

## **A review of challenges of logistics management and, barriers of e-business: how Malaysia's efficiency logistics service providers can develop services for e-business?**

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**Abstract:** Though resource based view (RBV) has been applied extensively in supply chain studies to examine how firms utilize logistics resources to attain superior performance, relatively little attention has been directed to exploring the effects of operational routines on logistics and supply chain competencies. This study focus on logistics service providers' (LSPs) strategy and operations. According by Rudolf et al., (2011) shows that logistics service providers should adapt their systems and procedures to customers' specific requirements, to ensure high-relationship performance. Satisfied customers especially from e-business partners should promote the providers' adaptations, because these adaptations enhance the probability of contract renewal and reduce the risk of providers' unexpected termination of the contract, because of the growth in online shopping has presented challenges for physical distribution service quality provided by retailers and sellers including both multi-channel and pure players, and logistics service providers (Yuan et al., 2011). This paper aims to combine the perspectives of logistics-service providers and e-business in the development of value-added logistics services. The purpose was to create a theory-based and initially tested framework that could help both service providers and e-business activities identify new opportunities for developing their logistics.

**Key words:** Efficiency logistics management; Logistics service providers; E-business performances; Challenges

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### **1. Introduction**

Logistics management has assumed a very prominent role as it provides the backbone economic growth and to facilitate international trade. It is one of the key service offerings required in the business environment today especially in e-business performances as a driver of growth in developing economies. As it has one of the catalysts for the development of industrialization in Malaysia, the performance of this management will have an impact of the nation's industrialization and its competitiveness in international trade. Logistics management is not only consists the physical movement of goods but it has to be efficient in the facilitation of the movement through documents processing, coordination, monitoring and financing activities. Thus, logistics management covers the whole of infrastructure and systems competency (Abdul et al., 2012).

Today, the dust has settled and many of the promising new e-business companies have failed or are struggling for economic survival. The failure of so many companies in e-business can be in part accounted for by the neglect of logistics as a key factor of success, implying a prominent role for companies specializing in the logistics segment (Bretzke, 2000). Logistics service providers are thus confronted with change in their respective market

environments. It is therefore surprising that little attention especially in Malaysia industry has been paid to an assessment of these changes and their direct as well as indirect implications for logistics service providers and e-business performance. This study tries to explore about challenges of logistics management especially in logistics services providers and how its competency impact on operations of e-business performance.

### **2. Logistics management challenges and constrains**

A study by McKinsey and Company (2011) highlighted unclear communication between logistics services providers and users lead to business interruption is one of the challenges. Before that, logistic service providers' management is the outsourcing of logistics operations to a third party. Companies, or clients, use these third parties known as logistics service providers to provide logistics services. Logistics service providers may provide logistic services to one or more clients at any given time. Clients may choose to outsource a portion, or all of their logistics services to one or more logistics service providers. When sending information to logistics service providers, the client communicates the receipts or shipment to the logistics service providers, which then runs the transaction on behalf

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of the client. Therefore, the client may be a buyer or seller for a transaction. A client typically outsources the following services to logistics service provider; warehousing, inventory management, cross docking and transportation and freight forwarding (Lambert et al., 1998).

Therefore, both logistics service providers and shipper have to form the partnership to create more value for both parties. This is because both parties have their own objective to resolve the problem whereby logistics service providers are now experiencing unstable growth and shippers are facing pressure to lower their cost and increase efficiency and effectiveness.

Firstly we explore challenges and constraints of logistics management around developed country. Thomaz (2009) reported in the fifth state of logistics survey that the increasing logistics cost in South Africa continue to be constraints and challenges to expand market into international trade. The survey reported this country's logistics cost were 14% higher compared to the other countries with the reason of being far away from all sources of imports, and relying heavily on road transport rather than rail transportation. Even the industry in China grows year of year, there were also some major challenges that interrupt the development like rising cost, financing bottlenecks, in-house mindsets to handle logistics, localized services, lack of unified top level institutional coordination and imbalance transport infrastructure development (Li & Fung Research Centre, 2008). In China, human resource is one of the constraints where the demand for talent outstripped supply in the logistics management (Li & Fung Research Centre, 2008). Other challenges in China as reported by Armstrong and Associates (2004) were poor infrastructure management, regulation, bureaucracy and culture, poor training, ICT, undeveloped domestic industry, high transport costs, poor warehousing and storage, regional imbalance and domestic trade barriers. In addition, Pomlett (2006) mentioned the recruiting and retaining good staff can be big challenges as there is a considerable lack of skill.

Now, several constraints were found in Malaysia's logistics management by the study of Ali et al., (2008) which includes lack of follow up actions after certain meetings or issues raised, lack of sophisticated management techniques among the supply chain companies, problems in information technology (IT) system with regard to the costly Electronic Data Interchange (EDI) pricing and charges due to in transparent marks-up by freight forwarders and overall performance and functionality of the system, lack of skilled and trained manpower, no single established source of logistics data and information including lack of information of the industry players, facilities, services and capabilities of the sectors, lack of research and development of the management, lack of regulatory forms to facilitate the management, lack of dissemination of information with regard to the development and expansion of the logistics

management. In term of logistics service provider, Thong (2007) found that the main problem is the inability to participate at the international logistics level as a result of limited IT linkage, overseas corporate network and capital investment.

Next constrains, like a cost of logistics management also the constraints as the proportion of the logistics management to total production cost is estimated at 20-30% in China, compared to only 10% in the developed countries (Dekker, 2002). The management of logistics cost is an important factor affecting the competitiveness on both macro level (national) and micro level (firms). Logistics management cost indicates the performance of logistics management, efficiency level and its competitiveness. Despite of its significance, current state of logistics cost accounting and management in Malaysia has not properly addressed and the challenges surround logistics cost measurement remains incoherent (Sahidah et al., 2013). One of the major challenge in the logistics cost accounting and management in Malaysia is lack of uniformity in the definition of logistics cost or the method used in the calculation of logistics cost. In many cases, the reported logistic costs of companies are defined differently even within the companies of the same business. Frequently, the cost of logistics management differs more than justified by their logistics activities performed. Thus, the definition of logistics management cost and method to calculate logistics cost remain incoherent. Therefore, it is difficult to compare the findings. Besides, it also leads to more complexities in cost of logistics management measurement and benchmarking process (Sahidah et al., 2013).

Next, other major logistics management barriers in China include the lack of responsiveness and dependability of local suppliers, inadequate communications infrastructure, complicated and time-consuming customs procedures and the unavailability of logistics consulting services (Carter et al., 1997). Study by Siew (2002) in the Singapore's transport and logistics management, this country faced some constraints in term of high cost of operations (especially land rental and wedges), small geographic space and domestic market, industry was fragmented and lacks scale with very few global players with global aspirations, instances of lack of logistics clusters, lack of responsiveness of customers need, shortage of skilled, experienced and entrepreneurial logistics professionals and inadequate technological capabilities to carry out wide range of logistics and supply chain management. Therefore, lack of responsiveness or lack of awareness among employees about new competitiveness business in the rapid progress of the technology and lack of sharing knowledge will be give negative impact on logistics management for customers, suppliers and partners business. The responsiveness is very important because of it will give a fast action for any situation (Fugate et al., 2012).

In addition, according to Shaharuddin et al. (2014) classified the obstacles from 38 articles into two major groups: internal barriers and external barriers in logistics management. There are 13 internal barriers and 7 external barriers, suggesting that there are ample opportunities for logistics to improve their managements and recovery effort since internal barriers are generally under the direct control of the firm. Hence, firms should consider taking extra motivation to tackle internal issues to improve environmental efforts, including recovery management. The internal barriers are employee attitude, top management support, communication, resources, wrong perceptions, culture, strategic capabilities, financial, performance metrics, and uncertainty of results, technology, risk issues, and infrastructure. External barriers consist of economics, competitive pressure, regulations, technical information, institutional weaknesses, support and guidance, and market barriers.

### 3. Efficiency of logistics management

Each of the challenges and constraints that exist can be used as an opportunity. What matters is how efficiently logistics companies face the challenges and constraints, so all these depend on the whole competency management. Studies regarding logistics management efficiency have received considerable attention in the logistics literature (for examples see Fugate et al., 2012; 2009; Thai et al., 2011; Borsch, 2011; Wu et al., 2010; Stank et al., 2005). In logistics, such interest might be attributed to the belief that logistics management efficiency is formed from several dimensions, such as a logistics operations with knowledge management (LOKM) framework (see Fugate et al., 2012; 2009) and also namely a business, logistics and management (BLM) framework (see Murphy et al., 2007; 2006; 1991). Previous studies have used the LOKM and BLM framework to study the competency of logistics managers (see Fugate et al., 2012; 2009; Thai et al., 2011; Esper et al., 2010; Razzaque et al., 2001). Studies about the efficiency of Malaysian logistics management have not been widely pursued. The closest studies to the problem were conducted by Dazmin et al., (2012), Rozhan et al., (2008) and Razzaque et al., (2001).

According to Dazmin et al., (2012) they examine about what are the dimensions of logistics management efficiency for Malaysian logisticians. The research method used was to survey Malaysian logisticians to obtain their perceptions of the importance of area of management efficiency, in their current position.

In their study, Rozhan et al., (2008) investigated the need for human resource management (HRM) dimensions in the supply chain management (SCM) of suppliers. Suppliers were required to develop specific HRM practices such as multi-skilling, teamwork and effective job rotation.

Meanwhile, Razzaque et al., (2001) make a comparison between logistics management from

Singapore and Malaysia based on the views of top management. Their findings showed that successful logistics management executives in complex business environments need to be multi-skilled generalists rather than technically-oriented specialists.

In related literature, Fugate et al., (2012);(2009), Esper et al. (2010) and Mangan et al., (2005) have studied difference perspectives on logistics management competency. Fugate et al., (2012) create a new climate of logistics management where is they contribute to the knowledge management and logistics operations literatures in numerous ways and remediate these omissions in the literature by considering the combined effect of LOKM (as per Fugate et al., 2009) and global manufacturing reach, on both logistics differentiation and organizational performance. Then, Esper et al. (2010) emphasized that in order for supply chain and logistics organizations to have a competitive advantage, they need to hire employees with key supply chain management (SCM) skills, implement leadership styles, create a learning working environment and create cross-functional teams. And Mangan et al., (2005) explored the challenges for management development in order to bridge the gap between current capabilities (managerial skills and competencies for logistics and SCM managers) and those required for future success.

Substantial studies, made by logistics researchers from around the world, have studied the relationship between knowledge management and logistics impact on organizational performance, also HRM and logistics, in the context of logistics management efficiency (see Fugate et al., 2012; 2009; Thai et al., 2011; Esper et al., 2010; Wu et al., 2007; Razzaque et al., 2001). However, attempts to explore the dimensions of efficiency in Malaysian logistics management have been few (see Dazmin et al., 2012; Rozhan et al., 2008; Razzaque et al., 2001). But the study about impact and relationship about logistics management especially for logistics service providers and e-business activities still not exist especially in Malaysia industrial. Due to the small number of studies in this area, it presents an opportunity to explore these dimensions. The current study was designed to fill this gap and to enhance our understanding of how Malaysian logistics management perceived efficient related knowledge management to give positive impact on others business performances such as e-business performances. Therefore, the objective of this study was to explore the extent to which efficient of logistics-related knowledge management on e-business development.

The development of competencies, in the 21st century, for managers requires effective program design and teaching methods for teach (Boyatzis et al., 2002). They further explained that competencies need to be effective and they can be explored through two dimensions; firstly, competencies as behavioral manifestations of talent, and secondly, competencies in a holistic theory of personality. In

relation to logistics management competency, knowledge, knowledge management and skills are perceived as important factors for logistics firms to stay competitive in the 21st century (Fugate et al., 2012; 2009; Chapman, et al., 2002; Londe et al., 1993).

Furthermore, Fugate et al., (2012);(2009) focused on four types of knowledge management and logistics management; i) Logistics-Related Knowledge Generation (LRKG), which is personnel's collection and evaluation of knowledge relative to its usefulness to business decisions; ii) Logistics-Related Knowledge Dissemination (LRKD), which is personnel are timely sharing of knowledge of the business environment with appropriate logistics operations management and other personnel within the firm; iii) Logistics-Related Knowledge Shared Interpretation (LRKS), which is the process of quickly achieving a cohesive understanding of knowledge by logistics operations management personnel; iv) Logistics-Related Knowledge Responsiveness (LRKR, it has the speed with which unified action is taken by logistics oriented personnel based upon available knowledge of the business environment. Besides that, Crook et al., (2008) focused on two types of knowledge and skills for logistics management: i) these were termed, broad skills, knowledge generation and dissemination (such as communication, computer, understanding end customer, and project management); ii) specialized supply chain skills, knowledge shared interpretation and responsiveness (like supplier relationship management and coordination, material management, metrics, and market knowledge).

#### 4. Logistics-related knowledge management

Having skills in strategic knowledge management is vital for managers and staffs especially for achieve efficiency of management (Huber et al., 1985). In logistics, effective strategic knowledge management plays an important role in determining successful management of logistics service providers' activities (Sandberg, 2007). Hence, for successful strategic knowledge management skills (SKMS) implementation by Dazmin et al., (2012), Malaysian logistics must feel that value is central to SKMS implementation by logistics firms. To have successful SKMS implementations, these logisticians need to focus on several factors such as effective teamwork in knowledge dissemination, communication in knowledge shared interpretation, negotiation in knowledge responsiveness, management skills in knowledge generation, and value-added perspective in creative ability (Dazmin et al., 2012; Fugate et al., 2012;2009).

From an effective teamwork perspective in scope of knowledge dissemination, Keller et al., (2009) provided a comprehensive review of the core literature pertaining to frontline logistics personnel and their managers. They believe that one of the factors for creating success in business logistics

depends on logistics managers creating enthusiasm among team members by educating employees about the business, and those managers must demonstrate a commitment to creative in make ideas, must create new thing in operations and management, to know where is their creative ability actually, and then implement into a reality by granting employee's responsibility and authority. Further analyses by Sandberg et al., (2010) demonstrated that cross functional teamwork is seen as one of the most important ingredients for top supply chain managers to execute effective management strategy.

Thai et al., (2011), Yazdanparast et al., (2010), and Wu (2007) provide papers about communication, negotiation and management skills in relation to logistics management, meanwhile according Fugate et al., (2012);(2009) provide these elements also in knowledge shared interpretation, knowledge responsiveness and knowledge generation, where is it integrated between logistics and knowledge management. These skills were found to be the area that educational and training institutions should aim to further develop, to enable the local logistics workforce to perform their job successfully (Thai et al., 2011). Also according Fugate et al., (2012) suggested logistics management should collaboration with educational institution to give real experience to graduate. From a related paper, to succeed in an uncertain environment, logistics managers must acquire skills in communication which lead to effective management skills.

From the value added perspective in creative ability, logistics firms need to focus more on the value adding services in their transportation and warehousing activities, since these two items were largely ignored in terms of lead-time performance (Hong et al., 2007). In addition to the existence of e-business in the industrial economy, business logistics is becoming increasingly important role to mobilize e-business operations better. Therefore, this study try to examine about the management of transportation and warehousing services improved indirectly has a positive impact on the performance of e-business. In short, we assumed the positive impact on the performance of e-business can be viewed when a customer's e-business ordering a second and so on, just as fast and accurate delivery. First perspective, here also can be seen that the management of logistics and e-business operations mutually need each other, with an increased use of technology gadgets widespread in Malaysia, and the ease of accessing the internet wherever based on previous studies such as Frank et al., (2013); Fugate et al., (2012); Fugate et al., (2009); Lin et al., (2006); Gunasekaran et al., (2004).

Malaysian logistics have seen the importance of understanding business logistics and others business climate where is more to using of technology (Thai et al., 2011; Kumar, 2008). So, global knowledge and skills are necessary for logisticians to be able to meet global challenges in a globalized market that

progress rapidly like e-business (Thai et al., 2011; Murphy et al., 2006). They must be a talented logistician who not only has a depth of logistics knowledge and capabilities but also knowledge and capabilities about non-logistics items; such as, finance, sales, marketing, customer service, and information systems, or their partners such as in e-business parts (Thai et al., 2011, Busse et al., 2011; Wu, 2007; Razzaque et al., 2001). Dazmin et al., (2012) show that Malaysian logistics need to acquire knowledge management about organizational awareness such as other business-based technology such as e-business operations and understanding of the logistics industry among their competitors.

In their study, Keller et al., (2009) showed it was necessary for logistics managers to incorporate awareness of diversity in their logistics business. This would provide a better understanding of how to elevate logisticians' professionalism. A previous study suggested a maturing of the logistics knowledge management discipline: in the sense that a more specialized set of management skills are needed for logisticians (Murphy et al., 2007). Whereas, Pohlen's examination of higher education institutions and professional bodies, Pohlen (2011), identifies the need for higher education institutions and professional bodies to provide effective logistics and transportation modules for graduates to be able to demonstrate their leadership knowledge and skills in practical situations. And according Fugate et al., (2012) in knowledge generation he mention about the collaboration between logistics management and educational institution is good to show them a real experiences in logistics management like attending events that allow networking, such as business colleges, research bodies, industry associations, trade shows etc.

For Malaysian logistics managers by Dazmin et al., (2012) they are expected to demonstrate vision as part of their effective leadership skill. For example, creating a closed-loop supply chain orientation may be facilitated when the supply chain leader demonstrates visionary leadership and a strong command of communication skills as their transformational leadership styles (Defee et al., 2009). Defee et al. (2009) believed that by developing a specific supply chain leadership style the transformation to such an orientation would be enhanced. The importance of ensuring successful communication internally and externally in logistics firms has been the main concern in many logistics papers (see Wu, 2007; Sauvage, 2003; Londe et al., 1993). In logistics management operations, critical relationship success factors include buyers and suppliers responses (Whipple et al., 2000). In addition to that, Daugherty (2011) proposed future studies on the collaboration between parties involved in logistics and supply chain management activities such as e-business management. She added that such collaborations offer the potential to make high impact on creative ability contributions and generate new knowledge as knowledge generation

like suggested Fugate et al. (2012);(2009) for logistics management efficiency.

In logistics management efficiency by Dazmin et al., (2012), suggested to higher education institutions (HEIs) for the logistics management. HEIs which offer logistics management programs should consider developing modules and courses in their programs which are able to demonstrate learning outcomes covering knowledge and skills in strategic management, business, and effective leadership. These learning outcomes must be able to be learnt and applied by logistics graduates so that they can achieve competency. As for employers, this study can be used as a general guideline for the recruitment and development of logisticians. For example, during the recruitment process, employer may test potential candidates regarding their knowledge and skills pertaining to strategic management skills, business knowledge, and leadership skills for determining level of efficiency.

### **5. Limitation of logistics management studies**

Longitudinal previous studies regarding the need for logistics' efficiency, based on the Business-Logistics-Management (BLM) Model, have been conducted by various researchers (Thai et al., 2011; Murphy et al., 2007; 2006; 1998; 1994; 1991; Razzaque et al., 2001). And, recently logistics-oriented knowledge management (LOKM) Model by Fugate et al., (2012), where is these researchers proposed a model that describes a linkage between LOKM and overall logistical performance, it's really match with logistics management and business based on technologies for today. Actually, they extend and improve upon recent research which suggests that the ability of a global firm to compete based on logistical capabilities can be predicted by its ability to manage knowledge development processes, i.e., the broader findings of Fugate et al. (2009).The models, however, was limited to the skills required by logistics managers within the scope of business, logistics and management functions in manufacture industry only. Whereas, the model of BLM was proposed by Richard F. Poist in 1984 with the justification that new logistics executives must possess a combination of business, logistics, and management skills (Poist, 1984), and the model of LOKM was proposed by Fugate et al., (2012); (2009) they provided that modern technologies logistics executive must added a combination of logistics, knowledge, knowledge management, business, skills and technologies.

According to Fugate et al., (2012), modern logistics executives required the LOKM knowledge and skills in order to manage logistics activities. However, the LOKM Model and others model like BLM has limitations. First, the target population in the longitudinal studies from 2008 to 2012 was mainly focused on top management in logistics firms (see Fugate et al., 2012; 2009; Thai et al., 2011; Murphy et al., 2007; 1998; 1994; 1991) and only focus to manufacture industries. The majority of

items in the LOKM and BLM components section are perceptions from the top logistics management samples. Therefore, it was still lacking in terms of its ability to capture the perception of other managerial levels, such as middle and low. As supported by Katz (2009), every manager requires conceptual, human and technical skills, but the level of each skill differs depending on their managerial level. Besides that, which they limited to those within manufacturing organizations only and not taken from outsource a majority of its logistics activities to third party logistics providers (Fugate et al., 2012).

Second, previous findings were only based on exploratory studies: the studies used the methods of ranking mean score (Murphy et al., 2007; 2006; 1998; 1991) and comparing means score (Murphy et al., 1994). Another study that applied the BLM Model demonstrated combinations of ranking mean score and exploratory factor analysis (Razzaque et al., 2001). Thai et al. (2011) combined both descriptive (mean and standard deviation) methods and ranking of mean scores in their studies.

Third, the data used in this study are cross-sectional, which could limit the predictive validity of results over time (Fugate et al., 2012). Therefore, this study uses this study as a starting point for examining the longitudinal influence of the constructs.

Fourth, they were limited to a single respondent per organization. Thus, inter-rater-agreement cannot be calculated (Boyatzis et al., 2002), and thus, the results may be unduly influenced by respondent opinions and perspectives. To address this possibility, this study tries to extent of research in other industrial settings like examine the impact of LOKM on e-business performances, and do with multiple respondents per firm.

Fifth, the limitations of survey design did not allow for the capture of some potentially important control variables. This sort of step is especially important in controlling for the antecedent influence of organizational behavior, for example, since the performance of other functions certainly influence organizational performance and vice versa. This research explore to these relationships where is this study adding a moderator on logistics-related knowledge management to examine the impact into e-business development performances.

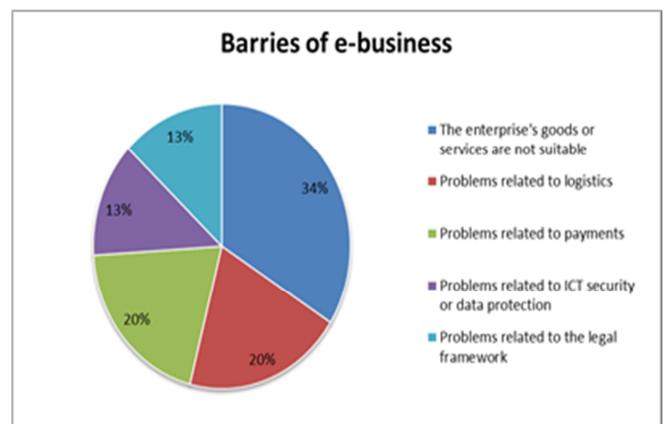
**6. Challenges and barriers of e-business development**

Now we bring to you to explore what of the challenges and barriers of e-business that will slow their operation. E-business touches all of our lives. The exploitation of broadband and high connectivity has yielded a plethora of business services especially, from manufacturing, retail and finance, and social networking. Multimedia communication is growing and so too the need for ever-increasing bandwidth. According Anne, (2015) two important challenges facing e-business are: (1) optimization to ensure that services can continue to grow without

reducing quality; and (2) security ensuring that customers can safely use internet systems without compromise to e-business companies' valuable data assets and privacy. Then, Zaid (2012) shows clearly about barriers of e-business development based on layers or levels in a country see Table 1.

**Table 1:** Barriers of e-business

Levels	Barriers
Social & Culture	Lack of popularity for online marketing and sales Lack of awareness of e-business benefits Lack of external pressure from suppliers and customers Linguistics barrier
Technical	Lack of Internet security Lack of e-business infrastructure Lack of qualified staff Inadequate quality and speed of lines Increase innovation and new technologies
Economic	Lack of financial infrastructure Unclear benefits from e-business adoption Cost too high Competitive pressure Lack of secure payment infrastructures
Politic	Change in regulations with each government Change in government policy Lack of an appropriate legal environment to apply e-business Low level of readiness among government institutions
Organizational	Difficulty in changing the existing working procedures Lack of management support Organizational resistance to change Limited suppliers and customers, because of not all among them have a credit card and good account
Legal & Regulatory	Absence of legal and regulatory systems No simple procedures and guidelines Lack of e-business standards Lack of e-business legislations



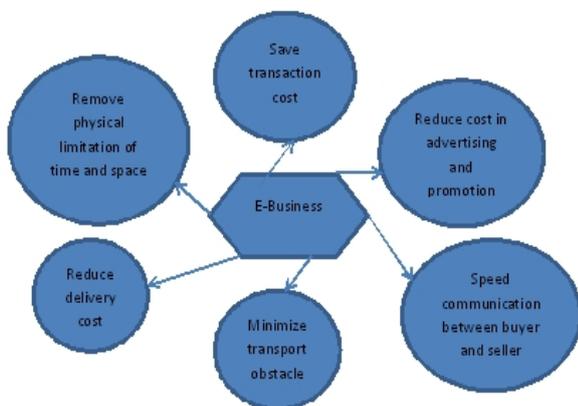
**Fig. 1:** Pie Chart of Barrier e-business

Source: Eurostat, Information Society Statistics, (2014).

Besides that, main obstacles that the enterprise from selling via a website by Eurostat, Information Society Statistics, 2014 see Fig.1. The chart shows that second higher barriers in e-business are problems related logistics 20%. Therefore, more research and study about both of them (logistics management companies and e-business operation) will improvement performance each other. Given the relationship between logistics management and e-business are inseparable, because e-business is highly dependent on efficient logistics management for decision-making processes, storage and transmission between supplier and customer. The simplest transactions in e-business, such as the delivery of goods to customers need the speed and efficiency of logistics management. Therefore, with development of e-business rapidly will increase demand of logistics management directly.

**7. Potential of E-business performances**

E-business technologies have the potential to lead to significant productivity gains at firm level. Especially when applied to business-to business relations, electronic technologies can lead to rationalization of business processes and cost savings. As an immediate impact, these technologies allow automation of common processes, such as distribution, sales, after-sales service and inventory management (OECD, 2000). There are a variety of ways by which the internet and e-business are useful for enterprises (Wikibooks, 2014); It facilitates the access of enterprises to world markets, it facilitates the promotion and development of tourism of developing countries in a global scale, it facilitates the marketing of agricultural and tropical products in the global market, it provides avenues for firms in poorer countries to enter into business-to-business (B2B) and business-to-government (B2G) supply chains and it assists service-providing enterprises in developing countries by allowing them to operate more efficiently and directly provide specific services to customers globally. Numerous studies claim their findings on the benefit and impact of e-business. Those findings can be summarized as follows (Nejadirani et al., 2011).



**Fig. 2:** Potential Benefits of E-Business  
Source: Nejadirani et.al (2011).

Evidence from case studies shows that the ways enterprises carry out e-business varies. Internet start-ups invent new ways of creating value-add, new services and new business models, while established small and large firms use the Internet to develop e-business strategies geared to expanding their business management, often internationally, and increasing their effectiveness.

In addition, groups of small firms are entering into electronic partnership with large firms which are their customers or suppliers or with industry-wide associations (OECD, 2000). For many enterprises in developing countries, support can be crucial to taking advantage of the opportunities afforded by e-business, whether it is in tapping a bigger clientele, new and often distant market or global value-chains.

Online trade in China alone has grown by 120% a year over the last ten years. In Latin America, e-business has grown from US\$ 1.6 billion to US\$ 43 billion in the past decade, with Brazil accounting for 59% of the Latin American market. E-business allows developing countries to compete in international trade, but the full potential of its benefits can be realized only when governments create business environments that harness the power of internet (International Trade Centre, 2013).

The innovative and dynamic aspects of globalization include increased market access, increased access to capital, and increased access to technology and information which have led to greater income and employment opportunities. This situation of course it easy for Multinational Enterprises, but for Small and Medium Enterprises also may take the advantage of their being small in size by offering customized and specialized goods and services. However many Small and Medium Enterprises cannot make use of cost advantages in mass production and some types of costs are not variable in relationship with company size (Hauser 2000; Totonchi et al., 2012).

In this context instead of competing against large Multinational Enterprises (MNE) and Small Medium Enterprises (SME) are encouraged to use electronic commerce technologies to expand their market size and to access global markets (Mesut et al., 2014). Therefore, Malaysia's e-business advantages in companies MNE and SME in tandem which is it's also can increase the demand of logistics management directly especially for logistics service providers. The potential development of e-business can promote more robust demand for logistics companies. Therefore, the management of each logistics companies must be competitive to ensure the satisfaction of services provided to traders' e-business is the best service. If, services and logistics management has always been at a satisfactory level, the e-business operations will quickly evolve as the satisfaction of every customer demand can be met. See Table 2.

**Table 2:** Advantage e-business for MNE and SME  
Source: Mesut et al., (2014)

Characteristics	E-Business Advantage for Small and Medium Enterprises	E-Business Advantage for Large/Multinational Enterprises
Dependence on a number of People	<ul style="list-style-type: none"> <li>• Long-term thinking and perspectives</li> <li>• Stability</li> <li>• No pressure for short-term success</li> <li>• High identification with the business, stable culture</li> <li>• High commitment</li> </ul>	<ul style="list-style-type: none"> <li>• Active thinking, limitless to the experiences and the knowledge of the owner(s)</li> <li>• Easier to adapt corporate culture to new situations and challenges</li> <li>• Lacking conflicts between corporate and personal objectives</li> </ul>
Close relationships to customers and business partners	<ul style="list-style-type: none"> <li>• Stable basis for further business</li> <li>• Able to cooperate successfully for mutual advantage</li> <li>• Ability and willingness to enter partnerships</li> </ul>	<ul style="list-style-type: none"> <li>• Able to focus too much on existing basis of business</li> </ul>
Simple structures	<ul style="list-style-type: none"> <li>• High flexibility and adaptability</li> <li>• Short reaction times</li> <li>• Cross-functional communication and cooperation within the organization</li> </ul>	<ul style="list-style-type: none"> <li>• Suitable for the complex planning and implementing of international activities</li> <li>• High willingness to introduce more sophisticated structures</li> </ul>
Size	<ul style="list-style-type: none"> <li>• Basis for specialization, often successful with niche strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Limitless resources</li> <li>• Adequate funds to finance investments and initial operating losses for new activates</li> <li>• Spending for market research and market entry take a much higher proportion of total spending in operations than in SMEs</li> <li>• Sufficient number of staff for additional tasks</li> <li>• Added of internationally experienced employees</li> </ul>

### 8. The strategy and operation of logistics service providers: Changes in supply chain configurations and impact of logistics service provider on e-business activities

Today, the dust has settled and many of the promising new e-business companies have failed or are struggling for economic survival. The failure of so many companies in e-business can be in part accounted for by the neglect of logistics as a key factor of success, implying a prominent role for companies specializing in the logistics segment (Yuan et al., 2011). Logistics service providers are thus confronted with change in their respective market environments. It is therefore surprising that little attention especially in Malaysia industry has been paid to an assessment of these changes and their direct as well as indirect implications for logistics service providers and e-business performance.

Logistics service providers differ among the palette of services they provide to their customers as well as with regard to other criteria. Although a commonly accepted typology for logistics service providers is still missing, some propositions exist on this matter like type of services (Christian et al., 2014; Dianne et al., 2011), geographical scope of operations and type of goods handled (Lisa et al., 2013). With regard to logistics service providers' contribution because of changes in the supply chain induced by e-business himself, competence of management of logistics service providers will be give effect on e-business performances also.

In these functions of logistics service providers will be explains that its impact on e-business performances. A more conceptual approach was taken by Rudolf, (2011) who clustered these functions into two broad groups: i) services which are directly related to the physical flow of goods and, ii) services which are not directly related to the physical goods flow.

However, these functions and types of services can be grouped with regard to the degree of customization as well. A clustering of logistics service providers according to this dimension was conducted by Won (2010), who divides logistics service providers into three major groups. The first group consists of service providers, which only offer standardized and isolated logistics services or distribution functions, like transportation and warehousing. The services they fulfill for e-business companies as their customers are standardized, resulting in highly interchangeable services among this type of logistics service providers. These logistics companies are highly specialized in their field and do not take over coordination or administrative functions for e-business companies as their customers. Logistics service providers mostly handle homogeneous objects and optimize their whole logistics management and system with regard to these special logistics objects. Standardizing logistics service providers strategic, plan, implement and control their own logistics systems according to their requirements and considerations. Example are traditional and major carrier with the integrators original express parcel services as offered in Malaysia, as a local courier service provider such as

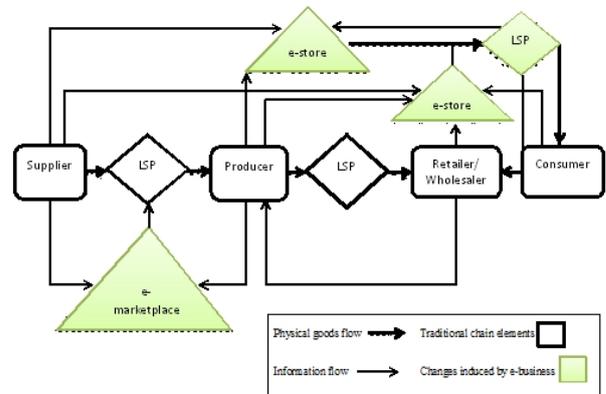
by Pos Laju National Courier, Sky Net Worldwide (M) Sdn. Bhd, GD Express Sdn Bhd, Secure Xpress Services Sdn Bhd, Sure-Reach Worldwide Express Sdn Bhd, CITY-LINK Express (M) Sdn Bhd, Taqibin Sdn Bhd, etc. And international courier service provider in Malaysia such as United Parcel Service (M) Sdn Bhd, DHL Express (Malaysia) Sdn Bhd, Federal Express Services (M) Sdn Bhd, TNT Express Worldwide (M) Sdn Bhd, etc.

The second group consists of companies which combine selected standardized services to bundles of logistics service according to e-business wishes as a customer. Its call them bundling logistics service providers. The operational coordination and arrangement of these service bundles are provided by the logistics service providers, whereas the disposition lies in the responsibility of the buying companies of e-business, role as a customer. Frequently these bundles of services consist of a core logistics activity, such as transportation, which is combined with secondary activities like simple assembly and quality control activities, performed by traditional forwarding companies in the automobile industry. For example closely in Malaysia's industry such as cooperation between Proton Parts Center Sdn. Bhd. with Pos Malaysia Sdn. Bhd. These bundles are offered undifferentiated for all potential customers and can thus not be regarded as customized services (Won, 2010).

Then, third group customizing logistics service providers, as these companies design logistics services and logistics systems according to the preferences of their customer in field of e-business. These logistics service providers combine and modify components of logistics services especially for the needs of one specific customer. Companies of this type usually take over coordinative and administrative responsibility for their customer as well (Rudolf, 2011). These providers also offer services which are not originally attributable to the logistics functions, but rather to financing and production activities. The core competence of customizing logistics service providers can thus be seen on the conceptual and coordination side, themselves outsourcing singular logistics activities to standardizing logistics service providers. The customizing logistics service providers take over responsibility for the effectiveness and efficiency of the logistics management and system of its customers. For example in Malaysia logistics industry such as Air Cargo division of Malaysia Airlines (MASKargo).

In addition, the business models for e-business described affect the structure of supply chains of whole industries, so competency of logistics management will be more important to drive and enhance e-business performance. As illustrated in Fig. 3, the main factors of change are the emergence of electronic marketplaces in the upstream part of the supply chain (b2b sector) and the possible disintermediation of the downstream chain (b2c sector) (Delfmann et al., 2002). In this section we will explain the impacts of electronics marketplaces

in e-business on the configuration of supply chains and subsequently discuss the implications for logistics service providers, then it's will change and has improvement of management which will impact back to e-business activities.



**Fig. 3:** E-business described affects the structure of logistics service providers

As we have seen above, constituent elements of e-business transactions are that the initiation and agreement phases of a transaction are conducted via the Internet. Whenever the goods for which the transaction is pursued are physical goods, the subsequent phases involve physical flows between the seller and the buyer. Whenever there are physical goods, a potential field of activity for logistics service providers is involved.

In traditional supply chains logistics service providers take a prominent role, as goods are to be shipped between suppliers and original equipment manufacturer producers as well as downstream through the distribution chain. Delfmann et al., (2002) extended to which these activities are outsourced to logistics service providers differ among industries as well as among individual companies. The grey-shaded boxes in Fig. 2 are the new elements added to a generic supply chain by e-business applications. They can either complement or substitute traditional supply chain structures. While the e-store would represent the product/service provider business model described earlier, the marketplace could represent a market maker business model.

**9. Conclusion**

This study shows the challenges of logistics management and, barriers of e-business as general. Then we try to explore the efficiency in management of logistics services providers Malaysia's companies to look what strategies and operations will impact on activities of e-business, at the same time it's can increase the Malaysia's e- business performances. This study concluded that efficiency of logistics management especially in logistics service providers' side will develop good services for e-business activities, with the best in their strategies and

operations by supported from previous researched such as by Christian et al., (2014); Lisa et al., (2013); Dianne et al., (2011); Noemi et al., (2011); and Yuan et al., (2011).

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