



## A STUDY ON PROBLEMS FACED BY LOGISTICS COMPANIES IN CARGO HANDLING WITH REFERENCE TO COIMBATORE CITY

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### ABSTRACT

Logistics has huge impact on the domestic and global economy of any country. With rising consumer demand and the resulting growth in global trade, the role of infrastructure support in terms of rails, roads, ports & warehouses hold the key to the success of the economy. Goods are transported predominantly by road and rail in India. Whereas road transport is controlled by private players, rail transport is handled by the central government. With the second largest network in the world, road contributes to 65 per cent of the freight transport (Rastogi, 2006). Road is preferred because of its cost effectiveness and flexibility. Rail, on the other hand, is preferred because of containerization facility and ease in transporting ship-containers and wooden crates. The present study deals with 50 samples. Statistical tools uses for the analysis of the data are Simple Percentage, Chi-Square Test and Weighted Average Mean.

**KEYWORDS** : Logistics, Global Trade, Warehouse, Containerization.

### I. INTRODUCTION

Logistics has huge impact on the domestic and global economy of any country. As such, the role and importance of logistics has been elevated in many business environments. This report gives an overview of logistics industry in India. The focus of the report is to study the problem faced by Logistics Company in cargo handling. We highlight on the challenges in the potential growth areas and expansion strategies for the logistics players in India to becoming highly localized world-class players.

#### 1.1. LOGISTICS IN INDIA

The logistics industry in India is evolving rapidly and it is the interplay of infrastructure, technology and new types of service providers that will define whether the industry is able to help its customers reduce their logistics costs and provide effective services (which are also growing). At the firm level, the logistics focus is moving towards reducing cycle times in order to add value to their customers.

Logistics is about moving materials, information and funds from one business to another business or from a business to the consumer. Logistics is an important part of the business economic system and is a major global economic activity. It encompasses activities like freight transportation, warehousing, material handling, protective packaging, inventory control, order processing, and marketing, forecasting and customer service.

### II. REVIEW OF LITERATURE

**Dobbersteinet. al(2007)** said that The Indian logistics sector, comprises the entire inbound and outbound segments of the manufacturing and service supply chains. Of late, the logistics infrastructure has received lot of attention both from business and industry as well as policy makers. However, the role of managing this infrastructure (or the logistics management regimen) to effectively compete has been slightly under-emphasized. Inadequate logistics infrastructure has an effect of creating bottlenecks in the growth of an economy; the logistics management regimen has the capability of overcoming the disadvantages of the infrastructure in the short run while providing cutting edge competitiveness in the long term. It is here that exist several challenges as well as opportunities for the Indian economy. There are several models that seem to be emerging based on the critical needs of the Indian economy that can stand as viable models for other global economies as well.

**Paul T-W Lee, Kai-Chieh Hu** (2012) indicated "Evaluation of the Service Quality of Container Ports" has investigated the relationship between the level of importance on service and satisfaction in port service. In order to achieve better service quality preference was given to the container cargoes and implement quality standards to achieve service quality excellence by allocating proper resource efficiency.

**S.K. Bose, N.G. Kannan(2012)**, itemized that "Improving The Service Quality Of Ocean Container Carriers" has encounter the service quality improvement of ocean container carriers to ensure breakthrough performance in India based on service criteria, transportation literature and customer satisfaction survey. The author found that the service criteria affect the service quality of ocean container carriers. The author added that there is a huge negative gap exists in the efficient resource allocation. Hence the author suggests that appropriate steps should be taken in the Indian Container Carrier industry.

#### Management of a small logistics company (1993-98)

Logistics encompasses all of the information and material flows throughout an organization. It includes everything from the movement of a product or from a service that needs to be rendered, through to the management of incoming raw materials, production, the storing of finished goods, its delivery to the customer and after-sales service (Pollitt, 1998). The scope of logistics has changed since the emergence of new technologies and strategic alliances in order to compete on flexibility and responsiveness. The growing importance of logistics arises from companies becoming globalized to gain access to new markets, realize greater production efficiencies, and tap technological competencies beyond their own geographical borders (McFarlan, 1984; Bovet, 1991; Cooper, 1993; Fawcett et al., 1993).

### III. OBJECTIVES OF THE STUDY

- To study the problem faced by logistic companies in cargo handling.
- To know the satisfaction level of carrier services provided by the logistic companies.
- To offer valuable suggestions to logistic companies to improve their operations

### IV. RESEARCH PLAN

Data source: Primary data and secondary data

Research instrument: Questionnaire

Sample size: 50 respondents

Type of question: Closed type

#### 4.1. STATISTICAL TOOL FOR ANALYSIS

The following tools are used for analysis purpose

- Simple Percentage Analysis
- Chi Square
- Weighted Arithmetic Mean

#### 4.2. SIMPLE PERCENTAGE ANALYSIS

The percentage method is used for comparing certain features, the collected data represented in the form of tables and graphs in order to give effective visualization of comparison made.

$$\text{Simple percentage} = \frac{\text{Actual Population Size}}{\text{Sample size}} \times 100$$

### 4.3. CHI-SQUARE TEST

Chi-square test is the statistical technique widely used for testing the hypothesis in non-parametric test. It can be used to determine the categorical data that are shown on the two classifications are independent or not.

The chi-square can be calculated by using following formulas:  
 Expected value = (row-1) \* (column-1)

$$\chi^2 = \frac{(O-E)^2}{E}$$

### 4.3. WEIGHTED AVERAGE MEAN

The term weight stands for relative importance of different items. Weights have been assigned to various ranks. The weighted score is calculated by multiplying the number of respondents in a cell with their relative weights and the whole number is summed up to give the weighted score for that factors.

Arithmetic mean computed by considering relative importance of each items is called weighted arithmetic mean is computed by using the following formula:

$$\Sigma XW = \frac{\Sigma WX}{\Sigma W}$$

Where,

- $\Sigma XW$  = weighted arithmetic mean
- $\Sigma WX$  = value of items
- $\Sigma W$  = weight of the items

### V. DATA ANALYSIS AND INTERPRETATION

#### Simple Percentage Analysis

Table showing the Major shipments about the concerns

PARTICULARS	NO OF RESPONDENTS	PERCENTAGE
Import	16	32
Export	18	36
Both	16	32
<b>TOTAL</b>	<b>50</b>	<b>100</b>

Source: Primary Data

**Inference:** From the above table 32% of the respondent's shipments is concerned is import, 36% of the respondents is concerned with exports, 32% of the respondents in both of shipments.

**Majority of respondents (36%) are in export concern**

### CHI-SQUARE TEST

**Null Hypothesis (H0):** "There is no significant difference between the nature of the company.

**Alternative Hypothesis (H1):** "There is significant difference between demands for your company

Table showing the observed value

Nature of the company/Demand for your company service	CHA	Freight forwarders	Liner agent	Stemer agent	Total
High level	2	2	6	0	10
Moderate	8	0	2	2	12
Low cost	6	10	2	2	20
Very low	0	2	2	4	8
<b>Total</b>	<b>16</b>	<b>14</b>	<b>12</b>	<b>8</b>	<b>50</b>

**Inference:** The calculated value is (29.781) is less than the table value (16.92). Hypothesis is a rejected. Hence there is a significant relationship between the nature of the company and demand for your company.

OBSERVED(O)	EXPECTED(E)	(O-E)	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
2	3.2	-1.2	1.44	0.45
2	2.8	-0.8	0.64	0.23
6	2.4	3.6	12.96	5.4
0	1.6	-1.6	2.56	1.6
8	3.84	4.16	17.30	4.50
0	3.36	-3.36	11.29	3.36
2	2.88	-0.88	0.77	0.27
2	1.92	0.08	0.006	0.003
6	6.4	-0.4	0.16	0.025
10	5.6	4.4	19.36	3.46
2	4.8	-2.8	7.84	1.633
2	3.2	-1.2	1.44	0.45
0	2.56	-2.56	6.553	2.56
2	2.24	-0.24	0.061	0.027
2	1.92	0.08	0.064	0.033
4	1.28	2.72	7.398	5.78
<b>TOTAL</b>	<b>50</b>	<b>0</b>	<b>89.841</b>	<b>29.781</b>

### WEIGHTED AVERAGE MEAN

Table showing the level of satisfaction towards the activities and services of the logistic company

PERFORMANCE	HS	S	N	DS	HDS	TOTAL	MEAN SCORE	RANK
<b>PROCESS</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>			
<b>Time taken for obtaining certificates/permission from outside agencies</b>	8	22	10	6	4	50	3.48	4
	230	60	24	6	1	174		
<b>Infrastructure facilities</b>	2	20	22	4	2	50	3.32	7
	10	80	66	8	2	166		
<b>Container handling charges</b>	10	16	22	2	0	50	3.68	3
	50	64	66	4		184		
<b>Timely dispatch of cargos</b>	8	20	18	4	50	2.64	11	
	32	60	36	4	132			
<b>Custom clearance procedures</b>	6	20	16	6	2	50	3.44	5
	30	80	48	12	2	172		
<b>Online inventory tracking</b>	12	22	6	10	50	3.72	2	
	60	88	18	20	186			
<b>Temperature control storage</b>	6	18	14	8	4	50	3.28	8
	30	72	42	16	4	164		
<b>Advanced data collection technology</b>	10	24	10	6	50	3.76	1	
	50	96	30	12	188			
<b>Hands free order selection</b>	4	6	20	10	10	50	2.68	10
	20	24	60	20	10	134		
<b>Storage and warehousing</b>	8	14	18	10	50	3.40	6	
	40	56	54	20	170			
<b>Freight forwarding agents</b>	10	16	12	12	50	3.00	9	
	50	64	36	24	150			

**Inference:** The table exhibits the weighted average mean scores. The table highlights weighted score, which help to decide the most important factor, on the cutting department process and its level of satisfaction. The highest score 3.76 is advanced data collection technology and the lowest score is 2.64 is timely dispatch of cargos.

### FINDINGS

- Majority of respondents (36%) are in export concern.
- Hence there is a significant relationship between the nature of the company and demand for your company.
- The highest score 3.76 is advanced data collection technology and the lowest score is 2.64 is timely dispatch of cargos.

### SUGGESTIONS

- The performance of the logistics service provider's logistics could be improved by providing still more infrastructural facilities.
- The cargo handling charges, especially in Coimbatore are to be revised to attract more exporters.

- Since cost is the factor for choosing another logistics service providers managements could try to revise their cost structure.
- Logistic service providers could try to improve facilities in cargo handling.
- The time taken for obtaining certificates could be reduced.

### CONCLUSION

A performance of logistic sector becomes inevitable at those liberalized, privatized and globalized system, with a view to sustain its performance and profit than to compete with private sectors. in this study such an effort has been taken to analyze the maximum aspect of the operating and logistics performance further it is understood that the present performance of companies is good enough to meet its future requirement in all aspects of the company implements the suggestions given in the study, the performance will be better in future also.

The government should take care revising the tax structure, clearance charges, demurrage charges for improving the logistics system. And they should take steps to impose uniformity in cost structure. In addition, applying still more infrastructural facilities would be an added an advantage .supporting facilities to CFS, warehousing, storage, facilities, etc will add benefits to the system. Further there is lot of modification like computerization, e-payment system, GPS tracking facilities etc can be used by logistics companies to improve their operations.

### REFERENCES

1. S.K. Bose, N.G. Kannan."Improving the service quality of ocean container carriers: an Indian case study." *Benchmarking: An International Journal*, Vol. 19 Iss: 6, pp.709 – 729, 2012.
2. Paul T-W Lee, Kai-Chieh Hu. "Evaluation of the Service Quality of Container Ports." *Evaluation of the Service Quality of Container Ports* Vol: 4. Iss: 3, 2012
3. Dobberstein, N., C-S Neumann, and M. Zils (2005) "Logistics in Emerging Markets," *McKinsey Quarterly*, 1, 15-17.
4. [www.deccanherald.com/](http://www.deccanherald.com/)
5. [www.echoupal.com](http://www.echoupal.com).
6. [www.acmainfo.com](http://www.acmainfo.com).