and weight container movement in the yard with deterministic machine availability constraints. They devised a genetic algorithm to solve the problem.

LV, G. AND SHEN, G.(2007).

Discussed that simulated annealing is an efficient approach to solve the problems of premature convergence that exist in genetic algorithm, which can reduce the scope of the search area and improve the convergence speed of the algorithm. It combines with genetic algorithm to form a new global optimal algorithm in the paper. The crossover operator of the genetic operation plays an important role in this algorithm. The result of a concrete example of the container assembly showed that this algorithm has many advanced properties compared with traditional general genetic algorithm

HATZITHEODOROU, G.(2009)

Stated the factors affecting the economics of stacking and wheeled operation in container terminals. He analyzed the factors by mathematical reasoning involving cost of land, cost of equipment and cost of labor, and their constituent factors inequalities were written. From a small the total cost of wheeled and that of stacking operations, graphs were developed for various values of top loader efficiency, number of days that containers stay in port, interest rates, and cost of land versus various values of the ratio between the total cost of stacking over the total cost of wheeled operation.

DONG, Y., YANG, S., AND SHI, L.(2010)

In his paper title “” said that the berth allocation problem in container terminal is a NP hard problem. The genetic algorithm initially seemed to be quite useful at finding generally good global solution but later proved to be quite inefficient at finding the absolute optimum solution in last few mutation. Therefore, a improved memetic algorithm was introduction in his paper. Various numerical examples were analyzed. Which showed that the proposed memetic algorithm can speed up the convergence and is more suitable for the berth allocation problem in container terminal

ZHENG, H., LI, L., AND REN, S.(2010)

They concluded that for the problem of continuous container terminal production resources scheduling, based on the terminal operation efficiency of the system, within the daily work plan for the shortest waiting time of quay cranes and all lorries with the shortest operation time; their paper put forward the container terminal and production resources scheduling model and presented this model based on the search solutions,

Brooks, Mary R.2010 :

□ This paper examines the critical role of transportation, including sea freight, in the logistics chain. It discusses various modes of transportation and their contributions to supply chain efficiency, highlighting the importance of sea freight for global trade.

Notte boom, Theo E., and Wilmsmeier, Gordon. (2019)

This study explores the future trends shaping containerized trade and logistics, with a focus on geopolitical shifts and technological advancements. It discusses the implications of these trends for sea freight transportation and the wider maritime industry.

Gan, X., Zhang, Y., & Wang, X. (2015)

Gan, Zhang, and Wang (2015) conducted a study focusing on the optimization of container loading plans to improve efficiency in sea freight logistics. Their research proposed a mathematical model for optimizing container loading processes, considering factors such as cargo weight distribution, container space utilization, and loading sequence. By applying their model, they demonstrated significant improvements in loading efficiency and reduction in transportation costs.

Chew, E.P., Lee, L.H., & Tan, K.C. (2018)

Chew, Lee, and Tan (2018) investigated the application of blockchain technology in sea freight logistics to enhance transparency, security, and efficiency in supply chain management. Their study explored the potential benefits of blockchain for tracking cargo movements, verifying transactions, and streamlining documentation processes. Through case studies and simulations, they highlighted the transformative impact of blockchain on sea freight operations, paving the way for more secure and efficient logistics practices

Notteboom, T., & Pallis, A.A. (2011)

Notteboom and Pallis (2011) investigated the governance structures and institutional arrangements in container terminal operations and sea freight logistics. Their research examined the role of public and private actors, regulatory frameworks, and stakeholder interactions in shaping port governance models and performance outcomes. Through case studies and comparative analysis, they provided insights into the complexities of port governance and its implications for efficiency, competitiveness, and sustainability in maritime trade.

Lam, J.S.L., & Yap, W.Y. (2017)

Lam and Yap (2017) conducted a study on risk management practices in sea freight logistics, focusing on strategies for mitigating operational, financial, and regulatory risks. Their research reviewed the key risk factors and challenges facing maritime stakeholders, such as cargo theft, natural disasters, geopolitical instability, and compliance with international regulations. By examining risk assessment methodologies and risk mitigation techniques, they offered practical recommendations for enhancing resilience and contingency planning in sea freight operations.

De Langen, P.W., & Pallis, A.A. (2010)

De Langen and Pallis (2010) examined the role of intermodal transportation networks in enhancing the efficiency and sustainability of sea freight logistics. Their study evaluated the integration of multiple modes of transport, such as rail, road, and inland waterways, in facilitating seamless cargo movements and reducing transportation costs. Through case studies and modelling exercises, they assessed the economic, environmental, and social benefits of intermodal connectivity for global supply chains and port hinterland.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research methodology

Research is defined as a scientific and systematic search for pertinent, information on a specific topic. Research is an art of scientific investigation. It is a careful investigation or inquiry especially through search of new facts in any branch of knowledge. It is the systematized effort to gain new knowledge. It is an academic activity and as such, the term should be used in technical sense. Research is, thus, an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison and experiment. In short, the search of knowledge through objective and systematic method of finding a solution to a problem is research. As a researcher, defining, evaluating and organizing data, making deductions and conclusions, and finally carefully testing the conclusions to determine whether they fit the formulating hypotheses is priority.

Data Collection

Primary Data:

The data is collected from the concerned staff of the company from the accounts department of the organization by interviewing them personally. The data was also collected with the purpose of evaluation.

Secondary Data:

Secondary data is provided by the organization in various forms. It includes referring of the manual of Lom logistics (www.lomindia.com), from the previously recorded information in the accounts department, local intranet facility provided by the organization and from the internet

Sample size:

The population size is 130 so out of that I have reviewed 110. I have used simple random sampling technique

Sample design:

Well-structured questionnaire of 20 questions

RESEARCH INSTRUMENT:**QUESTIONNAIRE:**

A questionnaire is sent to the persons concerned with the request to answer the question and return the questionnaire. The questionnaire consists of a number of questions printed in a definite order on a form or set of forms. The questionnaire is mailed to respondents who are expected to read and understand the questions and write down the reply in the space lent for the purpose in the questionnaire itself. The respondents have to answer the questions on their own. In this study, a questionnaire was used to collect data from the sample.

Chi square

A chi-squared test is a statistical hypothesis test used in the analysis of contingency tables when the sample sizes are large. In simpler terms, this test is primarily used to examine whether two categorical variables are independent in influencing the test statistic

$$\chi^2_c = \frac{\sum (O_i - E_i)^2}{E_i}$$

Null Hypothesis (H₀) - The Null Hypothesis is the assumption that the event will not occur. A null hypothesis has no bearing on the study's outcome unless it is rejected.

Alternate Hypothesis (H1 or Ha) - The Alternate Hypothesis is the logical opposite of the null hypothesis. The acceptance of the alternative hypothesis follows the rejection of the null hypothesis. H1 is the symbol for it

ANALYTICAL TOOLS

Percentage analysis

Percentage analysis is the method which is used for finding the average of collected information. Percentage analysis can be calculated as follows:

First the number of respondents is noted in a tabular form and then the percentage is calculated by dividing the number of respondents by total number of respondents which is then multiplied by 100.

$$\text{Percentage} = \frac{\text{No of respondents}}{\text{Total no. of respondents}} * 100$$

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 Data analysis and interpretation

Analyzing data is a process of looking for patterns in data that has been collected through inquiry and figuring out about what the patterns might mean. Interpreting the data is a process of trying to explain the patterns that were discovered. Analyzing and interpreting data may not always be a simple linear process.

Table 4.2 Age of Employees

S.no	Particulars	No of employees	Percentage of employees
1	21-30	56	51
2	31-40	35	32
3	41-50	14	13
4	Above 50	5	4
	Total	110	100

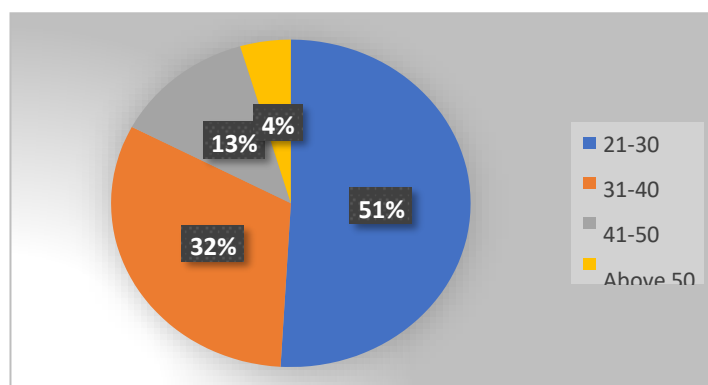


Chart 4.2 Age

Interpretation:

From the above chart it is interpreted that 51% respondents are between 21-30, 32% respondents are between 31-40, 13% respondents are between 41-50, 4% respondents are above 50.

Table 4.3 Gender

S.no	Particulars	No of employees	Percentage of employees
1	Male	82	75%
2	Female	28	25%
	Total	110	100

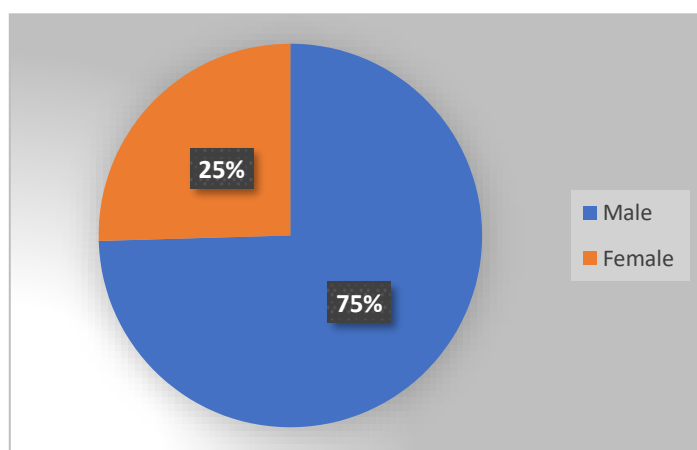


Chart 4.3. gender

Interpretation:

From the above table it is interpreted that 75% employees are male, 25% employees are female.

Table 4.4 Employees marital status

S no	Particulars	No of employees	Percentage of employees
1	Un married	58	53
2	Married	52	47
	Total	110	100%

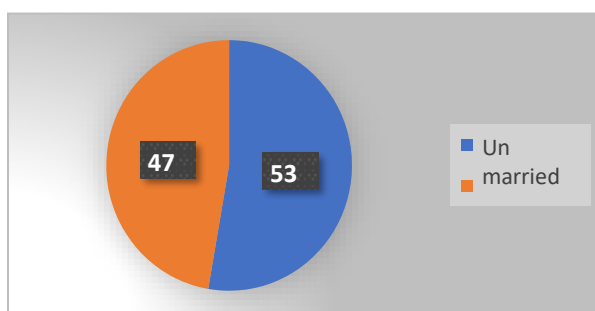


Chart 4.4. Employees martial status

Interpretation

From the above chart it is interpreted that are 53% employees are married, 47% employees

Table 4.5 Employees satisfy the customer

S no	Particulars	No of employees	Percentage of employees
1	Reasonable price	28	25
2	Preparing document as per customer requirements	55	50
3	Planning shipments as per customer requirements	27	25
	Total	110	100%

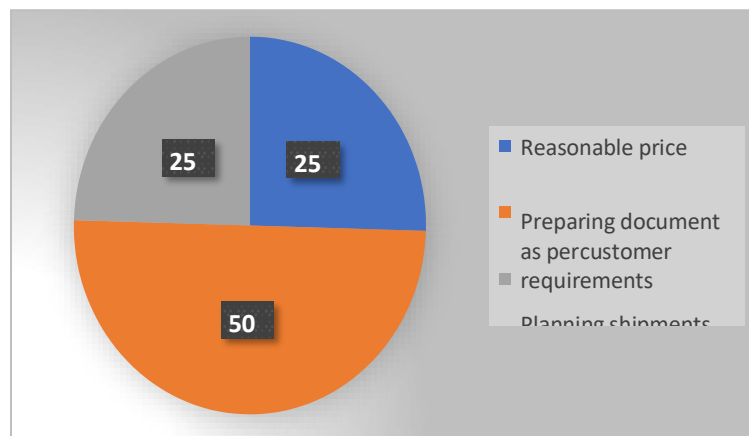


Chart 4.5 employees satisfy customer

Interpretation

From the above chart it is interpreted that are 25 % of the employees reasonable price 50% of the respondents are preparing document as per customer requirements, 25% of the respondents planning shipments as per customer requirements.

Table 4.6 Employees in sea freight handle customer request for document modification or updates

S no	Particulars	No of employees	Percentage of employees
1	Seeking advice from legal team	24	22%
2	Referring to official documentation from relevant authority	63	57%
3	Referring to official documentation from relevant authority	23	21%
	Total	110	100%

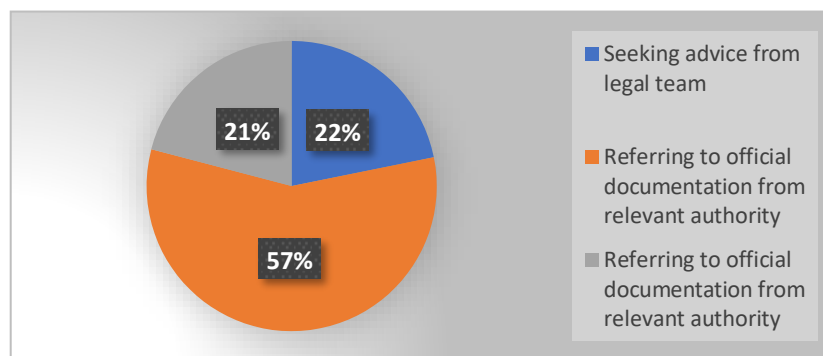


Chart 4.6 Employees in sea freight handle customer request for document modification or updates

Interpretation:

From the above chart it is interpreted that are 25 % of the employees reasonable price 50% of the respondents are preparing document as per customer requirements,25% of the respondents planning shipments as per customer requirements.

Table 4.7 Strategies employees do in sea freight handle unexcepted delay that may impact customer timelines

S no	Particulars	No of employees	Percentage of employees
1	Confirmation from the customer	27	20
2	Check alternative solution to arrive destination earlier	79	60
3	Delay in process suggesting the air freight which cost is high	26	20
	Total	110	100%

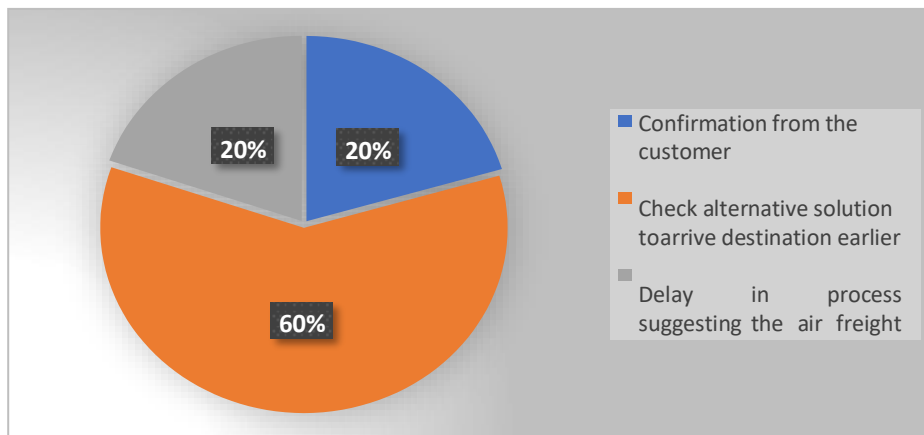


Chart 4.7 Strategies employees do in sea freight handle unexcepted delay that may impact customer timelines

Interpretation

From the above chart it is interpreted that 20% of the employee confirmation from the customer, 60% of the employees check alternative solution to arrive destination earlier, 20% of the employees Delay in process suggesting the air freight which cost is high.

Table4.8 Environmental factor affect freight charge

S.no	Particulars	No of employees	Percentage of employees
1	Due to climate, there is delay in vessel transit	36	33%
2	Due to climate, there is delay excepted in port operation	42	38%
3	Due to fire accident	22	20%
4	Due to war	10	9%
	Total	110	100%

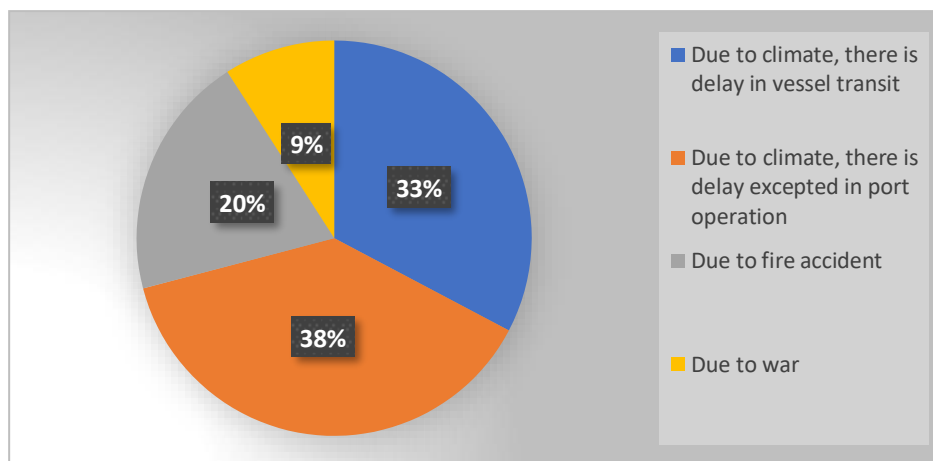


Chart 4.8 Environmental factor affect freight charge

Interpretation

From the above table it is interpreted that 33% environmental factor affect Due to climate, there is delay in vessel transit, 38% environmental factor affects, there is delay excepted in port operation, 20% environmental factor affects Due to fire accident, 9% environmental factor affects Due to war.

Table 4.9 Delay in custom clearness or transportation what additional cost may incurfor a sea freight shipment

S.no	Particulars	No of employees	Percentage of employees
1	Storage	66	60%
2	Not able to match buyer requirements	21	19%
3	Delay in transit	23	21%
	Total	110	100%

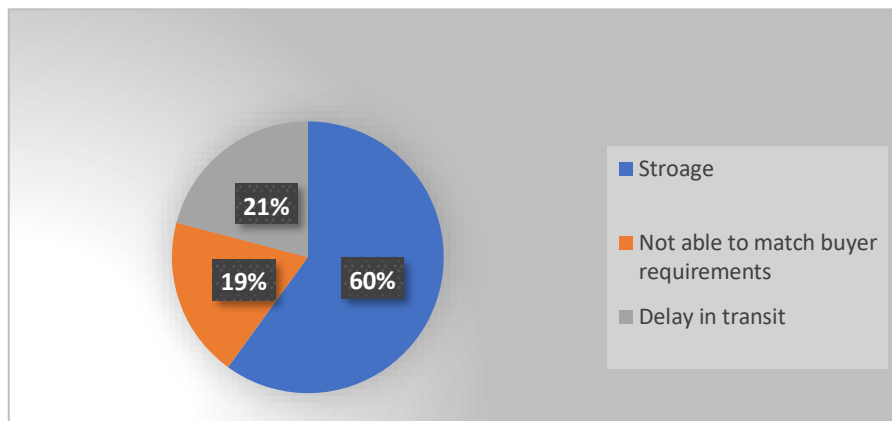


Chart 4.9 Delay in custom clearness or transportation what additional cost may incurfor a sea freight shipment

Interpretation

From the above table it is interpreted that 60% freight cost increase in storage, 19% Not able to match buyer requirements, 20% Delay in transit

Table 4.10 if there is increase in freight surcharges

S.no	Particulars	No of employees	Percentage of employees
1	Due to raising fuel prices	52	47%
2	Due to peak seasons	37	34%
3	Due to conjection	21	19%
	Total	110	100%

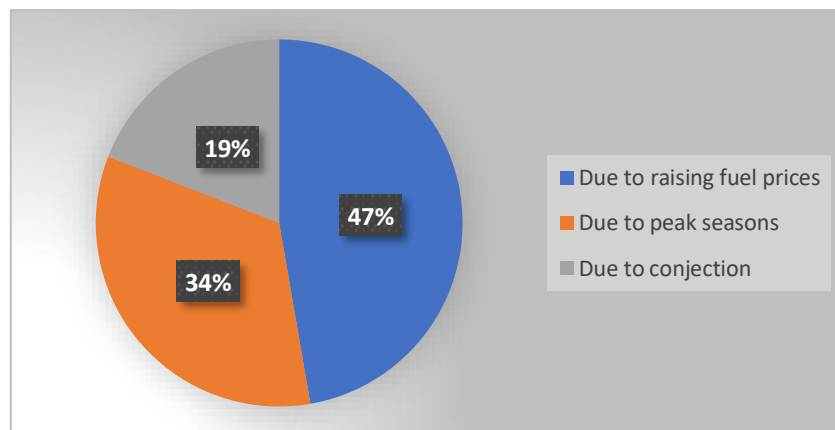


Chart 4.10 if there is increase in freight surcharges

Interpretation

From the above chart it is interpreted that 47% freight surcharge is increase due to raising fuel price, 34% freight surcharge is increase due to peak season, 19% freight surcharge is increase due to conjection.

Table.4.11 challenges faced in port operation

S.no	Particulars	No of employees	Percentage of employees
1	Due to climate condition unexcepted	46	42%
2	Due to manpower shortage	47	43%
3	Due to equipment shortage	17	15%
	Total	110	100%

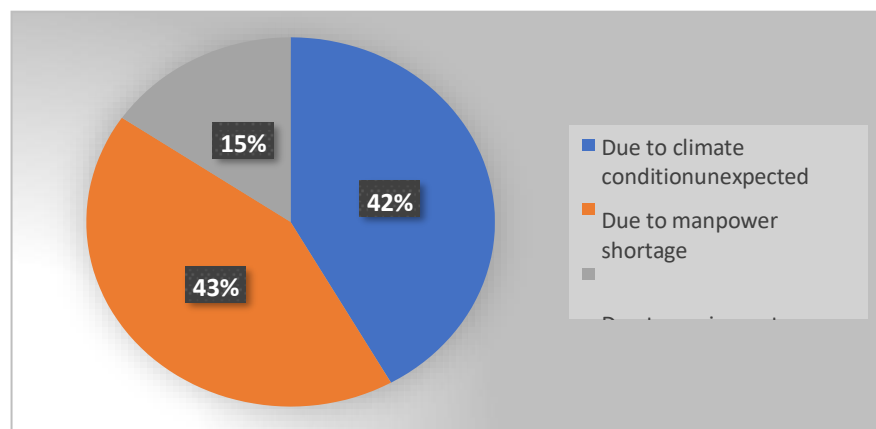


Chart 4.11 challenges faced in port operation

Interpretation

From the above chart it is interpreted that 42% due to climate condition unexcepted, 43% due to manpower shortage, 15% due to equipment shortage.

Table 4.12 Increase in transportation cost due to fuel

S.no	Particulars	No of employees	Percentage of employees
1	Strongly agree	25	23%
2	Agree	76	69%
3	Neutral	9	8%
4	Disagree	-	-
5	Strongly disagree	-	-
	Total	110	100

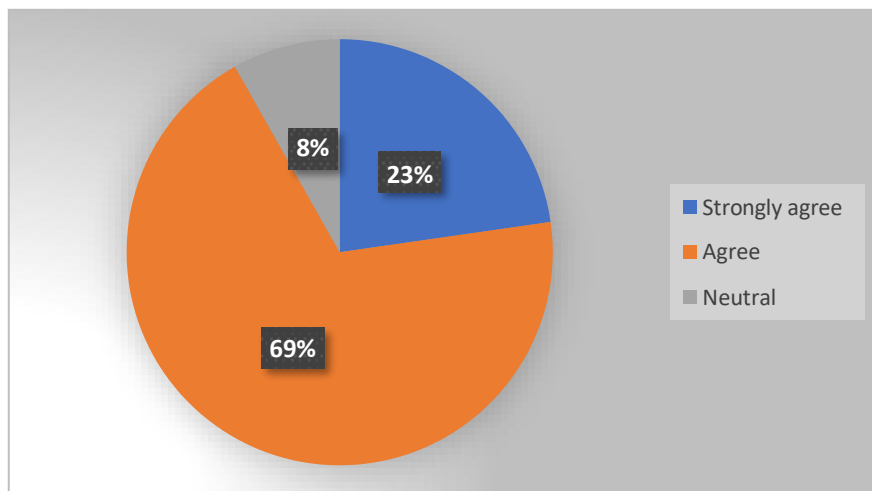


Chart 4.12 Increase in transportation cost due to fuel

Interpretation

From the above chart it is interpreted that 23% employee strongly agree with transportation cost is increase due to fuel price,69% employees agree with transportation cost is increase due to fuel price,8% employees neutral with transportation cost is increase due to fuel price.

Table 4.13 container shortage affect the freight cost

S.no	Particulars	No of employees	Percentage of employees
1	Strongly agree	28	25%
2	Agree	79	72%
3	Neutral	3	3%
4	Disagree	-	-
5	Strongly disagree	-	-
	Total	110	100%

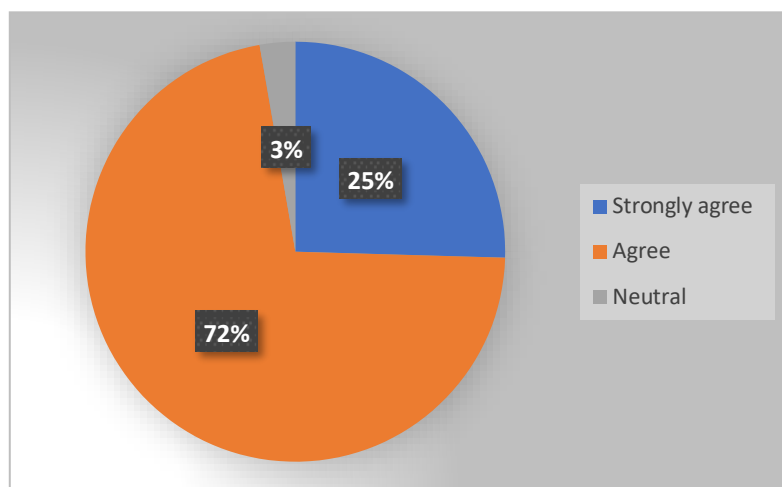


Chart 4.13 container shortage affect the freight cost

Interpretation

From the above chart it is interpreted that 25% employee strongly agree with container shortage affect the freight cost, 72% employees agree with container shortage affect the freight cost, 3% employee neutral container shortage affect the freight cost

Table 4.14 over dimension of cargo affect the freight charges

S.no	Particulars	No of employees	Percentage of employees
1	Strongly agree	37	34%
2	Agree	71	64%
3	Neutral	2	2%
4	Disagree	-	-
5	Strongly disagree	-	-
	Total	110	100%

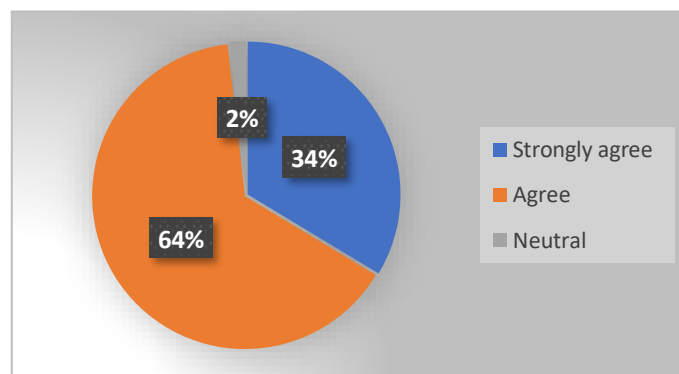


Chart 4.14 Over dimension of cargo affect the freight charges

Interpretation

From the above chart it is interpreted that 34% employee strongly agree with Over dimension of cargo affect the freight charges, 64% employee agree with Over dimension of cargo affect the freight charges, 2% employee neutral Over dimension of cargo affect the freight charges.

Table 4.15. landlocked country there will be more challenges to find the service

S.no	Particulars	No of employees	Percentage of employees
1	Strongly agree	24	22%
2	Agree	78	71%
3	Neutral	8	7%
4	Disagree	-	-
5	Strongly disagree	-	-
	Total	110	100%

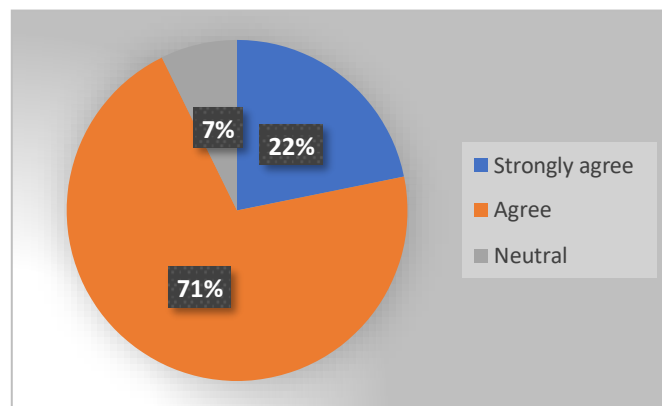


Chart 4.15 landlocked country there will be more challenges to find the service

Interpretation

From the above chart it is interpreted that 22% employees strongly agree with landlocked country there will be more challenges to find the service, 71% employee agree with landlocked country there will be more challenges to find the service, 7% landlocked country there will be more challenges to find the service

Table4.16 If certain type of cargo lead to lower ocean freight

S.no	Particulars	No of employees	Percentage of employees
1	Strongly agree	26	24%
2	Agree	84	76%
3	Neutral	-	-
4	Disagree	-	-
5	Strongly disagree	-	-
	Total	110	100%

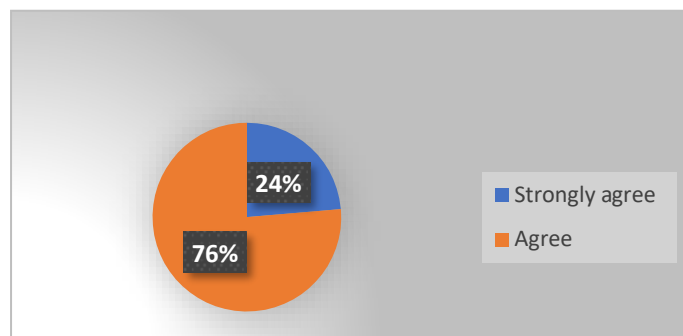


Chart4.16 If certain type of cargo lead to lower ocean freight

Interpretation

From the above chart it is interpreted that 24% employee strongly agree with the cargo lead to lower ocean freight, 76% employees agree with agree with the cargo lead to lower ocean freight

Table 4.17 difference in cost comparing to special container and standard container

S.no	Particulars	No of employees	Percentage of employees
1	Standard container the rate level is Standard	20	18%
2	Special container due to odd dimensions rate excepted to increase	31	28%
3	Special container if cargo loaded inside the container freight will be standard	41	37%
4	Depending upon the various country freight excepted to change for both special and standard container	18	17%
	Total	110	100%

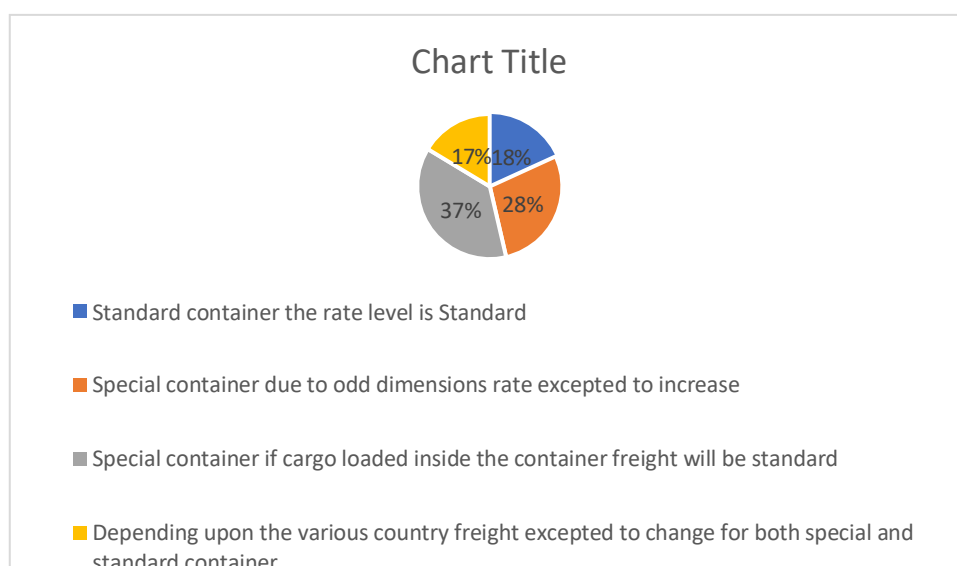


Chart 4.17 difference in cost comparing to special container and standard container
Interpretation

From the above chart it is interpreted that 18% Standard container the rate level is Standard, 28% Special container due to odd dimensions rate excepted to increase, 37% Special container due to odd dimensions rate excepted to increase, 17% Depending upon the various country freight excepted to change for both special and standard container.

Table 4.18 the cargo being loaded in tank container

S.no	Particulars	No of employees	Percentage of employees
1	Different by food oil	29	26%
2	Different by crud oil	57	52%
3	Different by industrial oil	24	22%
	Total	110	100%

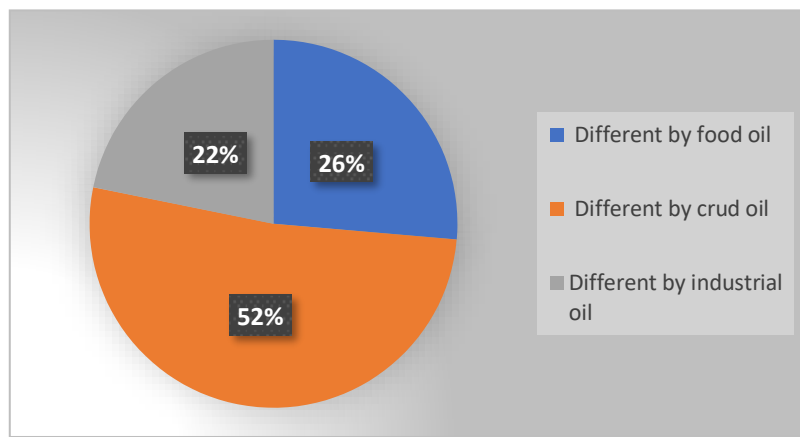


Chart 4.18 the cargo being loaded in tank container

Interpretation

From the above chart it is interpreted that 26% different by food oil, 52% different by crude oil, 22% different by industrial oil the cargo being loaded in tank container

Table 4.19 the changes of routing due to global issues affect the overall charges including freight

S.no	Particulars	No of employees	Percentage of employees
1	Strongly agree	24	22%
2	Agree	83	75%
3	Neutral	3	3%
4	Disagree	-	-
5	Strongly disagree	-	-
	Total	110	100%

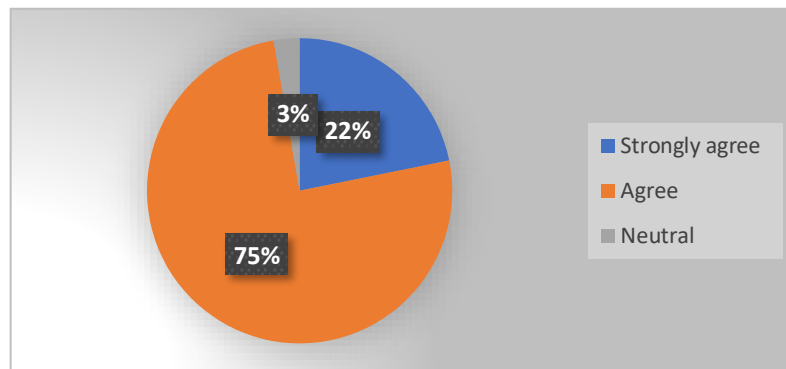


Chart 4.19 the changes of routing due to global issues affect the overall charges including freight

Interpretation

From the above chart it is interpreted that 22% strongly agree, 75% agree, 3% neutral changes of routing due to global issues affect the overall charges including freight

Hypothesis framed

CHI SQUARE

Null Hypothesis (Ho) – There is no significant between age and changes of routing due to global issues affect the overall charges including freight.

Alternative Hypothesis(H1) – There is significant between age and changes of routing due to global issues affect the overall charges including freight.

Age ^ While the changes of routing due to global issues affect the overall charges including freight Crosstabulation

Count		While the changes of routing due to global issues affect the overall charges including freight				Total
			Agree	Neutral	Strongly agree	
Age		0	10	1	0	11
	20-30	0	31	1	14	46
	31-40	0	25	1	8	34
	41-50	0	10	0	4	14
	Above50	0	5	0	0	5
Total		0	81	3	26	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.710 ^a	12	.022
Likelihood Ratio	23.551	12	.023
N of Valid Cases	110		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .01.

Interpretation

Since p value is lesser than 0.05, we accept that this is Significant. Therefore, there is association between age and changes of routing due to global issues affect the overall charges including freight

CHAPTER – 5

FINDINGS SUGGESTION AND CONCLUSION

FINDINGS

- Majority 51% of the respondents age are between 20-30
- Majority 75% of the Employees are male.
- Majority 53% of the employees are unmarried
- Majority 50% of the employees are preparing document as per customer requirements
- Majority 57% of the employee Referring to official documentation from relevant authority
- Majority 38% % environmental factor affects Due to climate, there is delay excepted in port operation.
- Majority 60% Not able to match buyer requirements while delay custom clearness and transportation in sea freight.
- Majority 47% freight surcharge is increase due to raising fuel price
- Majority 64% employee agree with Over dimension of cargo affect the freight charges.
- Majority 71% employees agree with landlocked country there will be more challenges to find the service.
- Majority 76% employees agree with agree with the cargo lead to lower ocean freight
- Majority 37% Special container due to odd dimensions rate excepted to increase
- Majority 52% different by oil the crud cargo being loaded in tank container .
- Majority 75% agree with changes of routing due to global issues affect the overall charges including freight

SUGGESTION

- Solve them by understanding rules, teaming up with reliable carriers, bargaining costs, clear communication, diverse suppliers, proper packaging, security, and eco-friendly methods.
- Plan smart, stay flexible, and build strong partnerships to sail through these challenges smoothly.
- Ensure staff are well-trained in regulatory compliance and documentation procedures to prevent delays and penalties at customs.
- Maintain good relationships with container providers to secure adequate supply and negotiate favorable terms. Consider leasing or sharing containers to mitigate shortages.
- Work with multiple suppliers and explore alternative shipping routes to reduce dependency on a single source or transit path

CONCLUSION

In an ever-changing world, the shipping industry has to face new challenges. If the one related to the impact on the environment is the biggest topic discussed, other subjects also lead maritime sector professionals to adapt quickly. This is the case with digitalization and the implementation of new equipment, the issues related to politics, or the management of human resources. To secure the future of the maritime field and logistics, companies must manage all the aspects of these challenges and be able to find sustainable solutions.

while sea freight presents numerous challenges, proactive measures can be taken to mitigate these obstacles and optimize the efficiency and reliability of maritime logistics operations. By implementing strategies such as advanced planning, diversification of suppliers and routes, investment in technology and infrastructure, and collaboration among stakeholders, companies can navigate the complexities of sea freight more effectively. Additionally, a focus on risk management, regulatory compliance, environmental responsibility, and continuous improvement can help address challenges and enhance the sustainability of sea freight operations.

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International Maritime Organization (IMO): <https://www.imo.org/>

Port Technology International : <https://www.porttechnology.org/>

APPENDIX: QUESTIONNAIRE:

1. Name

2. Email id

3.Age

1. 20-30

2. 31-40

3. 41-50

4. Above 50

4.Gender

1. male

2. female

5.Martial status

1. married

2. un married

6.How do employees in sea freight to satisfy customer

1. Reasonable price

2. Preparing document as per customer requirements

3. Planning shipments as per customer requirement

7.How do employees in sea freight handle customer request for documentmodification or updates

1. Seeking advice from legal team

2. Referring to official documentation from relevant authority

3. As per the legal complaints if modification required will arrange

8.what strategies employees do in sea freight handle unexcepted delay that mayimpact customer timelines

1. Confirmation from the customer
2. Check alternative solution to arrived destination more earlier
3. Delay in process suggesting the air freight which cost is high

9 Does Environmental factor affect freight charge

1. Due to climate there is delay in vessel transit
2. Due to climate there is delay excepted in port operation
3. due to fire accident
4. due to war

10.In case of delay in custom clearness or transportation what additional costmay incur for a sea freight shipments

1. storage
2. not able to match buyer requirements
3. delay in transit

11. Why there is increase in freight surcharges

1. due to rising fuel price
2. due to peak seasons
3. due to conjection

12. What are the challenges faced in port operation

1. due to unexcepted climate condition
2. due to manpower shortage
- 3.due to equipment shortage

13. Does increase in transportation cost due to fuel

1. strongly agree
2. agree
3. neutral
4. disagree
5. strongly disagree

14.If container shortage affect the freight cost

1. strongly agree
2. agree
3. neutral
4. disagree
5. strongly disagree

15.If over dimension of cargo affect the freight charges

1. strongly agree
2. agree
3. neutral
4. disagree
5. strongly disagree

16.In landlocked country there will be more challenges to find the service

1. strongly agree
2. agree
3. neutral
4. disagree
5. strongly disagree

17. If certain type of cargo lead to lower ocean freight

- 1) strongly agree
- 2) agree
- 3) neutral
- 4) disagree
- 5) strongly disagree

18. What is difference in cost comparing to special container and standard container

1. Standard container the rate level is Standard
2. Special container due to odd dimensions rate excepted to increase
3. Special container if cargo loaded inside the container freight will be standard
4. Depending upon the various country freight excepted to change for both special and standard container

19. What are the cargo being loaded in tank container

1. Different by food oil
2. Different by crud oil
3. Different by industrial oil

20. While the changes of routing due to global issues affect the overall charges including freight

1. strongly agree
2. agree
3. neutral
4. disagree
5. strongly disagree

A study on sea freight challenges of employees InLom logistics India Pvt Ltd.

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ABSTRACT

Logistics is the movement of goods from one place to other. Freight forwarders play a major role in logistics operations. The main objective of the freight forwarders is to dispatch the shipments via carriers. Forwarder has the ability to arrange cargo movement from one destination to another within a short limit of time. It is tough for a company to ship goods at a normal price without a forwarder. Forwarders are having a long-term relationship with carriers and obtain good deals in the least possible time. The forwarding operations and company strategy differ from one company to another, by providing different value-added services. Customer satisfaction plays an important role in business. The present study aimed to find out the challenges faced by freight forwarders in their operations. Due to various factors, they face challenges and that could be the reason for their failures. In some cases, due to hindrance, they may not be able to satisfy the customer needs. The major challenges faced are due to government policies and regulation (GST), importers or exporters, port authorities, warehousing of the goods, red tapism of insurance companies, customs clearance, liner companies, infrastructure problems etc. The study involves both primary and secondary data..

INTRODUCTION

Sea freight is a shipping method used by businesses to transport large amounts of goods overseas by sea using cargo ships. Since it's cost-effective, most businesses prefer to use this mode of transportation, when they have to move a huge quantity of goods. Sea freight is distinct from traditional modes of goods transportation as ideally large loads of good, or heavy machinery is shipped through Sea freight. In Sea freight, goods are transported in large metal containers (You must've probably seen one if you have been to a seaport). There are fewer restrictions imposed on sea freight. Sea freight is also used to transport several crucial commodities for a country, like Oil, Defense Equipment, and Aircraft. Like other modes of transportation, sea freight too involves seller (manufacturer), buyer, ocean carriers, freight forwarders, brokerage, port authority, and insurance providers.

Objectives

- To study the functions and work activities of sea freight
- To Identify the challenges / problems faced by sea freight
- To study the export producers of Lom Logistics India Pvt Ltd & document required for export
- To analyze Customer Expectations and Service Quality Challenges

Scope of the study

The scope of the study aims to understand how logistics service quality, as perceived by customers, influences customer's satisfaction which affects the overall performance of LOM logistics. The data on performance of the LOM logistics is measured through personal contact quality, information quality, order handling quality, timeliness, image, social responsibility and overall customer satisfaction of the company.

The shipping industry needs excellent organization, supervision and smooth functioning of the ports. The jobs include handling the ship and logistics operations, synchronizing deliveries with ships, enforcing security and health and safety initiatives, marketing and developing the port and many others.

Review of literature

ZHENG, H., LI, L., AND REN, S.(2010).They concluded that for the problem of continuous container terminal production resources scheduling, based on the terminal operation efficiency of the system, within the daily work plan for the shortest waiting time of quay cranes and all lorries with the shortest operation time; their paper put forward the container terminal and production resources scheduling model and presented this model based on the search solutions, with an example.

Arcaro and McKinnon (2013) explored the environmental sustainability of sea freight logistics, focusing on the adoption of green practices and technologies in maritime transportation. Their study reviewed current trends and initiatives aimed at reducing carbon emissions, minimizing fuel consumption, and mitigating environmental impacts associated with shipping operations. By synthesizing empirical evidence and industry best practices, they highlighted the challenges and opportunities for achieving sustainable development in the maritime sector.

Notteboom and Pallis (2011) investigated the governance structures and institutional arrangements in container terminal operations and sea freight logistics. Their research examined the role of public and private actors, regulatory frameworks, and stakeholder interactions in shaping port governance models and performance outcomes. Through case studies and comparative analysis, they provided insights into the complexities of port governance and its implications for efficiency, competitiveness, and sustainability in maritime trade.

Lam and Yap (2017) conducted a study on risk management practices in sea freight logistics, focusing on strategies for mitigating operational, financial, and regulatory risks. Their research reviewed the key risk factors and challenges facing maritime stakeholders, such as cargo theft, natural disasters,

geopolitical instability, and compliance with international regulations. By examining risk assessment methodologies and risk mitigation techniques, they offered practical recommendations for enhancing resilience and contingency planning in sea freight operations.

De Langen and Pallis (2010) examined the role of intermodal transportation networks in enhancing the efficiency and sustainability of sea freight logistics. Their study evaluated the integration of multiple modes of transport, such as rail, road, and inland waterways, in facilitating seamless cargo movements and reducing transportation costs. Through case studies and modelling exercises, they assessed the economic, environmental, and social benefits of intermodal connectivity for global supply chains and port hinterland regions.

Research methodology

Research is defined as a scientific and systematic search for pertinent information on a specific topic. Research is an art of scientific investigation. It is a careful investigation or inquiry especially through search of new facts in any branch of knowledge. It is the systematized effort to gain new knowledge. It is an academic activity and as such, the term should be used in technical sense. Research is, thus, an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison and experiment. In short, the search of knowledge through objective and systematic method of finding a solution to a problem is research

Primary Data:

The data is collected from the concerned staff of the company from the accounts department of the organization by interviewing them personally. The data was also collected with the purpose of evaluation.

Secondary Data:

Secondary data is provided by the organization in various forms. It includes referring of the manual of Lom logistics (www.lomindia.com), from the previously recorded information in the accounts department, local intranet facility provided by the organization and from the internet

Sample design:

Well-structured questionnaire of 20 questions

ANALYTICAL TOOLS

Percentage analysis

Percentage analysis is the method which is used for finding the average of collected information. Percentage analysis can be calculated as follows:

First the number of respondents is noted in a tabular form and then the percentage is calculated by dividing the number of respondents by total number of respondents which is then multiplied by 100.

$$\text{Percentage} = \frac{\text{No. of respondents}}{\text{Total no of respondents}} * 100$$

RESEARCH INSTRUMENT:

QUESTIONNAIRE:

A questionnaire is sent to the persons concerned with the request to answer the question and return the questionnaire. The questionnaire consists of a number of questions printed in a definite order on a form or set of forms. The questionnaire is mail to respondents who are expected to read and understand the questions and write down the reply in the space lent for the purpose in the questionnaire itself. The respondents have to answer the questions on their own. In this study, a questionnaire was used to collect data from the sample.

Table 1 Environmental factor affect freight charge

S.no	Particulars	No of employees	Percentage of employees
1	Due to climate, there is delay in vessel transit	36	33%
2	Due to climate, there is delay excepted in port operation	42	38%
3	Due to fire accident	22	20%
4	Due to war	10	9%
	Total	110	100%

Interpretation

From the above chart it is interpreted that 33% environmental factor affect Due to climate, there is delay in vessel transit, 38% environmental factor affects, there is delay excepted in port operation, 20% environmental factor affects Due to fire accident, 9% environmental factor affects Due to war.

Inference:

the majority 38% % environmental factor affects Due to climate, there is delay excepted in port operation

Table 2 challenges faced in port operation

S.no	Particulars	No of employees	Percentage of employees
1	Due to climate condition unexpected	46	42%
2	Due to manpower shortage	47	43%
3	Due to equipment shortage	17	15%
	Total	110	100%

Interpretation

From the above chart it is interpreted that 42% due to climate condition unexpected, 43% due to manpower shortage, 15% due to equipment shortage

Inference

Majority 43% challenges faced in port operation is due to manpower shortage

CHI SQUARE

Null Hypothesis (Ho) – There is no significant between age and changes of routing due to global issues affect the overall charges including freight.

Alternative Hypothesis(H1) – There is significant between age and changes of routing due to global issues affect the overall charges including freight.

Age * While the changes of routing due to global issues affect the overall charges including freight Crosstabulation

Count		While the changes of routing due to global issues affect the overall charges including freight				Total
			Agree	Neutral	Strongly agree	
Age		0	10	1	0	11
20-30		0	31	1	14	46
31-40		0	25	1	8	34
41-50		0	10	0	4	14
Above50		0	5	0	0	5
Total		0	81	3	26	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.710 ^a	12	.022
Likelihood Ratio	23.551	12	.023
N of Valid Cases	110		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .01.

Interpretation

Since p value is lesser than 0.05, we accept that this is Significant. Therefore, there is association between age and changes of routing due to global issues affect the overall charges including freight

Findings

- Majority 51% of the respondents are between 20-30
- Majority 75% of the Employees are male.
- Majority 53% of the employees are unmarried
- Majority 50% of the employees are preparing document as per customer requirements
- Majority 57% of the employee Referring to official documentation from relevant authority
- Majority 57% of the employee Referring to official documentation from relevant authority
- Majority 38% % environmental factor affects Due to climate, there is delay excepted in portoperation
- Majority 60% Not able to match buyer requirements while delay custom clearness and transportation in sea freight.
- Majority 47% freight surcharge is increase due to raising fuel price
- Majority 47% freight surcharge is increase due to raising fuel price

- **Suggestion**

- Solve them by understanding rules, teaming up with reliable carriers, bargaining costs, clearcommunication, diverse suppliers, proper packaging, security, and eco-friendly
- Plan smart, stay flexible, and build strong partnerships to sail through these challengessmoothly.
- Ensure staff are well-trained in regulatory compliance and documentation procedures toprevent delays and penalties at customs.
- Maintain good relationships with container providers to secure adequate supply and negotiatefavorable terms. Consider leasing or sharing containers to mitigate shortages.
- Work with multiple suppliers and explore alternative shipping routes to reduce dependency ona single source or transit path

Conclusion

In an ever-changing world, the shipping industry has to face new challenges. If the one related to the impact on the environment is the biggest topic discussed, other subjects also lead maritime sector professionals to adapt quickly This is the case with digitalization and the implementation of new equipment, the issues related to politics, or the management of human resources. Companies must manage all the aspects of these challenges and be able to find sustainable solutions. while sea freight presents numerous challenges, proactive measures can be taken to mitigate these obstacles and optimize the efficiency and reliability of maritime logistics operations. By implementing strategies such as advanced planning, diversification of suppliers and routes, investment in technology and infrastructure, and collaboration among stakeholders, companies can navigate the complexities of seafreight more effectively.

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Website:

- Company: WWW.LOMINDIA.COM
- International Maritime Organization (IMO): <https://www.imo.org/>
- Port Technology International: <https://www.porttechnology.org/>