A study on cargo movement strategies of logistics players (liners) in marine trade (with special reference to Tuticorin V.O.C Port.)

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Abstract

“Without international shipping, half the world would freeze and the other half would starve.”- Efthimios Mitropoulos, IMO Secretary-General.

The Sea traders (exporter/importer) are facing lot of risk for moving their cargo from port of loading to port of final destination. The cargo movement activities are very peculiar work, that why, the international traders are nominating or assigning few inter-mediators like customs house agent(CHA), logistics players that is freight forwarders, consolidators and liners (ocean carriers) etc. The liners are working with superficial knowledge to moving the cargo from one destination to another. The liners are facilitating to the sea traders through their own container, own and chartering vessels.

The liners are playing very vital role for gaining the foreign exchange to the nation. The ocean carriers are handling the cargo with multi-dimensional strategy to moving the cargo within the expected time of sea traders. The each and every liners are using some secret primary strategy for attracting the shippers and consignee like slashing the freight rate (transportation cost), bunkering cost (fuel), slashing the box cost (container) and reducing the transit time. Simultaneously, the liners are using some secondary strategy such as less vessel rotation, credit facilities to the shipper, and first in first out service and preparing and releasing the shipping documentation like equipment release order, vessel schedule, stuffing confirmation report, releasing the bill of lading etc... As per the international maritime organisation report the 90% of world trade are carried out through sea trade only. At the same time, there is a lack of awareness about the liners in among the researchers and management students’ community in India. The present study is going to examining the cargo movement strategies of liners (ocean carriers) in supply chain management. The researchers are hope; this present study will reduce the gap between the practical field and supply chain management theoretical area.

Keywords: Bill of lading, cargo movement, Bunkering, freight rate, Vessel schedule and stuffing confirmation.

1. Introduction

The international ocean carriers (liner) shipping industry has been undergoing major structural changes caused by a number of factors. Ocean carrier companies have responded to these challenges by engaging in mergers and acquisitions and by forming conference trade and global strategic alliances. Many of these organizational changes have reportedly been undertaken to achieve, among other things, economies of scale and financial performance of the ocean carriers. As per the Federal Maritime Contract Section 8 Report, Conferences are agreements among ocean carriers (Liners) that restrict competition by setting prices, rationalizing sailing schedules and ports of call, sometimes pool cargo or revenue and decreasing terminal handling surcharge, International Ship Protective Surcharge or carrier security surcharge. An ocean carrier or liner is a vessel designed to transport cargo from one sea port to another along regular long-distance marine trade routes according to a schedule. Liners may also carry people and may sometimes be used for other purposes (e.g., for pleasure cruises. Cargo vessels running to a schedule are sometimes referred to as liners. Some shipping companies refer to themselves as “lines” and their container ships, which often operate over set routes according to established schedules, as ”liners”. Ocean liners are usually strongly built with a high free board to withstand rough seas and adverse conditions encountered in the open ocean, having large capacities for fuel, victuals, and other stores for consumption on long voyages.
2. Role of ocean carriers in marine trade
Historical background of ocean carriers shows that, the ocean liners were the primary mode of intercontinental travel for over a century, from the mid-19th century until they began to use airliners in the late 1960s. Hence, it was very expensive in this circumstance marine trade occupy the major part moving the cargo from one destination to another. In addition to passengers, liners carried mail and cargo. Liners were also the preferred way to move gold and other high-value cargoes from one destination to another. The busiest route for liners was on the north Atlantic with ships travelling between Europe and North America. It was on this route that the fastest, largest and most advanced liners in all over the world. Such routes included Europe to African and Asian colonies, Europe to South America, and migrant traffic from Europe to North America in the 19th and first two decades of the 20th centuries, and to Canada and Australia after the Second World War. Shipping lines are companies engaged in shipping passengers and cargo, often on established routes and schedules. Regular scheduled voyages on a set route are called "line voyages" and vessels (passenger or cargo) trading on these routes to a timetable are called liners or ocean carriers. The alternative to liner trade is "tramping" whereby vessels are notified on an ad-hoc basis as to the availability of a cargo to be transported. (In older usage, "liner" also referred to ships of the line, that is, line-of-trade ships, but that usage is now rare.)

3. Concept of liner
The term ocean liner is usually used to refer to a ship that is constructed to a higher standard than a normal cruise ship, enabling it to cross oceans such as the Atlantic and Pacific with passengers embarked in inclement weather conditions. The main characteristic of ocean liners include heavier plating, robust scantlings, great seaworthiness, high speed (around 30 knots) and accordingly very powerful propulsion (up to more than 200,000 hp), along hull, usually sharp bow, high freeboards, deep draught, smooth shape of superstructure. Contemporary cruise ships built after the 1980s show characteristics of size and strength once reserved for ocean liners—some have undertaken regular scheduled transatlantic crossings. There have been nine or more newly-built cruise ships added every year since 2001, all at 100,000 tonnes or greater.

4. Strategic level of logistics players in foreign trade
- The Strategic network optimization, including the number, location, and size of warehousing, distribution places, and facilities in Tuticorin to store up the cargoes.
- Strategically alliance with suppliers, distributors, and customers, creating communication channels for critical information and operational improvements such as, direct shipping and 3pl. i.e. Third party logistics.
- The shipper – freight forwarders – ocean carriers or liner are sharing their information each other for operating and moving the cargo from Tuticorin to importer destination.

5. Tactical level
Determining the Sourcing contracts and other purchasing decisions towards freight forwarder/consolidators this is technically called nomination shipment.
1. Planning related to Inventory including quantity, location, and quality of inventory and transportation strategy, including frequency of Vessel Schedules or routes...etc.
2. Prepare the best plan of action for compete with competitors in supply chain management industries.
3. Providing credit facilities to the freight forwarders and consolidators for getting more volume of consignment and to inflate twenty feet equivalent unit (TEU).
4. Concentrating towards customer demand and habit for retain the existing customer as well as expand the market area through new approach in dry and sea port.

6. Ocean carriers Key Strategies to gain Market
Slashing the freight rate it includes (basic ocean freight, bunkering rate, currency adjustment rate, ISPS rate, Inland Haulage rate. Servicing the lesser transit time to the customers. Providing the excellent customer service, documentation and operation for satisfying as well as gaining the goodwill among the competitors shipping company.

7. Objectives of the study
- To find out the cargo movement strategies of Logistics players in marine trade.
- To observe the service offered by logistics players in foreign trade.

8. Profile of Tuticorin port trust
Tuticorin V.O.C Port is one of the 13 major ports in India. It was declared to be a major port on 11 July 1974. It is second-largest port in Tamilnadu and fourth-largest container terminal in India after Cochin container terminal, JNP (Mumbai) and Chennai port. Tuticorin Port is an artificial port. This is the third international port in Tamil Nadu and its second all-weather port. All Tuticorin Port’s traffic handling has crossed 10 million tons from April 1 to September 13, 2008, registering a growth rate of 12.08 per cent, surpassing the corresponding previous year handling of 8.96 million tons. It has services all over the globe. To cope with the increasing trade through Tuticorin, the GOI sanctioned the construction of an all-weather port at Tuticorin, which brings the second largest revenue to India. On July 11, 1974, the newly constructed Tuticorin Port was declared as the 10th major port. On 1 April 1979, the erstwhile Tuticorin minor Port and the newly constructed Tuticorin major port were merged and the Tuticorin Port Trust was constituted under the Major Port Trusts Act of 1963.

9. Major imports
Coal, cement, finished fertilizers, raw fertilizer materials, rock phosphate, petroleum products, petroleum coke, and edible oils.
10. Major exports

11. Tuticorin Port handling crosses 100 lakh ton
15th September 2014, Tuticorin Port’s traffic handling has crossed 100 lakh tonnes (Lt) during the current fiscal, from April 1 to September 13, registering a growth rate of 12.08 per cent, surpassing the corresponding previous year handling of 89.59 according to a press release. The performance has been possible due to increase in anchorage operation for handling industrial coal and increased traffic due to the cargoes such as copper concentrate, fertilizer and fertilizer raw material, containerized cargo and other commodities.

12. Statement of the problem
The modern business world, all the countries like to improve their foreign exchange reserve through international business. The logistics players (ocean carriers) are playing vital role for moving the cargo from production point to consumption point. The ocean carriers are doing countless number of activities for moving the cargo from one country to another. This area nature is very difficult to understand the business and management student’s community. That’s is the reason why, this present study is going to examine about the cargo movement strategies followed by the ocean carriers in supply chain management with special reference to VOC port Tuticorin.

13. Scope of the study
This present study is only portrait towards logistics players (ocean carrier’s) cargo movement strategies followed by logistics players in marine trade. In future, any researcher may study related to problems and prospects, supply chain model, transit time of cargo, vessel routing, documentation formalities and terminal handling operation of ocean carriers etc.

14. Research methodology
This paper is constructed based on the primary and secondary data sources. The primary data is collected through questionnaire method with the respondents of 10 out of 40 ocean carriers or liners in Tuticorin. The secondary data are collected through magazine, journal, website, books and other dailies etc.

15. Sampling design
The researcher is adopting convenient sampling method for collecting the primary data. The study is restricted in Tuticorin only.

16. Data evaluation
The collected data were not simply accepted as it is contained and over or emphasised facts. Therefore only relevant data are included in the report, which is helping to achieving the objective of this present study.

17. Statistical tool used
Simple Percentage method, five point scaling techniques with rank.

18. Limitation of the study
As the study made with primary and secondary data, there are certain limitation in the present study to be noticed. The sample size is 10 out of 40 ocean carriers in Tuticorin. It is difficult to know if all the respondents gave accurate information; some respondents tend to give misleading information.

19. Data Analysis
Simple percentage analysis:

Table 1: Experience of ocean carriers

<table>
<thead>
<tr>
<th>S.No</th>
<th>No of Years</th>
<th>No of Respondent</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 to 5</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td>2</td>
<td>5 to 10</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>3</td>
<td>10 to 15</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>4</td>
<td>15 to 20</td>
<td>7</td>
<td>70%</td>
</tr>
</tbody>
</table>

Source: Primary Data

20. Simple Percentage findings
From the above simple percentage table it’s been evident that 70% of respondent have more than 20 years of experience in the shipping trade in Tuticorin port.

Table 2: Satisfaction level of logistics players (ocean carrier) in Tuticorin port

<table>
<thead>
<tr>
<th>S.No</th>
<th>Particulars</th>
<th>V. Good</th>
<th>Good</th>
<th>Satisfactory</th>
<th>Poor</th>
<th>Total Score</th>
<th>Mean Square</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Road Connectivity</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Terminal Operator Service</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>27</td>
<td>2.7</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Container Yard Station</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>28</td>
<td>2.8</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Cargo warehouse services</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>27</td>
<td>2.7</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Customs services</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>23</td>
<td>2.3</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>IT Services</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>22</td>
<td>2.2</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Admin Services by Port</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>17</td>
<td>1.7</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Attitude of Associations</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>23</td>
<td>2.3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Domestic traffic support</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>15</td>
<td>1.5</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>Environment aspects</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>16</td>
<td>1.6</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: primary data
21. Point Scaling techniques
The researchers are adopting the five point scaling techniques for evaluating the satisfaction level of ocean carrier through this method. The researcher are allocating score for each level like very good score is 4, good is 3, satisfactory is 2 and poor is 1 to find out the total score and mean square as well as rank.

From the above table shows that, the majority of the respondents feels that container yard station satisfaction level is very high (2.8).

22. Major Findings of the study
80% of shipping companies are running as a Private entity. 95% of company turnover is per month is Rs.15 lakhs and above as per our findings. Almost all the ocean carrier companies covering the entire sea route for their business. 80% of respondent feels that the present market position been a satisfactory for the trade in the present trend. The respondent had clearly given the data indicating that maximum they are handling textiles and fertilizers as an export from the V.O.C Tuticorin Port. 80% of respondent said that equipment or containers like 20’ft and the 40’ High cube are been moving rapidly. 90% of respondent confirms that from TUT port more number of cargoes move towards European Region. 80% of respondent confirms that adopting the Financing related strategy is been success formula for attracting the client. 90% of respondent feels that the nearest port like Colombo, cochin, Chennai port supporting activities is been in excellent.

23. Recommendations
Road Connectivity’s from dry port to port area to be improved. Terminal operators should give more timing for loading and un-loading the cargoes. More Number of Private warehouses had to set up. Domestic traffic support should modernise and alternate route should make for the port. New Mechanism equipment to be installed like (JNPT PORT). Dredging to be done for the Mother vessel to enter the port.

24. Conclusion
This present study is come to know, the cargo movement strategies of logistics players (liners) are playing a vital role for attracting the clients. The satisfaction level of ocean carriers related to Infra-structure facilities offered by the Tuticorin port is Satisfactory level only as well as the road connectivity from dry port to Tuticorin port is very poor. If the government of India and ministry of shipping taking the necessary action for improving the entire facilities of Marine trade related area the ocean carriers performing entire activities very well and there is no doubt the Indian foreign exchange reserve and export volume will boom enormously in future.

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