

Logistics Service Provider (LSP): Foundations, Innovation and Future Research Avenue

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Abstract

The involvement of Logistics Service Provider (LSP) in supply chain activity has a far reaching impact on the development and the performance of the main channel member such as manufacturer, supplier and retailers. Logistics is the key elements for supply chain success. The LSP helps organization to understand key metrics for their business sustainability and long term goals of their supply chain so that they can ensure they can get the right item at the right place and at the right time. Research on LSP has received significant response among the academicians and practitioners in the recent decade. The purpose of this research is to provide general review as a sound foundation to promote future research in logistics service provider (LSP) study. The general review covers three main areas namely the notion and evolution of LSP, the provision of LSP, as well as the current innovation of LSP namely Halal Logistics service provider (HLSP). Modern logistics has been moved to the new shape of activity namely Halal logistics service. HLSP is regarded as innovation in the logistics industry worldwide. The review of previous work on LSP and HLSP spans the years from 1980s to 2019. This paper used content analysis method for general review. The review indicates the three main areas for future research direction on LSP. The main contribution of this paper to the literature review are twofold. Firstly, it extends the discussion from conventional logistics to Halal logistics service practice. Second, it advances the existing perspective of 3PL and highlights on the future logistics research opportunities.

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1. Introduction

The connectivity of the supply chain activity and the importance of logistics capability among the supply chain member have created the emergence of external party known as logistics service provider (LSP). It is widely recognized that logistics is part of supply chain activity and without logistics, the supply chain activity will be flounder. In general, many business has outsourced their logistics activity to the external party to gain competitive advantage and cater rapidly changing market.

The focus on core business activities by the main channel member such as manufacturer has led to the booming logistics outsourcing activities (Abdul Rahman, 2012). At the same time, the burgeoning global trade make a role of LSP in supply chain is substantial. As highlighted by Rahman et al (2014), logistics is a key activity in supply chain management which include transportation, warehousing, packaging and inventory management. In fact, to ensure no hick up in any supply chain activity, LSP need to constantly maintain and improved efficiency performance of logistics operation in business even though it is quite challenging (Shou et al. 2017; Rahman et al 2017b).

Research focusing on logistics service provider (LSPs) has received significant attention from the scholars and practitioners worldwide. With escalating local and global trade, rising demand on logistics service providers (LSPs) is increased. Recently, the global logistics market has reached a value of USD4, 730 billion in 2018. As published in Globe Newswire (2019), the stability of trade agreement among various nation is a key driver for the world logistics market. Logistics industry is recognized as a central issue in supply chain that move any product or material from one location to another in both direct and reverse direction (Abdul Rahman et al. 2014; Rahman et al. 2017a). The role of logistics is not only about transportation, but also storing and warehousing. In greater context, logistics could be defining as a process that plan and coordinates any material from the point of origin to point of consumption. Apart of transportation and warehousing activities, the major components of logistics also involved inventory management, packaging, material handling. At present, logistics industry has growing rapidly and received benefit from the technology advancement that involved automated material handling equipment, tracking and traceability system, biometric and Global Positioning System (GPSAs explained by Meade and Sarkis (2002), reverse logistics is associates with customer return of warranted or defective products to their supplier. It focus on how to efficiently and economically return defective products or waste material (Bai and Sarkis, 2019).

From global point of view, it has been published that the compound annual growth rate (CAGR) of the logistics industry from 2014 to 2018 is increasing year by year. CAGR is used to calculate the average growth of a single investment. Among the five type of logistics sector namely postal delivery, air transport, sea transport, road transport and rail transportation, the highest growth rate is rail transportation (see Figure 1). The next section will discuss on LSP from the research point of view.

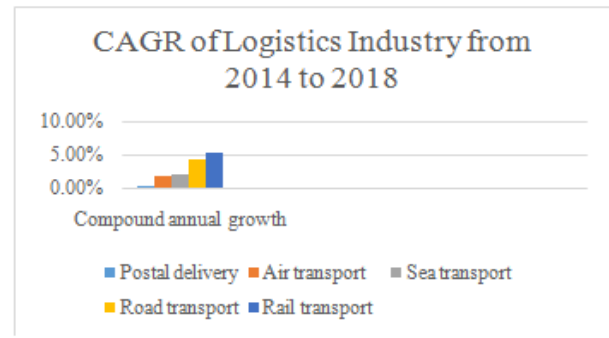


Figure 1: CAGR of logistics Industry

Source: Statistica (2019)

2. Literature Review on Logistics Service Provider (LSP)

The continuum of LSP definition: Logistics Service Provider, Third Party Reverse Logistics Provider (3PRLP) and Halal Logistics Service Provider (HLSP)

Despite the continuous popularity of LSP studies, views on the definition of the LSP concept have remained divergent. After almost five decade of LSP studies, there are many definitions provided by the scholars, including the activity of direct logistics, reverse logistics, as well as halal logistics. One of the great definition and among the earlier definition in the history is logistics refer to seven 'Rs' (Shapiro and Heskett, 1985), namely the right product transported or stored with the right quantity and the right condition, at the right place, right time, right customer and right cost. This was one of a great shared borrow by literature to provide multi dimension of LSP definition. Table 1 below highlights some of LSP definitions discuss in the literature between 1980s to 2019. This section starts with the discussion on the continuum of LSP definition, followed by LSP provision, as well as deliberation on new innovative activity by LSP known as Halal Logistics Service Provider (HLSP).

Table 1: Existing research on LSP definition

Author (Year)	Definition on LSP
Porter (1985)	Is an external party who handles inbound and outbound logistics activities.
Shapiro and Haskett (1985)	Logistics refere to seven 'Rs'. Right product, right quantity, right condition, right place, right time, right customer, right cost.
Wilson and Father (1985)	Is providing tailored, dedicated, contractual solutions to the distribution needs of others.
Sheffin and Semeijn (1990)	Is a mega carrier which offers virtually 'one stop shopping' for transportation and logistics needs.
Delaney (1996)	Logistics refer to the management of the inventory
Razzaque and Sheng (1998)	Is an expert in logistics activities who provides single or multiple logistics service with a strong emphasis on customer service
Berglund (1999)	An independent firm that offers multiple logistics services on behalf of a shipper or customer.
Rutner and Langley (2000)	Is a distribution activity that include both single transaction and longer term known as contractual relationship
Coyle et al (2003)	Is an external provider that undertakes all or part of a company's logistics function.
Rafiq and Jaafar (2007)	Is an external party who performs logistics activities.

Rahman, 2012	Refer to specific transportation activity performed by an expert external party in transportation (transportation outsourcing)
Rahman et al, (2018); Majid et al (2019); Khairuddin et al (2018)	Logistics include Halal innovative logistics activities that include Halal transportation and Halal warehouse
Bai and Sarkis (2019)	Is a provider that undertake reverse logistics function
Rahman et al (2019b)	Is an external party that carry out logistics function including local and multinational provider

Source: The authors

Logistics Service Provider (LSP) Provision

Having reviewed the above provided definition from previous scholars on LSP, LSP could be clustered to three category in term of service provision. As highlighted in previous article published between 1980s to 2019, the range of LSP provision could be divided to three main category namely conventional direct logistics activity, conventional indirect / reverse logistics activity, and halal related logistics service activity. Figure 2 below illustrate the three main logistics provision.

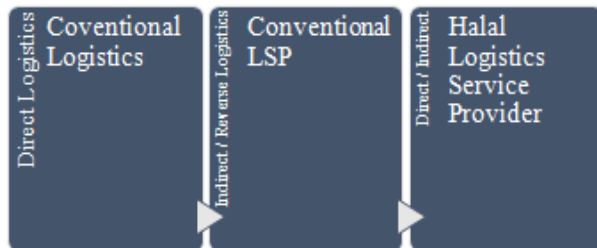


Figure 2: Three main category of Logistics Provision discussed in previous and current literature

Source: The author

Halal Logistics Service Provider (HLSP) as Current Innovation in Logistics Industry

Drawing upon the theory of Resource Based View (RBV), innovation capability inside the organization is regarded as a key strategy for achieving high organizational performance and business sustainability. Recent report by Global Islamic Economic Report (2016/2017), Halal sector has evolved substantially by new Halal business player, new Halal product and the maturing of existing players. Logistics has been stated as one of the sector that supports Halal ecosystem. In supporting Halal ecosystem, logistics players plays a significant role to involve in logistics activity to ensure the status of Halal product that they carry is still Halal (Majid et al., 2019; Khairuddin et al. 2019). As mentioned by Ahmad and Shariff (2016) and Rahman et al (2018), the fundamental of Halal transportation and warehousing is to ensure physical segregation of halal product with no halal product. This means dedicated transport is necessary to avoid cross contamination during transportation activities.

Prior research shows that firms with innovative effort are able to achieve higher performance despite significant

investment are required (Rahman et al, 2019a). This also applicable for logistics companies.

Recent development on Halal industry worldwide open up a big opportunity for LSP to cater the Halal logistics demand. The transformation from conventional logistics to Halal logistics activity by LSP allows LSP to achieve superior performance. Innovation is vital in any organization including LSP as innovation allows LSP to develop new offerings that add value to the firms while maintaining the price factor (Riedl et al., 2016). In recent article by Rahman et al (2018) and Khairuddin et al (2018), Halal logistics covers Halal transportation, Halal warehouse and Halal retail activity. The aim of the Halal logistics is to ensure the movement of the Halal product throughout the supply chain network is maintain Halal. The main aim for Halal logistics and supply chain is to avoid cross contamination from happening. This big role play by Halal Logistics Service Provider (HLSP) is critical to support Halal industry development across the globe. In this study, we particularly agree with Majid et al (2019) that emphasize on upholding the Halal integrity is the main responsibility for HLSP.

Figure 3 below shows the role of HLSP in every point of supply chain activities, in both direct and reverse logistics activity. The role of HLSP are also guided by the standards or the guideline developed by the Islamic authority in the country. To ensure the successful implementation of Halal logistics activity, apart from HLSP and their customer, the country Halal regulators or Halal authority, as well as country Halal promoting bodies play a significant function to ensure every aspect of management system in HLSP is monitored and controlled.

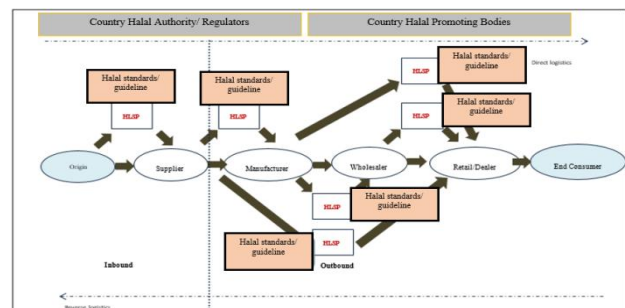


Figure 1: Halal Logistics Service Provider (HLSP) function in supply chain activity

Source: Adopted and revised from Rahman et al (2018)

At present, issue on Halal logistics services and operation has gained popularity among the scholars. As recommended by Busse and Wallenburg (2011), innovative in logistics business is vibrant for the well-being of the logistics organization and the industry. The next section will briefly explain current development of LSP studies with suggesting future research avenue for future scholars.

Future Research Recommendation

Even though logistics study has evolved more than thirty years ago, interest in Halal logistics study has started gaining popularity about a decade ago. Increased focus research by scholars lead to solid literature development and can be used as a main based for future academic and practitioner reference. This study would recommend three main ideas for future research to explore with regards LPS studies. The first recommendation is about to increase the number of investigation on LSP study from the provider perspective. As highlighted by Liu and Lyons (2011) and Rahman et al (2019), there are not many logistics study that focus on 'provider' perspective. Provider in this context is referring to the company that provides logistics services for its 'customer'. In general, the term customer in this context is a user of LSP services. LSP with different background and expertise, and different service capabilities encounter varying type of opportunity for service provision and access to customer. Since most of the previous research focus on LSP issue from customer perspective, this study proposes for future researcher to offer great attention to provider perspective. The proposed future work may include in the area of Logistics service quality from LSP perspective, information sharing and operational performance from LSP perspective, successful logistics partnership study from LSP perspective, the performance and its connection to logistics brand image from LSP perspective, the challenge in supplier selection from LSP perspective, strategic orientation framework from LSP perspective and many more.

Secondly, this study also proposes LSP study in future to increase the number of issue on reverse logistics in both conventional and Halal logistics study. Reverse logistics activity is associates with waste management study that leads to circular economy activity. Current LSP study are lack of reverse logistics research that investigates issue covering LSP reverse logistics design, the challenge of selecting and evaluating LSP reverse logistics providers, outsourcing reverse logistics activity, LSP entry into reverse logistics, outsourcing decision for reverse logistics, the dynamic design of reverse logistics and many more. In fact, with regards to Halal logistics study, even though current study on Halal LSP is still young, there is always an opportunity for future research to also look at the reverse Halal logistics point of view from Halal point of view.

The third area of research recommendation for future scholars are to focus on the theoretical lenses perspective

in LSP studies. There are many studies that exist that propose the use of several related theories in logistics and supply chain study such as Transaction Cost Theory (TCT), Agency Theory (AT), Resource Based View (RBV), Theory Social Network Theory (SCN), Relationship Marketing Theory (RM), Institutional Theory (IT) and many more. It would be a great contribution to the literature is the study focus on the list of theories used in LSP studies as it could be used as a central reference for future scholars in developing their research.

3. Conclusion.

In this article we have documented the evolve definition of LSPs, the role and provision of LSP, as well as the new innovative area of research in LSP namely Halal Logistics Service Provider (HLSP). The contribution of this paper is on the foundation of LSP discussed in literature, as well as the proposal for future research from LSP point of view. The salient features of the proposed future research are comprehensive and close the current gap on LSP issue discussed in the literature. On the other hand, the main contributions of this paper to logistics and supply chain literature body is twofold. Firstly, the evolution of LSP definition from 1980s to 2019 provided in this study reflect the evolution of logistics activity in the industry. It address the key features of logistics activities development in the industry. Secondly, it shed lights on the new area of logistics research to focus namely Halal logistics and supply chain area. The main area to explore and focus by research scholars and industry practitioner is on Halal supply chain is on the Halal integrity, Halal management system and Halal critical point of the transportation and warehousing activities performed by HLSP throughout the supply chain.

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