Operational Performance of Courier Companies to E-Business Firms: Literature Review

Nurul Izzah¹
Faculty of Industry Management,
Universiti Malaysia Pahang, Lebuhraya Tun Razak, 23600
Kuantan Pahang, Malaysia
damiza87@gmail.com

Liu Yao² Cheng Jack Kie³
Faculty of Industry Management,
Universiti Malaysia Pahang, Lebuhraya Tun Razak, 23600
Kuantan Pahang, Malaysia
liuyao@ump.edu.my
jackkie@ump.edu.my

Damhuji Rifai⁴
Faculty of Electrical Engineering & Automation
TATiUC, 24000 Kemaman, Terengganu
damhuji@tatiuc.edu.my

Abstract—This study aims to reviewing of operational performance in courier service companies as a third party logistics (3PL) to their business partner and customer, which is among them use of technology in business operations. It consists the definitions, process, types, components and theories of operational within joint venture or operations between courier companies their business partner or customers. Firstly we reviewing operational competence before we describe about operational performance based on literature of operational management. Because we found in literature of operation management, that operational performance origin based on operational competence, and operational performance consists of technology utilized for instance e-commerce and e-business systems integration to assist business operations systems with suppliers and customers. We concluded, that logistics suppliers and business partners should have trust because they dependence each other to run business operation, thus from operational performance we can know level of dependence, trust and sale growth of e-business firms with their logistics supplier provided by of courier companies.

Keywords—courier; logistics supplier; business partner; operational performance

1. INTRODUCTION

Courier companies is a third party logistics (3PL) where they act as a courier partner logistics for e-business firms within supply chain management flow [39, 40]. This paper try to explain about the factors of operational performance, it has been foundation within joint operations between courier companies and e-business firms [e.g., 39, 40]. Firstly we reviewing of operational competence before we describe about operational performance based on literature of operational management, and then e-business systems integration. Because we found in literature of operation management, that operational performance origin based on operational competence [e.g., 13, 16], and operational performance consists of e-business systems integration to assist business operations systems with suppliers and customers [19, 67].

Definition of operational always refers to development or continuous improvement in line with utilizing of creativity terms such as flexibility, useful services and newness in operations [68], we found operational competence defined as a bundle of flexible and systematic efforts to incrementally improve operations performance [13, 16]. Besides that according [67], claims that continuous improvement in operational competence is using a process perspective and structured methods to continuously improve organization activities, services and to enhance operational performance [e.g., 39, 40]. Hence, according [64] states that operational performance refers to a firm’s operational outcomes in terms of operational competence such as quality.
improvement, cost reduction, on-time delivery, lead-time reduction, and the ability to quickly respond to customer requests. Thus, this paper would investigated on moderating effects of operational performance between logistics services and e-business firm performances.

According literature of operational management previous researchers shows that operational competence influenced and produced from ability of frontline employees [e.g., 67, 68]. Besides that, in previous literature we found also in e-business systems integration between logistics companies and their business partner, there exists a relational governance factors, they are inter-firm dependence and inter-firm trust where they has been relational foundation factors and fastener between them [e.g., 64, 65, 67] to enhance operational performance. Therefore, the literature, theory, hypothesis propose and theoretical framework development for this study as below.

2. EFFECTS OF OPERATIONAL PERFORMANCE OF LOGISTICS SERVICES ON E-BUSINESS FIRM

A. Operational Competence

This conceptual of operation competence and operational performance is generally consistent with the concepts of process improvement in the operational management literature [9, 13, 16, 35, 45, 49]. According to the operational management literature, continuous improvement in operational competence broadly refers to the use of a bundle of systematic efforts to incrementally improve operations performance [13, 16]. Reference by [67], authors asserted that continuous improvement in operational competence as operational employees’ ability of using a process perspective and structured methods to continuously improve operational activities. Reference by [16] drew on the theories of dynamic capability and organizational learning, and the continuous improvement practices of 17 companies to identify the core elements to develop their continuous improvement framework to shows in enhancing operational performance.

Reference by [67] claims that operational competence and frontline employees can be manifested by their operational improvement in three aspects, namely, process management, structured methods and continuous attitude. Continuous improvement pertains to the view that improvement efforts are ongoing activities aiming to enhance operational performance incrementally [16]. Process management pertains to the view that operations consist of interrelated, repetitive processes and such processes should be improved through the use of quantitative techniques and the perspective of process customers [13]. Structured methods pertain to implementation of improvement projects that follow specific steps (e.g., DMAIC, PDCA) for problem identification and diagnosis, and solution generation and implementation [5].

Similarly, in the literature on operations management also, claims that frontline employees have been recognized as a crucial element in service operations [46, 48, 55], there is an apparent lack of in depth study on the development of creativity in employees [67]. Supported [67] authors argue that continuous improvement is a relevant operations management approach conducive in frontline employees of service operations because it emphasizes making constant enhancement in operational performance. There is evidence suggesting that experience of making changes and improvements promotes employees’ better thinking, and helps them identify opportunities and create new ideas [12, 59]. Thus, recently several studies interested on frontline service employees are competent in implementing continuous improvement practices, they are likely to be more competitive [e.g., 67, 68]. Reference by [67] authors conceptualized operational competence as service employees’ ability of using relevant improvement practices (i.e., process management and structured methods) to improve operational performance continuously, then they found that it have positive impact on the ability of frontline service employees.

B. E-Business Systems Integration as Operational Foundation between Logistics Suppliers and E-Business Firm Performances

E-business plays an increasingly important role in facilitating the timely flow of information, materials, and goods throughout supply chains. In the context of supply chains, e-business systems integration refers to the assimilation and adaptation of Internet based e-business operations, which enables firms to exchange information, share resources, and undertake continuous and collaborative activities [64]. It is not uncommon for firms to develop inter-firm alliances to reduce costs, access complementary resources and capacities, and cope with market competition [13, 61]. As a dominant aspect of inter-firm alliances, e-business systems integration not only reflects the state of interconnecting operational processes and business transactions but also materializes synergetic advantages of inter-firm alliances [17, 22, 53]. In this respect, efficient information exchange is of importance for exploring value-added opportunities and capitalizing on inter-firm resources and capabilities [14, 52, 54]. Similarly, in courier operation with e-business firms [65] stated that e-commerce systems and e-business systems development within firms between logistics suppliers and customers will be given effects on information and products flows effectively compared than traditional way.

Proven, the existing studies examining business-to-business (B2B) supply chains and the relationship between e-business systems development and firm performance suggest that e-business systems may help streamline information flow, improve customer service, and contribute to operational efficiency [33, 42, 44]. Recently, some studies have drawn attention to exploring firm performance from the perspective of relational governance because relational governance can help firms to achieve collaborative advantages and address operational uncertainties and contingent risks [3, 34, 51, 54, 60]. Firms may implement relational governance in routine business operations by integrating e-business systems processes to enhance relationships and strengthen collaborations [36].
In case by [64], authors examined the effect of relational governance on e-business systems integration, as firms are tightly coupling business processes with supply chain partners to leverage resources and capacities. It shows antecedent relational factors and the causality of e-business integration to reveal the extent to which e-business integration mediates the relationship between relational governance and operational performance.

Reference by [64] claims also, that inter-firm dependence and inter-firm trust to be precursors to e-business systems integration and attempt to advance the understanding of the role of e-business systems integration in the relationship between relational governance and operational performance. Authors states that inter-firm dependence refers to the extent to which a firm perceives its reliance on partners in supply chain operations [64]. Previous studies explore inter-dependence and suggest that it is commonly accepted that firms are unable to be autonomous and self-sufficient with respect to internal resources, capabilities, and strengths to meet the challenges of environmental change, market fluctuation, and competition [4, 18, 21, 41, 58]. Firms depend on business partners to expand their capabilities with inter-firm resources embedded in supply chains [4, 10]. Furthermore, authors asserted that inter-firm dependence is the mutual dependence between business partners with the practical goal of win-win solutions [64]. Firms may appreciate the value of business partners’ complimentary resources and capabilities and rely on the partners to strive for common interests [21, 23, 51, 57].

In particular, inter-firm dependence is vital to the governance of the supply chain relationship [29]. First, it is an exchange tie developed from positive exchange experience that bonds partners together and forms supply chain relationships [6]. Hence, supply chain partners can access relation-specific assets including the exchange of proprietary information, knowledge, and technical know-how [28, 29]. In addition, inter-firm dependence may provide a safeguard for supply chain partners to suppress unexpected behaviour, reduce counterparty risks, and enhance commitment to the partnership [41, 51, 57].

Based on the idea of inter-firm dependence, it may also create of good quality services by courier companies to serve e-business firms such as, logistics-related efficiency of managing knowledge [7], creative services [67, 68] with low negotiation between relational governance and operational performance. Authors states that inter-firm dependence refers to the extent to which a firm perceives its reliance on partners in supply chain operations [64]. Previously studies explore inter-dependence and suggest that it is commonly accepted that firms are unable to be autonomous and self-sufficient with respect to internal resources, capabilities, and strengths to meet the challenges of environmental change, market fluctuation, and competition [4, 18, 21, 41, 58]. Firms depend on business partners to expand their capabilities with inter-firm resources embedded in supply chains [4, 10]. Hence, e-business firms depend on business partners to expand their capabilities and efficient operational performance with inter-firm resources embedded in logistics management [39, 40]. Then, in logistics firms side they need ready to give best services performance and effective operational performance especially in efficiency of logistics management [39, 40]. Whereas, the organization have efficiency of managing knowledge will be creative to create new service or to added-value in existing services for their customers [39, 40, 68]. Reference by [68] shows that teamwork in organization that participated by team knowledge management effective and efficient has significantly on team creativity to increase firm of financial performance. And reference by [7, 8] shows that efficiency of managing knowledge in logistics management has significant implication for different market place and financial performance, so we implies the effect or significant in this e-business market also. Consequently, this situation would be impact on operational performance between both of them as a supplier and business partner [67, 68].

Accordingly Internet-based e-business is increasingly important to supply chain operations, as firms tend to integrate business processes with supply chain partners like courier partner logistics, further authors claims that as a business partner especially logistics it necessary particularly when recognizing the value and importance of inter-firm dependence and cooperative advantage [64]. Inter-firm dependence offers supply chain partners not only information sharing, complementary resources, and dynamic capability but also a reliable environment with reduced unexpected behaviour and transaction costs [38]. Thus, it encourages firms to work together to develop inter-firm relationships, integrate business operations, and accelerate information flow with business partners [27, 62]. The more important the inter-firm dependence is, the stronger the perception of strategic reliance will be [31]. Consequently, partners may be willing to make a relationship investment, which may result in establishing Internet-based e-business integration of routine processes and activities. When a firm perceives its dependence on partners and recognizes the importance and consequence of interdependent relationships, it has a need to develop e-business systems integration with supply chain partners [30].

Generalizing from these observations, this study imply the readiness of e-business in the management of logistics companies not only will increasing sales, operations and performance of the e-business firms, but will lead to an increase in the development of e-business systems and e-business industry in Malaysia. With regard to e-business systems development within any organization, [19, 43] authors argued that combination of e-commerce firms and other e-commerce company or cooperation between e-commerce entrepreneur and any e-business firms, it will be develop as e-business industry. Hence, information systems has built and generated an inter-firm dependence in products delivery and information flow, but not this factor only because between partnerships they need also factor of reliability and trust.

The inter-firm trust refers to a firm’s belief that the partners are reliable and predictable in fulfilling obligations and performing promised actions [25, 56]. Reference by [47] define trust as faith in the moral integrity of exchange partners, which is developed through business interactions and leads to inter-organizational bonds in terms of common goals, sentiments, and relationships in the face of uncertainty. At the organizational level, a firm’s boundary spanners such as logistics managers and procurement managers are supply chain partners’ representatives [64]. As a reflection of the collective belief of boundary spanners, inter-firm trust helps firms predict the actions to be performed by supply chain partners in fulfilling obligations and promises and makes them work collaboratively in supply chain operations [3, 25, 56, 66]. In other words, managers from logistics companies as representative to their business partners and customers, so they must have a good knowledge, good respond and polite attitude [7, 8], where e-business firm as a business partner would trust them completely to give creative services [68] or at least different and better service than other logistics suppliers companies.
Whereas, in the context of e-business systems integration, it is expected that inter-firm trust cultivates a conducive supply chain environment such as logistics supplier and e-business firms, not only fostering mutual confidence and enhancing cooperation and relationship stability but also leading to reductions in transaction costs, mitigation of unexpected behaviour, and reinforcement of relationships [11, 47, 66]. The existence of inter-firm trust suggests that firms have cooperative mind-sets in business operations, which should result in supply chain partners’ dedication to exchanging information and sharing resources [3, 47]. With e-business systems integration, firms tend to share proprietary knowledge, information and adaptively work with counterparts to develop supply chain partnerships [29, 50, 51]. Thus, they should benefit from reducing risks and increasing opportunities through the exploration of joint actions [25, 56]. Reference by [65] technology of information systems has built the flexible and creative service of logistics, it makes the operations between logistics supplier and e-business firms more smooth such as facilities of RFID, track and trace online and online payment [26]. Therefore, technology systems in business or we know now as an e-business systems will increase organization performances not only to financial but also to non-financial performance like improvement of e-business development level [68], where the cost decreases for many transaction because it has streamlined the process, short time and it would operation 24 hour and 7 days non-stop.

Supported by existing studies indicated that e-business systems helps firms improve operational efficiency, information flow, and time-to market of new products [1, 2, 20, 32, 33]. The supply chain partners may pursue e-business integration to effectively enhance operational performance [33, 62]. Authors states that operational performance refers to a firm’s operational outcomes in terms of quality improvement, cost reduction, on-time delivery, lead-time reduction, and the ability to quickly respond to customer requests [64]. Thus, this study adopting operational performance definition to evaluate it from logistics’ customer perspective, they are from industry of e-business.

**C. Resource-Based View (RBV) Approaches**

The above discussion also argues that operational competence and frontline employee ability are factors indirectly or directly in improved organization performance in service operations. These arguments are consistent with these source-based view (RBV) theory, which suggests that the competitive advantage of a firm lies primarily in the application of a bundle of valuable resources at the firm’s disposal [24]. From the theoretical lens of RBV, operational competence and employee ability are valuable resources that help the achievement of a specific form of competitive advantage to develop new services. RBV offers guidelines to identify valuable resources. First, valuable resources should be heterogeneous in nature and not perfectly mobile [24]. Operational competence and employee ability are congruent with the guidelines because they both are complicated and latent in nature, and are unlikely to be transferable easily between firms [67].

Second, valuable resources should be rare, inimitable, and non-substitutable [63]. Operational competence and employee creativity should help a service firm offer better values (e.g., efficient and innovative services) to its customers. Such employee competence in improvement is unlikely common among service firms. Also, competitors are unable to imitate them easily or substitute them using other employee competence or attributes, which suggests that operational competence and employee ability should be valuable resources for firms to achieve competitive advantage, there by supporting our efforts in investigating their impacts on one relevant competitive advantage, effectiveness in logistics services and operational performance.

In line with the extended resource-based view (RBV), e-business systems integration also may properly leverage relational governance, which can make it possible to obtain competitive advantage and create a synergistic effect whereby supply chain partners optimize resource utilization [10, 37]. The firms may realize the potential of complimentary resources and capabilities through information sharing and inter-firm business process reengineering [14, 52, 54]. Authors claims that e-business systems integration may leverage the relational resources embedded in inter-firm dependence and inter-firm trust to improve operational performance [3, 10, 64].

As shown by [64] that the mediating role of e-business systems integration in inter-firm alliances and business operations because it may serve as an enabler that transforms the potential benefits of relational governance into operational performance. According literature above, thus we adopted operational performance from [64] where included terms of inter-firm dependence, inter-firm trust and we add one more terms under this variables, it is business operation which refers to sales growth of e-business firms depend on cooperation with logistics suppliers, so we extend this study to explore the moderating role of operational performance in creative logistics services and e-business firm performances. Authors asserted that these aspects can be measured in regular and ongoing business processes, which essentially reflect a firm’s core competence derived from supply chain operations [56, 61, 64].

Consequently, as literature explained about operational excellent [15]; operational competence of logistics services [67]; and then e-business systems integration (logistic supplier companies and business partner) have positively effects on operational performance of logistics services [39, 40, 64], thus we proposed of hypothesis that operational performance moderates the relationship between logistics services and e-business firm performance. Therefore, we proposed that following hypothesis and framework theoretical (see Figure 1);

**Hypothesis:** Operational performance positively moderate the relationship between creativity in logistics services and e-business firm performance.
3. CONCLUSION

Consequently we implies that logistics operation has significant with e-business firm performances. Whereas in logistics management which they followed with continuous learning and improvement of management to services for development of new services to enhance competence and more competitive advantage [7, 8, 67]. Finally, to extend existing studies we try to evaluate operational performance as a moderator between logistics services and e-business firm performance, which [64] shows that logistics suppliers and business partners should have trust because they dependence each other to run business operation, thus from operational performance we can know level of dependence, trust and sale growth of e-business firm with their logistics supplier provided by of courier companies.

ACKNOWLEDGMENT

This research was made possible with a scholarship from the Ministry of Higher Education, Malaysia and support from University Malaysia Pahang (UMP).

REFERENCES


