

Service Innovation of Postal and Courier Services in Malaysia: Will It Lead to Customer Responsiveness?

Alminnourliza Noordin⁺ Norlena Hasnan and Nor Hasni Osman³

Universiti Utara Malaysia

Abstract. In Malaysia, the national postal services and private courier companies significantly contribute towards the national economy and also provide the employment opportunities. Postal and courier services in Malaysia have undergone a radical change due to the rapid evolution of Information Communication Technology (ICT). Nevertheless, the need to have efficient postal and courier services is undeniable because of the increase in e-commerce applications these days and the need for integrated supply chain. Unlike the manufacturing sector, the innovation models in the service are still inconsistent. This requires further investigation especially in the postal and courier services. The investment in service innovation is huge but the question remains. Will it lead to customer responsiveness? Hence, this study seeks to develop a model that link three main variables: service innovation, information communication technology (ICT) capability, and customer responsiveness. This link has been given little attention by prior research particularly in the postal and courier services sector. The proposed model is discussed in the paper.

Keywords: Service innovation, postal and courier, Malaysia, responsiveness.

1. Introduction

Starting from the late 1990s Malaysia is looking forward to be an innovation-led economy. The Ministry of Science Technology and Innovation [1] reported that Malaysia was ranked at 24th in the Innovation Competitiveness and also ranked at 26th in the Global Competitiveness Index for the year 2010-2011. One of the main contributions of this achievement was rooted from the service sector. Postal and courier service is part of the service sector that continues to develop. The global mail and package delivery was estimated to reach USD500 billion in 2008 [2] and is expected to keep increasing. The recent launch of Economic Transformation Program (ETP) by the government of Malaysia is expected to have more positive impact on the sector. The courier market could reach RM4 billion (about USD 1.3 billion) by the year 2020. However, this industry faces challenges as a result of globalization. Although, the Malaysia courier market has grown at 7 percent annually in average, this industry has numerous challenges ahead in terms of low profit margin, access to capital, technology adoption, and quality [3]. This paper focuses on the innovation, technology, and quality issue in the postal and courier services.

Generally, postal and courier services are related to delivery of parcels, packages, documents, letters, and printed materials. The scope of postal and courier services is defined in Table 1. Basically, the postal transportation process consists of mail collection, input sorting, organize the movement of mail (global area transportation), output sorting, and distribute mail [4]. The complexity of the process, therefore need to be assisted by ICT to ensure that the correct mail can be received by the customer on time.

In the past, the postal industry used to involve physical transportation of physical communication, like package and mail delivery [4]. However, the industry has evolved to include traditional post, courier services, freight services and e-services in recent years. Emerging technology based on the convergence of telecommunications, broadcasting and publishing has and will continue to change the landscape of physical communications globally. Therefore, postal organizations nowadays, regardless of their sizes face with the challenges dealing with the new technologies; with operating in the same way as private corporations, understanding what products are profitable and which are not, and dealing with almost constant change. To survive in today's world, postal organizations need to change through deregulation to become more competitive, market-oriented and customer-driven. In this environment, price is no longer the only

⁺ Corresponding author. Tel.: + 6049284595; fax: +6049286860.
E-mail address: alminnourliza@uum.edu.my.

determinant of the postal industry [5]. Speed and quality (or responsiveness) is the next source of competitive advantage [6] especially in the postal industry.

Table 1: Definitions for Postal and Courier Services

Postal Service	
Postal services related to letters	Services consisting of pick-up, transport and delivery services of letters, newspapers, journals, periodicals, brochures, leaflets and similar printed matters, whether for domestic or foreign destinations, as rendered by the national postal administration.
Postal services related to parcels	Services consisting of pick-up, transport and delivery services of parcels and packages, whether for domestic or foreign destinations, as rendered by the national postal administration.
Post office counter services	Services rendered at post office counters, e.g. sales of postage stamps, handling of certified or registered letters and packets, and other post office counter services.
Other postal services	Mailbox rental services, "poste restante" services, and public postal services not elsewhere classified.
Courier Service	
Multi modal courier services	Services consisting of pick-up, transport and delivery services, whether for domestic or foreign destinations of letters, parcels and packages, rendered by courier and using one or more modes of transport, other than by the national postal administration. These services can be provided by using either self-owned or public transport media.
Other courier services	Other courier services for goods, not elsewhere classified, e.g./trucking or transfer services without storage, for freight.

Source: World Trade Organization [7]

These challenges would certainly require the postal and courier services to be more innovative. We argue in the effort to become more innovative, would it also lead to better performance? The investigation on effect of innovation is important because the development of new service failure rate is very high [8]. In addition, most of the researches in the past have examined the effect of innovation on the operational and organizational performance in general but very little focus on the customer responsiveness. Therefore, the purpose of this paper is to discuss the current innovation in the postal and courier services in relation to the customer responsiveness. Finally, in the end of the paper, we propose a model to be investigated in relation to this relationship.

2. Customer Responsiveness

This paper defines customer responsiveness as the extent of capability of a firm in providing speedy services, variety of services, and willingness to help customers within the service delivery system [6]. In other words, responsiveness is the operational performance that measure capability of the service providers in terms of time, quality and flexibility in relation to their customers. Prior studies have found that customer responsiveness is substantially important in the logistic companies especially the postal and courier services. For example, studies found that the level of responsiveness (in terms of speed) is influenced by the service delivery [9, 10]. Specifically, the use of technology in the service delivery has been found to influence responsiveness [11]. A recent study on responsiveness also found that service delivery influences responsiveness [12]. Besides that, Arias-Aranda [13] discovered that service delivery is significantly related to service flexibility. Other studies have shown that the competence to innovate [14] and the firm's new service development process [15] could lead to a greater organizational performance. A study by Chen and Tsou [16] also supported that a firm's decision to develop service innovation for firm performance depends upon the innovation. Therefore, we conclude that service innovation should lead to responsiveness.

3. Service Innovation and the Postal and Courier Companies

Innovation is about people creating values and ideas to the customers. It has become a driving force for a large number of organizations around the world. Even a small innovation would result in a cumulative strength that is capable of creating the new one [17]. As marketplaces become ever more dynamic, there is a widespread recognition of the increasing importance of innovation to organizations and economies [18, 19]. Innovation is about an organization's ability to provide the creative space and the resources to explore those ideas knowing that new does not always mean successful. Taking risks is an integral part of innovation and people can learn as much from what did not work as what turns out to be successful.

Service innovation enables service firms to gain competitive advantage [20]. Innovation in postal and courier services is essential for their survival. Courier services will continue to grow in line with the growth of online shopping or internet business, and more home delivery, coupled with the increased infrastructure of developing countries and rural areas. E-commerce will be a key driver in the growth of postal and courier service with more and more people buying and selling through the Internet. People and the postal articles and goods to be moved efficiently from one place to another anywhere within the country as well as overseas. Thus, an integrated development strategy for the postal and courier sector is timely as digital and physical communications are likely to complement each other.

In addition, based on Hertog and Bilderbeek [21] service innovation model, Qiang, Chongfeng, Zhiyong and Guoyun [22] has suggested four types of innovation that can be applied in the logistic service such as postal and courier services (as shown in Table 2).

Table 2: Types of Innovation in Logistic Service

Types of Innovation	Description
Service Technology Innovation	Service technology innovation contributes to better and faster time and space utility, and improved the operational efficiency of logistics services. It concerns with the technology usage by the firms. For example, competitive advantage of logistics services can be greatly enhanced by the application of advanced logistics technologies, such as ERP systems, RFID, EDI technology, network technology, decision support systems, time-tracking systems, automated warehouses, and advanced loading and unloading equipment.
Service Concept Innovation	Service concept innovation contains the innovation of supply chain operation and management. The main parts of supply chain operations and management innovation are organization innovation, relationship innovation, and information innovation. The goal of organization innovation is to achieve value of the customer-centered supply chain, collaborate and integrate the customers and related enterprise.
Service Delivery System Innovation	It is the emphasis on the existing organizational structure and knowledge networks which should be adapted to the need of the development of new services. Therefore, project management ideas should be introduced, which sets up an intra-departmental and intra-organizational virtual team, through organizing, coordinating the supply chain to meet customer demand for all resources to complete supply chain solutions. Organizations should build up a learning organization, through enhancing learning and improving the capacity of enterprise and staffs as well as encouraging innovations.
Customer Service Interface Innovation	The companies can obtain long-term profitability and development by understanding customers' needs through customer surveys or third-party investigation. Additionally, they should also develop business strategies that match with the customers' supply chain and logistics solutions to enhance the customer value and service satisfaction, and enhancing mutual trust between customers and service providers.

4. Information Communication Technology Capability

In order to raise the service capability in the era of e-commerce, it was suggested that logistics service providers to employ new information technologies [23]. Adopting innovative logistics technologies may enable logistics service providers to enhance their service abilities [24]. Adopting technologies may involve five stages: awareness, interest, evaluation, trial and adoption [25]. Awareness stage is when someone starts to learn the existence of a new technology. The next stage happens when they start to gather information about the new technology. The third and fourth steps are when they analyze and try out the new technology. Finally, after decision being made, they will adopt the technology. This process may apply to any organization that adopting technology in their companies [25].

Walker and Cheung [26] listed 11 intangible benefits of ICT. They include 1) job enhancement for employees, 2) improved external communication, 3) change through innovation, 4) improved internal communication, 5) improved product quality, 6) improving management information, 7) avoiding competitive disadvantage, 8) supporting core business functions, 9) more timely management information, 10) gaining competitive advantage, and 11) improved customer service. Companies can use ICT for both efficiency (cost and time saving; doing things right) and commercial advantage (providing superior value; doing the right things). ICT capability can also affect the companies throughout their value chain, starting from procurement, transformation, marketing, and distribution processes to their customers [16].

In general, ICT is a tool for innovation, but ICT capability is the ability of the firms to understand and utilize IT tools and processes for achieving competitive advantage [27]. The definition of ICT, however, is still quite vague and confusing in literature. Many authors have used ICT, e-commerce, Internet, and e-business interchangeably [28]. One study explained that ICT is related with a wide array of technology, ranging from database programs to local area networks [29]. Moreover, the results of the studies on the effect of ICT on innovation are inconsistent. A study by Johannessen, Olaisen, and Olsen [21] suggests that ICT by itself does not encourage or discourage innovation. It is the people working in the organization that create innovation, not ICT. ICT is more or less like a tool to be used for innovation, since new technology can help companies to do things in a new or better way. Another study, however, has found that the use of ICT has a positive relation with innovation and performance, which is due to learning and adjustment, boosted by the maturity in using ICT by IT companies [21]. A study also found that IT capability is a strong moderator in the relationship between service innovation and supply chain performance [30]. Based on this, we propose that customer responsiveness and service innovation is contingent to the level of ICT capability of the postal and courier services.

5. Proposed Model of Service Innovation and Customer Responsiveness

Based on the above discussion, we propose the following model to be further investigated. We argue that customer responsiveness is influenced by the service innovation at the postal and courier services. The relationship is moderated by the level of ICT capability by the companies.

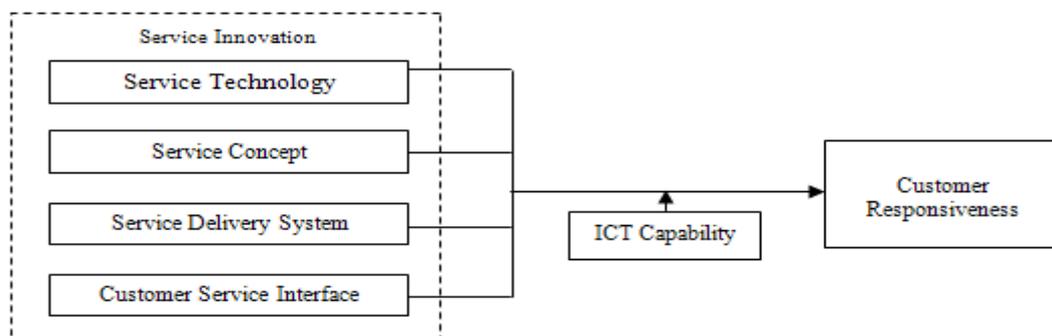


Figure 1: The model of service innovation and customer responsiveness

6. Conclusion

In this paper, we have proposed a model of service innovation in relation to the customer responsiveness in the postal and courier services. We have found this relationship to be further unveiled due to the intense innovation and the complexity of processes involved in the postal and courier services. In addition, we also differentiate the ICT and innovation. The capability of ICT is expected to moderate the relationship. The findings of the model are significant to the research and the postal and courier services for their business improvement especially in becoming more responsive to their customers.

7. References

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