

A Study on Container Freight Station Operations with Special Reference To Ujwal International Logistics, Chennai

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ABSTRACT: A CFS is an area typically a warehouse near shipping ports or crucial railway hubs. These container freight stations are either owned by private stakeholders or shipping terminals. Their primary function involves the consolidation and de-consolidation of less-than-container load (LCL) cargo. The objective of the study is to analyse the container freight station operations with special reference to Ujwal International Logistics, Chennai. The study based only on the opinion and expectation of employees. Total number of sample taken for the study is 100 respondents. Descriptive research design and Convenience sampling techniques were used for the study. Primary data and secondary data have been used in the study. Simple percentage analysis, chi square analysis and correlation analysis have been applied in this study to reach the finding of the study. It is found that there is positive relationship between the gender of the respondents and service quality efficiency. It is suggested that the concern must obtain frequent feedback regarding its operational performance from the customers. It is concluded that in order to survive in the industry, the CFS concern needs to offer excellent freight station operation services for several reasons such as satisfying the customers, retaining the customers and sustaining in the industry.

KEYWORDS: Container Freight Station (CFS), Ujwal International Logistics, Logistics Management, Cargo Handling Operations, Freight Forwarding,

I. INTRODUCTION

The term "Container Freight Station" (CFS) refers to a facility or warehouse where various goods or items are kept in preparation for shipping in one or more containers. A warehouse that specialises in cargo consolidation and deconsolidation is known as a CFS (container freight station). At a CFS, the products typically belong to a variety of different clients, and shipments are frequently made via LCL shipments. A CFS is a location, usually a warehouse close to important railroad hubs or trade ports. Either shipping terminals or private stakeholders are the owners of these container freight stations.

Consolidation and deconsolidation of less-than-container load (LCL) cargo is their main duty. De-consolidation is the act of separating the LCL shipments, whereas consolidation is combining multiple LCL shipments to create a full container load (FCL). Moreover, a Container Freight Station serves as a short-term storage facility for items intended for import and export. According to the most recent government statistics (from March 2017), India has 168 container freight stations. The warehouse of the CFS is close to the port or shipping terminal and is run by a shipping line or terminal. Also, these stations are in charge of the paperwork and customs processing processes for the cargo. It is a customs-alerted area where all transactions are authorised by customs.

The primary conduit between container freight terminals and the parties involved in the transaction is a Customs House Agent (CHA). CFS is now an essential component of the transportation industry. It has streamlined the import-export process at the places of origin and destination. Therefore, origin CFS and destination CFS are two different types of container freight stations. The demand for LCL cargoes has increased dramatically, making the stations a sought-after

facility for import-export. It provides the benefit of a single shipping location, which greatly helps to expedite and simplify the entire procedure.

OBJECTIVES OF THE STUDY

- To evaluate the service quality efficiency in the freight station operation
- To measure the customers perception towards freight station operation
- To understand the problems faced by the customers in the freight station operation
- To analyse the customer anticipation with the freight station operation
- To obtain suggestions from the respondents to enhance the freight station operation to survive in the industry.

II. REVIEW OF LITERATURE

Aicha AGUEZZOUL (2022), Better service is offered by Container Freight Stations (CFS), which also aids exporters in obtaining approval for the items they export. Therefore, an effort has been undertaken to investigate the function of CFS in international trade and how a new CFS might be approved and put into effect in the current environment. By moving cargo and customs-related activities beyond the port area, Container Freight Stations, which are situated close to the serving ports, assist in decongesting the port. The activities of CFS (rail siding, container yard, warehouse, and gate complex) aid exporters in the clearing of products, stuffing, and de-stuffing processes, which in turn encourages exports from the country. Giving additional authority and appropriate government regulation can boost performance.

George Baryannis (2019), The goal of this study was to evaluate the operations of the Container Freight Station (CFS) in Kenya's port of Mombasa. Despite the fact that the idea is new to Kenya, the study will examine how the container freight station (CFS) might help the port of Mombasa become less congested and more effective as a port of choice for the region of East and Central Africa. The study included both primary and secondary data analysis on information gathered from already-existing records and interviews with various operational CFS and C& F agents working in Mombasa. The results demonstrate that Mombasa port is currently one of the world's ports with the fastest expanding trends in container handling. They have occasionally caused congestion over the past ten years. The limitations have been a significant barrier to port operation as cargo, particularly imported vehicles and containers, have exceeded yard holding capacity against a background of subpar freight off-take to their eventual destination.

Aanchal Iyer (2020), International freight transportation has been transformed by containerization. It allows for multimodality and the optimization of port handling activities. Also, the building of ever-larger container ships enables economies of scale, and smart logistics, made possible by the growth of the Internet of Things, improves businesses' flexibility and responsiveness. The entire supply chain is negatively impacted by the fact that international multimodal transportation is vulnerable to unforeseen events (risks) and suffers from a lack of visibility. Research has been done in the area of supply chain risk management to address these issues, and the literature has been heavily researched. Using traceability and visibility data, this approach addresses risk management in the multimodal container supply chain. This paper's primary goals are to examine methods that have been put forth to increase the effectiveness of supply chains by addressing risk management in container transportation, to identify knowledge gaps, and to suggest future research areas. Finally, a particular strategy for managing shipments in real-time while accounting for random events is suggested.

III. RESEARCH METHODOLOGY

This study adopts a descriptive research design. The study uses random sampling technique to select respondents without bias. Convenience sampling is adopted in this study, a well-defined sampling design is adopted before collecting data. Primary data is collected for the first time for a specific purpose. Secondary data refers to data that has already been collected by others and is used for analysis. The sample size of the study is 100. Simple percentage analysis, chi square analysis and correlation have been used in this study.

IV. DATA ANALYSIS AND INTERPRETATION

Table No. 1 AGE OF THE RESPONDENTS

| Age (Years) | Number of Respondents | Percentage |
|--------------|-----------------------|-------------|
| Below 25 | 20 | 20.00% |
| 26–35 | 40 | 40.00% |
| 36–45 | 25 | 25.00% |
| 46–55 | 10 | 10.00% |
| Above 56 | 5 | 5.00% |
| Total | 100 | 100% |

Sample data

INTERPRETATION

20.0% of respondents are below 25 years of age, 40.0% are between 26 and 35 years, 25.0% are between 36 and 45 years, 10.0% are between 46 and 55 years, and 5.0% are above 56 years.

Table No. 2 GENDER OF THE RESPONDENTS

| Gender | Number of Respondents | Percentage |
|--------------|-----------------------|-------------|
| Male | 60 | 60.00% |
| Female | 40 | 40.00% |
| Total | 100 | 100% |

Sample data

INTERPRETATION

60.0% of the respondents are male, and 40.0% are female.

Table No. 3 CUSTOMER ANTICIPATION WITH THE FREIGHT STATION OPERATION

| Statements | Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree | Total |
|--|----------------|-------------|----------------------------|-----------|-------------------|---------------|
| Appropriate maintenance and repairing of container units | 30 (30%) | 45 (45%) | 15 (15%) | 7 (7%) | 3 (3%) | 100 (100%) |
| Need to reshape the facility layout for customers' comfort | 25 (25%) | 50 (50%) | 15 (15%) | 7 (7%) | 3 (3%) | 100 (100%) |
| Enough number of labours to offer the service | 28 (28%) | 42 (42%) | 18 (18%) | 8 (8%) | 4 (4%) | 100 (100%) |
| Requirement of modern container operation equipment | 32 (32%) | 40 (40%) | 15 (15%) | 8 (8%) | 5 (5%) | 100 (100%) |
| Problem-solving trained employees | 35 (35%) | 38 (38%) | 15 (15%) | 7 (7%) | 5 (5%) | 100 (100%) |

Sample data

INTERPRETATION

30% of respondents strongly agree and 45% agree that appropriate maintenance and repairing of container units is provided, while 15% are neutral, 7% disagree, and 3% strongly disagree. 25% strongly agree and 50% agree that reshaping the facility layout is needed for customer comfort, while 15% are neutral, 7% disagree, and 3% strongly disagree. 28% strongly agree and 42% agree that there are enough labours to offer the service, while 18% are neutral, 8% disagree, and 4% strongly disagree. 32% strongly agree and 40% agree that modern container operation equipment is required, while 15% are neutral, 8% disagree, and 5% strongly disagree. 35% strongly agree and 38% agree that problem-solving trained employees are available, while 15% are neutral, 7% disagree, and 5% strongly disagree.

Table No. 4 SERVICE QUALITY EFFICIENCY

| Statements | Excellent | Good | Average | Bad | Poor | Total |
|---|-------------|-------------|----------|-----------|-----------|---------------|
| Prompt tracking of important shipments | 32 (32%) | 40 (40%) | 15 (15%) | 8 (8%) | 5 (5%) | 100 (100%) |
| Proficiency in universal documentation handling | 30 (30%) | 42 (42%) | 18 (18%) | 6 (6%) | 4 (4%) | 100 (100%) |
| Shifting goods with great care | 28 (28%) | 45 (45%) | 17 (17%) | 7 (7%) | 3 (3%) | 100 (100%) |
| Qualified staff to aid customers | 35 (35%) | 40 (40%) | 15 (15%) | 6 (6%) | 4 (4%) | 100 (100%) |
| Prompt delivery to the preferred place | 33 (33%) | 42 (42%) | 15 (15%) | 6 (6%) | 4 (4%) | 100 (100%) |

Sample data

INTERPRETATION

32% of respondents rated prompt tracking of important shipments as excellent and 40% as good, while 15% rated it average, 8% bad, and 5% poor. 30% rated proficiency in universal documentation handling as excellent and 42% as good, while 18% rated it average, 6% bad, and 4% poor. 28% rated shifting goods with great care as excellent and 45% as good, while 17% rated it average, 7% bad, and 3% poor. 35% rated having qualified staff to aid customers as excellent and 40% as good, while 15% rated it average, 6% bad, and 4% poor. 33% rated prompt delivery to the preferred place as excellent and 42% as good, while 15% rated it average, 6% bad, and 4% poor.

V. CHI-SQUARE ANALYSIS: RELATIONSHIP BETWEEN AGE OF THE RESPONDENTS AND CUSTOMER ANTICIPATION WITH THE FREIGHT STATION OPERATION

HYPOTHESIS TESTING

Null hypothesis (Ho): There is no significant relationship between age of the respondents and customer anticipation with the freight station operation.

Alternative hypothesis (H1): There is some significant relationship between age of the respondents and customer anticipation with the freight station operation.

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 79.110 ^a | 60 | 0.051 |
| Likelihood Ratio | 82.094 | 60 | 0.031 |
| Linear-by-Linear Association | 3.815 | 1 | 0.051 |
| N of Valid Cases | 100 | | |

a. 79 cells (98.8%) have expected count less than 5. The minimum expected count is .10.

INTERPRETATION:

As per the above table, it is inferred that the P value is 0.051; it is not significant to 5% (0.05) significant level. The minimum expected count is 0.10. Thus null hypothesis is accepted and it is found that there is no significant relationship between age of the respondents and customer anticipation with the freight station operation.

CORRELATION ANALYSIS: RELATIONSHIP BETWEEN THE GENDER OF THE RESPONDENTS AND SERVICE QUALITY EFFICIENCY

| Correlations | | | |
|----------------------------|---------------------|---------------------------|---------|
| | | GENDER OF THE RESPONDENTS | service |
| GENDER OF THE RESPONDENTS | Pearson Correlation | 1 | .308** |
| | Sig. (2-tailed) | | 0.002 |
| | N | 100 | 100 |
| SERVICE QUALITY EFFICIENCY | Pearson Correlation | .308** | 1 |
| | Sig. (2-tailed) | 0.002 | |
| | N | 100 | 100 |

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

INTERPRETATION:

The above table indicates that out of 100 respondents, co-efficient of correlation between the gender of the respondents and service quality efficiency is 0.308. It is below 1. So there is positive relationship between the gender of the respondents and service quality efficiency.

VI. SUGEGSTIONS

- The concern must obtain frequent feedback regarding its operational performance from the customers.
- The concern must have the ability to track the shipments for customers convenience.
- The concern must have the proficiency in document handling.
- The concern has to take all the efforts to shift the customers goods with great care.
- There must be qualified staff to aid the customers. There must be prompt delivery to the customers preferred place.
- The concern must ensure for the adequate space in the warehouse. The concern has to rationally plan for economically substantial loads for cargoes.
- There must be proper arrangements to prevent the stocks in the ware house. The concern must fix the appropriate service charges to the customers.
- The concern must keep all required records of shipments for the clients. There must be proper intimation for customers regarding the status of the goods and services.
- There should not be any delay in prompt clearance from port to warehouse.
- The concern must arrange enough and sufficient staff to take care of the customers.
- There should not be any inconvenient at the ports in loading and unloading the goods for customers as well as labours.
- The concern must take all the efforts to sped up to identify the customers’ needs to fulfil promptly.
- There must be appropriate maintenance and repairing of container units. The concern must focus to reshape the facility layout for customer comfortability.

- The concern must arrange enough number of labours to offer the service as quality.
- There is requirement of modern container operation equipments for excellent services for the customers.
- There must be problem resolving for the customers by the trained employees.

VII. CONCLUSIOIN

A CFS is an extended arm of Port/ ICD/Air cargo Complex, where import/ export goods are kept till completion of their examination and clearance. The imported goods can be immediately shifted from the port to CFS which also helps in the reduction of port congestion. All the activities related to clearance of goods for home consumption, warehousing, temporary admissions, re-export, temporary storage for onward transit and outright export and transshipments take place from such stations. Therefore, clearance of goods from CFS is an important point of consideration for trade in respect of export/ import Cargo as it is the final Customs contact point. It is suggested that in order to survive in the industry, the CFS concern needs to offer excellent freight station operation services for several reasons such as satisfying the customers, retaining the customers and sustaining in the industry.

REFERENCES

1. Aicha AGUEZZOUL (2022), "Role of Container Freight Stations In International Trade", PARIPEX - Indian Journal Of Research, Volume : 5 | Issue : 4
2. Amine Belhadia (2022), "Factors affecting effective implementation of Container Freight Station Management Information System (CFSMIS): A Case of Interpel Investment Limited", European Journal of Business and Management, Vol.5, No.27
3. Abdalnaser S. H. Al-MSloun (2022), "Warehousing Practices of a Container Freight Stations", Ascendens Asia Journal of Multidisciplinary Research Conference Proceedings, Vol. 2, No. 4.
4. Shamas Pervaiz (2022), "A Literature Review, Container Shipping Supply Chain: Planning Problems and Research Opportunities" Logistics 5, no. 2: 41. <https://doi.org/10.3390/logistics5020041>
5. Samuel Fosso Wambaa (2022), "Container Terminal Berth and Yard Collaborative Allocation for Import and Export Synchronous Operations by Computational Logistics", Volume 2, <https://doi.org/10.1155/2022/6008543>
6. Baryannis, G., Dani, S., & Antoniou, G. (2019). Predicting supply chain risks using machine learning: The trade-off between performance and interpretability. *Future Generation Computer Systems*, 101, 993–1004.
7. Iyer, K. C., & Nanyam, V. P. S. (2020). Technical efficiency analysis of container terminals in India. *The Asian Journal of Shipping and Logistics*, 37(1), 61–72.
8. Gnanasekaran, K., Siranjeevi, M. S., & Bala Nageswara Rao, C. (2017). A study on process and documentation at container freight station. *International Journal of Advance Research and Innovative Ideas in Education*, 3(5), 443–448.
9. Sanjay Raj, M. S., & Saranya, P. C. (2025). The optimization of container freight station operation at Global Logistics Solutions India Pvt. Ltd. *International Advanced Research Journal in Science, Engineering and Technology*, 12(5). <https://doi.org/10.17148/IARJSET.2025.12558>
10. Song, D. (2021). A literature review, container shipping supply chain: Planning problems and research opportunities. *Logistics*, 5(2), 41. <https://doi.org/10.3390/logistics5020041>
11. Subrahmanyam, P., & Subhashini, S. (2018). Customs house agents' perspective on effectiveness of container freight stations, Chennai. *International Journal of Supply Chain Management*, 7(6).
12. Venkatesh, V. G. (2020). Supply chain integration barriers in port-centric logistics. *Transnational Journal of Logistics & Trade*, 8(2).



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