

SERVICE QUALITY AFFECTING CUSTOMER SATISFACTION IN PARCEL DELIVERY SERVICE

Surangkana Pipatchokchaiyo* & Mananya Meenakorn**

**Lecturer, ** Asst. Prof. Dr., Faculty of Management Science,*

Suan Sunandha Rajabhat University Bangkok, Thailand.

*E-Mail: *Surangkana.pi@ssru.ac.th, **Mananya.me@ssru.ac.th*

ABSTRACT

Abstract—The purpose of this study was to study service quality that affect the satisfaction in parcel delivery service in Thailand. The sample group of 385 residents used in the study came from people who used parcel delivery service in Bangkok with using a multistage randomized sampling method. The instrument used in this study was a questionnaire with a confidence value of 0.845. The statistics used in the data analysis were percentage, mean, standard deviation, and multiple regression analysis. The results of the study revealed that service quality in the aspect of responsiveness, reliability and assurance positively influenced customer satisfaction in parcel delivery service with statistical significance at $F=20.25$. All variables can explain the variability of customer satisfaction in parcel delivery service (R^2) accounted for 56.85 percent. While service quality in the aspect of empathy and tangibles did not influenced customer satisfaction in parcel delivery service. When considering multiple regression coefficients in the form of a standard score, the aspect of responsiveness had the highest multiple regression coefficients ($\beta = .289$), followed by reliability ($\beta = .252$) and assurance ($\beta = .138$), respectively. The results of this research can be used as a model for improving the quality of service to meet consumer needs and use it as a guideline for planning, formulating a policy for the competitive advantage of the transportation business.

Keywords—Customer satisfaction, Parcel delivery service, Service quality

INTRODUCTION

Nowadays, parcel delivery service is a very competitive service due to the behavior of today's consumers who prefer to shop through online platforms. As a result, the overall parcel delivery volume is likely to increase. Shipping is a service business that plays an important role in distributing products to both domestic and international markets. In 2020, the value of the parcel transportation market in Thailand tend to grow continuously. From the expansion of the e-commerce market, according to the behavior of consumers who turn to buy products via online platforms more. As a result, the overall parcel shipments tend to be significantly higher. In addition, the impact of the Covid-19 epidemic situation in Thailand that affects the behavior of consumers has changed. It is more popular to buy products through online platforms. Due to various limitations arising from the surveillance of the situation including avoiding infection by having to self-isolate at home under the Royal Decree on Public Administration in Emergency Situations. As a result, the number of online purchases has increased, resulting in an increase in the number of parcels in the system by Thai postal companies from the normal job by up to 60 percent per day (SCB Economic Intelligence Center, 2020).

The parcel delivery business has seen steady growth over the past 3 years (2019 – 2021), with an average growth of 40 percent per year, in line with the Thai e-commerce market that has grown an average of 18 percent per year, according to Euromonitor estimates. This growth is largely a result of changes in consumer behavior in the digital era, preferring to shop through online platforms both major Ecommerce websites such as Lazada, Shopee, and ordering products via social commerce such as Facebook, Line, Instagram, including on the website of each store itself. Therefore, it is expected that parcel shipments will be at least 4 million parcels per day in 2021 (SCB Economic Intelligence Center, 2020). Moreover, the promotion of the online store's marketing campaign will result in an increase of more than 1 million orders per day. This makes the competition in the parcel transportation business tend to be more intense. from entering and vying for market share of large operators and new foreign entrepreneurs who tend to increase investment by continuously expanding network of partners.

The parcel transportation business tends to have more intense price competition. In 2020, the parcel transportation market in Thailand. It consists of 3 major players with a combined market share of over 80 percent, namely Thailand Post Co., Ltd., Kerry Express, Lazada Express, and other middle players such as SCG Express, DHL E-commerce, Nim Express, and Ninja van. In addition, in the past two years, many large international players have started to invest in the Thai parcel delivery market, such as Best logistics, J&T Express and CJ logistics, etc. (Kasikorn Research Center, 2021). Discounting is therefore the main method used in Scramble for market share of new service providers This was reflected from the reduction in parcel delivery service rates. This is because the way to reduce shipping costs will help operators to attract more traffic, resulting in higher parcel volumes and already increasing market share. Higher volumes also reduce operators' average transportation costs or economies of scale. However, the intense competition in the parcel delivery business will benefit parcel couriers as they benefit from lower shipping rates, safer and faster delivery service and there are many entrepreneurs to choose.

In terms of service quality, it can be seen that the private transport business has a good image. There is no damage to the user's product, fast delivery to the destination at the specified time, customer friendly staff and have advice on how to use the service when private transport service users are confident that their products will not be damaged, and products will arrive at the destination within the specified time (Tengwongwattana, 2016). In general, it was found that the factors affecting the decision to choose a service user are the quality of the product and the quality of the service that comes with the product. Inappropriate delivery service, the product may not satisfy the customer. For this reason, service quality plays an important role as a service that comes with the product. If such service performs well, they will help to raise the level of satisfaction in product consumption and lead to decision making in choosing the service (Parasuraman et al.,1990). Good delivery management should consider the needs of all parties involved and the quality of service that the recipient is satisfied with in delivering the goods.

Therefore, the researcher is interested in studying the customer satisfaction of using the service of the private parcel delivery business in Bangkok which the purpose of this study was to study service quality that affect the satisfaction of choosing a private parcel delivery business. The results of this study are for the private parcel delivery business and other related agencies apply them in terms of service quality and brand image that will lead to the satisfaction of customers who use the service.

LITERATURE & THEORY

Service quality

Parasuraman et al. (1990) stated that the quality of service is the ability to respond to demands in the service business. Quality is the key to creating a differentiation in the business to stay above the competition. Quality of service offering that meets the expectation of the service recipient is something that must be done. The service quality consists of 4 aspects: 1) The concreteness of the service is the environment and tools such as modern equipment, the environment, the dress of the staff, and documents disseminating information about services, etc. 2) Reliability is the ability to provide the required level of service at the correct level. Trust is the ability of employees to provide services according to contracts, customer retention and sufficient number of employees. 3) The response to customers is the willingness to serve immediately and provide assistant as well as willing to serve service readiness planning for operations. 4) Customer confidence is that service providers must have the skills of working. necessary for the service be honest with consumers, polite and friendly to customers such as employees can provide information service news building trust and safety. 5) Knowing and understanding customers is easy access to communication and understand customers, such as the attention of service personnel, service time is convenient for customers, opportunity to receive information to service recipients, attention to customers, and clearly understand the specific needs of customers etc.

For this reason, the quality of service plays an important role in raising the level of consumer satisfaction and leading to attitudes in service decision making (Chen et al., 2018). The service business must try to set the quality of service to meet the expectations of the service recipient in order to influence the best attitude for the implementation which was found that the perception of good service quality resulted in a positive attitude towards the use of services (Boisvert & Ashill, 2011)

RELATED WORKS OR DISCUSSION

Related research was used to define the conceptual framework and research hypothesis. The research of Tengwongwattana (2016) studied about the service quality, price consciousness, brand image, and word of mouth affecting the decision to use private companies' domestic parcel shipping service of customers in Bangkok. The results indicated that the service quality in terms of reliability, responsiveness, assurance, and price consciousness affected the decision to use private companies' domestic parcel shipping service of customers in Bangkok at the significant level of .05. These factors explained 74.0 percent of the influence toward the decision to use private companies domestic parcel shipping service of customers in Bangkok. However, the results showed that the service quality in terms of tangible, empathy, brand Image, and word of mouth did not affect the decision to use private companies' domestic parcel shipping service of customers in Bangkok. The research of Poodanklang and Visitnitikija (2021) about service quality that affect user satisfaction of Flash Express was found that service quality had a statistically significant influence on the transportation service of Flash Express Company Limited. This may be due to the concreteness of the service, credibility, customer response, trust, and understanding and knowing customers will lead to satisfaction and confidence in the service which consistent with the research of Jantaraprawat & Napompech (2019). Moreover, the research of Laungsabtavee (2019) studied about quality of service and brand image affecting service decision was found that service quality in terms of tangible and brand image in terms of attributes value and user image affected the decision to use the private transport service of Kerry Express. Namahoot and Inkaew (2021) studied Innovative parcel delivery service in Thailand during COVID-19 pandemic using structural equation modelling. The results of the analysis reveal that service quality has the most direct influence on the attitude to use delivery service, follow by technological innovation, price consciousness, service innovation. Furthermore, service quality has indirect influence on the intention to use the service of the parcel delivery company in Thailand. Attitude as mediator variables has the most influence, follow by price consciousness, service innovation and technological innovation respectively.

METHODS

The target population used in this research was consumers who have used parcel delivery service in Thailand which cannot determine the exact population. The sample of 385 was conduct to collect data by using cluster sampling method from groups of social media users such as Facebook, Line, etc. An invitation to fill up the questionnaire was sent to members of the group who have used parcel delivery service business by using convenience sampling methods until the required number of samples is reached.

Tools used in this research is a questionnaire created by the researcher and in accordance with the definition of operations according to the characteristics to be measured, divided into 3 parts, consisting of demographic data, service quality opinions, and satisfaction parcel delivery service opinions. The estimation scale type of questionnaire was 5-level Likert's scale. The generated questionnaires were used to test the validity and reliability of the questionnaires before collecting data in order to obtain accurate research results and achieve the stated objectives. In this regard, the researcher will arrange for a pre-test with preliminary questionnaire of 40 sets. The results of the confidence check were the confidence values of each question were between 0.759-0.854 and got the total confidence of 0.845, which passed the reliability criteria (Hair et al., 2010). Additionally, the questionnaires generated were subject to content review from the advisor already. Therefore, it was concluded that the questionnaires could be used to collect data. The empirical data of 385 valid responses was collected through an online survey from consumers who have used parcel delivery service in Thailand.

Statistics used in data analysis, the researcher used descriptive statistics to describe the demographic characteristics such as frequency, percentage, mean and standard deviation. As well as the inferential statistical analysis was used to test research hypotheses by using Pearson correlation coefficient analysis and Multiple regression analysis.

RESULTS

The demographic information of the samples were consumers who had used Thai community products among the 385 samples. Most of responders accounted for 60.5 percent were female, 33.5 percent were aged between 31 and 40 years, 30.2 percent had marital status, and 37.5 percent had the highest level of education at the bachelor's degree. Moreover, 34.8 percent were state enterprise employees, 28.75 percent had average monthly income between 15,001-30,000 baht.

Moreover, the descriptive data on the service quality of parcel delivery service in Thailand, the overall aspects was at a high level. If considering each aspect, the aspect of responsiveness was at the highest level. followed by reliability, assurance, empathy and tangible, respectively, all aspects were at a high level.

The hypothesis testing results of the influence of service quality affecting customer satisfaction in parcel delivery service in Thailand by used Multiple Regression Analysis. The results revealed that the correlation of all factors in the model revealed that the value of VIF (Variance inflation factor) was not exceed 5, while the value of Tolerance was not less than 0.2 and a maximum Eigen value was at 5.125, which did not exceed 10.0, indicating that not all independent variables did not form multiple relationships between factors with multicollinearity (Hair, et al., 2010), consequently the data was appropriate to use multiple regression analysis. In addition, the result of multiple regression analysis revealed that responsiveness, reliability, assurance, empathy and tangibles can together predict customer satisfaction in parcel delivery service with statistical significance at $F=20.25$. All variables can explain the variability of customer satisfaction in parcel delivery service (R^2) accounted for 56.85 percent. The test results accept all hypothesis that service quality in the aspect of responsiveness, reliability and assurance are positively influenced customer satisfaction in parcel delivery service. When considering multiple regression coefficients in the form of a standard score, the aspect of responsiveness had the highest multiple regression coefficients ($\beta = .289$), followed by reliability ($\beta = .252$) and assurance ($\beta = .138$), respectively. The results of the hypothesis testing were summarized by considering the standard regression coefficient of the variable and the t value. It was found that responsiveness, reliability and assurance affected the customer satisfaction in parcel delivery service which is consistent with the research hypothesis at a statistically significant level of 0.05.

CONCLUSIONS AND FUTURE WORK

Conclusion and discussion

The researcher results were brought important issues to discuss the research results as follows.

1. Reliability of service quality affects consumers' decision to choose private parcel delivery services in Thailand., the result revealed that the service quality of reliability had a significant effect on the decision to choose the private company parcel delivery service in Thailand at the statistical significance of .05, is consistent with the assumptions. This is because the service personnel parcel transport can solve the problem exactly as desired, able to provide accurate information that meets the needs of the operation without errors. Including consumers can trust that personal data will be secured from service and parcels will arrive at their destination exactly as stated in the contract. As well as reliable, including having to maintain equipment and tools to be available at all times and having sufficient number of employees to provide services. This is consistent with the research of Poodanklang and Visitnitikija (2021) about service quality that affect user satisfaction of Flash Express was found that service quality had a statistically significant influence on the transportation service of Flash Express Company Limited. This may be due to the concreteness of the service, credibility, customer response, trust, and understanding and knowing customers will lead to satisfaction and confidence in the service.

2. Responsiveness of service quality affects consumers' decision to choose private parcel delivery services in Thailand, the result revealed that the quality of service in response to demand significantly affects the decision to use private company parcel delivery service within Thailand which is consistent with the hypothesis and consistent with the research of Jantaraprawat & Napompech (2019). Due to consumers can easily contact the parcel delivery company, employee can provide service with speed or can fix the problem quickly. Including the fact that the parcel delivery company has a convenient and fast service channel. This is consistent with the SERVQUAL, the concept of Parasuraman et al. (1988) stated that responsiveness to demand is the feeling that a customer feels fulfilled in that the company never rejects the customer before attempting to meet the demand. as

well as responding to customers as soon as they request them.

3. Assurance of service quality affects consumers' decision to use private company parcel service in Thailand, the result revealed that the quality of assurance services affects the decision to choose the delivery service of private companies in Thailand with a statistical significance of .05, which is consistent with the hypothesis. This is because the parcel delivery company employees are knowledgeable about the service, able to provide accurate and clear information. Including the fact that the parcel delivery company has a service system that meets standards, accurate, reliable and fast in transportation that meets the standards, including there is a correct service charge system. This is consistent with the concept of Tengwongwattana (2016) indicated that the service quality in terms of reliability, responsiveness, and assurance affected the decision to use private companies domestic parcel shipping service of customers in Bangkok and stated that confidence comes from the fact that service providers have the necessary knowledge and skills. The service necessary to be courteous and friendly to customers is honest and can build confidence for customers.

4. Empathy of service quality affects consumers' decision to use private company parcel service in Thailand, the result revealed that the quality of empathy services does not affect the decision to use private parcel delivery services within Thailand, which is inconsistent with the hypothesis. This is because consumers may pay attention to more important to other factors which corresponds to the concept of Parasuraman et al. (1988) stated that stated that the customer feels that the service provider takes good care of each individual customer and takes care of the specific needs of each individual customer. This is consistent with Namahoot and Inkaew (2021) reveal that service quality has the most direct influence on the attitude to use parcel delivery service.

5. Tangibles of service quality affects consumers' decision to use private company parcel service in Thailand, the results revealed that the service quality in the aspect of tangibles does not affect the decision to use private parcel delivery services of the consumers in Bangkok which is inconsistent with the assumptions set because consumers pay attention to prioritizes other factors rather than tangibles. This study is in part consistent with the study of Laungsabtaevee (2019) studied about quality of service and brand image affecting service decision was found that service quality in terms of tangible and brand image in terms of value attribute and user image affected the decision to use the private transport service of Kerry Express.

Recommendations and future work

Business operators involved in the delivery of private parcel delivery services in Thailand or various agencies related can be used the results of the study as follows:

1. The quality of service reliability, there should be a clear policy on the performance of the service to process the personal information of consumers who use the service to give consumers a sense of security in using the service. Including there should be a standardized service, delivered on time, without causing any mistakes in order to create trust among consumers in using the service.

2. The quality of service in responsiveness, there should be established to create communication channels that allow consumers to contact the parcel delivery company conveniently, creating a channel to receive services that are convenient and fast to make the service convenient and fast including in case of problems can be solved quickly.

3. The quality of service in assurance, the services employees should be trained to have knowledge of the service, able to provide accurate and clear information to consumers who receive services, have a service system that meets standards, accurate, reliable, as well as has a correct service charge system.

For further research, those interested should learn more about other areas, such as consumer loyalty, responsibility to consumers, etc., Due to today's logistics is great importance to business operations which are highly competitive. The study of such issues will gain a better understanding of the perceptions and needs of consumers who receive services, including applying the results to a study that is different from the to be presented in this research or not to compare with this research whether there is a conformance or how they are different until they can be used in practice.

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