

Perspectives On Logistics Outsourcing**Satya Prakash Tripathi**

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Received: 14 April 2020 Revised and Accepted: 8 August 2020**Abstract**

General: Complex business environmental realities are increasingly compelling firms to revisit strategies, propelling them to focus on core competencies while outsourcing non-core business functions. Logistics outsourcing, thus, is no longer a choice but is a norm.

Purpose: The research aims at outlining a taxonomy of perspectives on logistics outsourcing.

Methodology: The qualitative research uses systematic literature review and relies on meta-synthesis using only secondary data. It endeavours to evolve conceptual framework of various perspectives related to logistics outsourcing.

Findings: Review of logistics outsourcing through the lens of various perspectives, generates insight into 'What', 'Why' and 'How' of logistics outsourcing. It emerges that various perspectives are prisms through which firms may prefer to view their outsourcing needs depending upon how firms perceive their own competencies, industry opportunities, and values that logistics service providers create.

Research Implications: It helps identify research gaps and avenues for further research. It will help build theoretical and conceptual framework on logistics outsourcing.

Value: The research identified other implicit perspectives that have not been recorded explicitly in extant literature. The research formalises some fresh perspectives viz Military/ Level/ Traditional & Disruptive Outsourcing Perspectives. These proposed perspectives are contribution to literature on logistics outsourcing.

Keywords: Logistics, Outsourcing, Perspectives, Strategy, 3PL

INTRODUCTION**Logistics Outsourcing**

Fadile, Oumami and Beidouri (2018) propounded that the boundaries of firms are in constant state of evolution, wherein the firms are eternally faced with the choice of 'doing it in-house' or 'outsource it'. Millen, Sohal, Dapiran, Lieb and Van Wassenhove (1997) define logistics outsourcing as execution of some or all of logistics functions, by an external agency, which classically were performed in house. Logistics outsourcing being the flavour of the time now, big or small, corporate or proprietorship, multinational or home grown (Fadile et al., 2018), all business as well as non business entities are exploring this, albeit, in different measures. Associated resource and functional efficiency, has rendered logistics outsourcing a powerful business trend in modern firms (Qureshi, Kumar and Kumar, 2008).

Perspective

Oxford Dictionary (2018) defines Perspective as "a particular attitude towards or way of regarding something' or simply, a point of view" (p. 1020). In management terms, it may be understood as world view or underlying thought behind a management practice. Individuals have their own world view that may not be universally shared and that the world view continues to be shaped by influences (Hanvey, 1982). Varied perspectives provides different lens to view issues under investigation. Perspective may also be construed as analogous to the larger 'Why' a particular management thought or practice is applied in an organisation or in a process. It is widely accepted that if, the 'Why' is clear then the 'What' and 'How' becomes easy for the management. Therefore it is imperative that perspectives associated with Logistics Outsourcing be investigated thread bare. Examination of 'Logistics Outsourcing' through multiple perspectives, provides insights thereby, building a holistic framework for conduct of research (Shook, Adams, Ketchen and Craighead, 2009).

Owing to it's growing importance worldwide (Rajesh, Pugazhendhi, Ganesh, Muralidharan and Sathiamoorthy, 2011), outsourcing as a concept is well appreciated by all the organisations and is implemented in some measure or the other by most of the organisations. Owing to contextual differences across organisations, the interpretation of outsourcing is obviously different (Lewis and Alalayevsky, 2000). This is attributable to possible lack of established theoretical framework for evaluating organisations during the process of decision, implementation and subsequent impact evaluation (Bolumole, Frankel and Naslund, 2007). Crum, Poist and Daugherty (2011) have researched that even though the literature on logistics outsourcing is growing, however, synthesised efforts

on quality research remains limited, thereby, leaving ample scope to be covered.

RESEARCH METHODOLOGY

Objectives: To understand the concept of logistics outsourcing and to study different perspectives on logistics outsourcing. The research further aims at outlining a taxonomy of perspectives on logistics outsourcing.

Methodology: The study is descriptive in nature and uses secondary data with a qualitative meta synthesis approach. To this extent this paper aims at examining perspectives associated to Logistics Outsourcing, for evolving a comprehensive worldview on this very relevant topic through detailed examination of the existing literature. The basic foundation of this research rests on the established academic, management and organisational theories upon which some industry perspective, military thought and some implied perspectives have been built. Having reviewed the various perspectives, the paper endeavours to outline a conceptual framework factoring the examined academic perspectives.

PERSPECTIVES ON LOGISTICS OUTSOURCING

Theoretical Perspectives

Bolumole et al. (2007) observed a general lack of established theoretical framework in application of outsourcing decisions and assessment of impact of the outsourcing decisions. Theory is not panacea to all the problems but theory does help by shedding light at the research stage to help find solutions to the problem and while theory helps in understanding, it is the abstraction that helps building theory (Eccles, 1957).

Transaction Cost Economics (TCE) (Williamson, 1975): Transaction cost is indicative of cost of physical resources including human resource in any transaction. For profit maximisation, the transaction cost needs to be low (Bolumole et al., 2007). TCE believes that outsourcing should result in reduction of transaction costs (Fadile et al., 2018). Should the transaction cost required to be low, the activity should be outsourced (Skjoett- Larsen, 2000).

Resource-Based Theory (RBT) (Penrose, 1959): Fadile et al. (2018) observed that TCE alone is not sufficient to determine firm’s competitiveness since external agencies are engaged for firm’s organisational operations, and this brings in the RBT (Skjoett- Larsen, 2000). Key to enhanced performance by a firm is in ensuring efficient flow of right resources when required (Rungtusanatham, Salvador, Forza, & Choi, 2003), implying unhindered access to limitless resources ((Bolumole et al., 2007). RBT emphasises the conditions that must exist for resources to generate competitive advantage, suggesting that firms should outsource peripheral processes to be able to focus on core competencies (Bolumole et al., 2007 ; Sahay and Mohan, 2006 ; Rajesh, et al., 2011; Qureshi et al., 2008 ; Zhu, Ng, Wang and Zhao, 2017 ; Min, 2013 ; McIvor, 2009). While the other resources in possession of firms could be limitless, Prahalad and Hamel (1990) had propounded that competitive advantage is derived from unique resource barrier of ‘Core Competence’. Business strategy of outsourcing enables organisations gain competitive advantage (Sakolnakorn and Naipinit, 2016) by focusing on their core competence.

Network Theory (NT) (Ford, 1990): Hobbs (1996) explains that mere possession of complementary resources, as professed by RBT, is not the sole reason for outsourcing and thus leads to the NT, which is premised on belief that exchange of resources is necessary for firms and it views outsourcing as a network coordination means for firms to manage their supply chains as one entity (Snehota and Hakansson, 1995) rather than a set of fragmented entities (Bolumole et al., 2007). Networks help firms procure resources managed by other firms and to that extent, it focusses on relationship building between firms (Fadile et al., 2018).

General Systems Theory (GST) (Von, 1968): This theory maintains that businesses are essentially systems that comprise of processes and each of these should be viewed as one whole (Von, 1968). It emphasises on dynamic interdependence (Caddy and Helou, 2007) of components, therefore, collective performance of each firm involved in the supply chain impacts the performance of complete supply chain (Mahnke et al., 2005). The focus of GST is on the structure of the system, rather than the function of the system (Mishra and Garg, 2013) and thus, views outsourcing in structural terms (Bolumole et al., 2007) as a strategy to achieve logistics integration by involving third parties creating in interdependencies.

Other Theoretical Perspectives : Three more theories found significantly mentioned in the literature are : **Agency Theory** (Jensen and Meckling, 1979) assumes relevance when the outsourcer (the Principal) develops mechanisms of authority delegation to the service supplier (the Agent) for control and decision making (Eisenhardt and Martin 2000); **Channel Theory** stipulates that outsourcing is the outcome of improvement in distribution channel undertaken by companies with aim of cost reduction. (Kozlenkova, Hult, Lund, Mena and Kecec, 2015) and **Value Chain Concept** (Stock, 1997) views logistics from the perspective of value addition for achieving competitive advantage. Shook et al. (2009) have identified some more theoretical perspectives, such as: **Institutional Theory** emphasises that firms are subject to external pressures, forcing them to act in a certain way and a firm needs to adopt outsourcing only when it is compatible with its business strategy; **Resource**

Dependence Theory mandates that resource dependence of a firm on suppliers needs to be regulated, making the supplier more dependent on the firm; **Strategic Choice Theory** believes that a firm may choose between ‘Making’, ‘Buying’ or ‘Allying’ and these strategic decisions become the performance drivers for a firm ; **Socio-cognitive Theory** propounds that decisions by the firms to outsource is a product of beliefs of the managers and past practices of the firms.

Management Perspectives

The firm’s management perspective towards logistics outsourcing is reflected in **Cost Reduction** (Sahay and Mohan, 2006 ; Aguezzoul, 2014 ; Farahani and Rezapour, 2011) is achieved by economies of scale and cost optimisation by converting fixed costs to variable cost as a result of outsourcing non-core processes (Qureshi et al., 2007); **Improvement in Customer Services** (Zhu et al., 2017 ; Yeung, Selen, Sum and Huo, 2006 ; Marchet, Melacini, Perotti, Sassi and Tappia, 2017 ; Farahani and Rezapour, 2011) results from reduction in customer lead-time, prompt response, consumer awareness and superior quality of services. Outsourcing helps companies achieve this efficiently; **Increasing Flexibility** (Zhu et al., 2017 ; Marchet et al., 2017 ; Ansari and Modarress, 2010) helps meet un-foreseen contingencies like variation in demand, meeting surge requirements which are facilitated by the expertise of the logistics services providers; **Risk Sharing** (Rajesh et al., 2013) implies that outsourcing partners help share risks arising out of operations; **Exploiting External Resources** (Min, 2013) is made possible when outsourcing partners help firms access niche technologies and services which otherwise would not be economical in house; **Globalization** (Mohammed and Chang, 1998 ; Yeung et al., 2006) is facilitated when the outsourcing partners help extend the reach of the firms by exploiting cross nation linkages.

Scope (of Services To Be Outsourced) Perspective

Fadile et al. (2018) observed that that all the above theories have answered the ‘Why’ of the outsourcing. Therefore, it is imperative that perspectives on ‘What’ and ‘How’ to outsource be also examined. The methods and models of logistics outsourcing have been expressed in various ways in the literature, which addresses the ‘How’ of outsourcing to a large extent. To answers ‘What’ of outsourcing, ‘Scope Perspective’ is, therefore, now proposed. The Scope Perspective will help in understanding the extent of services that firm would like to outsource. In other words, each firm will have its own perspective on what all activities it would want to be outsourced. It is presumed that ‘What’ perspective helps in objective assessment of the services or the deliverables and their extent, that can be outsourced. Sahay and Mohan (2006) have identified all possible logistics outsourcing services viz warehousing, inbound & outbound transportation, fleet management, labeling & packaging, export & import management including customs handling, distribution, inventory control, product returns, logistics information systems. These services have been classified into four levels by Hsiao, Van der Vorst, Kemp and Omta (2010) as Level 1(basic transportation & warehousing); Level 2 (value added services viz packaging & labeling); Level 3 (management functions viz inventory control & transportation planning); Level 4 (distribution network management). Whereas, Andersson and Norrman (2002), clubbing the above levels, suggest only two categories that is basic and advanced services. Evolution, over the years in the academic thought about ‘What’ of logistics, has been summarised comprehensively by Fadile et al. (2018) in three categories viz ‘**Basic Logistics Services**’, ‘**Value-Added Logistics Services**’ and ‘**Advanced Logistics Services**’, as a result of review of 12 studies undertaken between 1997 and 2016 which trace the contemporary academic thought about what kind of service was construed as Basic, or Value Added, or Advanced Services at different points of time over two decades.

Logistics Operations Perspective

The answer of ‘What’ can be outsourced is related to extent of outsourcing service that any service provider (who) is willing to provide under the various models of outsourcing. This perspective examines ‘Who’ of the logistics outsourcing operations. The term ‘Logistics Service Provider’ (LSP) is a generic expression for many other outsourcing service providers such as Transporter, Outsourcer, Logistics Services Firm, 3PL (third-party logistics provider), Logistics Integrator (Hertz and Alfredsson, 2003; Forslund, 2012), Orchestrator (Zacharia, Sanders and Nix, 2011). While, Hertz and Alfredsson (2003) perceive LSP as an external agency managing on behalf of outsourcer, Sink et al. (1997) see the LSP as subset in the outsourcer firm, performing some or full part of logistics functions and Berglund et al. (1999) feel that LSP should not be viewed as mere intermediary, but as a full-fledged industry. It is appreciated that, the role of LSP and consequently their nomenclature has been evolving with the scope of the services increasingly being offered by the LSP to remain competitive (Rahman, 2011). Thus, there is a felt need to distinguish between the various types of LSPs from a more formal perspective of outsourcing models. In the logistics industry parlance (Fadile et al., 2018) have categorised the LSP in five conventional types ie 1PL, 2PL, 3PL, 4PL and 5PL based on their structure of business models they employ. Some perspectives evaluated in this research include:

First Party Logistics (1PL): Oldest concept (Meidutė, Litvinenko and Aranskis, 2012), also referred to as ‘Haulier’ and prevalent when buying and selling is taking place in same location (Vasiliauskas and Jakubauskas,

2007). Service user firms themselves performing their own logistics function employing their own logistics assets and managing them in-house (Gunasekaran, 2002).

Second Party Logistics (2PL): An external transport operator meets the physical transportation needs of a firm (Fadile et al., 2018). A 2 PL is a commodity capacity provider, usually called 'Forwarder' (Vasiliauskas and Jakubauskas, 2007) providing tight scoped basic services of warehousing, transportation and transshipment (Hanus, 2013).

Third Party Logistics (3PL): Logistics cooperation, wherein all logistics operations are delegated to a service provider (Meidutė et al., 2012). Aspirations of one stop solution, have evolved 2 PL to 3 PL providers giving integrated solutions (Vasiliauskas and Jakubauskas, 2007) offering additional value-added services like cross-docking and delayed differentiation, apart from basic services (transportation & warehousing) (Fadile et al., 2018). Invariably, the 3 PL emerges as a consulting agency undertaking planning, coordinating and optimising functions in the larger supply chain, employing Information Systems (Hanus, 2013). Ability to scale up and customise solutions as per client needs and market conditions, is the hallmark of 3 PL (Hosie et al., 2012).

Fourth Party Logistics (4PL): 4PL is evolved version of 3 PL (Fadile et al. 2018). 4PL was registered as trademark by Accenture in 1996. Ascribed as 'Integrator' (Hanus, 2013), as a single point contact, a 4PL manages all outsourcing needs of customers by contracting and integrating capabilities of other 2PL and 3PL (Vasiliauskas and Jakubauskas, 2007) with own resources to design and manage complex supply chains (Saglietto, 2013). Functions of integrating and controlling resource, financial and information flows in the manufacturing and distribution processes of all other 3PL, are inherent to the operations of a 4PL (Meidutė et al., 2012).

Fifth Party Logistics (5PL): The latest in the family of LSP, 5PL is highest level of evolution in logistics integration (Hosie, Sundarakani, Tan and Koźlak, 2012), essentially is management of all stakeholders in the supply chain integrating information systems (Fadile et al., 2018) on web based e business platform as 'virtual logistics services provider' and 'info-mediary' without deploying any physical and by providing innovative solutions through the entire supply chain by engaging in dimensions like mapping and reengineering supply chains and 4 PL activities (Hosie et al., 2012). It therefore, emerges that 5 PL is strategic in its intent and manifestation.

Lead Logistics Provider (Fadile et al., 2018) (LLP): LLP offers services similar to a 4PL, however, LLP, unlike a 4PL, utilises its own physical assets in fulfilling customer needs (Fadile et al., 2018). LLP is a product of limitations of individual 3PL operators, wherein, it is essentially a lead 3PL with advantages of scale, leveraging capabilities of 3PL and integrating its own skills for rendering a comprehensive logistic solution for the supply chain (Bhatti, Kumar and Kumar, 2010).

Military Perspective

Whitehall (2000) views logistics as movement and maintenance of forces in peacetime as well as in war, suggesting that it is logistics that determines the quantum of forces that can be applied in a theatre of war and also the tempo of operations that can be achieved. Londe, Grabner and Robeson (1993) state that roots of contemporary business logistics are traced to military logistics and McGinnis (1992) says that numerous insights to modern business practices are explained by military logistics. This notwithstanding, there are significant differences between how the business industry and the military perceives logistics and consequently its outsourcing. Military logistics aims at military effectiveness for national security, unlike business logistics that aims at maximising shareholders value, thereby, making a distinction between public and private interests (Yoho, Rietjens, Tatham and Rietjens, 2013). While in peacetime, the military logistics may have cost effectiveness approach, in war time, cost effectiveness is secondary and operational effectiveness is paramount (Kovács and Tatham, 2009). The business approach is towards financial outcomes, whereas, military logistics approach is towards operational outcomes (Yoho et al., 2013). Resource requirements in support of military logistics are massive with unpredictable surge and spurts, unlike the business logistics where the patterns are well established (Yoho et al., 2013).

While business logistics mistakes may result in loss of profit, failure in military logistics could have catastrophic outcomes for the nations. Military history bears the testimony the outcomes of war have been dictated by logistics (Lamba, 2016). Appropriately, it is said that "War is a National effort" (Lamba, 2016 p.2) and sustaining the war waging potential of the Armed forces is a national enterprise. Armed forces have to resort to the concept of Comprehensive Logistics Management, necessitating dedicated military assets but also a robust and responsive logistics chain (Nagalia, 2010), assured availability at the point of requirement, pronounced safety margins and customised distribution channels to suit the operational requirements. Asset visibility, logistic velocity, defined levels of redundancy and assured availability will be the key to a responsive and effective military supply chain (Kumar, 2014).

Level (of Outsourcing) Perspective

Level perspective is proposed to examine the impact that logistics outsourcing will have on the performance of the organisation. Abstraction of levels of outsourcing, as they impact organisations has been articulated by Bolumole et al., (2007) as Strategic, Tactical and Operational. Outsourcing that results in significantly high profitability and long term organizational impact can be related as Strategic level. Whereas, logistics outsourcing that results in process efficiency or marginal cost efficiency may be appreciated as Operational level. This perspective also helps in understanding the extent (or level) of outsourcing that is desired to achieve an intended impact and also to estimate the type of LSP to be engaged for achieving the desired impact. In other words, the Level (of Outsourcing) Perspective helps in understanding the felt need of organisations to outsource.

Strategic Perspective: Strategy is the realm of higher control with a comprehensive dimension (Eccles, 1957) focusing on development of policies and organisational structure to create integrated logistics chain (Zhu et al., 2017) and deployment of strategic resources by the LSP for competitive advantage (Wong and Karia, 2010).

Tactical Perspective: Tactical level is concerned with direction on ongoing issues (Eccles, 1957), it views outsourcing as enabler to achieve the strategic objectives, involving determination of tools to manage logistics chain.

Operational Perspective: This views outsourcing as means of efficient operation of complete logistics chain by focusing on systems and process controls.

Outsourcing decisions at the three hierarchy of supply chain ie strategic, tactical and operational have their implications at the corresponding levels (Fadile et al., 2018). At strategic level, outsourcing decisions facilitate aligning with firms long-term goals. At tactical level outsourcing decisions help achieving global presence and superior service quality and at operational level it helps delivering cost advantages and enhancing profitability (Ganeshan and Harrison, 1995).

Disruptive (Outsourcing) Perspective

Deloitte Consulting LLC, in their Global Outsourcing Survey, 2016, have identified **Traditional Outsourcing** as outdated and hails **Disruptive Outsourcing** as the new kid on the block. Traditional considerations of Cost Reduction and Performance Improvement are giving way to considerations of Competitive Advantage, Transformation and Automation, thereby, enabling firms upscale business, reach new markets and enhanced productivity. The survey also identifies Cloud Computing, Robotic Process Automation and Cognitive Automation, as technologies driving the disruptive outsourcing.

FINDINGS

Examination of logistics outsourcing through multiple perspectives, provides insights building a holistic framework for conduct of research. This paper has analysed 56 papers on the issue of logistics outsourcing and various perspectives that examine this relevant topic. Sufficient literature exists on the theoretical perspective and most theoretical frameworks are associated with Transaction Cost Theory, Resource Based Theory, General Systems Theory, Network Theory, Agency Theory and Value Chain Theory, while some researchers have also scantily explored other associated theories viz Channel Theory, Institutional Theory, Resource Dependence Theory, Strategic Choice Theory and Socio-cognitive Theory. Though each of these theories are absolute and divergent in themselves in perspective to outsourcing, but, each one of them fall short individually, for a holistic explanation for outsourcing and therefore, it can be inferred that they are complementary in justifying the need for outsourcing (Bolumole et al., 2007).

Rich literature exists on the Logistics Operations Perspective. This perspective tries to identify as to who or which type of LSP is most suitable for an identified level of outsourcing assurance that an outsourcer is looking for. Conversely, it helps benchmark various logistics operators according to their capability, as to how suitable or capable a given LSP is for an intended outsourcing expectation of the outsourcer. Various Types of Logistics service providers along with their distinguishing features has been summarised at Figure 1.

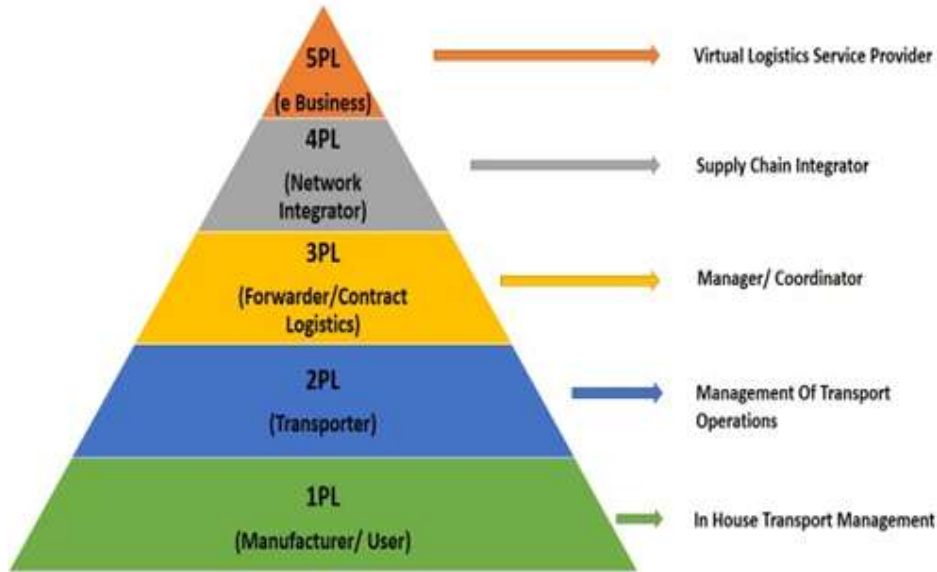


Figure 1. Types Of Logistics Service Providers & Their Distinguishing Features

The Management perspective helps in understanding the drivers that are propelling the outsourcing in the logistics field, helping understand how management perceives virtues in outsourcing their logistics functions. The scope perspective examines evolution of academic thought on logistics services that can be outsourced. Literature review reveals that perspective on the scope of logistics services to be outsourced is under evolution. The scope of ‘What’ of outsourcing in each of the three categories (Basic, Value Added and Advanced services) have been expanding continually. The scope that was considered two decades back as Advanced Services are now found categorised as Basic Services and at the same time the scope of Advanced Services has been assimilating newer domains thereby rendering the nature of ever expanding ‘Scope’ of logistics activities that the firms are willing to outsource.

In addition to the above much acknowledged perspectives, relevant literature has been reviewed to identify certain other implicit perspectives that have not been recorded explicitly in the existing literature. The review has resulted in formalising some fresh perspectives viz Military Perspective, Level (of outsourcing) Perspective (or Impact Perspective) and Traditional & Disruptive Outsourcing Perspective. These proposed perspectives are the contribution to the literature in the field of evolving logistics outsourcing. Outsourcing of military logistics functions to a LSP therefore calls for a different capability sets on part of the LSP and different relationship monitoring mechanism. Perspective of military planners regarding military logistics outsourcing and imperatives thereof, indicate immense scope that exists in exploring frameworks that will help align industry best outsourcing practices for military outsourcing needs. The Disruptive perspective takes a transformational view and identifies logistics outsourcing as practices driven by technological advancement and calling for technology absorption by the LSPs for seeking competitive edge. Brief assessment of disruptive outsourcing trends presents itself as an enticing research avenue. A conceptual logistics outsourcing framework factoring the examined perspectives is proposed and the same is diagrammatically depicted as under:-

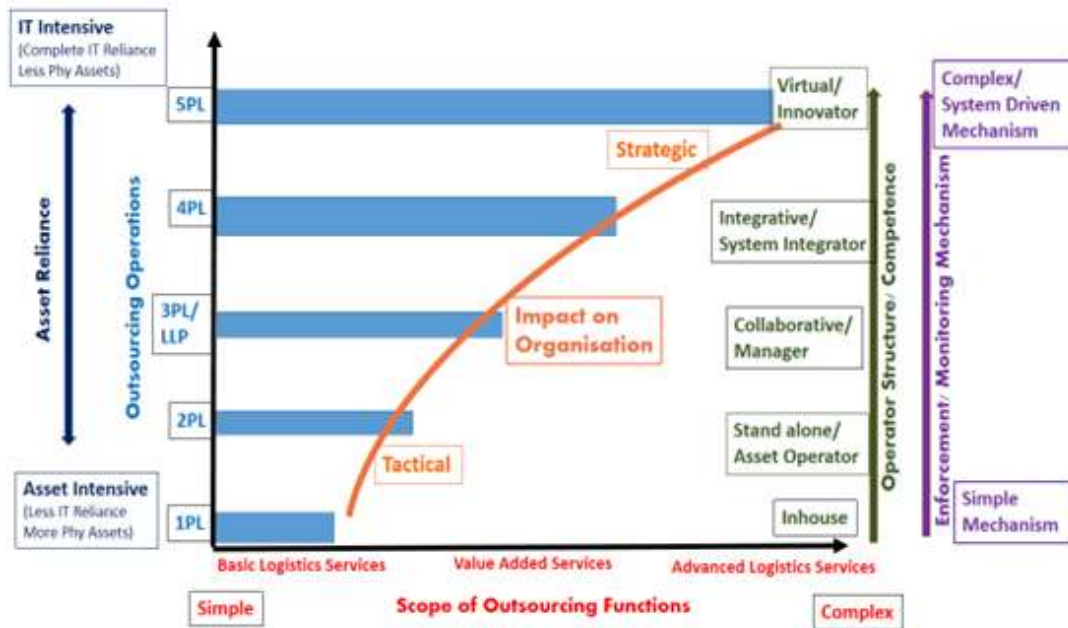


Figure 2. Conceptual Framework : Perspectives on Logistics Outsourcing

Conceptual Framework of Perspectives: Evolution of LSPs in scope of outsourcing functions has a distinct correlation of migration, by the LSPs, from a physical asset intensive organisations, to IT intensive organisations, that are lean on physical asset reliance. As the LSP enhance the scope of their service offering, the impact of outsourcing relationship assumes strategic dimensions. Higher the desired outsourcing impact, the LSP selection gets more refined. For strategic impact the operator competencies ought to be superlative and this has a direct proportional dependence on the operators support structure. To assume the role of strategic partner, the LSP has to transform its relationship offering to the realm of integrative dimension. The scope of engagement with the LSPs by the organisations, determines the nature of enforcement and monitoring mechanism required to manage the outsourcing relationship. Non strategic relationships call for simple monitoring mechanism, whereas, strategic relationships require full relationship management mechanism (Hofer et al., 2009). Given the ever increasing prominence of strategic outsourcing (Krause et al., 2001), it is Incumbent on future researches to continue contributing “theoretical and pragmatic insights” (Shook et al., 2009) in this relevant topic and more so on relatively less explored perspectives of Regional/Country, Technological, Historical, Governmental and Buyers/Suppliers perspectives, to suggest a few.

CONCLUSION

Logistics outsourcing being a sunshine domain would increasingly remain relevant to the industry as well as academia due to its obvious utility. Some perspectives that are relevant to the issue at hand but have not been explicitly covered in the existing literature, such as “Military” perspective, “Level (of outsourcing)” perspective and “Traditional & Disruptive” perspectives, would merit more detailed academic enquiry. Military perspective will help align industry best outsourcing practices for military outsourcing needs. Disruptive perspective takes a transformational view highlighting the need for technology absorption and assimilation in the industry. Prelim assessment of disruptive outsourcing trends presents itself as an enticing research avenue. Quality research grounded in theoretical frameworks would also be useful to the logistics industry in mitigating the contextual differences in initial interpretation about logistics outsourcing and their subsequent implementation and evaluation, across organisations.

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