



A STUDY ON CARGO HANDLING PROCESS IN SHIPPING AND LOGISTICS WITH SPECIAL REFERENCE TO SANGUINE LOGISTICS (P) LTD, CHENNAI.

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ABSTRACT :

Cargo handling, according to John Mangan and associates, is "the process of managing and moving goods throughout the supply chain, encompassing activities such as loading, unloading, sorting, storing, and transporting cargo." The foundation of international trade is the transportation and logistics sector, which makes it possible to transfer commodities across great distances and across a wide range of geographic locations. Cargo handling, which includes a number of technical procedures aimed at effectively managing the loading, unloading, and movement of goods throughout the supply chain, is a critical role at the centre of this convoluted network. The main objective of this study is to analysis the cargo handling process in shipping and logistics with special reference to Sanguine Logistics (P) Ltd, Chennai. Descriptive research design and random sampling technique have been adopted in the study.

KEYWORDS: Cargo, Loading, Unloading, Supply Chain, Transportation

INTRODUCTION

When items (cargo) are moved, loaded, unloaded, and stored during transportation, it's referred to as the "cargo handling process." This term is especially relevant when discussing shipping and logistics. Usually, this procedure takes place at a number of locations along the supply chain, including terminals, warehouses, ports, and airports. Cargo handling is "the set of operations involved in the loading, discharging, stowing, and securing of cargo on ships," according to David K. Bates. Cargo handling, according to John Mangan and associates, is "the process of managing and moving goods throughout the supply chain, encompassing activities such as loading, unloading, sorting, storing, and transporting cargo."

IMPORTANCE OF EFFICIENT CARGO HANDLING PROCESS

1. Diminished Expenses

Processes for managing cargo that is efficient in reducing labour, storage, and transportation costs. Through the optimisation of resources, reduction of idle time, and simplification of operations, firms can minimise their overall logistical expenses, resulting in increased profitability.

2. Enhanced Contentment with Clients

Products are delivered to clients on time and undamaged when cargo handling is done with promptitude and dependability. This improves client happiness, fosters loyalty and trust, and fortifies commercial ties. Satisfied consumers are more likely to make future purchases and recommend the company to others, which contributes to long-term commercial success.

3. Increased Effectiveness of the Supply Chain

An efficient supply chain operates better when its freight handling procedures are effective. Goods can move smoothly from suppliers to manufacturers, distributors, retailers, and finally end users by reducing delays, bottlenecks, and disturbances. This lowers lead times, increases overall operational performance, and increases supply chain efficiency.

4. Optimised Inventory Management

Companies can handle their inventory more skillfully when they use efficient cargo handling procedures. Businesses can avoid stockouts, obsolescence of inventory, and overstocking by precisely monitoring the movement and storage of goods. Better inventory turnover rates, lower carrying costs, and better cash flow management are the results of this.

5. Advantage in Competition

Businesses that have effective cargo handling procedures have an advantage over their competitors in the market because they can provide more flexible scheduling, dependable service, and quicker delivery times. By doing this, they can draw in new business, win over existing clients, and set themselves apart from rivals in the sector.

6. Monitoring Compliance and Risk

Processes for handling freight that are efficient guarantee that industry standards and legal requirements are met. Compliance with safety, security, and environmental requirements helps firms reduce the risk of theft, liability, and accidents. By doing this, the business minimises its legal and financial risks, preserves its reputation, and promotes a compliance and responsible culture.

CHALLENGES IN CARGO HANDLING PROCESSES

1. Delivery Delays

Transportation, loading, and unloading delays can cause supply chain disruptions and missed deadlines. Delivery delays can be caused by a number of things, including traffic jams at ports, bad weather, labour disputes, and malfunctioning machinery.

2. Losses and Damages

During handling, cargo may sustain losses or damage due to careless handling, poor packaging, or difficult transit circumstances. Businesses suffer financial losses as a result of this, but it also harms their brand and undermines consumer confidence.

3. Failures in Communication

Improper communication between shippers, carriers, handlers, and customers can result in misconceptions, mistakes, and inefficiencies in the activities involved in handling goods. Inaccurate documentation, missing instructions, and delays in decision-making can all be caused by poor communication.

4. Limitations on Capacity

Capacity limitations in cargo handling operations can be caused by poor infrastructure, insufficient storage facilities, and traffic at ports or terminals. This can result in slower throughput, longer processing times, and bottlenecks, particularly during busy times of the year or when demand is strong.

5. Adherence to Regulations

Governments, international authorities, and industry organisations have enforced a multitude of norms and standards that cargo handling operations must adhere to. Cargo handling procedures become more complex and expensive when safety, security, environmental, and customs standards are adhered to.

6. Particular Cargo Needs

Specialised knowledge, tools, and facilities are needed to handle cargo that includes hazardous products, perishables, large, or fragile objects. If these unique standards are not met, there may be safety risks, legal infractions, and cargo damage.

7. Workplace Problems

Workplace inefficiencies, labour disputes, or a shortage of skilled labour can all affect cargo handling operations. Processes used in cargo handling can be affected by low productivity, poor quality, and labor-related interruptions due to inadequate training, high turnover, and other factors.

SIGNIFICANCE OF THE STUDY

Global commerce, supply chain management, and customer happiness are all directly impacted by the cargo handling process, which is essential to the effectiveness of shipping and logistics. The capacity of logistics firms to manage cargo effectively, satisfy unique client demands, and guarantee on-time delivery has emerged as a critical performance metric as organisations depend more and more on the quick, dependable, and safe conveyance of products. But even with automation and improvements in logistics technology, there are still gaps in our knowledge of the relationship between customer happiness, cargo handling effectiveness, and service quality. A thorough examination of cargo handling procedures from a customer-centric standpoint is lacking in existing research, which often focusses on supply chain management in general. By evaluating service quality, response to specific requests, and overall cargo handling efficiency, this research seeks to close this gap and provide useful information that businesses can use to improve their operating strategy. By tackling these important aspects, the study advances knowledge of optimal cargo handling techniques, which eventually leads to better service provision in the shipping and logistics sector.

PROBLEM IDENTIFICATION

In the area of shipping and logistics, the cargo handling procedure is critical to assuring timely delivery and service quality for clients. However, various obstacles and issues exist in this crucial part of operations, affecting organizational performance and customer service quality. Often, the inability to meet unusual requests causes client unhappiness and tarnishes the company's reputation. Furthermore, inefficient cargo handling processes raise expenses, lead to missed opportunities, and may result in penalties for noncompliance with contractual or regulatory obligations. These inefficiencies not only inhibit organizational effectiveness but also limit market expansion and competition. This research seeks to address these issues by assessing the current safety measures, customer service quality, and overall efficacy of the cargo handling process in shipping and logistics. The study's goal is to improve operational efficiency, eliminate risks, and increase customer satisfaction by identifying areas for improvement and executing specific solutions.

SCOPE OF THE STUDY

The scope of the study is confined to Chennai. The main aim of this study is to analyse the cargo handling process in shipping and logistics with special reference Sanguine Logistics (P) Ltd, Chennai. It is also focused on to assess the customer service quality in the logistics company. The study helps to

understand company's capability to handling the special requests from the customers. The sample of this study is 185. The sample is collected from customers of Sanguine Logistics (P) Ltd, Chennai

LIMITATION OF THE STUDY

1. The data was collected only from customers of Sanguine Logistics (P) Ltd, Chennai. the geographical area for the study is the Chennai only.
2. Time is the main constraint.
3. The sample size for the study was 120 only.

REVIEW OF LITERATURE

du Plessis, F., Goedhals-Gerber, L., & van Eeden, J. (2024). Global supply networks, especially those that rely on temperature-controlled cold chains, are significantly disrupted by climate change. 90% of the world's trade depends on shipping containers, which are particularly vulnerable when being kept at ports. In order to reduce these risks, cargo owners usually assign them to maritime cargo insurance. The global economy is suffering significant losses as a result of severe weather and climate change

Bo Feng (2024), The literature on air cargo operations is reviewed, and theoretical research is contrasted with real-world issues faced by airlines, freight forwarders, and terminal service providers. We specifically analyse research that employed mathematical models to investigate the service processes in air cargo operations and to identify the key features of air cargo operations, such as the inherent distinctions from passenger operations

Martin-Navarro, A., Lechuga Sancho, M. P., & Medina-Garrido, J. A. (2023). This research thoroughly examines how Business Process Management Systems (BPMS) are used in port operations, emphasising how they may improve and automate procedures including hazardous material management, cargo manifests, and customs declarations. The authors point out a notable void in the port industry's BPMS research and offer potential directions for further investigation.

David Šourek (2023), The airline bears heavy expenditures when an aircraft is delayed during ground handling. Due to delays, certain flights may need to be cancelled in urgent circumstances. Therefore, every member of the ground operations team is working to make sure that these activities move forward as quickly as possible. This essay illustrates the techniques that may be used to maximise the amount of handling equipment that is required as well as the variables that may affect that amount.

Turbaningsih, O. (2022). With an emphasis on the transportation of extra-large, vital, and valuable goods for infrastructure projects, this paper presents project logistics. From fabrication yards to final installation sites, it talks about the flow of project cargo operations. It also highlights the necessity of integrated planning approaches that take into account end-to-end visibility, variability management as well as integrated intercontinental and domestic workflows in addition to total delivery costs, and transport routing management, technical safety considerations.

TipavineeSuwanwongRodbundith (2021), COVID-19 impacting the aviation industry in various ways, including both the passenger and air cargo sectors. Due to changes in actual flight movements, this crisis significantly affects air cargo capacity. It is necessary to modify the operational process in line with the new laws and regulations, as well as to meet WHO compliance. The issue arises when the volume of air cargo is unstable, impacting management planning. This paper examined (1) the effects of pandemic disease on shipping and cargo operations and (2) the significant factors influencing air cargo terminal processes due to COVID-19.

RESEARCH METHODOLOGY

Research methodology is the term used for the systematic approach to conducting research. Various methodologies are used across different types of research, and the term is generally interpreted to encompass data collection, data analysis, and research design. In simple terms, the purpose of research technique is to provide researchers with a clear understanding of their subject matter.

RESEARCH DESIGN

A plan for addressing the research question is called a research design. A researcher can explore the unknown with the support of a methodical approach when they use a study plan. A research method is a tactic to carry out that scheme. Descriptive research design is used in this study. Using a descriptive research design, the researcher details or describes the case or situation in their study materials. This type of study design relies entirely on theory, where the researcher collects, assesses, organizes, and then clearly conveys the results.

SAMPLE DESIGN

In this study, sample data was collected from 120 customers of Sanguine Logistics (P) Ltd, Chennai. The sample size for this research is 120.

SAMPLING TECHNIQUE

A scientific method for gathering and evaluating vast volumes of data is data analysis, which turns them into useful information by spotting common patterns and trends. The researcher utilised the following instruments to analyse the data and draw study conclusions.

- Percentage analysis
- Chi-square test

- Correlation

METHODS OF DATA COLLECTION

The process of gathering information from all pertinent sources in order to address the research problem, test the hypothesis, and assess the results is known as data sourcing. It includes numerical numbers together with qualitative and quantitative data. There are two types of data gathering techniques. There are two types of data: primary and secondary.

Primary Data:

A primary data source is one that is first collected for a certain objective in order to get further data. A questionnaire served as the primary data source for this investigation. Primary data for this study was gathered via a survey questionnaire.

Secondary Data:

Secondary data refers to information that is already available elsewhere but was collected for another purpose. This study used secondary data collected from company websites, periodicals, journals, and books.

CORRELATION

CORRELATION ANALYSIS

RELATIONSHIP BETWEEN YEAR OF DEALING WITH THE COMPANY AND CUSTOMER SERVICE QUALITY

Correlations		
	YEAR OF DEALING WITH THE COMPANY	CUSTOMER SERVICE QUALITY
YEAR OF DEALING WITH THE COMPANY	Pearson Correlation	1
	Sig. (2-tailed)	.261**
	N	.004
CUSTOMER SERVICE QUALITY	Pearson Correlation	120
	Sig. (2-tailed)	.261**
	N	.004

**. Correlation is significant at the 0.01 level (2-tailed).

SUGGESTIONS

1. To increase customer happiness, the business should make sure that questions are answered promptly.
2. To increase employees' proficiency in cargo handling procedures, the organization must offer ongoing training.
3. The business must always communicate politely and professionally with its customers.
To guarantee safe and effective cargo handling, the business should use cutting-edge methods and best practices.
4. To cut down on delays, the business must improve logistics and simplify processes.
The business should provide adaptable solutions to successfully satisfy certain client demands.
5. The business must give clients a methodical way to submit requests for special processing.

CONCLUSION

It is found that ensuring customer happiness and operational effectiveness in shipping and logistics is greatly dependent on the cargo handling process. The study emphasizes that a good cargo handling approach must include meeting particular requirements, communicating clearly, and addressing restrictions in an efficient manner. Furthermore, trust-building and guaranteeing the safety of both personnel and cargo depend on maintaining dependability in achieving delivery deadlines, providing timely updates, and upholding safety regulations. To be competitive in the sector, one must prioritize avoiding delays, demonstrating skill in handling a variety of cargo kinds, and being dedicated to providing excellent customer service. All

things considered, the results show that ongoing development in these domains can greatly raise the efficiency and degree of satisfaction of the cargo handling procedure, which will ultimately support the company's overall success.

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