

FACTORS INFLUENCING CUSTOMER SATISFACTION IN INTERNATIONAL COURIER SERVICES: ZTO EXPRESS AS AN EXAMPLE

Mingda Wei^{1*}

¹ Graduate School, Siam University of Thailand

* Corresponding Author, E-mail: dtsauto@hotmail.com

Abstract: The purpose of this study is to investigate the service quality that affects customer satisfaction in ZTO Express Thailand as a logistics express delivery service. The sample group used in this study includes 380 residents who use the express delivery service of ZTO Express Thailand for online shopping, using a multi-stage random sampling method.

This study adopts a quantitative research method and designs a questionnaire based on the two stages of the Customer experience theory as independent variables. In the research framework diagram, customer satisfaction is the dependent variable, speed and freight are independent variables, and their effects on customer satisfaction are studied separately. A questionnaire survey was used as an instrument in this study. The statistical methods used in data analysis are percentage, mean, standard deviation, and multiple regression analysis. This analysis analyzed the correlation between customer satisfaction, speed and freight of ZTO Express, with a sample size of 380. The results show that: Customer satisfaction and speed: The correlation coefficient is 0.76** ($p < 0.01$), indicating that there is a significant positive correlation between the two. That is, the faster the express delivery speed, the higher the customer satisfaction. Customer satisfaction and freight: The correlation coefficient is 0.68** ($p < 0.01$), indicating that there is a significant positive correlation between the two. That is, the more reasonable the freight, the higher customer satisfaction. Speed and freight: The correlation coefficient is 0.73** ($p < 0.01$), indicating that there is a significant positive correlation between the two. That is, the faster the express delivery speed, the higher the freight may be. Combining these analysis results, it is concluded that customer satisfaction with ZTO Express is significantly positively correlated with both express delivery speed and freight. Improving express delivery speed and reasonable freight pricing are the keys to improving customer satisfaction. In addition, the significant correlation between speed and freight suggests the importance of express service pricing strategy. These relationships were statistically significant ($F = 43.89$), and therefore, the findings support all hypotheses that changes in speed and freight have a positive impact on customer satisfaction with parcel delivery services.

Keywords: Customer Experience Theory, Customer Relationship Management, Customer Satisfaction

Introduction

In recent years, with the rapid development of e-commerce, the logistics industry has also grown rapidly. As one of the leading companies in the field of logistics, ZTO Express has achieved remarkable results in the domestic market, but its development in the international market still needs to be improved. However, in today's highly competitive market, logistics services have become an important part of corporate competitiveness. Customer satisfaction is a crucial factor in the logistics industry, because customer satisfaction not only affects the reputation and performance of the company, but also directly affects customer loyalty and repeat purchase rate (Zhong et al., 2020).

As an Asian country with a rapidly developing economy, Thailand also has a large room for development in the e-commerce industry. ZTO Express has entered the Thai market for some time, but in the fiercely competitive environment, customer satisfaction has become an important key for companies to win market share (Jing et al., 2020).

Many studies have explored the relationship between customer satisfaction and logistics. Some studies have shown that the quality of logistics services has a significant impact on customer satisfaction (Amling & Daugherty, 2020; Jing et al., 2020). Good logistics services can improve customer satisfaction, thereby increasing the market share and profits of enterprises (Zhong, 2022). The quality of logistics services includes on-time delivery, cargo integrity, after-sales service and other aspects, which directly affect the customer's overall impression of the company. In addition, some studies have also shown that customer satisfaction can be improved by improving logistics efficiency and reducing costs (Zhong, 2022; Jamous et al., 2022). Notifying customers in advance of the time of delivery of goods can reduce customer waiting time and improve customer satisfaction. In addition, some studies have also shown that the reliability and service level of express delivery companies have a great impact on customer satisfaction. It can be said that companies need to "adapt to local conditions" and choose the most appropriate delivery method according to market demand and their own conditions. Whether it is express delivery, self-owned logistics, crowdsourcing delivery, or group shipment, they should "keep improving", continuously optimize service processes, and improve efficiency and accuracy (Jing et al., 2020).

Through these measures, companies can not only improve consumer satisfaction, but also "take steady steps" in the fiercely competitive market and continue to gain the trust and support of consumers. Therefore, the research on improving customer satisfaction of ZTO Express in Thailand is of great significance. This study analyzes the current situation, and through in-depth understanding of the needs and preferences of Thai consumers, optimizes the relevant aspects of ZTO Express in Thailand in a targeted manner, finds influencing factors, improves customer satisfaction, and wins a larger market share, thereby achieving sustainable development.

Research Objectives

- 1) To explore the impact of the speed on the customer satisfaction of ZTO Express in the Thai market.
- 2) To analyze the impact of freight rate on the customer satisfaction of ZTO Express in the Thai market.

Literature Review

Customer satisfaction

Customer satisfaction refers to the difference between the actual experience and expectations of customers after purchasing and using a product or service (Zhang et al., 2022). When the actual experience exceeds expectations, customers will feel satisfied; when the actual experience does not meet expectations, customers will feel dissatisfied. In overseas express delivery services, customer satisfaction is an important indicator of service quality and is crucial to the success of the company. Wen et al. (2021) explored the relationship between expectations, satisfaction, and visitor loyalty, and found that the higher the customer's expectations, the more services that meet their expectations can improve satisfaction and brand awareness. Therefore, in overseas express delivery services, customer satisfaction is an important indicator of service quality and is crucial to the success of the company. Deng et al. (2023) evaluated the competitiveness of express delivery companies through information entropy and gray correlation analysis, pointing out that companies need to continuously improve service quality to maintain competitive advantages. In overseas express delivery services, the key factors affecting customer satisfaction mainly include the following aspects:

Delivery speed: The speed of overseas express delivery is one of the most important factors affecting customer satisfaction. Customers expect their packages to be delivered within the expected time. Faster delivery speed can improve customer satisfaction and enhance customer trust in the company. For example, Jing et al. (2020) found in their study of railway freight services that speed and reliability are important factors affecting customer choice.

Delivery punctuality: On-time delivery means that the package is delivered within the promised time. Punctuality is an important indicator for measuring the reliability of express delivery services. High punctuality can reduce customer anxiety and improve satisfaction.

Freight and fee transparency: Reasonable freight and clear fee structure have a significant impact on customer satisfaction. Hidden fees or opaque pricing strategies will lead to customer dissatisfaction, which in turn affects their purchasing decisions. Lei et al. (2022) explored the main factors affecting customer satisfaction and loyalty in urban express delivery services and found that service speed, fee rationality and customer service are key factors. Express delivery mainly meets

consumer needs at a lower price, and this economic advantage is the main motivation for buyers to participate.

Package security: Ensuring the safety of packages during transportation and avoiding damage or loss is the key to improving customer satisfaction. The integrity of the package directly affects customers' evaluation of the service.

Customer service quality: High-quality customer service, including timely response to customer inquiries, problem solving and assistance, is an important factor in improving customer satisfaction. Excellent customer service can improve customer experience and enhance loyalty to the company. High-quality customer service can significantly improve customer satisfaction. Shan et al. (2021) explored the relationship between user satisfaction and user perceived value. The results showed that perceived value has a positive impact on user satisfaction and positively affects user behavior through user satisfaction, especially in online shopping on overseas platforms. It shows that perceived value has a positive impact on user satisfaction, and high-quality customer service is an important way to improve perceived value. Jamous et al. (2022) also studied the relationship between perceived value, satisfaction and loyalty, and proposed that adjusting perceived value can improve consumer satisfaction and loyalty.

Tracking and transparency: Providing real-time tracking information so that customers can know the status of the package at any time can significantly improve satisfaction. A transparent tracking system makes customers feel at ease and reduces uncertainty.

Customer satisfaction is an important measure of the quality of overseas express delivery services. By optimizing delivery speed and punctuality, reasonable freight and cost transparency, improving customer service quality and package security, and providing real-time tracking services, express delivery companies can significantly improve customer satisfaction, enhance market competitiveness, and gain long-term customer loyalty and support (Li et al., 2023). Therefore, this study will use customer satisfaction as the dependent variable to conduct research.

Customer experience theory

Customer experience theory believes that customer satisfaction depends not only on the product or service itself, but also on the overall experience of the customer during the purchase process (Shi, 2021). ZTO Express can improve customer experience by providing personalized services, simplifying the delivery process, and improving service efficiency, thereby improving customer satisfaction. In today's highly competitive market environment, customer experience has become one of the important factors for companies to win customer trust and competitive advantage. Customer experience theory believes that customer satisfaction depends not only on the quality of the product or service, but also on the feelings and experience during the entire purchase process. As a well-known express delivery company, ZTO Express should recognize the importance of improving

customer experience in order to increase customer satisfaction and enhance market competitiveness (Jing et al., 2020). First of all, personalized service is the key to improving customer experience. ZTO Express can provide customers with customized services by understanding customer needs and preferences, so that customers feel valued and cared for. Secondly, simplifying the delivery process is also an effective way to improve customer experience. In the process of delivering parcels, if the process is complicated and cumbersome, it is easy for customers to feel unhappy and inconvenient (Lei et al., 2022). ZTO Express can improve customer experience by optimizing processes, simplifying operating steps, reducing waiting time, and improving handling efficiency, so that customers can complete express delivery faster and more conveniently. Finally, improving service efficiency is also an important means to improve customer experience. Customers generally hope to receive their parcels quickly (Chunhua et al., 2023). Therefore, ZTO Express can provide customers with better service experience by improving delivery speed and punctuality and updating logistics information in a timely manner. In summary, customer experience theory is of great significance for ZTO Express to improve customer satisfaction. ZTO Express can create a good shopping experience for customers, establish customer loyalty, and enhance market competitiveness by providing personalized services, simplifying delivery processes, and improving service efficiency (Loo & Asrah, 2022). By continuously optimizing service quality and improving customer satisfaction, ZTO Express can occupy a more advantageous position in the fierce market competition and achieve sustainable development.

Customer Relationship Management

Customer Relationship Management (CRM) is a management method that uses information technology and strategic management to manage and analyze the interaction between enterprises and customers in order to improve customer satisfaction and loyalty (Chunhua et al., 2023). It can be said that customer relationship management emphasizes that building and maintaining close relationships with customers is essential to improving customer satisfaction. The object of this study, ZTO Express, can strengthen its relationship with customers and improve customer satisfaction by establishing effective customer communication channels, providing customized services, and conducting regular customer satisfaction surveys. In summary, ZTO Express needs to comprehensively apply the above theories to improve customer satisfaction in the Thai market, continuously improve service quality, optimize customer experience, strengthen customer relationship management, and differentiated service marketing to meet customers' growing express delivery needs.

Methodology

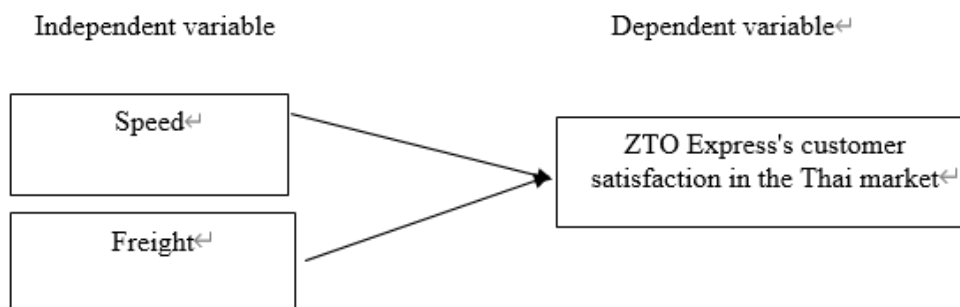
The target population of this study is local Thai consumers who have used the delivery service of ZTO in Thailand for shopping. A cluster sampling method was used to extract a sample of

380 people from the social media user groups such as Facebook, WhatsApp, and Line to collect data. A convenience sampling method was used to send invitations to fill in the questionnaire to the group of local Thai people who have used logistics in Thailand until the required sample size was reached. The instrument used in this study is a questionnaire created by the researcher and operationally defined according to the characteristics to be measured. It is divided into 2 parts, including demographic data, customer satisfaction with shipping costs and delivery speed, and the second part is a scale. The generated questionnaire is used to test the validity and reliability of the questionnaire before collecting data in order to obtain accurate research results and achieve the established goals, and passed the reliability standard (Chunhua et al., 2023).

H1: Speed has a significant impact on ZTO Express's customer satisfaction in the Thai market.

H2: Freight has a significant impact on ZTO Express's customer satisfaction in the Thai market.

The research framework was designed based on the hypothesis, as shown in Picture 1.



Picture 1: Conceptual Framework

In the statistics used in data analysis, the researcher used descriptive statistics to describe demographic characteristics, such as frequency, percentage, mean, and standard deviation (Baxter, 2019). As well as variable collinearity test and correlation coefficient analysis to test the research hypotheses.

Results

The demographic information of the sample is 380 consumers who have used Thai community products. Most of the respondents are female, aged between 30 and 45 years old, married, with a bachelor's degree as the highest education, mostly employees of private enterprises, and an average monthly income of 15,000-40,000 baht, indicating a certain purchasing power. In this study, the correlation between customer satisfaction, speed and freight of ZTO Express was analyzed. The sample size is 380, and the correlation coefficient between customer satisfaction and speed of ZTO Express is 0.76**, indicating that there is a significant positive correlation between customer

satisfaction and speed of ZTO Express ($p < 0.01$). This means that the faster the express delivery speed, the higher customer satisfaction. The correlation coefficient between customer satisfaction and freight of ZTO Express is 0.68^{**} , indicating that there is a significant positive correlation between customer satisfaction and freight of ZTO Express ($p < 0.01$). This means that the more reasonable the freight, the higher the customer satisfaction.

Table 1: Correlation Analysis of Various Variables

Sample 380	ZTO Express's customer satisfaction	Speed	Freight
ZTO Express's customer satisfaction	1		
Speed	0.76^{**}	1	
Freight	0.68^{**}	0.73^{**}	1

Note: $*p < 0.05$, $**p < 0.01$.

Speed and freight: The correlation coefficient is 0.73^{**} , indicating that there is a significant positive correlation between speed and freight ($p < 0.01$). This means that there is a certain correlation between freight and express delivery speed. The faster the express delivery speed, the higher the freight. The conclusion is that the correlation analysis shows that customer satisfaction of ZTO Express has a significant positive correlation with both express delivery speed and freight. This shows that improving express delivery speed and reasonable freight pricing are key factors in improving customer satisfaction. In addition, the positive correlation between speed and freight also suggests the importance of express service pricing strategy, which is statistically significant, $F = 43.89$. All variables can explain customer satisfaction of parcel delivery services. The test results accept all hypotheses, that is, changes in speed and freight will have a positive impact on customer satisfaction with parcel delivery services.

The results of the collinearity test showed a mean VIF value of 2.51 for all variables, and the results are shown in Table 2. This indicates that the collinearity of the model is low and allows the next step of empirical analysis.

Table 2: Test for collinearity of variables

Viable	VIF	1/VIF
lnSpeedjt	4.8	0.217
lnFreightjt	2.68	0.373
lnCSijt	2.71	0.394
Mean	VIF	2.51

To avoid pseudo-regression, a unit root test on the panel data is required to determine the stationarity of the variables. The LLC test and the PP test were performed separately for each variable. As can be seen in Table 3, the LLC of variables lnSpeedjt, lnFreightjt, lnCSijt, test and PP

test are less than 0.05, that is, the original hypothesis 5% significant level of the existence of unit root is rejected, and the above data can be regarded as stationary.

Table 3: Result of inspection

Viable	lnCSijt	lnSpeedjt	lnFreightjt
LLC test	-1.288(0.0189)	44.262(0.0014)	-3.511(0.0002)
PP test	72.845(0.0000)	35.551(0.0174)	32.030(0.0430)
Stationary	yes	yes	yes

Discussion

The Impact of Speed and Punctuality of ZTO Express in the Thai Market. In the Thai market, the speed and punctuality of ZTO Express have a significant impact on customer satisfaction. The faster the delivery speed, the higher the probability of on-time delivery of the package, and customer satisfaction will also increase. Speed and punctuality directly affect the overall customer experience, especially in time-sensitive express delivery needs. In the field of express delivery companies, speed and timeliness are key indicators of service quality, and their impact on customer satisfaction is obvious. Express delivery services need to respond quickly to customer needs and ensure that every package can be delivered on time; timeliness emphasizes accuracy and completion of delivery within the agreed time to win customer trust and recognition. The optimization of speed and timeliness can not only improve customer experience, but also help companies establish brand image and improve customer loyalty in a highly competitive market. Therefore, express delivery companies should continuously optimize internal management, improve delivery efficiency, and improve overall service levels with speed and timeliness as the core. The above-mentioned correlation coefficient between customer satisfaction and speed is 0.76** ($p < 0.01$), which also shows that the improvement of express delivery speed and punctuality can not only improve customer satisfaction, but also enhance customer loyalty and brand trust. Therefore, ZTO Express should focus on improving its speed and punctuality in the Thai market to meet customer expectations and needs.

The impact of ZTO Express's freight and fee strategy in the Thai market. In the Thai market, ZTO Express's freight and fee strategy also has an important impact on customer satisfaction. A reasonable freight pricing strategy can improve customer price satisfaction and increase their willingness to use ZTO Express services. In e-commerce logistics, freight and fee strategies have a significant impact on customer satisfaction. The pricing strategy of freight and related fees plays an important role in shaping the overall shopping experience. When e-commerce companies provide affordable shipping options or clear incentives (such as free or discounted shipping thresholds), customers are more likely to be satisfied with their purchases.

In addition, unexpectedly high shipping costs or unclear fee structures can lead to frustration and shopping cart abandonment, which has a negative impact on customer satisfaction. In addition,

the speed and reliability of different freight options directly affect customer satisfaction. Fast and reliable delivery services help improve the shopping experience, while delays or mishandling may lead to dissatisfaction. Moreover, the correlation coefficient between customer satisfaction and freight is 0.68** ($p < 0.01$), which indicates that the balance between freight and service quality is one of the important considerations for customers to choose express delivery services. By optimizing freight and fee strategies, ZTO Express can improve customer perceived value and thus enhance market competitiveness. In addition, transparent fee structures and favorable pricing strategies can also help improve customer trust and satisfaction.

ZTO Express's success in the Thai market depends on its performance in speed and punctuality and the rationality of its freight and fee strategies. Improving express delivery speed and punctuality can significantly improve customer satisfaction and loyalty, while optimizing freight and fee strategies can enhance customer price satisfaction and trust. Taking these factors into consideration, ZTO Express can gain greater competitive advantage and customer support in the Thai market by improving service quality and pricing strategies.

Conclusions

In the global express delivery industry, customer satisfaction is a key indicator for measuring service quality and corporate competitiveness. ZTO Express's success in the Thai market depends on its performance in speed, punctuality, and freight and cost strategies. This study analyzed 380 samples to explore the correlation between ZTO Express's customer satisfaction and speed and freight and put forward some key findings and conclusions.

The results clearly pointed out that speed and freight are two important factors affecting customer satisfaction. Correlation between customer satisfaction and speed: The correlation coefficient is 0.76** ($p < 0.01$), indicating that there is a significant positive correlation between the two. That is, the faster the express delivery speed, the higher the customer satisfaction. This finding shows that improving delivery speed is an effective means of improving customer satisfaction. Correlation between customer satisfaction and freight: The correlation coefficient is 0.68** ($p < 0.01$), indicating that there is a significant positive correlation between the two. That is, the more reasonable the freight, the higher customer satisfaction. This means that a reasonable pricing strategy plays an important role in improving customer satisfaction. The increase in express delivery speed is usually accompanied by an increase in costs, so a reasonable pricing strategy is needed to cover these costs without making customers feel that the freight is too high. This balance is the key to developing an effective pricing strategy.

The results of this study support all hypotheses, indicating that changes in speed and freight have a significant positive impact on customer satisfaction. Correlation between speed and freight:

The correlation coefficient is 0.73** ($p < 0.01$), indicating that there is a significant positive correlation between the two. That is, the faster the delivery speed, the higher the freight may be. This suggests that while improving the speed, the pricing strategy needs to be adjusted simultaneously to maintain customer satisfaction. By improving delivery speed and optimizing freight strategies, ZTO Express can improve customer satisfaction and loyalty in the Thai market and gain greater market competitiveness and customer support. These findings provide valuable references for ZTO Express's global operations and emphasize the important role of speed and cost strategies in improving customer satisfaction.

There are two aspects of strategic recommendations for ZTO Express. In order to gain greater competitive advantages in the Thai market, there are two aspects of strategic recommendations for ZTO Express: First, optimize delivery speed: improve delivery efficiency through technology upgrades and process optimization to ensure fast delivery of packages (Amling & Daugherty, 2020). Second, a reasonable pricing strategy: formulate flexible and competitive freight strategies, provide a variety of transportation options and preferential measures to meet the needs of different customers.

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