

Strategic Orientations and their Effects on Sustainable Service Offerings

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Abstract: - The aim of this paper is to examine the relationships between strategic orientations (reputation-based strategy, efficiency-based strategy and innovation-based strategy) and the sustainable service offerings in closed-loop supply chains (CLSCs) by third party logistics provider (3PLs). The central importance of the practical implication is to offer solutions to facilitate third party logistics (3PLs) in offering sustainable services, as an addition to the existing services in conventional forward logistics services. In theoretical implications, the institutional theory (INT) has provided fundamental explanation of the 3PLs strategic orientations that influence the effective sustainable service offerings in CLSCs. The analysis results indicated that two types of strategic orientations that impacted sustainable services in CLSCs are efficiency-based strategy and innovation-based strategy. However, reputation-based strategy is less important to 3PLs, signifies the lack of environmental image strategy in offering the sustainable services to their customers. Further research should focus on the impacts of green initiatives by 3PLs into economy, social and environmental aspects, as well as the effect of other green offering by 3PLs to their customers.

Key-Words: -strategic orientations, reputation-based strategy, efficiency-based strategy, innovation-based strategy, sustainable services, closed-loop supply chains, third-party logistics

1 Introduction

Exploitation of resources and manufacturing by products are increasing the pressure on the natural world. This is due to the fact that as much as 75% of material resources used in products and their manufacture are disposed back to the environment as waste within a year. If this trend is left continued over the half decade, the situation may even turn catastrophic especially when there is higher demand of resources that may cause ten times increase in the form of waste. On this note, the government has put a serious effort by introducing the National Green Technology Policy and National Climate Change in the year 2009 respectively with the emphasis on the energy and natural resources conservation as well as promotes the use of renewable resources.

It is noticeable that not many firms presently engaging with the management of sustainability functions actively and seriously. This is because these activities are presumed to add additional

burden and not justified in terms of economic to the manufacturing operations. Some of the disadvantages with the return flows include incurring high processing cost and warehousing cost and dealing with awful waste management. According to Evangelista, McKinnon and Sweney [2], environmental sustainability has become challenging field to manufacturers and retailers as they need to invest an increasing amount of their resources in order to gain the objectives in environment.

The main objective of this study is customers' demand. By looking at the current scenario in supply chains, many products tend to have lesser life cycle due to the continual effort towards innovation to fulfil the customers' demand. Therefore, with the growing legislation and laws related to the environmental protection and liberal return policies in order to defend the buyer's right,

the return management is being the concern from all the parties participated in the supply chains.

The first issue that initiate this study is demands from customers (manufacturers). When customers have demanded from manufacturers for sustainable services due to global warming, manufacturers put necessity on 3PLs to carry out the services for them. Study by Johanson and Brooks [7] stated that, as the impact of the concern on growing of global warming, the focus was then prompted on the development of sustainability in the supply chains. Previous initiatives indicated that energy and materials can be considered as reusable to avoid wastes through incinerations and landfills.

The second issue is 3PLs' offers towards the firms. There are not all 3PLs are proactive enough in offering CLSCs. Too much focus in assuming their traditional mediator functions in forward logistics causing the limited service offerings in the reverse flow of supply chains. In a study by Li and Olorunniwo [14], managers in two out of three firms (two 3PLs and a manufacturer) agreed that the reverse logistics area received much less attention and lack of innovation than the forward logistics [24]. Most of the 3PLs are specializing in the field as freight forwarding, container haulage and operate with minimal linkage to the other components in the logistics chain in Malaysia [4].

The last issue is regarding the lack of strategic orientation. Based on the study by Shaharudin, Zailani and Tan [27], the CLSCs' strategy integrates the performance of environmental towards whole supply chains. Therefore, it emphasis given to strategic configuration in combined environment of reverse and forward logistics that can offer more rewards as compared to merely a tactical level which separate handling of both flows in the operations. Firms that are producing environmental related products and services cannot run away with the strategy development which is a part of the earlier stage of supply chains design. It is necessary to emphasis on strategic orientations to ensure the successful of integration between forward and reverse flows in CLSCs. Through strategic focus, the overall changes can be made to the present supply chains in order to promote for a better practices in CLSCs.

The following section briefly reviews the literature, followed by a discussion on the conceptual framework and hypotheses development. The subsequent section provides the research methodology, trailed by the data analyses and findings before presenting the discussion of the study. Finally, the paper provides the conclusion of the study with theoretical implications, practical

implications and suggestions for future study are provided at the end of the paper.

2 Literature Review

In the next section, literature reviews will be discussed, followed by sustainability, strategic orientations of reputation-based strategy, efficiency-based strategy, innovation-based strategy, CLSCs and lastly sustainable services. It will then proceed with a conceptual framework, hypotheses development, methodology, data analysis and findings, discussions, conclusions, theoretical implications, practical implications and suggestions for future research.

2.1 Sustainability

Based on the study by Lieb and Lieb [11], sustainability is predicted to attract more attention on managerial in the industry of 3PLs. Despite, with burden from various stakeholders involving customers, investors also policy makers, it has been the most favourable to the firms for the last few years. In additions, lots of large firms are operating in the 3PLs' industry and have increased their commitments to build programmes in environmental sustainability. Referring to the study by Abassi and Nilson [1], although many firms have seen initiatives in sustainability drives for additional costs, however, literature have suggested that the adoption in policies for corporate environmental could be a new and the most powerful sources in strategic differentiation.

2.2 Strategic Orientations

According to Hong, Kwon and Roh [5], they stated that strategic green orientations have relationship to a firms' long-term commitment via continuous adoption of programs related to environment in order to generate products and services that are environmentally friendly. These products and services are crucial to enhance the performance of the firms via internal integration with the customers [25]. Hence, strategic green orientations is not only related for the adjustment of previous green activities but also needed to encourage firms in respect of the continuous adoption of enforcement initiatives for its sustainability and planning for long-term.

Referring to the study by [1], he defined the strategy of green supply chains (GSCs) according to resistant adaption, seeking eco-efficiency and

environmental reputation. Latest study by Testa and Iraldo [29] stated that trials to accurately assess adoption of traits and motivations in green supply chains management (GSCM) and proposed three strategic approaches mostly admired by firms that are reputation-led, efficiency-led and innovation-led.

2.2.1 Reputation-based Strategy

Based on the study by Langley and Capgemini [11], the trend is growing in all of the activities in outsourcing logistics through industries proven that the pivotal also validity of 3PLs' services in getting efficient and responsive supply chains. Despite, active participation of top level management in observing the firm previous environment practices, adopting latest programs related to environment and reinforcing future firms' strategic effort in order to increase the corporate image. All of these efforts need long-term commitment from the initiatives of the firms and the participation of the top level management.

Referring to the study by Mahmoudzadeh, Mansour and Karimi [15], usually, 3PLs' options in selection are guided by strategic performance requirements of the firm. Businesses see 3PLs' sources as a reasonable in handling the reverse logistics' activities while they need to concentrate in their main competencies. It is because reverse logistics' activities can be considered as complex activities and are out of firms' technological dimension. In additions, the firm make an effort to avoid the e-waste from arriving to the landfills by utilizing 3PLs. 3PLs are responsible to control the recovery of the asset, recycling and disposition. In order to facilitate the environmental sustainability and the reputation of the green market the initiatives, replacements of the warranty or recyclables have been taken.

2.2.2 Efficiency-based Strategy

Based on the study by Lambert and Cooper [9], some European 3PLs' providers face failures to appropriately brand their services. Despite, they also failed to encourage all of the potential customers that have all kinds of services in almost all operations in logistics. In order to allow the 3PLs' relationships of buyer-supplier efficient, services like routine, standard and customized services have been distinguished. Routine 3PLs' services more on volume-based and involved services such as transportation and warehousing. Besides that, in standard 3PLs' services, there involved easy

customized such as transport of air-conditioned. Study by Langley and Capgemini [10] stated that most frequently outsourced customized by 3PLs are such as transaction of hold high and hence, been performed in the long duration contracts. These services include different forms of servicing postponement such as assembly, services of repair or after-sales.

Study by Lee, Baker and Jayaraman [12] found that integrated forward-reverse logistics' system has been tried to adopt for a huge 3PLs' providers by developing and defining new expectations for a reverse logistics' network in adapting into the 3PLs' providers. In additions, Mahmoudzadeh, Mansour and Karimi [15] have planned a vibrant reverse logistics' network. The network is especially for the 3PLs' providers that deal with examining and refurbishing of the returned products. The returned products will always come from the retailer or the end consumer.

2.2.3 Innovation-based Strategy

According to Wang, Liu and Wei [32], it is noted that the aim of innovation at logistics firms is in order to exploit the benefits of economic. 3PLs are very innovative in adopting solutions of new supply chains. Hence, reducing costs and increasing service and trust. After that, they have proposed that this strategy is different from efficiency-based strategy because it used the strategy of supply chains' environmental that is more environmentally friendly. This strategy guides firms in developing products from the viewpoints of the product life cycles (PLCs) and allows stricter needs of environmental to their suppliers. It also trained them in adjusting operational stages by following the latest environmental regulations. The application of this strategy owns the expertise of the professional environmental and combine the specific significant of green activities such as green design to improve latest processes in supply chains that is product growth.

In the study by Vachon and Klassen [30], the innovation-based strategy has closed relationship to the strategy that usually used by leading innovation firms through their adoption of the GSCM that can maintain their existing leadership over their competitors. Based on the study by Wagner and Sutter [31], this strategy is vital because demands by current competitive market environment for innovation from 3PLs, other than combination and quality services to boost the acceptance and competitiveness in the market. According to Panayides [19], process of innovation and service in

reverse supply chains (RSCs) permits for environmental beneficial innovations could help to build value for their customers. As the outcomes, 3PLs can maintain their leadership and enhance the performance in business to be able for providing unique solutions in GSCs' services.

2.3 Closed-Loop Supply Chains (CLSCs)

CLSCs are connected to the recovery of materials for high-value (remanufacture) or low value (recycling). All of these materials can be produced through production as returned goods, post-use or at the end of life [17]. CLSCs are strategy or combined environmental performance in the entire supply chains. In additions, reverse logistics that 'closes the loop' can be described as a typical supply chains and includes recycling of materials to be new products that have value in the market and in the remanufacturing. The stage is to terminate or to lessen solid wastes such as hazardous substances and wastes. Environmental practices have been proven throughout the supply chains which vary from the green design, green process practices until various types of products' practices in the end life. It can be understood as "Re's" that give meaning of reduction, recycling, reuse and remanufacturing. After that, the strategies of motivation in CLSCs regularly remain low for simple reasons of poor control in dissemination over the RSCs and the inability of supply chains to believe such activity is economically sustainable [16].

2.4 Sustainable Services

Referring to the study by Shaharudin, Govindan, Zailani and Tan [26], sustainable services are essential to the firms that are continuously looking for operations under economically, socially and environmentally friendly. Since before, this field is one among the most unobserved criteria by the manufacturers and the 3PLs are grateful in providing much product competitiveness for their future. Besides that, the past are passive enough and always presuming their functions in forward logistics' services. Nevertheless, both parties must agree with the fact that the sustainability has become the attention by the stakeholders and societies to demand rational costs for products or services. Hence, the return flow management of product has become the main focus to the manufacturers to satisfy the sustainable targets and objectives of the firms.

3 Conceptual Framework

According to the study by Rahim, Jalaludin and Tajuddin [21], there are some studies stating that there occur to be a positive relationship in the firm's activities and the consumer's behaviour. There is an enormous impact on the firms' reputation to adapt the green practices. Subsequently, Isaksson and Huge-Brodin [6] found that by expanding the environmental performance, it may ensure the firms to increase the edge of competitiveness to minimize cost, obtain stronger reputation among the customers and elevate their competitiveness internationally.

One way towards greener buildings, the United States Green Building Council's Leadership that practising System of Green Building Rating supports overall building effort to sustainability by identifying performance in the areas of energy efficiency and materials selection. These endeavours are known as enablers that can be either strategies, tools, practices or methods that trigger the supply chains to appear. For example, waste reduction or management of eco-efficiency. Procedure related to reassembly, product recovery, reusing and reverse logistics are examples of managing the eco-efficiency [11].

The first phase of innovation refers to innovation that indirectly affects the customers. It focuses to boost the efficiency and operations of the 3PLs. For the time being, the 3PLs will give lower costs or increase the profit margins [3]. In Nässjö, Schenker, they implement a huge range of services that they see as value-added services. They manage customers' modems and digital boxes. It involves repairing, assuring the quality and reconditioning including returned used equipment recycling and databases that allow the customers to make follow up.

As such, Fig.1 shows a conceptual framework that illustrates the strategic orientations and sustainable services.

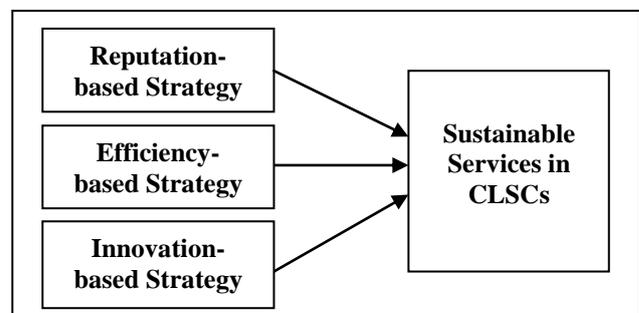


Fig.1: Conceptual Framework of Strategic Orientations and Sustainable Services

As shown in Fig.1, the proposed conceptual framework stated that 3PLs are able to offer sustainable services in CLSCs from the adoption of the strategic orientations. It includes the reputation-based strategy, efficiency-based strategy and innovation-based strategy that involve in the firms' practices and daily routines. All of these three strategies can increase the stage level of the practices in GSCM. As the outcomes, it enables effectively the sustainable service offerings by 3PLs to their customers. It is suggested that 3PLs to respond to the sustainable services' offerings based on strategic concept of institutional theory (INT) by utilizing the three forms of isomorphism [34]. The three isomorphism are normative, coercive and mimetic. It is insisted that all of these forces can bring up 3PLs' new business opportunities to maintain the existing business also current customers. Common services by 3PLs, for instance, transportation, customer order management, bar coding and warehousing can be further extended towards the sustainable services in CLSCs by recovering value and overall minimizing the undervalue of the returns. Effective management and return assimilation from diverse market channels can help customers to minimize waste and having recovery increment.

4 Hypotheses Development

Analysis in regression can be classified as statistical models to represent, estimate or forecast causal relationship among a dependent variable (sustainable services) and the independent variables (reputation-based strategy, efficiency-based strategy and innovation-based strategy). Besides that, the aim is also to identify how strong the influence of the predictors (all of the independent variables) on the sustainable services (dependent variable).

The hypotheses developments are as follows:

Strategy that concerned on the execution of CLSCs, sustainable supply chains and green supply chains can be known as reputation-based strategy. This strategy allows the customers of 3PLs to give more attention on its importance and from its adoption, reputation in the firms can be achieved. In previous studies, researcher has found that by adapting the green practices can allow for positive relationship to the firms' activities and consumers' behaviour [21]. Positive environment is seeking by nature of corporate firms to differentiate themselves with competitors. Study by Mahmoudzadeh, Mansour and Karimi [15] stated that strategic

alternative can be achieved for simultaneously promoting environmentally and financially of the firms by being a 'green' image. Hence, Kibert [8] stated that it has become the major factor to encourage the firms' green activities. Due to this matter, this strategy done by 3PLs is predicted to recognize the level of adoption in green practices (i.e. minimizes the waste management and provides renewable energy) that can highly give results on sustainable services in CLSCs. This is due to 3PLs' beliefs in gaining some experiences from the adoption, ultimately it can guide them to draw the proactive set of sustainable services in CLSCs. Hence, this leads to the following hypothesis.

Hypothesis 1: A reputation-based strategy will positively influence the sustainable services

Efficiency-based strategy is a strategy that assists firms to increase economic benefits and environmental benefits through waste minimization and efficient use of resources. Study by Olariu [18], CLSCs' management indicates an efficient business model and environmental programmes can allow the firms to reduce cost for resources, receive operational optimization and environmental damages' reduction. Referring to the study by Petterson [28], an advanced system in Information Technology (IT) facilities targets as many customers they can. Besides that, this may generate benefits in productivity through environmental technologies' execution. The efficient consumption of energy will boost the important attention. Manufacturers will join the 3PLs to generate efficient reverse logistics' operations and in planning the firms' strategy, power or energy consumption has become the priority [17]. As a result, this allows 3PLs to offer more sustainable services to their customers in CLSCs because of the ability for these sustainable services to use the resources effectively. Therefore, this leads to the hypothesis.

Hypothesis 2: An efficiency-based strategy will positively influence the sustainable services

According to Wang, Liu and Wei [32], it is noted that the objective of innovation at firms' logistics is in order to exploit the benefits of economy. Hence, it assists to minimize costs and boosts service and trust. Besides that, this strategy also guides firms to develop sustainable services. At the same time, it trains them to adjust operational stages through the latest environmental regulations. The application of this strategy owns the expertise of the professional environmental and combines the specific significant

of green activities such as green process, green design in improving latest processes in supply chain that is product growth. Therefore, 3PLs can offer new sustainable services as the impact for innovativeness in CLSCs. This leads to the hypothesis.

Hypothesis 3: An innovation-based strategy will positively influence the sustainable services

5 Methodology

Two types of data were used to carry out this study that is primary data and secondary data. Primary data involves questionnaires whereas secondary data includes literature reviews.

Sample Questions
- Firms' reputation is enhanced by adapting the green practices
- Reverse logistics' business by 3PLs decrease the costs, risks and focus in increasing the productivity of the firm
- Firms need to use environmental resources and encourage innovative competencies to the management of reverse logistics to improve the environmental performance
- CLSCs include the materials' recovery for either high value (remanufacture) or low value (recycling)

Table 1: Sample Questions posed to each of the questionnaires

Most of the respondents in this study are knowledgeable on the questions that have been asked. This is because they involved the chief executive officers and managers of the companies from department of sales and operations. They come from similar profession that is Penang Freight Forwarders' Association (PFFA) members in Malaysia. PFFA is one of the registered associations in The Federation of Malaysia Freight Forwarders (FMFF). PFFA consists of 200 companies as members. After all the data and information have been collected from the respondents, it is then being interpreted and analyzed using computer software, Statistical Package for Social Sciences (SPSS) in Windows Version 16. All the required results were gained from Standard Error, Cronbach's Alpha, Pearson Correlation, R-squared and also analysis of Multiple Regression.

This study is a cross-sectional study when it took for three months for the mass questionnaires' distribution. From 200 questionnaires distributed to

200 respondents (one respondent from each company), only 140 feedbacks were received from the respondents. Before the survey was conducted, it started by several stages that is developing questionnaire, telephone calls and pilot study of the firms. In the study by Sekaran [22], the questionnaires' method has been employed in this study because of its advantage in order to cover a wide geographical area in less time and cost.

Before mass questionnaires' distribution is carried out, the questionnaire's items have been tested for validity among academicians in the public university. The lecturers are among the experts in psychometrics and also in language skills. The respondents were being asked to evaluate the items for readability, clarity and adequacy. In the subsequent stage, researcher made telephone calls to all the top level management and had explained to them the purpose of the pilot study. Then, 20 questionnaires were distributed to the top management by online and by hand.

6 Data Analysis and Findings

6.1 Reliability Analysis for the Independent Variables and Dependent Variable

Study Variables (Reliability)	N of Items	Cronbach's Alpha
Reputation-based Strategy	4	0.69
Efficiency-based Strategy	9	0.80
Innovation-based Strategy	10	0.80
Sustainable Services	10	0.74

Table 2: Reliability Analysis for the Independent Variables and Dependent Variable

From 140 respondents, the result indicated the value of Cronbach's Alpha test of reputation-based strategy for 4 items at 0.69 with percentage of 69%. Other than that is efficiency-based strategy that expressed the result of Cronbach's Alpha test for 9 items at 0.80 with percentage of 80%. The third value is innovation-based strategy with Cronbach's Alpha test for 10 items at 0.80 with percentage of 80%. Lastly is sustainable services that showed the value of Cronbach's Alpha test for 10 items at 0.74 with percentage of 74%.

The conclusion is 0.69 for reputation-based strategy, followed by 0.80 for efficiency-based strategy and innovation-based strategy showing

strong significance towards the sustainable services. Lastly is the sustainable services at 0.74.

6.2 Regression Analysis

Model	Standardized	T	Sig.	Collinearity	
	Coefficients			Tolerance	VIF
	Beta				
(Constant)		4.56	0.000		
Reputation	0.01	0.18	0.856	0.89	1.13
Efficiency	0.38	4.19	0.000	0.52	1.92
Innovation	0.34	3.90	0.000	0.55	1.83

Table 3: Regression Analysis

From Table 3, Beta weights' size indicated the relationships of independent variables' strength. There is a positive result for Beta value for efficiency-based strategy with the value of 0.38 followed by the Beta value for innovation-based strategy and reputation-based strategy with the value of 0.34 and 0.01 respectively.

The T-value from the above table indicated that the efficiency-based strategy has the highest T-value that is 4.19 if compared with the other strategies. The value is more than 1.96 that can be considered as significant [23]. Then it followed by the innovation-based strategy with the value of 3.90. Both results have shown significant results of two-tailed significance. Lastly is reputation-based strategy. The T-value is 0.18 that is less than 1.96. Therefore, reputation-based strategy is not significant in two-tailed.

Table 3 indicated that the reputation-based strategy was not significant with value of 0.856 that is more than 0.05. Hence, it indicated that there is no significant relationship between the reputation-based strategy and the sustainable services. From the above result, H1 is rejected.

Table 3 stated that the efficiency-based strategy was perfectly significant when the value is $0.000 < 0.05$. Therefore, it showed that there is significant relationship between the efficiency-based strategy and the sustainable services. The efficiency-based strategy is the strategy that connects the environmental performance to the process of operation in the supply chains. It helps the firms to maximize economic performance and benefits through the efficient resources use and processes. At the same time, it may reduce the amount of waste. In specific, this strategy seeks to utilize the resources by using the most effective energy consumption utilization. Example of the system in sustainable services that 3PLs can apply to improve

environmental awareness and appropriate use of natural in recent development has been introduced by Zhou and Ni [33]. This allows for more efficient process in operating the materials rate of recycling. As a result, this allows 3PLs to offer more sustainable services to their customers in CLSCs because of the ability for the sustainable services to use the resources effectively. From the above result, H2 is accepted.

From Table 3, it revealed that the innovation-based strategy was perfectly significant when the value is $0.000 < 0.05$. Therefore, it revealed that there is significant relationship between the innovation-based strategy and the sustainable services. The innovation-based strategy can be considered as a strategy that facilitates firms to develop some products through the life cycle's product. In the meantime, it strictly incorporates environment requirements. This strategy is vital especially to develop sustainable services. Besides, it also brings expertise in environmental sustainability and combines specific green activities for the production. Overall, the ecosystem's compatibility can be achieved easily [25]. Study by Simpson and Samson [28] stated that to a certain point, firms are urged to involve additional resources and encourage their capabilities in innovation for GSCM. Therefore, 3PLs can offer new sustainable services as the impact for innovativeness in CLSCs. From the above result, H3 is accepted.

7 Discussions

Solvable sub problems can be created from the strategies (reducing global warming) due to the activities of the CLSCs. Competitors can assist to provide usable theory in strategy-making and evaluation. Strategy has its own roots to consider the pure competitors. Under the core competitors, it can be said that the output is undetermined. No ones can predict which strategies will be used later. A determinate solution appears if the 'advantages' asymmetries are there. It is by executing the only strategies that can show sustainable services throughout CLSCs' activities.

In this study, two types of strategic orientations that impacted sustainable services in CLSCs are efficiency-based strategy and innovation-based strategy. However, reputation-based strategy is less important to 3PLs, signifies that the lack of environmental image strategy in offering the sustainable services to their customers.

The analysis findings expressed that researcher has determined the problems that ordinarily faced

by 3PLs. First problem is due to lack of information sharing between 3PLs and customers when 3PLs cannot get all the vital information from the customers. Subsequently is due to the market barriers from the customers when they prefer not to outsource the CLSCs to 3PLs (due to the lack in demand from manufacturer). Lastly, the improper management of the products returns impacted the low efficiency of the process flow in reverse logistics. Overall, it may lead to the total loss to the customers instead of giving option to resell.

In a way to solve all of these problems, the study has provided with some potential solutions. Firstly, the 3PLs have to maximize their crucial role to reconstruct offering services of the CLSCs' activities by presuming the role in leadership. Besides that, 3PLs have to give attention on the perspective of the service offering also in the competitive awareness. Lastly is internal focus for general 'dissemination' versus broad engagement for targeted customers. This includes the customer's orientation and segmentation on how to convey and share the green knowledge and competencies with them.

Researcher has identified few weaknesses in today's studies. There is a need for further study on manufacturers. The study must more focus on the strategies and sustainable services offering by the 3PLs to their customers not including what manufacturers do in their daily operations towards sustainable services. Subsequently is a wide distribution on the questionnaires. PFFA has become the only population involved in the distribution of questionnaires for this study. If the number of population is enormous, the possibility to get accurate answers would be higher. Hence, it is suggested to distribute the questionnaires to other states other than to PFFA only in the future.

8 Conclusions

The overall aim of this study was to comprehend more on the strategies (strategic orientations) offered by the 3PLs to the customers of 3PLs in CLSCs towards the sustainable services which can be defined as service offering that surrounded with elements of economic, environmental protection and even social that are yet to appear especially to the current traditional, competing offers and also conventional in the market. It has taken us into various strategies that bring towards sustainable services that are reputation-based strategy, efficiency-based strategy and innovation-based strategy.

The continuous concern on the research on 3PLs, is essential and contributions in finding the right strategy to design and offer the sustainable services to their customers. In sum, the strategic orientations that impacted sustainable services in CLSCs are the efficiency-based strategy and innovation-based strategy. In additions, the concept in sustainable services can satisfy the sustainability demands by the customers, reduction in costs and also practices to comply on environmental protection regulations.

9 Theoretical Implications

In the theoretical implications, INT purpose is an act underlying philosophies on the effort of 3PLs to develop sustainable services. Referring to the meaning of INT, customers have become the external pressure towards 3PLs in order to give influence for the innovation from offering the sustainable services in CLSCs. The customers are commonly from those less capable firms in their reverse operations flow. In the nutshells, the INT will give further explanation on the forces behind the differentiation strategy used by 3PLs to compete and differentiate themselves from their competitors. Therefore, this study is expected to support the development of theory-building and conceptual framework in the field of reverse logistics. From the view of conceptual framework, that can be considered as the first stage of development.

10 Practical Implications

A practical point of view assists the 3PLS to be better by offering absolute sustainable services to the customers. Although by adding sustainable services throughout the organization may take creativity, eventually 3PLs can gain knowledge on how to use it in order to differentiate themselves from their competitors. Besides that, identification of barriers from this study is very helpful to the 3PLs in evaluating their own green practices situation later. It is due to the barriers pattern that give reflection to the current behaviour and anticipations towards the sustainable services.

In additions, 3PLs can provide information that are depth and clear regarding services offered to the customers. This can give confident to the customers to allow 3PLs to work for them. Besides that, it is to convince the proactive impacts of the actions towards the customers' (manufacturers) profitability. 3PLs need solution more on CLSCs' behavioural in the logistics context. By doing the study, they can gain significant, detail and accurate

knowledge all related to the issues such as management of the raw materials and the customers.

11 Suggestions for Future Research

There are few recommendations that researcher can suggest for the future research. The first recommendation is to make further study on the impacts of contribution in green initiatives by 3PLs into economical aspects. In previous research, there are few studies on the impacts of contribution in green initiatives by 3PLs into economical aspects. Only few of the benefits are included in such as to minimize the costs by the customers in term of providing staff and transportation costs.

Besides that, the future research needs to make further study on the impact of contribution in green initiatives by 3PLs into environmental and social aspects. The usual contribution states are to reduce global warming and waste through landfills and incinerations.

Lastly is to make further study on the impact of contribution of 3PLs' green offering to the customers. Future research needs to carry out study on the impact of contribution in green initiatives of 3PLs' offering to the customers. By expanding information on the impact of contribution in the green initiatives, this may encourage the 3PLs to have some added value services such as reverse logistics that can improve their profit margin.

References:

- [1] Abbasi, M., & Nilsson, F. (2012). Themes and Challenges in making Supply Chains Environmentally Sustainable. *Supply Chain Management: An International Journal*, 17(5), 517–530
- [2] Evangelista, P., McKinnon, A., & Sweeney, E. (2013). Technology Adoption in Small and Medium-sized Logistics Providers. *Industrial Management & Data Systems*, 113(7), 967–989
- [3] Giannetti, B. F., Bonilla, S. H., & Almeida, C. M. V. B. (2013). An Emergy-based Evaluation of a Reverse Logistics Network for Steel Recycling. *Journal of Cleaner Production*, 46, 48–57
- [4] Govindan, K., & Murugesan, P. (2011). Selection of Third-party Reverse Logistics Provider using Fuzzy Extent Analysis. *Benchmarking: An International Journal*, 18(1), 149–167
- [5] Hong, P., Kwon, H.B. and Roh, J.J. (2009). 'Implementation of Strategic Green Orientation in Supply Chain', *European Journal of Innovation Management*, Vol.12, No.4, pp.512-532
- [6] Isaksson, K., & Hüge-Brodin, M. (2013). Understanding Efficiencies Behind Logistics Service Providers' Green Offerings. *Management Research Review*, 36(3), 216–238
- [7] Johanson, G. A., & Brooks, G. P. (2009). Initial Scale Development: Sample Size for Pilot Studies. *Educational and Psychological Measurement*, 70(3), 394–400
- [8] Kibert, C. J. (2012). Sustainable Construction: Green Building Design and Delivery. John Wiley & Sons.
- [9] Lambert, D. M., & Cooper, M. C. (2000). Issues in Supply Chain Management. *Industrial Marketing Management*, 29(1), 65–83
- [10] Langley, C.J., & Capgemini (2012). "The State of Logistics Outsourcing– 2012 Third-Party Logistics: Results and Findings of the 16th Annual Study", 1-49 retrieved on 30 March 2014 from <http://www.capgemini.com/resource-file>
- [11] Langley, C.J., & Capgemini (2010). "The State of Logistics Outsourcing-2010 Third-Party Logistics: Results and Findings of the 15th Annual Study", 1-49 retrieved on 30 March 2014 from <http://www.capgemini.com/resource-file>
- [12] Lee, Y. J., Baker, T., & Jayaraman, V. (2012). Redesigning an Integrated Forward–Reverse Logistics System for a Third Party Service Provider: an Empirical Study. *International Journal of Production Research*, 50(19), 5615–5634. doi:10.1080/00207543.2011.651538
- [13] Lieb, K.J., & Lieb, R.C. (2010). Environmental Sustainability in the Third-Party Logistics (3PL) Industry. *International Journal of Physical Distribution & Logistics Management*, 40(7), 524-533
- [14] Li, X., & Olorunniwo, F. (2010). An Exploration of Reverse Logistics Practices in Three Companies. *Supply Chain Management: An International Journal*, 13(5), 381–386
- [15] Mahmoudzadeh, M., Mansour, S., & Karimi, B. (2013). To Develop a Third-party Reverse Logistics Network for End-of-Life Vehicles in Iran. *Resources, Conservation and Recycling*, 78, 1–14
- [16] Martusa, M. R. (2013). Green Supply Chain Management: Strategy to Gain Competitive Advantage, *Journal of Energy Technologies and Policy*, 3(11), 334–341
- [17] Molinari, L. (2012). Reducing E-Waste of Consumer Electronics Through Reverse Logistics, 1-12 retrieved on 6 April 2015 from <http://www.atcle.com/docs/wp-Reducing-E-Waste->
- [18] Olariu, I. (2013). Conceptual Issues regarding Reverse Logistics, Studies and Scientific Researches, 326–331 retrieved on 4 May 2015 from <http://sceco.ub.ro/index.php/SCECO/article/view/21>

- [19] Panayides, P. M. (2006). Maritime Logistics and Global Supply Chains: towards a Research Agenda. *Maritime Economics & Logistics*, 8(1), 3-18
- [20] Pettersson, V., & Naversten, M., (2012). Logistics Clusters: A Study on the Jonkoing-Nassjo-Vaggeryd Region retrieved on 2 January 2014 from <http://www.divaportal.org/smash/get/diva2:530327/FULLTEXT01.pdf>
- [21] Rahim, R. A., Jalaludin, F. W., & Tajuddin, K. (2011). The Importance of Corporate Social. *Asean Academy of Management Journal*, 16(1), 119–139
- [22] Sekaran, U., (2013). *Research Methods for Business* (5th ed.). New York: Mc Graw-Hill
- [23] Sekaran, U., (2010). *Research Methods for Business* (4th ed.). New York: Mc Graw-Hill
- [24] Selviaridis, K., & Spring, M. (2007). Third Party Logistics: A Literature Review and Research Agenda. *The International Journal of Logistics Management*, 18(1), 125-150
- [25] Seuring, S. And Muller, M. (2007). ‘Core Issues in Sustainable Supply Chain Management- A Delphi Study,’ *Business Strategy and the Environment*, Vol.17, No.8, pp.455-466
- [26] Shaharudin, M. R., Govindan, K., Zailani, S., & Tan, K.C., (2015). “Managing Product Returns to Achieve Supply Chains Sustainability”, *Journal of Clean Production*, 101, 1-15
- [27] Shaharudin, M. R., Zailani, S., & Tan, K. C. (2014). Barriers to Product Returns and Recovery Management in a Developing Country: Investigation using Multiple Methods. *Journal of Cleaner Production*, 96, 220–232
- [28] Simpson, D. & Samson, D. (2008). ‘Developing Strategies for Green Supply Chain Management’, *Decision Line*, Vol.39, No.4, pp.12-15
- [29] Testa, F., & Iraldo, F. (2010). Shadows and Lights of Green Supply Chain Management: Determinants and Effects of these Practices based on A Multi-National Study. *Journal of Cleaner Production*, 18 (10-11), 953–962
- [30] Vachon, S., & Klassen, R. D. (2008). Environmental Management and Manufacturing Performance: The role of Collaboration in the Supply Chain. *International Journal of Production Economics*, 111(2), 299-315
- [31] Wagner, S. M., & Sutter, R. (2012). A Qualitative Investigation of Innovation between Third-party Logistics Providers and Customers. *International Journal of Production Economics*, 140(2), 944-958
- [32] Wang, W., Liu, Y., & Wei, Y. (2013). Research on Management Strategies of Reverse Logistics in E-Commerce Environments, *Journal of System and Management Sciences*, 3(2), 45–50
- [33] Zhou & Ni (2010). Research on Management Strategies of Reverse Logistics in E-Commerce Environments. *Journal of Public Affairs, Administration and Management*, 3(1), 299-307
- [34] Shaharudin, M. R., Zailani, S., & Ismail, M. (2015). Third-party logistics strategic orientation towards the reverse logistics service offerings. *International Journal of Management Practice*, 8(4), 356–374.