

Effect of The Service Quality of Express Service Company on Thai E-commerce Customer Satisfaction in Thailand: A Case of Kerry Express

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Abstract: During the past ten years, E-commerce has experienced incredible development. However, some conflict in express service quality has occurred, and many customers complain about the problem that happened in the express process. Thus, this research not only tests the relationship between express service quality and customer satisfaction of customers in Thailand but also gives suggestions to solve the conflict of express service quality. This research is quantitative and collects data via a questionnaire. The research will employ multiple regression to figure out the relationship between the Thai Express firms' service quality and customer satisfaction of E-commerce shopping customers in Thailand. It is concluded that all the six dimensions (ordering quality, commodity distribution quality, customized quality, information quality, courier service quality, and error handling quality) positively affect customer satisfaction in Thailand except for Response quality which is not related to customer satisfaction. Finally, based on the experimental results, this paper proposes development suggestions for Thai Express companies.

Keywords: Express service quality, Customer satisfaction.

1. Introduction

Customers are continuously expanding and embracing online shopping day by day because of their busy and complex lifestyles, which influence how they use the internet to acquire products and services. The four variables that encourage the expansion of internet shopping are 1) Government Support and Promotion; 2) Channels for online sales and services 3) an increase in the number of foreign investors in the online market (Watcharaphon Jiangkong, 2017).

Many merchants must respond to changing market demands for online shopping to grow. Online vendors must grasp the importance of client happiness to acquire a competitive advantage. Customer satisfaction is essential for establishing lucrative consumer interactions, retaining, and expanding customers, and maximizing customer lifetime value (Kotler et al., 2011). Customer happiness is becoming increasingly important, with high-quality products and services that provide value for money recognized as critical for long-term survival, let alone long-term success (Wisniewski and Donnelly, 1996).

To better study the effect of express service quality on the satisfaction of eCommerce customers, this paper chooses Kerry logistic company as an example to further analyze the effect of courier service quality on the satisfaction of Thai online shopping customers by studying the effect of service quality of Kerry company on the satisfaction of Thai online shopping customers.

Why did this paper choose Kerry Express users as the research subject?

The first reason is that Kerry express has a wide range of users in Thailand. Kerry Express (Thailand) Public Company Limited is a parcel delivery provider. The Company's services include business-to-business, business-to-person, person-to-person, Bangkok same day, easy chip, extra services, and receiving the parcel in person. Its business-to-business service

serves customers by delivering parcels to offices and business establishments. The Company has more than 15,000 service centers covering approximately 77 provinces. The Company has nine large parcel sorting centers, over 1,200 sub-distribution centers, and over 25,000 delivery vehicles (Forst & Sullivan, 2020).

The second reason is that Kerry Express is also a well-known brand in the Thai courier industry, and the study of it is representative. Kerry express wins the No. 1 brand in Thailand's logistics industry in 2021. Therefore, it is typical to study the quality of Kerry Express's service from the perspective of customer satisfaction.

The third reason is that Kerry Express works with several e-commerce platforms, so many e-commerce platforms, for instance, Shopee, use the Kerry Express service to deliver products to customers' homes. Therefore, Kerry Express is suitable as the subject of this study.

Although there are many studies on the impact of service quality on customer satisfaction, the research on the express delivery industry in Thailand is still limited. Although some scholars have carried out relevant research on the express delivery industry in Thailand, the sample size is small and cannot reflect the situation in Thailand as a whole (Nopphong 2021).

Different studies use different dimensions to measure courier service quality and get different results (Guo, 2020). Previous research on Thai express company service quality was measured by 5 dimensions (Nopphong 2021). However, Guo (2020) used 7 dimensions in his study of the service quality of express companies in China. 7 dimensions have not been used to study the service quality of express companies in Thailand. In this paper, we will use ordering quality, commodity distribution quality, response quality, customized quality, information quality, courier service quality, and error handling quality. The dimension of processing quality to measure express companies' service quality. Therefore, this paper will fill these research gaps.

2. Literature Review

The definition of express service quality is mainly formed by western scholars based on relevant theories in marketing and management, combined with express characteristics. More is to analyze the content and elements of express service and does not conduct an in-depth analysis of the conceptual attributes of express service quality. In 1907, the world's first express company was established in Washington, USA, which opened the prelude to the development of express service.

The quality of express delivery service began in the early 1970s. In 1974, professor Maisky of the University of Michigan proposed the 7Rs theory of express delivery service quality. The status and reasonable commodity price and accurate commodity information will deliver the commodity correctly (Perrault, 1974).

Scholars LaLonde and Zinzez (1976) defined logistics services as "activities for satisfying customer needs, ensuring customer satisfaction, and winning corporate praise" (Lalonde, 1976). This definition has begun to rise into the realm of marketing. However, the concept of logistics service proposed by them is still from the perspective of third-party enterprises, rather than customer-centric. It is too simple to study the relationship between express service quality and

customer satisfaction through this concept.

Mentzer et al. believed that the quality of express delivery service is a concept, which should include the quality of physical logistics and distribution services and the quality of customer marketing services. Consumers' feelings should be regarded as one of the criteria for evaluating the quality of express delivery services (Metzger,1999). Mentzer (2001) and others have perfected and supplemented this concept. They pointed out that the physical distribution service is only a part of the quality of express service, and the service personnel, delivery process, and timely error handling should also be considered. process. At this time, the research has noticed other aspects of the express service, but the concept of express service quality at this time is still not comprehensive enough compared with the development of the express industry today.

For the construction of research models, theoretical support is essential. Through the literature review and summary of the three aspects of service quality, express service quality, and customer satisfaction in the second part, it can be found that there have been many previous studies on the relationship between the three, and it has been verified. This paper will apply the research framework of Guo (2020).

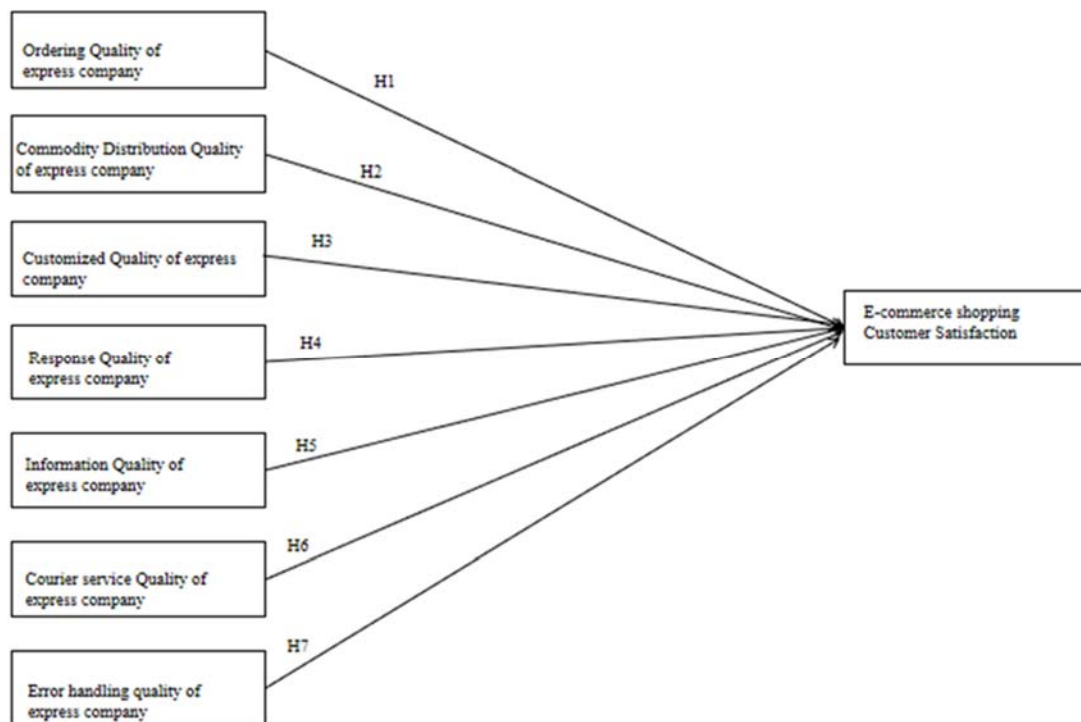


Figure 1. Conceptual Framework

3. Methodology

This research is aiming to point out the relationship between express service quality and Thai E-commerce customer satisfaction in Thailand. This study uses quantitative analysis and questionnaire survey methods to collect the main data from users in Thailand. The questionnaire is divided into three parts. The questionnaire in Section 1 is demographic information, asking about the user's

background. Section 2 is based on the variables of this study, which are service quality dimensions. Section 3 customer satisfaction. The data analysis employed multiple regression via SPSS.

This research is going to study the Thai E-commerce customer satisfaction in Thailand; hence the target population is the number of Thai customers of E-commerce who ever used Kerry express service.

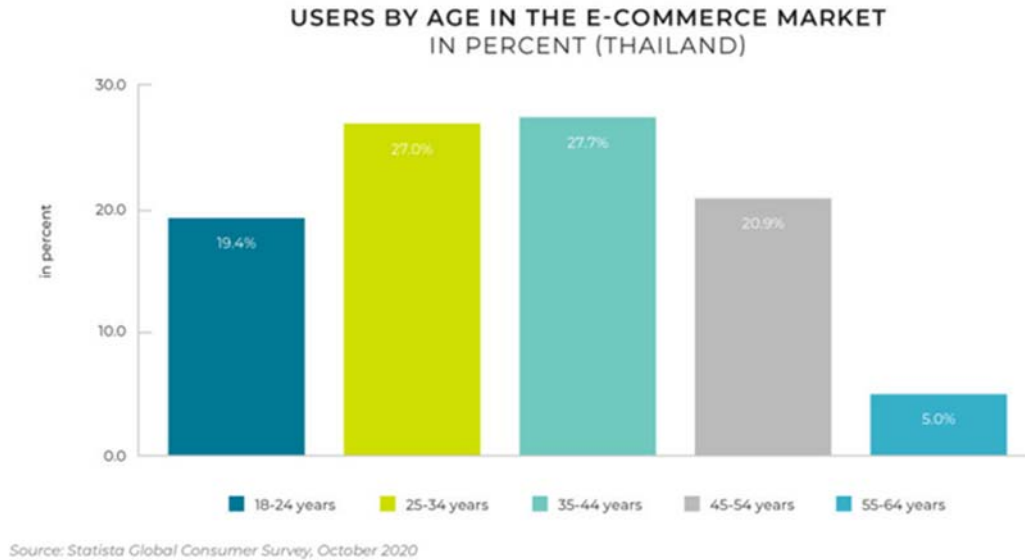


Figure 2. User by age in the Ecommerce Market

Figure 2 demonstrated the percentage of 18-24 years users of e-commerce is 19.4%, the percentage of 25-34 years users of e-commerce is 27.0%, the percentage of 35-44 years users of e-commerce is 27.7%, the percentage of 45-54 years user of e-commerce is 20.9%, the percentage of 55-64 years user of e-commerce is 5.0%. Hence the research subject is focused on the age range between 18 years and 54 years old Thai customers.

According to the above part, the population is unknown, this research chooses a 95% confidence level, 0.5 standard deviations, and a margin of error (confidence interval) of +/- 5%. My Z-score is 1.96. therefore, the sample size is calculated as below:

$$\begin{aligned} \text{Necessary Sample Size} &= (Z\text{-score})^2 * \text{StdDev} * (1 - \text{StdDev}) \\ &/ (\text{margin of error})^2 = ((1.96)^2 * .5(.5)) / (.05)^2 \\ &= (3.8416 * .25) / .0025 \\ &= .9604 / .0025 \\ &= 384.16 \end{aligned}$$

Consequently, the necessary sample size is 385.

There were three sections to the questionnaire. The participants were required to fill in some personal information in the first section. The second portion included detailed statements for each dimension, including service quality dimensions and customer satisfaction. The questionnaire adopted Guo's (2020) questionnaire design which study expresses service quality effect on E-commerce customer satisfaction in Thailand.

To better understand the basic information of the respondents, this question will understand the distribution of the respondents in terms of gender, age, monthly online shopping spending, monthly spending times, and online shopping history.

This study's target population is Thai online consumers, hence the surveys will be distributed online. Before distribution, 100 questionnaires are distributed to verify their

reliability. If each question's Alpha reliability metric is more than 0.7, the questionnaire is well-designed.

After the pilot test and adjustments, the questionnaire will be sent to the study sample. In this research, we'll send 400 surveys via email via snowballing sample. To fulfil the sample size of this study, volunteers must be 18-54 years old Thai and have utilised KERRY Express. Unless they match the prerequisites, send the email to other users. We submit the survey to a Thai responder, who fills it out and forwards it till 400 are gathered. Email collects survey results. Valid surveys are removed, logged, data is input, and data analysis starts.

In this study, using factor analysis methods, there are 7 variables related to customer satisfaction. Use to determine the relationship between variables, and then perform decomposition.

The data was input into SPSS, which was used to perform confirmatory factor analysis. During the exploratory factor analysis, the variables were appropriately factored. Factoring was either accepted or denied using multiple regression in SPSS. This study made use of the program.

Result

To make sure this research questionnaire can collect reliable data and analyze the useful result, a reliable test was necessary to be an issue.

Table 1. The Reliable Test result

Cronbach's Alpha	N of Items
.868	23

Based on table 1, the reliable test is shown as above. There are 23 items in the questionnaire, and Cronbach's alpha is 0.868 higher than 0.8 which means the questionnaire can collect reliable data.

Table 2. Multiple regression results

variables	coefficients	P-value
(Constant)	0.139	0.340
Order Quality	0.338	0.000***
Commodity Distribution Quality	0.291	0.000***
Customized Quality	0.129	0.000***
Response Quality	0.032	0.440
Information Quality	0.267	0.000***
Courier service Quality	0.066	0.083*
Error handling quality	0.481	0.000***
R square	0.561	
F-statistic	71.431	0.000***

$$CS = 0.139 + 0.338 * OQ^{***} + 0.291 * CDQ^{***} + 0.129 * CQ^{***} + 0.032 * RQ + 0.267 * IQ^{***} + 0.066 * CSQ^{*} + 0.481 * EHQ^{***}$$

CS=Customer Satisfaction

OQ= Ordering quality

CDQ= Commodity Distribution Quality

CQ= Customized Quality

IQ= Information Quality

CSQ=Courier service Quality

EHQ= Error handling quality

*** Represent significant at 0.01 confident level.

** Represent significant at 0.05 confident level.

* Represent significant at 0.1 confident level.

The data analysis in Table 2 shows that the R-squared is 0.561, i.e., 56.1%, which is greater than 50%, indicating a high degree of fit, indicating that 56.1% of the online shopping customer satisfaction is influenced by the courier service quality of ordering quality, product delivery quality, customization quality, response quality, information quality, courier service quality, and error handling quality, which are the seven dimensions influenced.

According to Table 7 $P=0.000 < 0.05$ for F-Statistic, indicates that in the regression analysis, at least one of the variables is significantly affecting customer satisfaction and

the existence of the regression equation is meaningful.

According to Table 7, order quality, Commodity Distribution Quality, Customized Quality Information Quality, and Error handling quality's P-value are lower than 0.01 and the coefficient higher than 0, which means these variables are a positive effect on customer satisfaction at a 0.01 confidence level.

The Courier service Quality's P-value is higher than 0.01 and lower than 0.1 and the coefficient is higher than 0 which means the Courier service Quality positively affects customer satisfaction at a 0.1 confident level.

4. Conclusion

In this paper, by analyzing and summarizing the previous scholars' research on the relationship between courier service quality and customer satisfaction, this paper adopts the research model of Guo (2020), and the seven dimensions of ordering quality, product delivery quality, customization quality, response quality, information quality, courier service quality, and error handling quality together construct the theoretical research model of this paper. Through the analysis of data from 400 valid questionnaires, it is concluded that there are different degrees of correlation between the seven dimensions and customer satisfaction. The specific findings are as follows:

Table 1. Hypothesis Summary

Hypothesis	Result
Ordering quality of Kerry express service company positive impact on Thai E-commerce customer satisfaction	Accept
Commodity distribution quality of Kerry express service company positive impact on Thai E-commerce customer satisfaction	Accept
Customized quality of Kerry express service company positive impact on Thai E-commerce customer satisfaction	Accept
Response quality of Kerry express service company positive impact on Thai E-commerce customer satisfaction	Reject
Information quality of Kerry express service company positive impact on Thai E-commerce customer satisfaction	Accept
Courier service quality of Kerry express service company positive impact on Thai E-commerce customer satisfaction	Accept
Error handling quality of Kerry express service company positive impact on Thai E-commerce customer satisfaction	Accept

Rely on table 8, the hypothesis of response quality is rejected, and others are accepted. Therefore, the response quality of Kerry express cannot impact Thai E-commerce customer satisfaction. Order quality, Commodity distribution quality, Customized quality, Information quality, Courier service quality, and Error handling quality of Kerry express can positively impact Thai E-commerce customer satisfaction.

Therefore, there are some suggestion for express companies in Thailand to improving the Customer satisfaction.

4.1. Improve the order quality

Based on the above analysis, if the order quality can be improved, customer satisfaction will be increased. Therefore,

here are a few suggestions for improving order quality.

First, the express company should optimize the operation interface to facilitate customers to place orders. For example, courier companies should apply big data business to help customers find the services they want quickly.

Second, Express companies should improve commodity information to facilitate customers to compare goods. In the face of a wide range of goods in the network, how should consumers choose, often according to the commodity information displayed by merchants, netizen evaluation, friend recommendation, and other ways to choose. Therefore, more commodity information can allow consumers to get more effective content, thus helping consumers to choose. In addition to the text description and picture display, the display of commodity information can add some video materials to shoot the video of different scenes for different products, fully showing the material, performance, use method, cleaning method, and other information of the product. In addition to showing the information about the product itself, this way can also increase the trust of consumers and improve customer satisfaction

4.2. Improving the quality of commodity distribution

Based on the research result, commodity distribution quality improvement can lead the customer satisfaction improved. Commodity distribution is the most important part of the whole online shopping link. Goods reach consumers from the network is mainly the distribution link. The quality of commodity distribution directly affects consumers' psychological feelings about receiving goods and their satisfaction with online shopping.

Therefore, the company can increase the number of courier outlets to facilitate courier delivery to customers. For densely populated areas courier companies should increase the number of outlets to prevent the accumulation of goods and goods stranded.

4.3. Improve customized quality

Based on the research result, customized quality improvement can lead the customer satisfaction increased. Customized quality is mainly to provide different personalized services for different customer groups. Therefore, express companies can customize different services for different user groups, thus meeting different customer needs.

For different customer groups to provide personalized services, the first is for young people who cannot charge express at any time, they work busy, rest time, online times and quantity is more, weekdays are not at home at ordinary times, if there is express delivery, must want to be able to have a place, such as express ark, express put station, cooperation, etc. The choice of these positions also needs to consider, cannot be too far from the consumer's address, it is best to be the community gate, community, some of the only ways home, to ensure that the delivery staff can complete the delivery task in time, but also can ensure that the consumer goods have a safe temporary point. For young people, the express ark is undoubtedly the most convenient choice, because it is not limited by time, any time to come back to take, as long as the time is free, other storage methods are limited by time, so, if express enterprises and express ark to strengthen cooperation, provide the various convenient way, so consumers in choose and buy goods is also ask merchants cooperation third-party

logistics enterprise, and according to the cooperative enterprises to see whether can bring convenience.

4.4. Improve the quality of information

Based on the above research results, information quality improvement can lead the customer satisfaction increased. For information quality improvement, there have two recommendations for the express company

(1) using modern technology to improve logistics sorting technology with the continuous development of science and technology, technology has been integrated into people's daily life, a smartphone changed people's consumption, payment, travel, brought great convenience to people's lives, the progress of science and technology benefits to all. For express delivery enterprises, the reference of science and technology greatly saves the cost, of using a barcode, radio frequency, and other ways to sort, classify and package the goods, and efficiently complete the early loading preparation work of the goods. The packaging and packaging work in the early stage can also make consumers clearly understand, and if there are problems in the later stage, they can retrieve computer information and video information, to form a complete packaging, transportation, and distribution chain of goods.

(2) Improve the logistics information system upgrade and update of the logistics information service system, Can let consumers have a clear grasp of what they buy anytime and anywhere, Using the express enterprise platform APP, mobile phone SMS, e-mail, and other ways So that consumers can supervise and master the product in real-time in the whole process of transportation, The diversity of the information content, For example, where to start, where to be now when to deliver, the contact information of delivery personnel, Every link is clear to consumers, Real-time update of accurate logistics information by express delivery enterprises can increase the sense of security of consumers, Improve your satisfaction rate.

4.5. Improve the quality of courier services

Based on the above research results, courier service quality improvement can lead the customer satisfaction increased. For courier service quality improvement, there have two recommendations for the express company.

(1) improve the service level of couriers

Courier as the only person in face-to-face contact with consumers throughout the online shopping process, the business literacy of couriers will directly allow consumers to link personal behavior and corporate behavior. At present, most couriers are randomly recruited by society, there are no unified normative standards, and no strict inspection system, for couriers, to think they are simply a courier, with no sense of belonging to the enterprise, that as long as the completion of today's delivery tasks can be. Therefore, for courier enterprises, the introduction of more high-end talent, regular training for employees, training qualified to enter the work phase, the assessment of business literacy, complaint rate high or low, dress code, transport goods of small transport neatness normality are included in the scope of salary assessment, the use of performance appraisal, for good employees to reward, and advanced personal deeds for the internal enterprise Learning propaganda, enterprises from labor-intensive to technology-intensive transformation.

(2) Standardize the operation process of couriers

For consumers who cannot check the goods in person using video recording, once a dispute occurs, can delineate the

responsibility, and can effectively reduce the rate of unnecessary complaints, for courier enterprises is also for the protection of their enterprises and employees. For the express mail to be issued, standardize the standard of distribution packaging, using a unified outer packaging. For special goods using different packaging methods to reduce the rate of damage to goods, packaging, and delivery of each process should be the courier pre-employment training program so that the enterprise can reduce the loss of service in the future.

4.6. Improve Error handling quality

Based on the above research results, Error handling quality improvement can lead the customer satisfaction increased. For express enterprises, after-sales service is mainly the attitude towards consumers with problems after receiving goods. A good service attitude will give consumers psychological comfort, and reasonable processing results will make consumers feel satisfied. For sending valuables to inform consumers that best can buy insurance, insurance formula if the problem can reduce the loss of consumers, for valuables express companies need to use different delivery and ordinary goods, increase consumer trust, is also an aspect worth considering.

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