

## **Existing Obstacles of the Third Party Logistics (3PL) Market in Sri Lanka**

**Dr. M.A. Asoka Malkanthie**

**Senior Lecturer**

**Department of Marketing Management**

**Faculty of Management Studies and Commerce**

**University of Sri Jayewardenepura**

**Nugegoda,**

**Sri Lanka**

**[maamalkanthie@sjp.ac.lk](mailto:maamalkanthie@sjp.ac.lk)**

**J.M.D.J.N. Jayamanna**

**Commander**

**General Sir John Kotelawala Defence University**

**Ratmalana**

**Sri Lanka**

**jjanaka76@yahoo.com**

### **ABSTRACT**

*With the globalization of businesses and consequent competitive pressures, all companies try to deliver customized products all over the world quickly and on time. This has placed a number of demands on the logistics systems. While today the world logistic industry is practicing up to 7PL, within a short span of time, Sri Lanka is still grappling with 3PL activities. Therefore, the intention of this research is to identify the challenges, barriers / factors hindering the growth of the 3PL market in Sri Lanka to facilitate the growth of the industry to meet world competition. According to the findings, customers are quite happy with their 3PL providers, but they are not very satisfied as well as any high trust to the 3PL providers. Costs, lack of control, lack of coordination, lack of cooperation are the main issues that respectively affect the growth of the 3PL market in Sri Lanka. Inadequate capabilities are also one of the problems. Lack of control and lack of coordination are significant factors that diminish the satisfaction of customers and lack of control is the only significant factor that diminishes the trust of customers.*

*Minimizing lead time between delivery, adoption of new technology, handling the order channels multiplied by the number of delivery options and handling overstocks due to online sales, and adoption of new technology are considered the future challenges in 3PL market in Sri Lanka.*

**Key Words:** *logistics, 3PL, satisfaction, trust, hindering issues*

## 1. INTRODUCTION

Over the last decades, logistics has developed significantly (Aldebert and Hudziak, 2012). Logistics is defined as: “a part of supply chain management that plans, implements, and controls the efficient, effective forward and reverse flows and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customer requirements” (CSCMP, 2015). “Logistics management activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/demand planning, and management of third party logistics service providers” (CSCMP, 2015). It is widely accepted that the outsourcing of logistics services aims at enabling the creation of strategic and operational value such as inventory and logistics cost reduction, order fill rate

and accuracy increase, and order cycle time reduction (Langley and Capgemini, 2010). For these reasons a majority of shippers, 64%, are increasingly using Third Party Logistics (3PLs) (Aldebert and Hudziak, 2012). According to the Council of Supply Chain Management professionals, Third Party Logistics (3PL) means "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). “Lying on a key East-West trade route and set close to India, Sri Lanka possesses the essential location advantage needed for it to develop into a key logistics hub in South Asia. Despite being a small economy, with total trade amounting to about US\$31 billion in 2014 (only 4% of India’s US\$778 billion), the island state is an important transshipment hub in the region. It is a site where many shipping companies consolidate and deconsolidate cargo for transshipping to other

destinations” (HKTDC, 2015). “World Shipping Council statistics show that the Port of Colombo, Sri Lanka’s major container port on the west coast, was the busiest port in South Asia in 2013, handling 4.31 million TEUs. This puts it ahead of India’s largest container port, Jawaharlal Nehru (4.12 million TEUs in 2013). In the first 11 months of 2014, the Port of Colombo reported a steady growth of 4% in container traffic, according to the Sri Lanka Ports Authority (SLPA). Notably, the transshipment volume grew far faster than domestic cargo business during the period, accounting for more than 75% of total container throughput” (HKTDC, 2015). But, 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). Therefore, it is an essential requirement to identify the challenges, barriers / factors hindering the growth of the 3PL market in Sri Lanka to facilitate the growth of the industry to meet world competition. The objectives of the current research are as follows:

- a. To measure the satisfaction, and trust levels of 3PL customers and suppliers in Sri Lanka.
- b. To identify existing obstacles of the 3PL market in Sri Lanka.
- c. To understand the most significant obstacles and their impact that diminishes the satisfaction and trust of customers of the 3PL market in Sri Lanka.
- d. To identify the future challenges to be faced by the 3PL market in Sri Lanka.

## **2. LITERATURE REVIEW**

### **2.1. Supply chain management**

The term ‘supply chain management’ (SCM) is over three decades old, and was initially viewed as a method to “better manage resources and assets of organizations. (Ellram & Cooper 2014). There is no commonly agreed – upon definition for SCM (Chicksand et al.2012). Coyle et al. (2013) defined SCM as “the art and science of integrating the flows of products, information, and money through the entire supply pipeline from the supplier’s supplier to the customer’s customer. Cristopher (2011) describes the present SCM process as “the management of upstream and downstream relationships with suppliers and customers in order to deliver superior customer value at less cost to the supply chain as a

whole. Shaffer et al. (2011) described the important corporate role that SCs eventually play in organizations by reshaping the business. Yew et al. (2010), demonstrate that SC partners plan and jointly execute logistic activities through better understanding and commitment among its partners, which they gain through effective relationships. 3PL companies play a major role in the supply chain.

## **2.2. Third- Party Logistics (3PL) in Sri Lanka**

According to the World Bank, Sri Lanka was ranked 89th out of 160 countries in 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. This indicates a need for Sri Lanka to improve the quality of its logistics services, as well as a requirement for greater investment in "hardware" - ports, roads and railways" (Report of Hong Kong Research Trade Development Centre (HKTDC), 2015).

## **2.3. Customer Satisfaction**

Customer satisfaction is defined as the customer's overall or global judgment regarding the extent to which product or service performance matches expectations (Stank et al. 1999; Anderson and

Sullivan, 1993). Customer satisfaction should be developed and maintained because customer satisfaction helps to reduce perceived risk, reduce transactions costs, increase customer loyalty and customer retention and thus impact on organizational performance (Bejou et al. 1996). When supply chain partners are satisfied with each other, they exchange ideas freely between them (Nyaga et al. 2010) and assist them to maintain and continue their relationship (Janvier-James, 2012). Collaboration leads to satisfaction and motivates SC partners to engage in future collaborative activities (Ramanathan & Gunasekaran, 2014) as well as collaboration assists firms in forming integrated SCs (Cannella & Ciancimino, 2010)

A global logistics study conducted by CGEY (2003), found that customers are satisfied with their 3PL providers and responded positively when questioned as to their intended use of 3PLs over the next 3 to 5 years (Langley, 2003). Chinese customers also showed a high level of satisfaction on their logistics outsourced services (Huang, 2003). A survey conducted in the Singaporean logistics industry found that over three-quarters (76.3%), of the users indicated that their firm's commitment to the contract

services concept was moderate or extensive, while the remaining users indicated that their firms' commitment was limited or very limited. (Bhatnagar et.al.1999).

According to Gattorna, Ogulin, and Selen (2004), customer satisfaction with LSPs is statistically significantly influenced by, having a signed contract with the LSP (negatively impacted on customer satisfaction), concerns of customer quality provided by the LSP, and uncertainty about cultural fit of the organization with the LSP. Further according to their findings the most important explanatory variables were obstacles rated as important in implementing LSP services, such as coordination and integration between the company and the LSP, and LSP having insufficient understanding about the company's operations. Both factors were rated negatively in terms of customer satisfaction.

#### **2.4. Trust**

“Trust is a set of specific beliefs dealing mainly with integrity (Trustee honesty and promise keeping), benevolence (trustee caring and motivation to act in the truster's interest), competence (trustee's ability to do what the truster needs) and predictability (trustee's behavioral consistency) of a particular vendor”

(Gefen et al. (1999, 2003)). According to Chenet et al. (2000), trust can be developed by having a good internal service quality within organizations and it plays a key role in service provision and is considered important in building relationships. Trust is considered to be important of significant importance, not only for building but also maintaining relationships (Lagace 1991, Morgan and Hunt 1994, Oakes 1990). Termination of relationships is a loss for both parties. Hence, organizations purposely give attention and invest resources in building trust (Ghijsen, Semeijn, and Wang, (2009).

#### **2.5. Hindering Issues**

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 coordination), lack of adequate expertise in specific products and markets, unrealistic customer expectations (lack of cooperation), inadequate description of services and service levels (lack of coordination), lack of logistics cost awareness by the client (cost) and lack of 3PL innovation (Ackerman, 1996; Ellram and Cooper, 1990; Wilding and Juriado, 2004).

The most frequently 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 Van, 1996). Further, many authors cite problems with respect to service performance, disruption of 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; Gibson and Cook, 2001, Sink and Langley, 1997; Svensson, 2001; Van L., et al., 2000). Despite gaining access to logistics information systems (Rao et al., 1993), 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).

## **2.6. Future Challenges**

Gupta, Singh and Suri, (2015) identified the challenges faced by 3PL market in India as, non industry status, infrastructural bottlenecks, behavioral complexities, poor quality of logistics operations, inefficient inspection Strategies, increasing globalization, low rate of technology adoption, and

skill shortages. Zhang (2006) identified poor infrastructure, regulation issues and finding qualified staff as challenges in the 3PL market in China. Further, Langley et. al. (2015), in the 19th annual third-party logistics study, identified handling the number of order channels multiplied by the number of delivery options due to online sales, handling overstocks due to returned goods in online sales, minimizing lead time between deliveries, and adoption of new technology as future challenges in the 3PL market.

## **2.7. Theory**

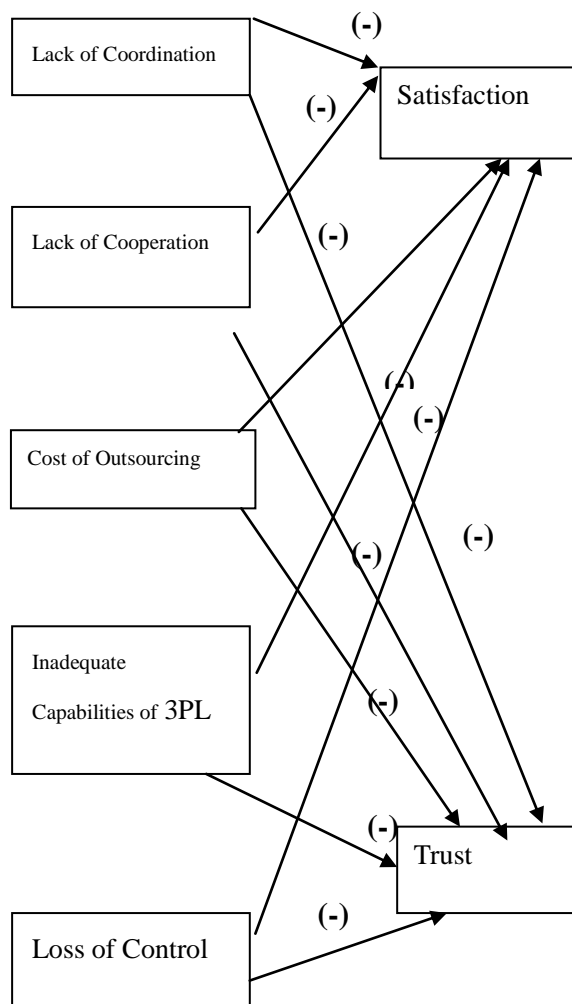
The self discrepancy theory was introduced by psychologist Higgins (1987) with the purpose of explaining the relationship between aspects of the self and affect. In this theory, Higgins posits that individuals possess different types of self-guides, or standards, against which they compare their current self. These comparisons yield information that individuals are either near their self-guides or are distant from them. In the case of proximity to self-guides, individuals experience positive affect. In the case of discrepancy from self-guides individuals experience negative affect.

This discrepancy theory is applied in this research to

find the gap between expectations and perceptions of the actual service the customers receive from their 3PL service providers.

**2.8. Framework**

Figure 2.1 - Conceptual framework of the study.



The conceptual frame work was derived from the literature review and all the independent variables negatively affect the dependent variables, satisfaction and trust.

**2.9. Hypotheses**

Based on the literature review the following hypotheses were developed.

H1: (a) Lack of coordination, (b) Lack of cooperation, (c) Cost of outsourcing, (d) Inadequate capabilities, and (e) Loss of control negatively affect customer satisfaction in the 3PL market in Sri Lanka

H2: (a) Lack of coordination, (b) Lack of cooperation, (c) Cost of outsourcing, (d) Inadequate capabilities, and (e) Loss of control negatively affect customer satisfaction in the 3PL market in Sri Lanka

**3. METHODOLOGY**

The population of the study consists of organizations at use 3PL services in Sri Lanka. The sampling unit was taken as the respective managers of 3PL customer organizations. In order to select the respondents among customers, the snowball sampling technique was used in this research study. In snowball sampling, 3PL companies were asked to identify their customers belonging to the target population of interest. Fifty customers were taken as the sample since, similar studies have used a somewhat similar sample size. For example, Ghijsen, Semeijn, and Wang, (2009) used 76 valid

questionnaires for their study. For the purpose of measuring satisfaction level, trust level, and identifying hindering factors affecting the growth of 3PL market in Sri Lanka (in collecting quantitative primary data.), a standard questionnaire was used as the instrument. Before collecting data from the sample, a pre test was conducted using 10 respondents. This pre test was developed to discover any possible weaknesses in the questionnaire. Consequently, in the final questionnaire, the researcher tried to eliminate the drawbacks identified in the pretest. The researcher conducted face to face interviews for the purpose of collecting qualitative primary data. Qualitative data was noted down and later the common wordings were listed by the researcher to interpret the explanations given by the respondents. Measurement scale used by Ghijsen, Semeijn and Wang (2009) were used to measure the satisfaction and trust in this research. Lack of coordination was measured according to Gattorna, Ogulin and Selen (2004). Lack of cooperation was measured according to Lau and Zhang (2006). Cost of outsourcing was measured according to Jennings (2002), and inadequate capabilities of 3PL companies were measured according to Lau & Zhang (2006).

Loss of control was measured according to Blumberg (1998), Lonsdale and Cox (2000), Embleton and Wright (1998) and Beaumont and Sohal (2004). All the above dimensions of the study were measured on a 5-point Likert scale (1=strongly agree, 5=strongly disagree). An open ended question was also included to identify the specific factors hindering the growth of 3PL market in Sri Lanka and in order to look into the factors in detail, in-depth interviews were conducted. The challenges identified in the literature review were given to respondents and they were asked to identify the challenges relevant to the Sri Lankan context and an open ended question was included in the questionnaire to identify any other challenges faced by the 3PL market in Sri Lanka. In addition, in order to explore the factors in detail, in-depth interviews were conducted. Further validity and reliability tests were conducted and the items with factor loading values lower than 0.7 were removed.

#### **4. RESULTS**

In order to identify the levels of satisfaction, trust and hindering issues, the mean values of the constructs were calculated. Then a stepwise liner regression test was conducted to find out the impact of hindering factors affecting the growth of the 3PL market in Sri



Lanka on satisfaction and trust.

According to Table 4.1, customers are quite happy with their 3PL providers because mean values are above the average. But they are not highly satisfied and there is no high trust in and loyalty to the 3PL providers.

**Table 4.1 - Mean Values of Satisfaction and Trust**

	Satisfaction	Trust
Mean	3.5946	3.390
N	50	50
Std. Deviation	.35233	.5234

Table 4.2 explains the mean values of the hindering issues that affect the growth of 3PL market in Sri Lanka. Mean values of Cost (X3), Lack of control (X5), Lack of coordination (X1), and Lack of cooperation (X2) are above the average and therefore, these factors are the main issues that respectively affect the growth of the 3PL market in Sri Lanka. The mean value of the inadequate capabilities (X4) is also at an average level.

**Table 4.2- Mean values of the hindering issues**

	X1	X2	X3	X4	X5
Mean	2.82	2.69	3.07	2.47	2.82
N	50	50	50	50	50
Std. Devi.	.69	.70	1.09	.826	.69

Further, according to the in depth interviews conducted with the customers, high labor turnover and high training cost, lack of skills and knowledge, lack of Industrial knowledge, labor unions (Trade union activities) and political influence respectively were identified as hindering issues that affect the growth of the 3PL market in Sri Lanka.

In order to identify the impact of hindering issues on satisfaction and trust, a step-wise linear regression analysis was conducted.

According to Table 4.3 two models were extracted and the adjusted R square is strong in both models.

Further, according to Table 4.4, both models are significant. Therefore, the second model was considered as it has the highest adjusted R square.

**Table 4.3- Model Summary (Customers satisfaction)**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error
1	.824 <sup>a</sup>	.679	.672	.20
2	.842 <sup>b</sup>	.709	.696	.19

a. Predictors: (Constant), lack. control

b. Predictors: (Constant), lack. Control, lack. cooperation

According to the analysis lack of control and lack of cooperation are significant factors (p< 0.05) that

diminish the satisfaction of customers in the 3PL market in Sri Lanka. Lack of coordination, cost and inadequate capabilities have been excluded from the model since they are not significant ( $p > 0.05$ ).

**Table 4.4 Significance of the models- customer satisfaction**

Model	df	Mean Square	F	Sig.
1 Regression	1	4.12	101.31	.000 <sup>b</sup>
1 Residual	48	.04		
1 Total	49			
2 Regression	2	2.15	57.17	.000 <sup>c</sup>
2 Residual	47	.03		
2 Total	49			

a. Dependent Variable: satisfaction  
b. Predictors: (Constant), lack. Control

$$\text{Satisfaction} = 5.194 - 0.470 \text{ LC} - 0.101 \text{ LCO}$$

LC= Lack of Control

LCO= Lack of Cooperation

According to the above equation of satisfaction, 5.194 is the constant of the equation. While holding lack of cooperation constant, when lack of control increases by one unit, satisfaction will decrease by 0.47 units on average. Also, while holding lack of

control constant, when lack of cooperation increases by one unit, satisfaction will decrease by 0.101 units on average. Lack of control and lack of corporation are the two main reasons affecting satisfaction and both factors negatively affect satisfaction.

Next, in order to identify the impact of hindering issues on customer trust, a step-wise regression analysis was conducted.

**Table 4.5 Model summary- Trust**

Model	R	R <sup>2</sup>	Adj.R <sup>2</sup>	Std. Error
1	.895 <sup>a</sup>	.802	.797	.23

a. Predictors: (Constant), lack. control

According to Table 4.5, the adjusted R square is strong in the extracted model. Further, the model is significant.

According to the analysis, lack of control is the only significant factor ( $p < 0.05$ ) that diminishes the trust of customers in the 3PL market in Sri Lanka. Lack of coordination, lack of cooperation, cost and inadequate capabilities have been excluded from the model since they are not significant ( $p > 0.05$ ).

Therefore, the following equation can be derived;

$$\text{Trust} = 5.295 - 0.674 \text{ LC}$$

LC= Lack of Control

According to the above equation of trust, 5.295 is the constant of the equation. When, lack of control increases by one unit, trust will decrease by 0.67 units on average. Lack of control is the main reason affecting trust and there is a negative impact from lack of control on trust.

According to the qualitative and quantitative data of the study, future challenges of the 3PL market in Sri Lanka were identified as, minimizing lead time between deliveries, adoption of new technology, and handling number of order channels multiplied by the number of delivery options due to online sales according to the customers' point of view.

## **5. CONCLUSION**

### **5.1 Key Findings**

In Sri Lanka, customers of the 3PL companies are also quite happy with their 3PL service providers. But the level of satisfaction and trust towards the service providers is not significantly high. Further, cost, lack of control, lack of coordination and lack of cooperation respectively were identified as the main issues in the 3PL market in Sri Lanka from the customers' point of view. These findings are

supported by the findings of previous research studies such as by Ackerman, 1996; Ellram and Cooper, 1990; Wilding and Juriado, 2004. In addition, inadequate capabilities are also an area that has to be considered and attention paid to. Ellram and Cooper, 1990; Gibson and Cook, 2001; Sink and Langley, 1997; Svensson, 2001; and Van Laarhoven et al., 2000 also identified this as one of the main issues in the 3PL industry. High labour turnover and high training cost, Lack of skills and knowledge, Lack of industrial knowledge, Labour unions (Trade union activities) and Political influences were also identified as problematic areas in the qualitative study.

Apart from that, lack of control and lack of coordination are significant factors affecting customer satisfaction. Lack of control is the only significant factor that diminishes the trust of customers in the 3PL market in Sri Lanka. Minimization of lead time between deliveries, adaptation of new technology, and handling number of order channels multiplied by the number of delivery options due to online sales are considered by the customers as the future challenges in the 3PL market in Sri Lanka. Similar future challenges were

identified in the 19th annual third-party logistics study as well.

### **5.2 Theoretical Implications**

The hindering factors in the growth of 3PL markets are somewhat common across the globe. But, in the qualitative study of this research, it was possible to identify a few exceptional factors that hinder the growth of the 3PL market in Sri Lanka. High labour turnover and high training cost, lack of skills and knowledge, lack of industrial knowledge, labour unions (trade union activities) and political influences were also identified as the main problematic areas in addition to the general hindering issues across the globe.

### **5.3 Managerial Implications**

The findings of the research have great importance for decision makers in the industry. Providers of 3PL companies especially can implement the necessary changes to provide a better service in order to satisfy customers. High labour turnover and high training cost, lack of skills and knowledge, and lack of industrial knowledge are a few issues that providers can manage. According to the discussions with customers, many trainees are hired for the jobs at low pay by the suppliers and they are not given proper

training in the overall business performance of the organization. Therefore, by recruiting permanent employees for the companies and developing them and keeping them in the organization while rotating their jobs will help to enhance the level of business performance as well as to satisfy customers about their services. Lack of coordination, lack of cooperation, and lack of control can be addressed by employing well trained customer relationship managers both in customer organizations and provider organizations.

### **5.4 Further Research**

The rise of e-commerce has been impressive in the past decade. Its influence as a driving force of change in logistics is undeniable both within companies and within supply chains. It is therefore surprising that little attention has been paid to investigate and assess the direct as well as indirect implications of e-commerce for the Third Party Logistics industry. Hence, the influence of e-commerce and related information and communication technology (ICT) developments on the Third Party Logistics industry can take other paths that merit further exploration. In addition, lack of control was identified as one of the problems in the 3PL industry. Therefore, further

research could also address how managerial and balance of power issues are handled where both a 3PL and an in-house department manage logistics.

## 6. REFERENCES

- Ackerman, K.B. (1996), Pitfalls in logistics partnerships, *International Journal of Physical Distribution & Logistics Management*, 26-3.
- Aldebert, L., Hudziak, J. (2012), Addressing quality problems in 3PL processes, A case study in a 3PL Company, *Master's Thesis in Supply Chain Management*, Chalmers University Of Technology, Sweden.
- Anderson, E. and Sullivan, M. (1993), The antecedents and consequences of customer satisfaction for firms, *Management Science*, 12- 2
- Beaumont, N. and Sohal, A. (2004), Outsourcing in Australia, *International Journal of Operations & Production Management*, 24- 7
- Bejou, D., Wray B., and Ingram T. N. (1996), Determinants of relationship quality: An artificial neural network analysis, *Journal of Business Research*,.36-. 2
- Bhatnagar, R., Sohal, A.S., & Millen, R. (1999), Third Party Logistics Service: a Singapore Perspective, *International Journal of Physical Distribution & Logistics Management*, 29- 9
- Blumberg, D.F. (1998), Strategic assessment of outsourcing and downsizing in the service market, *Managing Service Quality*, 8- 1
- Cannella, S., & Ciancimino, E., (2010), On the bullwhip Avoidance phase: Supply chain collaboration & order smoothing, *International Journal of Production research*, 44-22
- Chenet, P., Tynan, C. and Money, A. (2000), The service performance gap: Testing the redeveloped causal mode, *European Journal of Marketing*, .34- 3
- Chicksand, D., Watson, G., Walker, H. Radnor, Z. and Johnston, R. (2012), Theoretical perspectives in purchasing & supply chain management: an analysis of the literature, *Supply Chain Management: An International Journal*, 17-4.
- Coyle, J., Langley, C., Novack, R. & Gibson, B., (2013), *Supply Chain Management: A Logistics Perspectives*, 9<sup>th</sup> ed., South Western Cengage learning, Ohio, USA.
- Christopher, M., (2011), *Logistics & Supply Chain Management*, 4<sup>th</sup> ed., Pearson Education Limited, Harlow, United Kingdom

- CSCMP (2015) Definition of logistics, [Online], <http://www.cscmp.org/> [Accessed :17<sup>th</sup> November 2015].
- Ellram, L.M. and Cooper, M.C. (1990), Supply chain management, partnerships and the shipper-third party relationship, *International Journal of Logistics Management*, 1- 2
- Ellram, L.M. and Cooper, M.C. (2014), Supply chain management: It's all about the journey, not the destination, *Journal of Supply Chain Management*, 50-1
- Embleton, P.R. and Wright, P.C. (1998), A practical guide to successful outsourcing, *Empowerment in Organizations*, 6- 3
- Gattorna, Ogulin, Selen, (2004), An empirical investigation of 3rd- and 4th-party logistics provider practices in Australia, *Proceedings of the ANZAM*, 2004
- Gefen, D. and Silver M. (1999), Lessons learned from the successful adoption of an ERP system. *Proceedings of the 5th International Conference of the Decision Sciences Institute*, Athens, Greece
- Gefen, D., Karahanna, E. and Straub D. W. (2003), Trust and TAM in online shopping: An integrated model, *MIS Quarterly*, vol.27, no 1
- Ghijzen, P., Semeijn, J., Wang, A. (2009), 'Modern 3PL Services in China: The Role of Trust', *Journal of International Business and Economy*, vol.10, no.2
- Gibson B.J, Cook R.L, (2001) 'Hiring practices in US third - party logistics firms', *International Journal of Physical Distribution & Logistics Management*, Vol. 31 no. 10.
- Gupta, A., Singh, R.K., Suri, P.K. (2015), 'Study of Best Practices and Challenges for Logistics Providers in India', *International Conference of Advance Research and Innovation (ICARI-2015)* 397 ICARI
- Higgins, E. T., (1987), Self discrepancy: The theory relating self and affect, *Psychological Review*, 94
- HKTDC Research (Hong Kong Research Trade Development Centre), (2015), "Sri Lanka: An Emerging Logistics Hub in South Asia".
- Huang, D. (2003), Third-Party Logistics in China: Still a Tough Market, <http://www.mercemc.com/defaultFlash.asp?section=Perspectives>, [Accessed:10<sup>th</sup> November 2015].
- Janvier- James, A.M., (2012), A new introduction to supply chains and supply chain management: Definitions and theories perspectives, *International Business Research*, 5-1.
- Jennings, D. (2002), Strategic sourcing: benefits,

- problems and a contextual model, *Management Decision*, 40- 1
- Lagace, R. R. (1991), An exploratory study of reciprocal trust between sales managers and salespersons, *Journal of Personal Selling and Sales Management*, 11- 2
- Langley, J. and Capgemmini, (2012), Third-Party Logistics-Results and Findings, 16th Annual Study.
- Langley, J. and Capgemmini, (2003), Third Party Logistics – Results and Findings of the 2003, 8<sup>th</sup>Annual Study.
- Langley, J. and Capgemmini, (2010), Third-Party Logistics- Results and findings, 15th Annual Study.
- Langley, J. and Capgemmini, (2015), Third-Party Logistics- Results and findings, 19th Annual Study.
- Lau, K. H. and Zhang, J. (2006), Drivers and obstacles of outsourcing practices in China, *International Journal of Physical Distribution and Logistics*, 36,-10
- Lonsdale, C. and Cox, A. (2000), The historical development of outsourcing: the latest fad? *Industrial Management & Data Systems*, 100, - 9
- Manzini, A. R., Pareschi & Persona, A. (2007), Logistics outsourcing: an examination of third-party providers, *International Journal of Logistics Systems and Management*, 3-2
- Morgan, R. and Hunt S. (1994), The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58- 3
- Nyaga, G. N., Whipple, J.M., & Lynch D.F., (2010), Examining Supply Chain Relationships: Do buyer and supplier perspectives on collaborative relationships differ?, *Journal of operations Management*, 28-2
- Oakes, G. (1990), The sales process and the paradoxes of trust, *Journal of Business Ethics*, 9, - 8
- Ramanathan, U., & Gunasekaran, A. (2014), Supply chain collaboration: Impact of success in long term partnerships, *International Journal of Production Economics*, 147
- Rao, K., Young, R.R. and Novick, J.A. (1993), Third-party services in the logistics of global firms, *Logistics and Transportation Review*, 29- 4.
- Shaffer, K.J., Dalton, P.M., & Plucinski, D.M., (2011), Exploring the theoretical basis for the management of the supply chain, *International Journal of Business and Public Administration*, 8-2
- Svensson , G, (2001), The Impact of Outsourcing on Inbound Logistics Flows, *The International Journal of Logistics Management*, 12 - 1.

- Sink, H.I., Langley, C.J. and Gibson, B.J. (1996), *Production Economics*, 128-1
- Buyer observations of the US third-party logistics market, *International Journal of Physical Distribution & Logistics Management*, 30- 5
- Sink, H. L. and Langley, C. J., (1997), A Managerial Framework for the Acquisition of Third-Party Logistics Services. *Journal of Business Logistics*, 18,
- Stank, T. P., Goldsby T.J., and Vickery S.K. (1999), Effect of service supplier performance on satisfaction and loyalty of store managers in the fast food industry, *Journal of Operations Management*, 17-2.
- Van, D.D.A. and Ploos van, A.M.J. (1996), Outsourcing logistics management activities, *International Journal of Logistics Management*, 7- 2
- Van Laarhoven, P., Berglund, M. and Peters, M. (2000), Third party logistics in Europe – five years later, *International Journal of Physical Distribution & Logistics Management*, 30- 5
- Wilding, R. and Juriado, R. (2004), Customer perceptions on logistics outsourcing in the European consumer goods industry, *International Journal of Physical Distribution & Logistics Management*, 34- 8
- Yew, W.C., & Karia, N., Exploring the competitive advantage of logistics service providers: A resource based view approach, *International Journal of*
- Zhang, J, Lau, K.H, (2006), Drivers and obstacles of outsourcing practices in China, *International Journal of Physical Distribution & Logistics Management*, 36 -10.