

IMPACT OF EFFECTIVE CARGO HANDLING METHODS IN IMPORT AND EXPORT TOWARDS CLIENT SATISFACTION

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ABSTRACT

The purpose of the study is to identify the export and import documentation problems which required for the logistics business. The smooth movement of goods and payments for them across national borders is made possible by export and import documentation, which is essential in international marketing. Each package is accompanied by a number of paperwork. These forms must be filled out completely and accurately. Yet, export documentation is complicated since there are several forms that must be completed and there are many authorities to whom the relevant documents must be submitted. Improper documentation may delay the delivery of goods to the importer. Customers may get the right documents later, but a storage fee may need to be paid in the meantime. It is recommended to engage the assistance of shipping and forwarding agents who will locate the necessary documentation, appropriately submit it, and make transportation arrangements. Every exporter needs to be properly knowledgeable about the export processes and documentation. Every nation undertakes a variety of activities to encourage exports and imports in order to participate effectively in the global marketing. This project report provides an objective understanding of the issues with export and import documentation that are commonly faced in the logistics industry.

Keywords: Export and Import Documentation, International Market, Economic Development, Customs Brokerage.

1. INTRODUCTION

The word cargo refers in particular to goods or produce being conveyed generally for commercial gain – by ship, boat, or aircraft, although the term is now often extended to cover all types of freight, including that carried by train, van, truck, or intermodal container. The term cargo is also used in case of goods in the cold-chain, because the perishable inventory is always in transit towards a final end-use, even when it is held in cold storage or other similar climate-controlled facility. Multi-modal container units, designed as reusable carriers to facilitate unit load handling of the goods contained, are also referred to as cargo, especially by shipping lines and logistics operators. Similarly, aircraft ULD boxes are also documented as cargo, with associated packing list of the items contained within. When empty containers are shipped each unit is documented as a cargo and when goods are stored within, the contents are termed as containerised cargo. Cargo handling refers to the overall activities in warehouses and logistics centers such as loading and unloading cargo, transporting cargo, warehousing, picking, and sorting. The main work in cargo handling is separated into six tasks: assortment, stacking/taking inventory, transportation, storage (allocation), sorting, and picking. These tasks greatly effect productivity and quality in logistics. Cargo handling is a very important part of logistics, and losses in cargo handling directly increase logistics costs. Cargo handling involves many different tasks, so next we will explain in detail the most common. Cargo handling means the organisation and handling of cargo between the carrying waterborne vessel and the shore, whether it be for import, export or transit of the cargo, including the processing, lashing, unlash, stowing, transporting and temporary storage of the cargo on the relevant cargo handling terminal and directly related to the transporting of the cargo, but excluding, unless the Member State determines otherwise, warehousing, stripping, repackaging or any other value added services related to the cargo. Cargo handling means services provided or arranged for warehouse, facilities, and services for storage and handling of any type of shipment that are transported by air.

2. BENEFITS OF USING CARGO HANDLING

2.1 ACCURACY

Fast and careful physical handling is key points in quality to provide. Warehouses and equipment, designed by WFS Technical department, are constantly stimulated by the input of technical innovation and by the need for a permanent improvement of functional efficiency. WFS merges cautious handling techniques with advanced processing methods and software to ensure integrity in physical cargo handling.

2.2 ADAPTABILITY

WFS is able to adjust its operations to match with airlines operation briefing sheets, standard level agreements and all other specifics enquiries.

2.3 TRANSPARENCY

A computerized operation data handling system was specifically developed for full compatibility with airline systems, complying with the IATA format, updating them on a real-time basis. Regular briefings/debriefings take place

between successive handling teams in order to ensure service continuity, and flight handling reports are provided to the customer on-field representative.

2.4 TRACKING

WFS uses IATA Cargo2000 milestones standards messages to provide via Web site, EDI real-time information and status of each shipment.

2.5 SECURITY

Absolute compliance with safety and security rules and regulations. Basic training and continuing education are carried out for the entire staff, under the supervision and authority of Airfirm Authorities and Civil Aviation Authorities. Compliant equipment and processes are installed such as X-ray machines, CCTV, decompression chambers, dog-assisted team units, Ras Cargo diagnosis for detection of explosives. Security audits and regular dangerous goods inspections are conducted as well as random tests in operative conditions

3. EXPLANATORY MEMORANDUM

Handling of Cargo in Customs Area Regulations, 2009 provide for a comprehensive mechanism for handling of goods in a customs area and set out the terms and conditions for all facilities where customs cargo is handled. It also provides for the conditions and responsibilities of the persons handling import or export cargo in Inland Container Depot (ICD) or Container Freight Station (CFS) or seaport or airport or Land Customs Stations (LCS) and provide adequate control over the cargo handling entities to ensure that the adequate infrastructure is set up at such facilities for efficient handling of import or export goods. This also fulfils the recommendation made by the Public Accounts Committee (2005- 2006) for the Government to formulate appropriate provisions in this regard.

3.1 INVESTMENTS / DEVELOPMENTS

Some of the major recent developments are

- India has plans to invest US\$ 82 billion in port projects by 2035.
- Indian ports received cumulative FDI inflow worth US\$ 1.63 billion between April 2000- June 2021.
- In October 2021, the Syama Prasad Mookerjee Port, Kolkata, gave importers the opportunity to bring in vessels at the deep drafted anchorages located at Sagar, Sandheads and X Point.
- In October 2021, Adani Group announced that it wants to make Adani Port a net-zero carbon emitter by 2025 and power all its data centres with renewable energy by 2030.
- Jawaharlal Nehru Port Trust (JNPT) Special Economic Zone (SEZ) became the first of its kind operational port-based multi-product SEZ in India.
- The Competition Commission of India (CCI) approved Adani Ports and Special Economic Zones proposed acquisition of 10.40% equity investment in Gangavaram Port in September 2021. The 10.4% equity shareholding will be bought from the government of Andhra Pradesh.
- APSEZ (Adani Ports and Special Economic Zone) plans to become the world's largest private port company by 2030 and carbon neutral by 2025.

4. GOVERNMENT INITIATIVES

Some of the major initiatives taken by the government to promote the ports sector in India are as follows:

- In October 2022, Cabinet Committee on Economic Affairs approved the development of a container terminal at Tuna-Tekra, Deendayal Port, the terminal will be built on a Build, Operate & Transfer (BOT) basis under Public-Private-Partnership (PPP) mode.
- In August 2022, Minister of Road Transport and Highways Mr. Nitin Gadkari, Minister of Ports, Shipping & Waterways and Ayush, Mr. Sarbananda Sonowal, and Minister of State for Road Transport & Highways, Gen (Retd) VK Singh signed a tripartite agreement for swift development of modern Multi Modal Logistics Parks (MMLP) under Bharatmala Pariyojna across the country. India's international obligations in this field.

In December 2021, India and Russia are about collaborating on shipbuilding and inland waterways.

- In November 2021, the Union Minister for Ports, Shipping and Waterways & Ayush, Mr. Sarbananda Sonowal, inaugurated the new Radars and Vessel Traffic Management System of Cochin Port Trust. The VTMS (Vessel Traffic Management System) commissioned in Cochin Port in 2009 has been upgraded with a state-of-the-art system consisting two new radars, one AIS Base station, three VHF Radios and associated software & hardware installed at a cost of Rs. 5.8 crore (US\$ 772,161.66).
- In November 2021, Union Minister for Ports, Shipping & Waterways and Ayush, Mr. Sarbananda Sonowal, inaugurated the simultaneous launching of five vessels at Cochin Shipyard Limited (CSL).

- In November 2021, the Union Minister of Culture and Tourism, Mr. G Kishan Reddy, announced that the centre has sanctioned Rs. 100 crore (US\$ 13.31 million) for the Visakhapatnam port cruise terminal.
- The Draft Indian Ports Bill 2021, which was circulated in July 2021, aims to centralise the administration of minor ports that are currently managed by state governments.
- The Inland Vessels Bill 2021 was approved by the Lok Sabha in July 2021. Instead of distinct regulations created by the states, the bill attempts to include a single legislation for the country. The registration certificate issued under the new law will be valid throughout the country and state approvals will not be necessary. The bill also establishes a single database for recording vessel and crew information on an Internet portal.
- In July 2021, the Marine Aids to Navigation Bill 2021 was passed by the Parliament, incorporating global best practices, technological developments

In June 2021, the Ministry of Ports, Shipping and Waterways and Ministry of Culture sign a MoU for cooperation in development of National Maritime Heritage Complex at Lothal Gujarat

4.1 ROAD AHEAD

Increasing investment and cargo traffic point towards a healthy outlook for the Indian ports sector. Providers of services such as operation and maintenance (O&M), pilotage and harbouring and marine assets such as barges and dredgers are benefiting from these investments. The capacity addition at ports is expected to grow at a CAGR of 5-6% till 2022, thereby adding 275-325 MT of capacity. Domestic waterways have found to be a cost-effective and environmentally sustainable mode of freight transportation. The government aims to operationalise 23 waterways by 2030. As part of the Sagarmala project, more than 574 projects worth Rs. 6 lakh crore (US\$ 82 billion) have been planned for implementation between 2015 and 2035. In Maritime India Summit 2021, the Ministry of Ports, Shipping and Waterways identified a total of 400 projects worth Rs. 2.25 lakh crore (US\$ 31 billion) investment potential.

5. STATEMENT OF THE PROBLEM

- The research must be implementing for cargo safety of goods and service in V.O. Chidambaranar Port Authority at Thoothukudi.
- The research find out employee opinion for how to handling the cargo goods which ever secure for demandable level.
- The scope of the study analyse production and operation level of logistic and working environment conditions to the employee performance.
- The study will be obtaining stock level of cargo goods about future reference.

6. OBJECTIVES OF THE STUDY

- To study the proper commitment of cargo handling service to the V.O.Chidambaranar Port Authority
- To study the material handling about safety to the firm.
- To study the cargo agencies how to manage the goods and service.
- To study the types of handling work rolling cargo.
- To study the availability of marine transaction about cargo product.
- To study the safety and secure packing

6.1 SCOPE OF THE STUDY

- For this analysis the present situation of cargo handling products and the related factors are studied.
- It is observed during research that different ports do not provide the detailed data of cargo handling products and productivity.
- However, efforts were made mainly to find out the CPA's present position with regards to other developed and growing ports in the region and Thoothukudi and how difficulties and limitations can be overcome successfully.

6.2 LIMITATIONS OF THE STUDY

- Respondents are not willing to fill the questionnaire.
- Very often the respondent do not express their true feelings, in such case their habit, preference, practice, cannot be assessed correctly.
- Some of the respondents refuse to give the information best known to them.
- Time was a limiting factor for the study.

7. REVIEW OF LITERATURE

Logannathan-The researcher has suggested that the Customs stands to safe guard and promote the export trade and import trade. Therefore, it should serve these business men by providing sufficient requirements such as easy documentation, increase of drawback rates and the reducing tax for import of machineries. Though after 2011, there will be high flow of goods from our country to another, the Custom formalities and cumbersome documentation will prove to be a hindrance and the basic requirements for the easy and comfortable business is to know the Custom regulations.

Ching-Chiao Yang et al -The purpose of this study is to examine the relationships between resource, logistics service capability, innovation capability and the performance of Taiwanese container shipping service firms based on the resource-based view (RBV). A structural equation modeling (SEM) approach was employed to test the research hypotheses. Results indicated that resource had a significant positive effect on logistics service capabilities and innovation capabilities. In addition, the findings indicated that logistics service capability had a positive effect on the performance of container shipping service firms. However, resource and innovation capability were not found to have significantly positive effects on firms' performance. Theoretical and managerial implications of the research findings for container shipping service firms are discussed.

Manolis N. Kritikos -This paper addresses a variant of the vehicle routing problem with time windows (VRPTW) that targets the balancing of the load carried by each active vehicle (balanced cargo VRPTW or BCVRPTW). A new approach, based on the free disposal hull (FDH) method of data envelopment analysis, is proposed; it consists of an initial, feasible route generation procedure that employs an effective heuristic for the VRPTW, followed by an iterative method for selecting routes on the efficiency frontier, according to the criteria of the BCVRPTW and the notion of non-dominated solutions embedded within FDH.

Kee-hung Lai et al -Increasing number of shipping firms adopt green shipping practices that emphasize environmental management throughout their operations. To balance productivity with the environment, the design of shipping activities in compliance with energy saving and resources conservation is an important part of greening efforts by many shipping firms. We find that SDC is beneficial for the financial and service performance of shipping firms. Based on the contingency theory, we argue further that company policy and procedure as well as shipper cooperation differentiates the performance outcomes of shipping firms in their SDC for environmental management. Our empirical findings show a positive relationship of SDC with service performance particularly when their company policy and procedure and shipper cooperation are characterized at high than low levels in the process.

Celalettin Serinkan et al-Learning organizations are known as organizations which adopt learning as a team, systems thinking, creating a vision. The capacity of organizational learning is accepted as an important variable being a learning organization. When the Turkish literature on learning organizations was reviewed, it has been noted that there are some research carried out in different areas of interest, except cargo sector. The cargo industry worldwide has played an increasingly important role in world trade and cargo industry being the fastest growing sector in the dynamic market and therefore knowledge and learning are important issues for these foundations. The aim of this research was to evaluate the organizational learning capacity of the Cargo employees.

Hristos Karahalios -Ship operators are developing their business in a competitive and highly regulated industry. For ship operators is important to utilize management systems in reducing potential threats to shipboard crew and cargoes carried. This paper enhances the risk management principles in respect to financial damages related to a ship collision. A methodology is proposed involving a performance management system to measure the expected costs and benefits of a ship's collision caused to its ship operator. As essential parts of the research methodology, Fuzzy Sets and Analytic Hierarchy Process (AHP) are referred to design scorecards, which identify key points for accident prevention on board ships. The ship operators may use the results in evaluating their management systems through taking into account the economic burden that will be generated to ship operators in case of a collision incident.

8. RESEARCH METHODOLOGY

8.1 INTRODUCTION.

Research methodology is the process of systematic investigation of any management problem is deals with research design, data collection method, sampling plan, and statistical data.

8.2 RESEARCH DESIGN

A research design is purely and simply the frame work of plan for a study that grids the collection and analysis of data. The research design would be descriptive and analytical in nature

8.3 Sampling

Sampling may be defined as "The selection of some part of an aggregate the basis of which judgement or inference about the aggregate or totalling is made.

8.4 Sampling Techniques

The sampling technique used in this study is "Convenience sampling," When the population elements for inclusion in the sample based on the ease of access, it can be called as convenience,

9. DATA COLLECTION METHOD

For this study, primary data and secondary data

9.1 Primary Data

Primary data was collected from this study. The primary data was collected by questionnaires from the consumer. In the questionnaires open ended questions, Close ended questions, multiple questions are used.

9.2 Secondary Data

The secondary data were collection from different source, in the current content the secondary data was collected through Published Books, Journals, Magazines, and Related Websites.

9.3 TOOLS FOR ANALYSIS

- Percentage analysis
- Correlation
- Chi-square analysis 4. Anova

10. VALUES:

- Total satisfaction of customer.
- Partnership with stakeholders.
- Commitment to Quality and Team Work.
- 0Faimess, Accountability and transparency in work.
- Consideration for social and natural environment.
- Value addition through productivity, safety and security.

Considering the vision, mission and values, to provide efficient seaport and logistics service to best value of the customers and Results Framework Document was prepared to achieve the targets in the heads of following as per Ministry of Ports, Shipping and Waterways guidelines.

- To augment capacity of the Port by developing International Standard Infrastructure and installation of modern equipment.
- To improve the draught in-front of the berths to handle bigger size vessels according to the requirement.

To provide efficient, prompt, safe and timely service to the trade at the optimum cost. - To

11. ANALYSIS AND INTERPRETATION

11.1 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.

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

GENDER

S.NO	Gender	No. of Respondents	Percentage (%)
1	Male	145	94.2
2	Female	9	5.8
Total		154	100

12. INTERPRETATION

The above table shows that out of 154 respondents, 145 (94.2%) of the respondents are male and the remaining 9 (5.8%) of the respondents are female.

Majority 154 (94.2%) of the respondents are male.

12.1 CHI – SQUARE TEST

Chi-square is a statistical test commonly used to compare observed data with data we would expect to obtain

according to a specific hypothesis.

The formula for calculating chi-square = $(O-E)^2$

O = Observed Frequency

E = Expected Frequency

Hypothesis Testing:

Null Hypothesis (H₀):

There is no significant Relationship between Year of experience and Import General Manifest document is Must for Import.

Alternative Hypothesis (H₁):

There is a significant Relationship between Year of experience and Import General Manifest document is Must for Import.

Case Processing summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Year of Experiences * IGM Is Must for Import	120	100.0%	0	.0%	120	100.0%

AGE OF THE RESPONDENTS*OPINION FOR GLOBAL MANAGEMENT Crosstabulation							
Count							
		POINION FOR GLOBAL MANAGEMENT					TOTAL
		Excell nt	Goo d	Moderate	Poor	Very Poor	
Age of tha Respondents	Below 25 years	13	0	0	0	0	13
	25 to 35 years	22	30	0	0	0	52
	35 to45 years	0	13	22	3	0	38
	Above 40 years	0	0	0	9	8	17
Total		35	43	22	12	8	120

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.932E ^a	12	.000
Likelihood Ratio	186.216	12	.000
Linear-by-Linear Association	92.117	1	.000
N of Valid Cases	120		
a) 12cells (60.0%) have expected count less than 5. The minimum expected count is .87			

12.2 CORRELATION ANALYSIS

There are several different correlation techniques. The survey systems optional statistics module includes the most common type, called the person or product moment correlation. The module also includes a variation on this type called partial correlation. The latter is useful when you want to look at the relationship between two variables while removing the effect of none or two other variables.

$$r = \frac{\sum XY}{\sqrt{(\sum X^2) (\sum Y^2)}}$$

Relation between Filing the General Manifest Document is Easy and Filing the Bill of Lading Document is Easy in the documentation process.

Hypothesis Testing:

Null Hypothesis (H₀):

There is no significance between the age of the respondents and opinion for global management.

Alternative Hypothesis (H₁):

There is significance between the age of the respondents and opinion for global management.

Correlations			
		EDUCATIONAL QUALIFICATION OF THE RESPONDENTS	THE PACKING OF CARGO HANDLING IN THE FIRM
EDUCATIONAL QUALIFICATION OF THE RESPONDENT	Pearson Correlation	1	.931**
	Sig. (2-tailed)		<.000
	N	108	108
THE PACKING OF CARGO HANDLING IN THE FIRM	Pearson Correlation	.931**	1
	Sig. (2-tailed)	<.000	
	N	108	108

INTERPRETATION

The above table shows that, Coefficient of correlation between relationship between Filing the General Manifest Document is Easy and Filing the Bill of Lading Document is Easy in the documentation process after obtain is 0.932. It is below 1. So, there is positive relationship between Filing the General Manifest Document is Easy and Filing the Bill of Lading Document is Easy in the documentation process..

12.3 ONE-WAY ANOVA

$$F = \frac{MST}{MSE}$$

Examination of change, or ANOVA, is a solid measurable method that is utilized to show contrast between at least two methods or parts through importa

nce tests. It likewise shows us an approach to make numerous examinations of a few populaces implies. The Anova test is performed by looking at two sorts of variety, the variety between the example implies, just as the variety inside every one of the examples. Beneath referenced recipe addresses one-way Anova test measurements:

Relationship between years of experience and The Letter of the Credit is Required for Obtaining an Export License

Hypothesis Testing

Null Hypothesis (H₀):

There is no significant different between years of experience and The Letter of the Credit is Required for Obtaining an Export License.

Alternative Hypothesis (H1):

There is significant different between years of experience and The Letter of the Credit is Required for Obtaining an Export License.

ANOVA					
The Letter of The Credit Is Required for Obtaining an Export License					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	68.051	4	17.013	89.172	0.816
Unweighted	32.341	1	32.341	169.513	.000
Weighted	64.457	1	64.457	337.851	.000
Deviation	3.594	3	1.198	6.279	.001
Within Groups	21.940	151	.191		
Total	128.682	153			

INTERPRETATION

The above table shows that the P value (0.816) is more than 0.05. so, there is no significant. sum of squares within group between groups values have 0.347 and 128.335 respectively based on The Letter of The Credit Is Required for Obtaining an Export License with respect to the year of experience of the respondents. hence accepting alternative hypothesis. Thus, rejecting null hypothesis.

13. FINDINGS

- ✓ Majority 90.0% of the respondents are male
- ✓ Majority 43.3% of the respondent's age level is 25 to 35 years.
- ✓ Majority 51.7% of the respondents are graduate.
- ✓ Majority 30.0% of the respondents income level is rs,20,001 to 25,000.
- ✓ Majority 43.3% of the respondents are 2 - 5 years experienced person.
- ✓ Majority 43.3% of the respondents are said it was good for the firm handling method of cargo goods and service.
- ✓ Majority 65.0% of the respondents said they follow sea freight follows in firm 8. Majority 31.7% of the respondents said they handle plastics
- ✓ Majority 31.7% of the respondents said it is accuracy about the pandiyan plastic commitments.
- ✓ Majority 41.7% of the respondents think the transaction is good about the cargo commitment communication
- ✓ Majority 60.0% of the respondents said the network and security facility is sufficient.
- ✓ Majority 35.8% of the respondents said the global management was good.
- ✓ Majority 34.2% of the respondents to select training and safety about the types of handling services role.
- ✓ Majority 89.2% of the respondents to respondents to said the firm tracking for globalization level.
- ✓ Majority 39.2% of the respondents are highly satisfied about the cargo packing handling in the firm 16. Majority 59.2% of the respondent's reason for heavy load about the goods damages in import and export.
- ✓ Majority 47.5% of the respondents select to insurance about recovery for the goods unexpected incidence.
- ✓ Majority 37.5% of the respondents are reply for always to the custom duty offers. 19. Majority 43.3% of the respondents are said the cargo agencies are good for service. 20. Majority 62.5% of the respondents said the network is good position

14. SUGGESTIONS

- Update of technology with respect to cargo handling should be strictly practiced.
- The V.O. Chidambaranar Port Authority cargo handling procedure should be standardized and employees should be trained accordingly to avoid delays.

- It would be desirable if the cargo complex is provided with increased number of Xray machines and the staff for screening.
- Advanced X-Ray machines sufficient of screen big lots should also be installed this can reduce the waiting time at the queue significantly. This will reduce the high dwell time of imports cargo.
- It would be desirable if firm complex implements e-filing of the shipping bill. This leads to reduce paper work and the time involved in transactions can be reduced

15. CONCLUSION

Ship cargo industry is one of the sectors of the Indian economy and has been growing since liberalization and globalisation of trade policy. The present study makes an attempt to analyse the majority of clients said the efficiency of custom documentation activities in cargo traffic department. In this port ultimately results in reduction of corruption and increase of ship cargo traffic. V O C Port authority has been over the years being a prime exporter of vaccines to various countries. Company has good reserves and high credibility in foreign market due to which it is not facing problem related to foreign exchange risk and recoveries from importers' abroad. The company has kept itself in accordance with the latest change in the technology. It has now upgraded with EDI system of the filling documents to customs. Documentation is one of the most important aspects of overseas trade. The present procedure and documentation process, though simplified over a period of time is still lengthy and complicated. Export import procedure and documentation in India that is in place to protect all the parties involved in the business.

16. REFERENCES

Ship cargo industry is one of the sectors of the Indian economy and has been growing since liberalization and globalization of trade policy. But in this globalized world, cost management and cost reduction has become priority in international trade to achieve competitive advantage. The present study makes an attempt to analyse the extent of efficiency of logistics management activities in cargo traffic in Thoothukudi because efficient management of logistics activities in the V.O. Chidambaranar Port Authority ultimately results in reduction of cost of transportation and increase of ship cargo traffic. The aim of the study is to suggest measures to improve the efficiency of the present logistics management activities followed by the international Ship cargo.

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