Third Party Logistical Obstacles in Manufacturing Industries
Vishal V. Bhoyar, Nitin P. Bhone, Satish B. Chawale, Nishant G. Jogi

Abstract—In today’s manufacturing industries, supply of different goods is the important part. Due to the importance of continuous supply, a new type of industry get generated which is known as third party logistics in which the firm’s logistics activities can be outsourced. It came into existence during the deregulation of freight transport industry in the 1980’s and has progressed in the 1990’s along with the development of IT. The concept of Third party logistics has been developed from the need to develop transportation services by transportation companies to its customers. However there are certain obstacles in implementation of TPL services for manufacturing industries. So now a day, many manufacturing industries turned to logistics outsourcing to rebuild their distribution networks and gain competitive advantages. Logistics outsourcing in which a third party logistics (TPL) provider is contracted for all or part of industries logistics operations has observed consistently increasing use. The work in this field has exploratory type & is mainly focused on, advantages, obstacles, risks and prevention. This paper elaborates the general observations on SCM and TPL relation and also role of TPL in manufacturing industries and risks and prevention measures in logistics outsourcing.

Keywords— Supply Chain Management, Third Party Logistics, Obstacles, Risk & Prevention.

I. INTRODUCTION

Manufacturing industries collect raw materials from suppliers and deliver finished goods to the customers. This function is executed by logistics. Logistics is a logical extension of transportation and its related areas to achieve an efficient and effective goods distribution system. It encompasses the activities of inventory management, order processing, warehouse and materials handling and physical distribution. Thus Logistics has been an important part of every economy and every business entity. The worldwide trend in globalization has led to many companies outsourcing their logistics function to Third-Party Logistics (TPL) companies, so as to focus on their core competencies.

According to the council of logistics management, logistics is the part of supply chain process that plans, implements and controls the effective flow and storage of goods, services and related information from the point of origin to the point of consumption in order to meet customer’s requirements. Outsourcing logistics activities including transportation and warehousing to outside firms, is termed as third party logistics which is emerging as a new type of industry where the firm’s logistics activity can be outsourced. It came into existence during the deregulation of freight transport industry in the 1980’s and has started growing from 1990s parallel with the development of IT.

What is Supply Chain Management?
The concept of supply chain has historical background. Historically it is shifted from physical distribution to logistics management and then to supply chain management. According to Christopher (1992) supply chain is network of organizations that are involved through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services in the hands of the ultimate consumer. Managing these linkages and delivering the product/service to the customer in a cost effective way is supply chain management (SCM). The SCM is the philosophy that extends traditional intra-enterprise activation by bringing trading partners together with the common goal of optimization and efficiency. In short SCM integrates supply and demand management within and across the industries. So supply chain management (SCM) is viewed as a system that links an enterprise with its customer and suppliers. Information flows from customer in the form of forecast and orders to both the enterprise and suppliers. This information is refined through planning into specific manufacturing and purchasing objectives. As materials and products are purchased, a value added inventory flow is initiated which ultimately results in ownership transfer of finished products to customers. The customer remains the primary focus of the process. However, improved linkages with supplies are necessary because controlling uncertainly in customer demand, manufacturing processes and supplier performance are critical for effective SCM. SCM is an integrated approach that is highly interactive and complex requires simultaneous consideration of many trade-offs. SCM is the management of all key business process across a number of the supply chains. Successful SCM requires a change from managing
individual function to integrating activities into key supply chain process. Operating an integrated supply chain requires continuous information flows, which in turn helps to create the best products flow.

II. MANAGING LOGISTICS IN SCM

Logistics has been defined as the art of managing the supply chain and the science of managing and controlling the movement of goods and other resources from the point of origin to the point of requirement or consumption. The origins of logistics can be traced back ancient Greece where logos is the Greek word meaning ratio, calculation, reason and Greek military with the name Logistics were responsible for ensuring supplies were distributed correctly. The Oxford English Dictionary defines LOGISTICS as “The branch of military science having to do with procuring, maintaining and transporting material, personnel and facilities”. SCM have all the knowledge of flow of goods, information and money from the raw materials supply stage, through production and consumption stage, and finally to the recycling stage and is composed of several management tools. Different approaches in accounting, production management, information processing, marketing, etc. have been developed to solve the problems in SCM. For example, accounting approach to SCM mainly focuses on cash flow in the supply chain, while information processing approach focuses on the flow of information.

According to the Council of Logistics Management i.e. CLM, logistics is that part of supply chain process that plans, implements and controls the effective flow and storage of goods, services and related information from the point of origin to the point of consumption in order to meet customers’ requirements. Logistics management includes inventory control, material handling, order control, transportation, warehousing, etc. although the concept of logistics mainly focuses on goods flow, other flow such as information and money flows are also given attention. In particular, information management has close relation and then cannot be ignored. The general idea of logistics is to strategically manage the total flow of goods. Thus, logistics optimization is not only accomplished from the viewpoint of one firm, and therefore, total optimization of the flow of goods including firms in the supply chain is required.

A firm, which possesses logistics know-how on coordination economic resources, any have opportunities to make advises. Such a logistics coordinator, also called Third Party Logistics (TPL), has been gaining attention and emerging as a new type of industry which is a result of the deregulation of freight transport industry during 1980’s, and has developed parallel along with the development of IT in the 1990’s.

III. FUNCTIONS OF TPL

TPL means outsourcing logistics activities including transportation and warehousing outside firms, which are not a consignor or a consignee. However, it is not common TPL practice to outsource a single activity of logistics independently, but to outsource multiple activates from the firm’s strategic point of view.

TPL has the following features at present:
1. Integrated (or multi-modal) logistics service provider
2. Contract-based service provider
3. Consulting service provider

First, a TPL provider is regarded as an integrated logistics service provider. IT-related activities for controlling goods flow such as order processing, and inventory management, among others are also included in the function of the TPL provider. However, the TPL provider need not provide all the services solely. The TPL provider can outsource some activities to sub-contractors. A TPL provider can be classified into the asset-based and the non-asset-based. The realization of the potential in the outsourced logistics market, TPL service providers are expanding their basket of services. Third party logistics incorporating value-addition in their services and customizing their supply chain management solutions.

IV. OBJECTIVES OF TPL

A. Value-added services
Companies have come to realize that good logistics can enhance the attractiveness of their products to the customers. As a result, they seek providers whose operation can add value rather than simply keep the costs down. This leads to what is known as ‘Total transportation service offering’. One of the common themes that have emerged in the recent past is ‘zero defect’ and ‘continuous improvement’. Some logistics service provider provides an extension to the product line, performing such activities as re-labelling, repacking or even final product configuration at their distribution centres.
B. Reducing overall costs

The logistics companies have a distribution network in place and so can operate at lower costs. Logistics providers can bring into the relationship ‘cross functional’ industry experience that their clients does not have. State-of-the-art logistics networks are characterized by linked database, paperless transaction, analytic modelling and real-time tracking and tracing capabilities, all of which lead to faster time to market, lower inventories. So, that company can concentrate on their core competencies. So outsourcing logistics is a better option, as it allows companies to stick to their core-competencies.

V. APPLICATION OF TPL IN VARIOUS INDUSTRIES

One of the industries that are increasingly looking for outsourcing logistics is Textile, especially as it is facing the challenges of demanding delivery requirements and multiple export markets. With large retailers such as Wal-Mart and Target seriously evaluating new suppliers in India, this industry is bound to outsource logistics going forward. Secondly the retail industry is expected to jump into the TPL bandwagon, with large retailers such as Shoppers Stop, RPG and Big Bazaar expanding to smaller cities. Realizing the potential in the outsourced logistics market, TPL service providers are expanding the basket of services relevant to retailing.

VI. OBSTACLES IN IMPLEMENTATION OF TPL

1) Lack of coordination during integration of the TPL-
Some companies fail to appreciate the number of players (e.g. the various departments) involved in the transition process and the amount of coordination and communication needed for both sides to be on the same page during implementation. As a result, there can be conflicting messages among departments and between the company and the TPL provider, which leads to glitches in integration and can result in the company getting less than full value from the TPL.

2) Lack of Management –
If a firm has an efficient, well-managed distribution system, outsourcing that system may not reduce operating costs. If an in-house logistics service had poor operational performance, a firm may be tempted to outsource it to a third party. If the firm selects outsourcing, the executives also have to know how to manage contracts and relationships with the third party logistics provider. If the logistics activity has been badly managed in the first place, it may not be possible for the logistics manager of the firm to be any better at managing an external provider.

3) Poor managerial relationship-
Many firms do not pay sufficient attention to managing the TPL relationship after the initial integration. Others do not regard TPLs as equal partners and so lose the benefits of strategic collaboration. Instead of frequent, clear and two-way communication on all aspects of the operation, the logistics service provider operates in an information vacuum and the entire operation becomes reactionary. Some relationships also suffer from established performance measurements that are either vague or virtually unachievable.

4) Dependence on the Third Party Logistics Provider-
A firm that out sources its logistics activities to a third party logistics provider runs the risk of becoming dependent on that provider. By contracting out logistics activities to same third party logistics provider over a long period of time, firm any find itself in an increasingly vulnerable position and may even lose control of part of its logistics activities.

5) Loss of Logistics Innovative Capacity-
If a firm has outsourced its logistics services, its logistics innovative ability may be impaired. In the long term policies, if a firm wants to maintain its comprehensive competitive competences, it will have new ways of providing logistics series for the business. External sourcing does not guarantee innovation. During outsourcing contract periods, the third party logistics provider may not recognize an opportunity to innovate as its focus may be primarily on costs.

6) Loss of Control over the TPL Provider-
All collaborative projects results in some loss of control. In outsourcing arrangements, partial control of a project inevitably passes from the sponsor to the collaborator. The extent to which the firm may effectively control an outsourced logistics business will greatly determined by the information received and the early detection of problems. Since the information available to the logistics manager would be less comprehensive than it would be if the logistics business was conducted in-house, a lack of effective communication could ensure as a result. This could lead to problems of quality and to delays, as well as to misunderstandings and even mistrust.
7) Evaluating and Monitoring TPL Provider Performance-
In order to evaluate properly the functions of a third party logistics provider, firms should have in place clear guidelines for appraising third party logistics provider outcomes. However most often than not, this is a factor that is frequently overlooked by firms when developing a partnership with third party logistics provider. Monitoring logistics outsourcing is often a difficult and complex task. In order to ensure that the business carried out by the third party logistics provider meets the required standards, Resources such as money, time and expertise are needed to establish an effective monitoring system.

8) Conflicts of Culture-
In logistics outsourcing arrangements, the goals of each party are often different; the factors that determine the commercial merit of the partnership are being considered from different perspectives. Management styles and degrees of bureaucracy within firms may also be different. Consideration of these factors is essential to ensure the viability of the collaborative venture and the future success of the partnership.

9) Preventive Measures-
To promote the services effectiveness for firms and operations efficiency for third party logistics service providers, and to minimize the uncertainties associated with logistics outsourcing, risks prevention measures should be implemented.

10) Performance Indices for Logistics Outsourcing-
The performance assessment indices in logistics outsourcing should include both cost and service measures. The performance assessment indices should evaluate systematically the performance of integrated third party logistics operation, reflect accurately the relationship between third party logistics providers and firms and realize effectively the integration of third party logistics providers and users.

11) Information Sharing Mechanism-
The most common risks in logistics outsourcing are probably are decision making risk under incomplete information and moral risks resulting from asymmetric information. In logistics outsourcing there is typically one participant with superior information and the other participant who possesses inferior information. In order to avoid potential problems, information sharing encouragement mechanisms must be developed. Information technologies can be used to establish these information sharing mechanism which can lead to win-win situations for both participating parties.

12) Proper Material Flow -
Problems related to material flow are always faced by TPL companies. These problems can be related to inventory policy, scheduling of fleet, routing of vehicles, consolidation and warehousing. Many of such material flow challenges can be tackled better using coordination techniques.

VII. CONCLUSION
Third party logistics provider’s plays vital role in cost reduction, productivity, profits as well as the improvement of the service quality of their customers and thus become important part of supply chain management. Successful logistics outsourcing can provide significant benefits, both, to industries and third party logistics providers. The outsourcing of logistics activities, manufacturing industries can save on capital investments, and. reduce financial risks. The objectives and concerns related to TPL logistics outsourcing are cost reduction, increase of delivery time, concentration on core competencies, increasing flexibility and concerns are loss of control, dependence on service provider, losing direct customer contact. The main challenges for TPL services providers are to maintain relationship with customers at the same time to earn profits under price pressures from customers also delivering the services in different geographical regions. TPL have an opportunity of growth in technology, management solutions, IT sectors and the Physical Services such as Freight carriage. As far as Indian manufacturing industries are concern there is wide scope for TPL service providers to earn the maximum profit along with satisfying customers need.

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