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Reverse Service Quality Gap of 3PL (Third Party Logistics) Market in Sri Lanka

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Abstract

Third Party Logistics (3PL) plays a vital role in supply chain management. In supply chain each and every party is important and there should be an effective collaboration with each other to become successful. According to the famous SERVQUAL model, five service quality gaps have been identified but all are forward gaps. Therefore, in this research it is argued that not only forward gap but also reverse gaps are important for successful supply chain and the study was conducted using 3PL companies and their respective customers in Sri Lanka. Data collected using qualitative method and data analyzed using thematic approach. It is revealed that there are many reasons for forward quality gaps in 3PL market in Sri Lanka, as well as reverse quality gaps also plays a major role in effective operation of 3PL companies.

Key Words: 3PL, Supply Chain, SERVQUAL Model, Quality Gap

Introduction

Outsourcing of logistics functions are widely popular and growing importance all over the world (Razzaque and Sheng, 1998). Logistics is defined as: “a part of supply chain management that

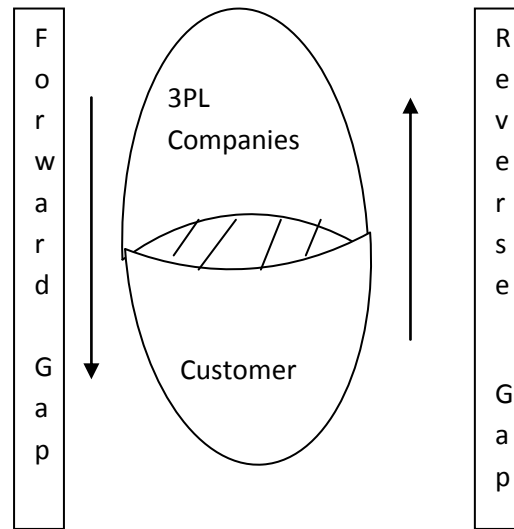
plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customer's requirements.”(CSCMP, 2015). Third party logistics (3PL) can be defined as agents that companies contract to perform their logistics operations. It consists in the use of specialized external companies, to perform all or part of the logistics activity (Razzaque and Sheng, 1998; Sahay and Mohan, 2006). Many companies have gained competitive advantage by reducing in-house operations by using 3PL service providers instead (Rahman, 2011). “The relationships associated with 3PL are typically more complex than any traditional logistics supplier relationships and they are truly strategic alliances. These relationships have become a popular way to enhance an organization's flexibility in meeting rapidly changing market conditions, focus on core competencies, and develop long-term growth strategies” (Thakkar et al, 2005). In today's global marketplace, integrating with supply chain members is important since individual firm can no longer compete as independent entities (Drucker, 1998; Lambert and Cooper, 2000)

Sri Lanka is emerging as a key sourcing base in South Asia for international buyers, leading to increased demand for 3PL services, including warehousing and transportation, as well as integrated supply chain solutions (HKTDC, 2015). But, the country's logistics and transport industry still lag behind a number of the region's other leading hubs, including Hong Kong, Singapore and Dubai. Sri Lanka was ranked 89th out of 160 countries according to the World Bank's 2014 Logistics Performance Indicator (LPI). Notably, Sri Lanka scored 2.91 on competence and quality of logistics services, compared to India's 3.03, UAE's 3.5, Hong Kong's 3.81 and Singapore's 3.97 according to the statistics (HKTDC, 2015). Further, while today world logistics industry is practicing 4PL, 5PL, and collaboration up to 7PL, within a short span of time, Sri Lanka is still grappling with 3PL, JIT (Just in Time), and VMI (Vendor Managed Inventory) (Malkanthie & Jayamanna, 2016). Therefore, the developments in 3PL industry are crucial to the country for its future growth.

In Sri Lanka, Customers of the 3PL companies are also quite happy about 3PL service providers. But the level of satisfaction, and trust towards the service providers are not considerably high (Malkanthie & Jayamanna, 2016). Further, Cost, lack of Control, Lack of coordination and lack of cooperation, Lack of skills and knowledge, Lack of industrial knowledge, Trade union activities are identified as problematic areas in 3PL market in Sri Lanka according to the customers' point of view (Malkanthie & Jayamanna, 2016). Hence, it is clear that there is a service gap between customer expectations and what they actually experiencing in 3PL market in Sri Lanka.

The concept and definition of service quality has been greatly influenced by the works of Parasuraman et al. (1985, 1988, and 1991). They conceptualize service quality as the relative perceptual distance between customers' expectations and evaluations of service experiences. It was operationalized using gap model and a multi-item scale called SERVQUAL (Parasuraman et al., 1988, 1991). It seems that the studies in the context of quality of service in supply chain have focused on one directional view (customer perception and expectations) since SERVQUAL instrument was specifically designed to capture gap 5 (gap between customer expectation and perception). But, a bi-directional study (i.e. issues of customers that prevent giving a better service) may help to fulfill the basic objective of supply chain. Hence, the intention of this bi-

directional study is to identify the leading factors affecting the service quality gap in 3PL market, Sri Lanka.



Therefore, the objectives of the research are to identify the

- Interface gap (forward) between third Party logistics service provider and logistics user
- Interface gap (reverse) between logistics user and Third Party logistics service

Literature Review

3PL industry

According to the Council of Supply Chain Management professionals, 3PL is defined as "a firm provides multiple logistics services for use by customers. Preferably, these services are integrated, or bundled together, by the provider. (Manzini et al, 2007). The main reasons for outsourcing are: reduction in capital investment in equipment, facilities and human resource, on-time delivery requirement. Third-party logistics (3PL) are widely popular in all over the world, particularly in Europe, and North America (Sahay and Mohan, 2006). According to Rahman (2011), many organizations today, users 3PL service providers instead of in house operations. Though the level of satisfaction with 3PL service providers is high in many countries, in Sri Lanka it is moderate (Malanthie & Jayamanna 2016) and is reflected in a commitment to continue their use in the future. Thus, it predicts that the use of 3PL services will continue to grow over the next several years.

According to Lieb (2008), ten years of research 3PL in the United States reveals a resilient industry that has changed with user demands and an increasingly global economy. 3PL relationships today have become more collaborative. It is good news for big users of logistics. "The relationships associated with 3PL are typically more complex than any traditional logistics supplier relationships and they are truly strategic alliances. These relationships have become a popular way to enhance an organization's flexibility in meeting rapidly changing market

conditions, focus on core competencies, and develop long-term growth strategies” (Thakkar et al, 2005).

Hindering issues of 3PL market

The design and implementation of 3PL relations appears to be problematic. Often-cited difficulties include lack of understanding of client’s supply chain needs, lack of adequate expertise in specific products and markets, unrealistic customer expectations, inadequate description of services and service levels, lack of logistics cost awareness by the client and lack of 3PL innovation (Ackerman, 1996; Ellram and Cooper, 1990; Wilding and Juriado, 2004).

The most often-cited problems associated with 3PL partnerships are loss of control over the logistics function and loss of in-house capability and customer contact (Ellram and Cooper, 1990). Lack of responsiveness to customer needs is also cited as a problem of outsourcing (van, and Ploos, 1996). Further, many authors cite problems with respect to service performance, disruption to inbound flows, inadequate provider expertise, inadequate employee quality, sustained time and effort spent on logistics, loss of customer feedback and inability of 3PL providers to deal with special product needs and emergency circumstances (Ellram and Cooper, 1990). Despite gaining access to logistics information systems (Rao et al., 1994), shippers appear to be dissatisfied with service provider’s IT capabilities and prefer to rely on in-house systems instead (Van L., et al., 2000). In contrast, there have been many studies so far investigating success factors for 3PL partnerships (Lambert et al., 1999; Van L., et al., 2000). In Sri Lanka, lack of control, lack of cooperation, high labour turnover and high training cost, lack of skills and knowledge, lack of industrial knowledge, labour unions (Trade union activities) and political influences are the main issues in 3PL industry (Malkanthis & Jayamanna, 2016).

The model of service quality

The popular gap model of service quality was developed by a group of American authors, A. Parasuraman, Valarie A. Zeithaml and Len Berry, in a systematic research program carried out between 1983 and 1988. Principal dimensions (or components) of service quality was developed by them through this model and proposed a scale for measuring service quality (SERVQUAL) as well as suggested possible causes of service quality problems. At the beginning the researchers of gap model identified ten dimensions of service quality, but after by testing and retesting, total number of dimensions was reduced to five, namely - reliability, assurance, tangibles, empathy and responsiveness. These five dimensions are thought to represent the dimensions of service quality across a range of industries and settings

SERVQUAL instrument (i.e. questionnaire) is used by many researches to measure potential service quality problems and the model of service quality to help diagnose possible causes of the problem. *Expectancy-confirmation paradigm* is the base of gap model which examines the consumers perceive quality in terms of their perceptions. In other words, of how well a given service delivery meets their expectations of that delivery is measured through the SERVQUAL instrument. .

According to the gap model, when customer expectations are greater than their perceptions of received service, service quality is deemed low. When perceptions exceed expectations then service quality is high. The model of service quality identifies five gaps that may cause customers to experience poor service quality. But, gap 5 is the service quality gap that can be directly measured. In other words, the SERVQUAL instrument was specifically designed to capture gap five.

Methodology

Qualitative thematic approach was used to analyze the data. Thematic analysis was used because it does not wedded to any pre-existing theoretical framework, and therefore it can be used within different theoretical frameworks (Braun & Clarke,2008). In depth interviews were conducted with the employees of 3PL companies and their respective customers. Twelve 3PL companies (Finlays , Advantis, EFL, DHL John keels, OVIKLO, Toll global forwarding lanka pvt. Ltd. Egle logistics, Del logistics company, Aitken Spence, DPL, Expo Lanka Holdings) and six of their customers (Cargills, Unilever, MAS, Nestle, Fonterra, Gsk) in Sri Lanka were interviewed

Analysis and Results

First, in order to identify the interface gap (forward) between logistics service providers and their respective logistics user, in- depth interviews were conducted with customers to identify the issues pertaining to them in dealing with 3PL service providers that hinder the smooth operations at the initial stage from the interviews forty codes were identified according to the guide lines of thematic analysis by Braun & Clarke (2008) and thirteen themes were identified from the codes. Identified themes are given below with some of the statements of the respondents as examples.

1. Inefficient Labor- This was identified as the main issue that hinders the service quality of 3PL companies in Sri Lanka.

One of the respondents said “we deal with cold chain. To manage a cold chain, we need knowledge on two different areas; knowledge on logistics and knowledge on food and hygiene factors. In FCS, there is no professional who can deal with both hygiene factors and logistics. When we consider the employees who engage in loading, don’t have much knowledge on ergonomic, safety and methodologies that they can practice at work place”.

Another respondent said “they are not providing a defined set of employees to us. In that case we find it difficult to put the reliability on Advantis’ employee about a specific task. Sometimes newly coming employees are not having proper knowledge on logistics activities which matters for their time efficiency”.

Moreover, a respondent from Nestle said “Labor shortage and high labor turnover of logistics employees has become a issue for Nestle”. In addition to the above views many issues received on temporary workers, high labor turn over,, lack of labor skills, labor shortage in 3PL companies, Sri Lanka

2. Lack of facilities is the next problem with 3PL companies in Sri Lanka. One of the respondent said “Current market demand is fluctuating with the time. But, sometimes 3PL providers fail to provide required warehouse space according to our requirements.” Another respondent expressed his view as “dairy products need to be stored under special conditions. They are highly sensitive for germs. When there is a germ attack whole production plant has to be close down temporarily. This occurs once or twice a month. In order to maintain undisrupted service company needs to have buffer stock. But 3PL provider does not have that capacity”. As well as inadequate storage capacity, lack of warehouse facilities in outstations, lack of flexibility to change space requirement with the seasons, inadequate trucks and powered pallets, lack of freezers, incapability to meet the company’s specific logistic requirements were revealed as problems associate with facilities in 3PL companies in Sri Lanka
3. Risk of leaking sensitive information was identified by some of the service receivers and one respondent said “our company is not only the customer of Advantis. Advantis also offers their services to P & G. P& G is one of the major competitors of us. Because of that there is a possibility to lose our sensible data through 3PL service provider”. Another respondent said “with the tough competition going in the FMCG industry, the information regarding the quantity stored, date of dispatching, etc might be worth millions for the competitors. However, through the outsourcing of logistics functions, there exists a high risk of leakage of information to the competitors”.
4. Interdepartmental integration and coordination problems are one of the main issues that reduce the quality of the service providers. This was explained by one of the respondent as “EFL has separate customer service department. But, the operations department always involves with customers. There is no proper flow of information between two departments.” Another view in this regard is; “most of the time shipments do not meet the deadlines because inefficient communication between office staff and warehouse staff. Therefore delay handling charges are getting high”.
5. Cultural mismatch
According to the responses, cultural mismatch negatively affect for a better service quality. One of the respondent said “Due to the differences of company cultures, languages and style of the service receiver, the communication between two entities will take into chaos”. Another respondent expressed his view on cultural mismatch as “multinational and multi cultural corporate relationship of logistics provider and receiver negatively affects to have smooth functions between two companies. The mismatch between standards, safety measures has created an issue.
6. Technological mismatch
Under technological mismatch, incompatibility of information systems between company and 3PL company and having no integrated ERP system with supplier are fund out as the main issues that hinder the service quality of 3PL supplier.

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7. poor technology usage

Some of the evidence to show poor technology usage of 3PL companies in Sri Lanka is given below according to the views of respondents.

“Nowadays, warehouse industry has taken major steps in RFID technology. But at FCS, RFID technology has used in few places such as in RFID dock control system and for pharmaceutical operation. But, FCS doesn’t use this technology for tracking inventory whereas in some other warehouses we can see that they using this technology for such operations”. Another respondent said “Some warehouses still use paper based system for labeling. This may cause logistics activities to carry inefficiency as it is difficult to choose items and it can’t be done automated way”. Another view on this is “there is no barcode system at some warehouses and it may cause to inefficient activities”. High manual documentation, high documentation, more manual work in logistic companies, no proper documentation, were some of the views received from respondents.

8. Contract problems were highlighted as a minor issue with compared to other issues discussed and conflicts, changing and breaching agreements, inflexible contracts were discussed under this matter.

9. Lack of coordination between customer and supplier was highlighted as one of the main issues and some of the views were; “sometimes, Advantis fails to provide documentation on time with the delivery. Therefore, we are unable to pay their charges on time. “Nestle does not experience on time delivery due to the problems with logistics partner. Due to this, Nestle lose its’ revenue. “Absence of flexible working hours has made the company difficult to deal with its logistics partner”. “As a leading food and beverage company, the demand for Nestle food items is always at a high level regardless of the season, climate and time period. Therefore Nestle requires warehousing facility to work for 365 days a year. Sometimes it is not being provided by our logistics partner”. In addition to these views, difficult to coordinate, poor communication, late submission of bills, not sharing information on time, issues of stock outs when required were found out were discussed by many respondents as issues of 3PL companies.

10. High cost was found out as one of the problems with cold storage facility providers in Sri Lanka. “Cold stores are having only with Finlay. Being the sole company to provide such service there seems to be a monopoly in cold storage industry. Therefore they charge high rates for the service”. This view was shared by many companies in that industry.

Lack of control, no value addition by using 3PL, poor communication, no proper understanding between 3PL service provider and the company, failure of 3PL to meet company’s future growth needs were the other issues highlighted by the respondents.

The reasons behind the interface gap (forward) between logistics service provider and logistics user can be identified according to the above thirteen themes revealed from the in-depth interviews with the customers. They can be summarized as inefficient labor, lack of facilities, risk of leaking sensitive information, Interdepartmental integration and coordination problems, Cultural mismatch, Technological mismatch, poor technology usage, contract problems, Lack of coordination between customer and supplier, High cost, Lack of control, No value addition by using 3pl, failure of 3pl to meet company's future growth needs. According to Malkanthie & Jayamanna (2016), inadequate capabilities, lack of control and lack of coordination also were identified as issues that diminish the satisfaction of customers with 3PL service providers in Sri Lanka.

Next in order to identify the Interface gap (reverse) between logistics user and 3PL logistics services, in-depth interviews were conducted with twelve logistics companies. From the interviews their perception on their shortcomings and customer problems that affect to the smooth operations of 3PL companies were identified. From the interviews, eight codes were identified according to the guidelines of thematic analysis by Braun & Clarke (2008). Then, five main themes were identified by examining the eight codes identified in the analysis. Though there are few issues identified in the relationship with the customers by 3PL service providers, they are the main issues from customers' side from the view of 3PL service providers in addition to their own problems. The themes identified are listed below as the main issues for reverse service quality gap between customer and 3PL service providers.

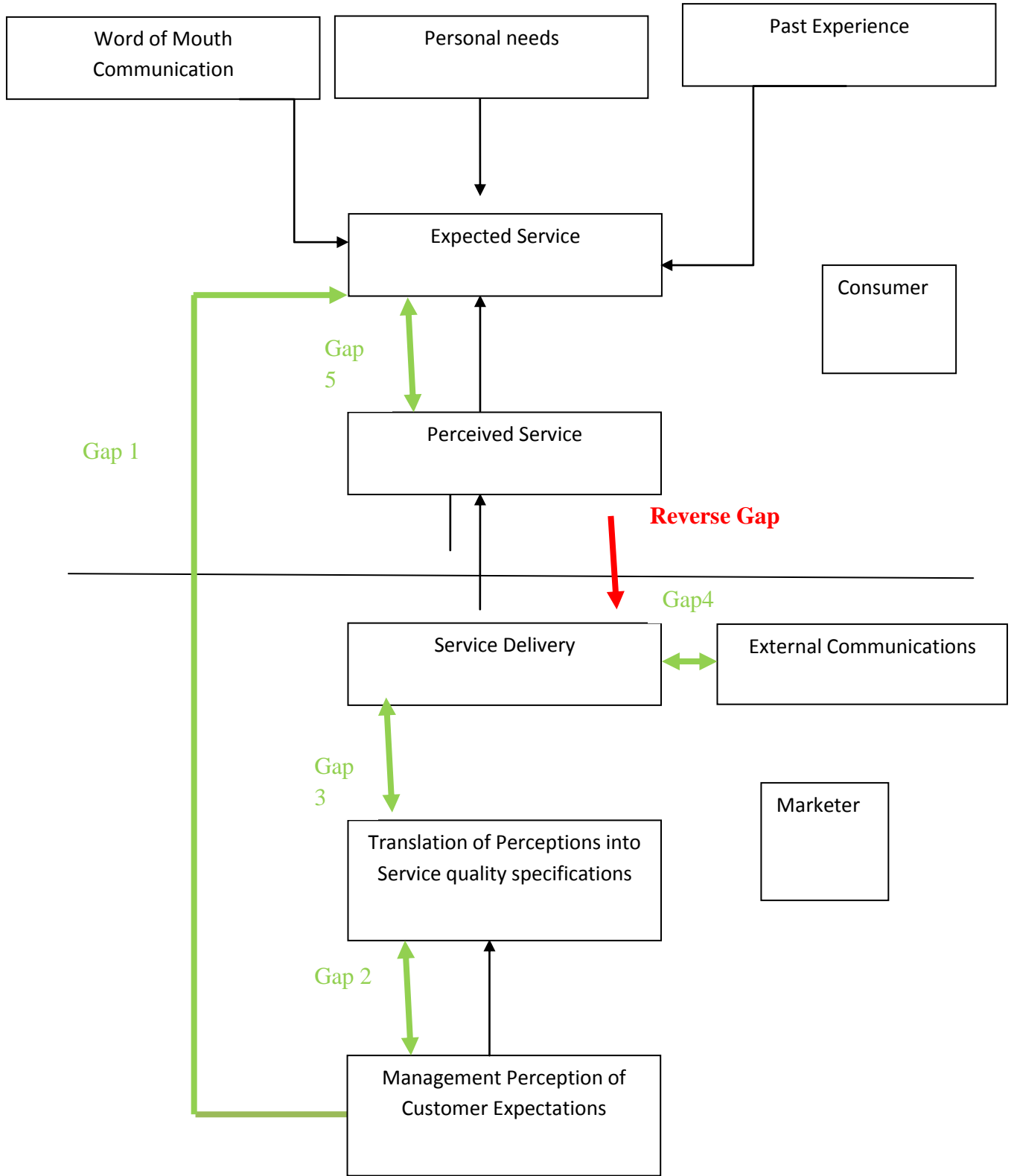
1. Poor communication by customer with 3PL provider was mentioned as one of the main issues by 3PL companies
2. Inaccurate information
Some of the views given on this issue is "customers change the due dates of exporting/importing their products and rush to do them quickly". "Sometimes, customers do not provide accurate booking details and Air Freight department face big problem regarding it".
3. Rush from customers
"Highly demanding customers for quick picking, dispatching and distributing activities, are unreasonable and it makes the whole operations in Finlay's disrupted" is one of the views in this regard.

In addition to the above issues, inaccurate orders, cultural mismatch, poor coordination from customers side were identified as reasons that hinder the service quality of 3PL providers.

Further, 3PL companies also identified they themselves have many problems such as inefficient labor, inadequate facilities, poor interdepartmental coordination and communication etc in order to have good relationship with their customers.

From the above analysis of data, gap five of the SERVQUAL model can be modified in 3PL market in Sri Lanka and the proposed model is as follows:

Figure 1- proposed developments to the SERVQUAL model



Discussion

In this study service quality gap in 3PL industry was studied from two perspectives; forward gap and reverse gap in the relationship between 3PL service providers and their customers. This reverse gap concept also proposed by Seth et.al. (2006). The reasons behind the forward gap i.e. the gap of customer expectations from 3PL service providers and their perception were identified as inefficient labor, lack of facilities, risk of leaking sensitive information, Inter-departmental integration and coordination problems, Cultural mismatch, Technological mismatch, poor technology usage, contract problems, Lack of coordination between customer and supplier, High cost, Lack of control, No value addition by using 3pl, failure of 3pl to meet company's future growth needs from the in-depth interviews conducted with customers as well as suppliers. The most highlighted issues were identified as labor problems, lack of facilities and poor technology usage. One of the companies explained the problem of labor as "Most of the employees are manpower (i.e. companies who supply employees) employees. Therefore, they always tend to change their jobs time to time to find a job with better remunerations and less work. Manpower suppliers have people, with different attitudes and different education levels. Therefore, manpower employee recruitment cannot do in a standard way. Most of the time, these employees are school leavers who do not have any experiences in doing a job. So it is really hard to train them and keep them. Logistics is an industry which has to do with experience. Due to the high labor turnover, it is difficult to keep employees with up to date knowledge about the industry".

In the next stage, the reverse gap was studied from 3PL companies' perspective. In order to have a successful supply chain not only efficient forward flow of materials/goods is vital but also backward or the reverse support also significant. If the customer does not support properly the supplies is in chaos. The reasons identified for the reverse gap are: Poor communication, inaccurate information, inaccurate orders, Cultural mismatch, and Poor coordination. One of the 3PL service provider explained about its customers as " in the industry of logistics provision, there exist highly demanding customers for quick picking, dispatching and distributing activities, which is sometimes unreasonable. But in order to carry on business with them, we have to do those in one way or the other. But the issue is, when such action are taken, the whole operations get disrupted." Another 3PL company said "customers change the due dates of exporting or importing their products and rush to do them quickly. In this study, it was identified that number of problems identified by the customers of their suppliers. But no customer identified their own problems not to have a smooth supply chain. The customer organizations should look at themselves as well to get efficient flow of raw materials or goods. This research helps to identify the weaknesses of both 3PL companies and their customers in order to develop strong relationship and smooth function of supply chain.

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