

PERCEPTION OF EMPLOYEES TOWARDS OUTBOUND LOGISTICS WITH REFERENCE TO GARMENT COMPANIES IN TIRUPUR DISTRICT

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ABSTRACT

Garment industry is prime exemplifier of global sourcing and has been facing complexities in the area of regulation policies, logistics performance, cultural differences, political and economic uncertainties, etc. Various research studies have emphasized logistics delays as most crucial link to garment exports considering the seasonality and time sensitivity of garment products. Moreover, the fierce competition of Post-MFA phase brought out the significance of lead time management, on time delivery and logistics performance. It was predicted that India will emerge as big gainer in the post MFA phase but it did not happen in the quantum which was expected. Many researchers have identified delayed delivery and logistics hindrances as crucial challenges for Indian scenario. The objective of the present research was to study outbound logistics activities and related issues and challenges of garment exports with the companies in Tirupur. The prime focus of the study was to identify the key issues and challenges of logistics activities and measure their effect on delivery lead time and cost implications with respect to Tirupur. The conclusion is that Garment supply chain represents a complex supply chain, characterized by ever increasing demand of fashionable and fresh products coupled with quality and low prices. There is fierce competition amongst suppliers and buyers are always on the lookout for the the suppliers who can meet their criteria of lower delivery lead time, price, quality and product innovation. The three main stakeholders of garment export business are: buyer (retailer/brand owner), seller (manufacturer exporter) and intermediary. Raw material suppliers, freight forwarders multimodal transporters are also important links in the garment supply chain.

Keywords: *Outbound logistics, Garment industry and Tirupur*

INTRODUCTION

World history has witnessed many waves of globalisation, which has affected global economy and international trade. Emergence of an active international capital market in the 1970s, demise of communism and growing liberalization reinforced the momentum of globalization, which resulted in current scenario of high mobility of capital and resources

internationally. Globalisation has benefitted international businesses through global sourcing. Global sourcing means globalization in two respects: a) Internationalization of purchasing activities and b) Adoption of strategic sourcing orientation.

The strategic sourcing decisions are important to sustain competitiveness these decisions are taken when the buying firm attempts to establish long-term business partnership with international suppliers. Cost is often a primary motivation for global sourcing. In early phases of global sourcing, price along with quality consistency and reliable delivery were prime business winning factors for international suppliers. But over a period of time product innovation, product range and speed of delivery too became key determinants. Global sourcing decisions also cater to many other aspects of business like flexibility, diversification and strategic focus. The textile and garment industry is dynamic, global, diverse, complex, and is a prime exemplifier of globalization.

One of the prime drivers of global garment sourcing was search for lower costs. The global garment sourcing manifested in three ways throughout the 1970s, 1980s and 1990s: first, sourcing of garment from suppliers in lower wage sites across the world. Second, the rising power of large retailers and corporate buyers based in industrial countries who played a key role in organizing and coordinating these emerging global networks and clothing supply chains. Third, the 2 rise of information technologies and the deepening power of retailers demanding timely supplies of garment in 1990s. Garment sourcing has received increasing attention over the last decade due to two important developments:

- a) The business firms have been competing increasingly in dynamic and complex world marketplace, considering continual changes and uncertainties in product availability, prices, and competition.
- b) The prominence of effectively managing global textile and garment supply chain has increased. Global garment sourcing have been facing various risks and challenges.

The main perceived garment sourcing challenge factors are:

- a) Regulations- tariffs, trade restriction bills,
- b) Logistics- inventory management, border-crossing procedures, transportation delays,
- c) Cultural difference- language barrier, different customs, different business practices,
- d) Country uncertainty- foreign exchange fluctuations, political instability. Many research studies have identified logistics problems as the number one global sourcing challenge and these logistics problems may differ from one sourcing region to the other. Thus the perception of employees towards outbound logistics with reference to garment companies in Tirupur district.

STATEMENT OF PROBLEM

The background of the research emphasizes the importance of garment exports in global sourcing and also the crucial role of lead time and logistics in this regard. Background history of Multi Fibre Agreement, post-MFA scenario and trade performance of leading exporting countries clarifies the performance and prevailing conditions of Indian garment exports industry. Explanation of importance of textile and garment industry to Indian economy, existing

challenges hampering the lead time management and potential growth justifies the need of research work. Logistics related issues have emerged as one of the major challenging area for Indian garment industry. So far the body of literature only mentions few logistics challenges but does not cover entire gamut of micro level logistics challenges related to logistics of Indian garment exports industry. The severity level of these challenges affecting delivery lead time has also not been covered in any study.

Which are the key issues and challenges that significantly affect outbound logistics activities having effect on delivery lead time of garment exports?

OBJECTIVES OF THE STUDY

To identify key issues and challenges in context of international outbound logistics of garment exports that affect delivery lead time.

To identify the factors influencing the supply chain process.

To Measure delay lag and cost implications to garment exporters due to delay in delivery lead time of garment shipments resulting from issues and challenges involved in outbound logistics activities of garment exports in Tirupur.

SCOPE OF THE STUDY

The logistics and supply chain management industry in India has been receiving greater attention in the last few years. Yet, in spite of its huge potential, the sector's growth has not kept pace with India's wider economy and this is a threat to our future competitiveness. Keeping in mind, this particular research has been carried out to understand about supply chain management system adopted by hosiery export units in Tirupur city, Tamilnadu. The study aims to clear that outbound logistics movement of products, services and information from a firm's manufacturing to customer and involved defined network of transportation links, warehousing and storage, and finally delivery at the destination in a cost effective manner within the desired time.

RESEARCH METHODOLOGY

Research design: The researcher was concerned mainly with descriptive research design. The study was conducted in order to find out the perception of customers about international outbound logistics activities affecting delivery lead time of Indian garment exports in Tirupur.

SAMPLING DESIGN & TOOLS APPLIED

Sampling techniques

Sampling Plan:

One of the main elements in the research design is sampling plan which is further divided into sampling unit, sampling size, sampling type.

Sampling Unit:

Sampling unit can be defined as the basic unit containing the outbound logistics activities affecting delivery lead time of Indian garment exports in Tirupur.

Sampling Size:

In this research, the sample size amount to one hundred and fifty, which are surveyed from employees of the companies who export products from Tirupur.

Sampling Type:

Convenience sampling has been adapted in this research. It is a non-probability sampling and it is refers to selecting a sample based on convenience.

DATA COLLECTION

Primary data: The primary data the respondents which or collected with a questionnaire schedule was used with employees of the company.

Secondary data were collected from the company profile, manuals, journals, magazines and newspapers etc.

Tertiary Data: The data were collected from the various literatures which are related to the subject of outbound logistics.

Primary data: Structures self administered questionnaire had been used as a research tool for collecting

Secondary data: Articles, Journals and websites.

Tools used for the study: Percentage analysis, Oneway Anova, Kruskal wallis test and multiple regression.

LIMITATIONS OF THE STUDY

- The sample size of the study is limited to 150.
- There may be a bias towards primary data collected from the respondents.
- The study time towards the concept it limited to 3 months so a deep analysis about the concept cannot be made.

ANALYSIS AND INTERPRETATION

Demographic variables	Particulars	Frequency	Percent
Age	Less than 25	12	8
	25-35	26	17.3
	35-45	71	47.3
	45-55	14	9.3
	55 and above	27	18
	Total	150	100
Gender	Male	115	76.7
	Female	35	23.3
	Total	150	100
Martial Status	Married	84	56
	Unmarried	66	44
	Total	150	100

Out 150 respondents 8% are less than 25 years of age, 17.3% are from the age group between 25-35, 47.3% are from the age group between 35-45, 9.3% are from the age group between 45-55 and 18% are more than 55 years of age. 76.7% are male and 23.3% are female. 56% are married and 44% are unmarried.

DESCRIPTIVE STATISTICS ACCEPTANCE TOWARDS CUSTOMS CLEARANCE

Particulars	N	Mean	Std. Deviation
CC1	150	3.27	1.356
CC2	150	3.14	1.316
CC3	150	3.49	1.186
CC4	150	3.07	1.100
CC5	150	3.16	1.433
CC6	150	2.60	1.147
CC7	150	3.32	1.255
CC8	150	3.63	1.039

The above table shows that the respondents agree towards Technical challenges in EDI systems (3.27), Number of staff/officers/resources at customs (3.14), wrong declaration by shipper (3.49), corruption/ bureaucracy/non-cooperation of customs officers, understanding of valuation and supporting procedures/policies of customs officials (3.16), missing documents/error in documents or in registered data at customs (3.32) and manual /physical inspection at customs (3.63). Meanwhile the respondents disagree towards companies distribution partner having a good technical knowledge about the FMCG product and service (2.60).

ACCEPTANCE TOWARDS EXPORT DOCUMENTATION

Particulars	N	Mean	Std. Deviation
ED1	150	3.20	1.182
ED2	150	3.21	1.251
ED3	150	3.33	1.115
ED4	150	3.33	1.173
ED5	150	3.34	1.098

The respondents agree towards partial automation/integration of systems for export documentation at various export related agencies (3.20), level of clarity in export sales contract/ international practices and guidelines (3.21), clerical errors in export related documents (3.33), number of documents required in existing process (3.33) and level of complication involved in export documentation (3.34).

ACCEPTANCE TOWARDS PORT WAREHOUSING AND MATERIAL HANDLING

Particulars	N	Mean	Std. Deviation
PWMH1	150	3.70	.968
PWMH2	150	3.50	1.268
PWMH3	150	2.92	1.288
PWMH4	150	2.93	1.193
PWMH5	150	2.84	1.386

The respondents agree towards space for seaport operations/storage/internal movement (3.70), berthing space and quay infrastructure (3.50). The respondents disagree towards seaport information technology (it) system (2.92), number of cargo handling equipment at sea port (2.93) and bureaucratic issues at seaport operations (2.84).

ACCEPTANCE TOWARDS ICD/CFS WAREHOUSING AND MATERIAL HANDLING

Particulars	N	Mean	Std. Deviation
ICD/CFS1	150	2.65	1.285
ICD/CFS2	150	2.68	1.323
ICD/CFS3	150	2.58	1.189
ICD/CFS4	150	2.90	1.104
ICD/CFS5	150	2.85	1.257

The respondents disagree towards Number of cargo handling equipment at ICD/CFS (2.65), number of vehicle entry points at ICD/CFS (2.68), number of vehicle entry points at ICD/CFS (2.58), number of rail sidings at ICD/CFS (2.90) and technology level of warehousing systems at ICD/CFS (2.85).

ACCEPTANCE TOWARDS ROAD TRANSPORTATION

Particulars	N	Mean	Std. Deviation
RT1	150	2.81	1.276
RT2	150	2.70	1.252
RT3	150	2.23	.935
RT4	150	2.86	1.036
RT5	150	2.69	.837
RT6	150	2.69	.837
RT7	150	2.69	1.105
RT8	150	2.50	1.134

The respondents disagree towards quality /condition of roads (2.81), availability of trucks/trailers for road transit (2.70), level of efficiency /technology (GPS, etc.) inbuilt in trucks /trailers for road transit (2.23), level of expansion of road network (2.86), level of professionalism/skills of truck driver (2.69), time involved in interstate regulatory check points (2.69), waiting time due to vehicle entry restrictions in cities (2.69) and level of maintenance practices of trucks/trailers (2.50).

ACCEPTANCE TOWARDS COST IMPLICATION FACTORS

Particulars	N	Mean	Std. Deviation
CIF 1	150	3.33	1.441
CIF 2	150	3.08	1.108
CIF 3	150	2.60	1.074
CIF 4	150	2.97	1.220
CIF 5	150	2.91	1.099

The respondents agree towards cost implication factor leading to increase administration workload and costs (3.33) and increased transportation costs (3.08). The respondents agree towards cost implication factor affecting sales and promotion plans (2.60), inventory costs (2.97) and cost implication factor affecting account receivable and cash flow of the companies (2.91).

ONE WAY ANOVA

COMPARISION BETWEEN AGE AND ACCEPTANCE TOWARDS OUTBOUND LOGITICS

H01: There is a significant difference between age and acceptance towards outbound logistics

Particulars	Age	N	Mean	Std. Deviation	F	Sig
Acceptance towards customs clearance	Less than 25	12	3.0433	1.05486	1.710	0.151
	25-35	26	3.5315	.60434		
	35-45	71	3.1592	.76849		
	45-55	14	3.3329	.82414		
	55 and above	27	3.0674	.69223		
	Total	150	3.2141	.76834		
Acceptance towards export documentation	Less than 25	12	3.2000	1.05830	1.067	0.375
	25-35	26	3.5462	.75165		
	35-45	71	3.2338	.76866		
	45-55	14	3.0571	.86087		
	55 and above	27	3.3111	.81775		
	Total	150	3.2827	.80940		

Acceptance towards port warehousing and material handling	Less than 25	12	2.8167	1.05987	0.797	0.529
	25-35	26	3.3077	.98180		
	35-45	71	3.1324	.85986		
	45-55	14	3.2571	.94276		
	55 and above	27	3.2889	.81398		
	Total	150	3.1773	.89579		
Acceptance towards ICD/CFS warehousing and material handling	Less than 25	12	2.2833	.86742	2.488	0.046
	25-35	26	3.1231	.84300		
	35-45	71	2.6507	.79694		
	45-55	14	2.7857	.70804		
	55 and above	27	2.7407	.95243		
	Total	150	2.7320	.84942		
Acceptance towards road transportation	Less than 25	12	1.9517	.56299	16.681	0.000
	25-35	26	2.4108	.40701		
	35-45	71	2.7915	.45749		
	45-55	14	3.2971	.36948		
	55 and above	27	2.4741	.60593		
	Total	150	2.6484	.57382		
Acceptance towards cost implication factors	Less than 25	12	2.8000	.78161	10.938	0.000
	25-35	26	2.4000	.39598		
	35-45	71	3.3211	.71031		
	45-55	14	2.9857	.40356		
	55 and above	27	2.7185	.77709		
	Total	150	2.9800	.74645		

H01a: There is a significant difference between age and acceptance towards customs clearance as the level of significance is at 0.151 which is greater than 0.05.

H01b: There is a significant difference between age and acceptance towards export documentation as the level of significance is at 0.375 which is greater than 0.05.

H01c: There is a significant difference between age and acceptance towards port warehousing and material handling as the level of significance is at 0.529 which is greater than 0.05.

H01d: There is no significant difference between age and acceptance towards ICD/CFS warehousing and material handling as the level of significance is at 0.046 which is less than 0.05.

H01e: There is no significant difference between age and acceptance towards road transportation as the level of significance is at 0.000 which is less than 0.05.

H01f: There is a significant difference between age and acceptance towards cost implication factors as the level of significance is at 0.000 which is less than 0.05.

KRUSKAL-WALLIS TEST
COMPARISON BETWEEN MARITAL STATUS AND ACCEPTANCE TOWARDS
OUTBOUND LOGISTICS

H02: There is no relationship between marital status and acceptance towards outbound logistics

Particulars	Marital Status	N	Mean Rank	Chi square	Sig
Acceptance towards customs clearance	Married	84	72.39	0.984	0.321
	Unmarried	66	79.45		
	Total	150			
Acceptance towards export documentation	Married	84	73.60	0.369	0.544
	Unmarried	66	77.92		
	Total	150			
Acceptance towards port warehousing and material handling	Married	84	68.52	5.033	0.025
	Unmarried	66	84.39		
	Total	150			
Acceptance towards ICD/CFS warehousing and material handling	Married	84	67.13	7.159	0.007
	Unmarried	66	86.15		
	Total	150			
Acceptance towards road transportation	Married	84	85.00	9.182	0.002
	Unmarried	66	63.41		
	Total	150			
Acceptance towards cost implication factors	Married	84	85.89	11.220	0.001
	Unmarried	66	62.28		
	Total	150			

H02a: There is no relationship between marital status and acceptance towards customs clearance as the level of significance is at 0.321 which is greater than 0.05.

H02b: There is no relationship between marital status and acceptance towards export documentation as the level of significance is at 0.544 which is greater than 0.05.

H02c: There is a relationship between marital status and acceptance towards port warehousing and material handling as the level of significance is at 0.025 which is less than 0.05 and unmarried respondents have higher impact towards port warehousing and material handling.

H02d: There is a relationship between marital status and acceptance towards ICD/CFS warehousing and material handling as the level of significance is at 0.007 which is less than 0.05 and unmarried respondents have higher impact towards ICD/CFS warehousing and material handling.

H02e: There is a relationship between marital status and acceptance towards road transportation as the level of significance is at 0.002, which is less than 0.05, and married respondents have higher impact towards road transportation.

H02f: There is a relationship between marital status and acceptance towards cost implication factors as the level of significance is at 0.001, which is less than 0.05, and married respondents have higher impact towards cost implication.

FINDINGS

- Most of the respondents are from the age group between 35-45.
- Maximum of the respondents are male.
- Most of the respondents are married.
- There is no significant difference between age and acceptance towards ICD/CFS warehousing and material handling
- There is no significant difference between age and acceptance towards road transportation
- There is a relationship between marital status and acceptance towards road transportation
- There is a relationship between marital status and acceptance towards cost implication factors

SUGGESTIONS

- Considering the export revenue earning¹ from garment and textiles, setting up of dedicated cell in customs for garment custom clearance in key pockets with maximum garment traffic is strongly recommend.
- 24x7 customs clearance facilities² (for all garment product categories) in ICDs³ of key export clusters should be prioritized along with seaports to ensure seamless movement of consignment without delay lag.
- Procedural hassles have to be removed to reduce downtime in customs clearance. More robust infrastructure of information and communication technology (ICT) interventions to reduce downtime of exiting ICT system and handle more users simultaneously.
- Provision of special license for drivers engaged in movement of cargo trucks.
- Sensitization programs for truckers towards the issue overloading of vehicle which affect riding quality of roads and speed of the vehicle.
- Implementation of one time toll tax for cargo trucks to operate on highways (yearly/monthly basis)
- Single window procedures for issuance of national permit for cargo trucks to enhance mobility of vehicle movement across multiple states.

- Broadening, expansion and integration of national and state highways with improved maintenance policies

CONCLUSION

The conclusion is that Garment supply chain represents a complex supply chain, characterized by ever increasing demand of fashionable and fresh products coupled with quality and low prices. There is fierce competition amongst suppliers and buyers are always on the lookout for the the suppliers who can meet their criteria of lower delivery lead time, price, quality and product innovation. The three main stakeholders of garment export business are: buyer (retailer/brand owner), seller (manufacturer exporter) and intermediary. Raw material suppliers, freight forwarders multimodal transporters are also important links in the garment supply chain.

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