

Factors affecting the decision to choose a parcel delivery service with the company Flash Express in Bangkok

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Abstract

In the current era of globalization, technology, communication devices, and internet networks have revolutionized the way people connect. These technologies play a crucial role in daily life, encompassing education, entertainment, and business. The rapid growth of technology has transformed trade systems, shifting from traditional brick-and-mortar stores—characterized by high costs and limited customer access—to the expansion of e-commerce via the Internet. This shift reduces costs, enhances efficiency, and broadens customer bases without reliance on distributors and middlemen. (Natpatsaya et al., 2024).

Despite its growth, the success of e-commerce relies heavily on effective logistics and transportation management systems. Efficient delivery ensures goods reach customers on time while minimizing costs. However, many organizations still face challenges such as delays and high operational costs due to inadequate systems. Delivery quality remains a critical factor, with customers prioritizing speed, accuracy, and reliable tracking.

This study examines factors influencing customer satisfaction with delivery services, focusing on two key areas: Employee performance and problem-solving – Prompt and professional service to address customer issues. Delivery quality and tracking – Accurate, timely deliveries with transparent tracking systems. An analysis of online delivery services in Bangkok reveals overall customer satisfaction to be positive. However, deeper insights highlight these two factors as most impactful. Addressing these areas can enhance customer trust, improve logistics systems, and create competitive advantages for businesses in the growing e-commerce market (Papinda Kammanee, 2022).

Keywords: Parcel delivery service, Mixed activities, Marketing mix

1. Introduction

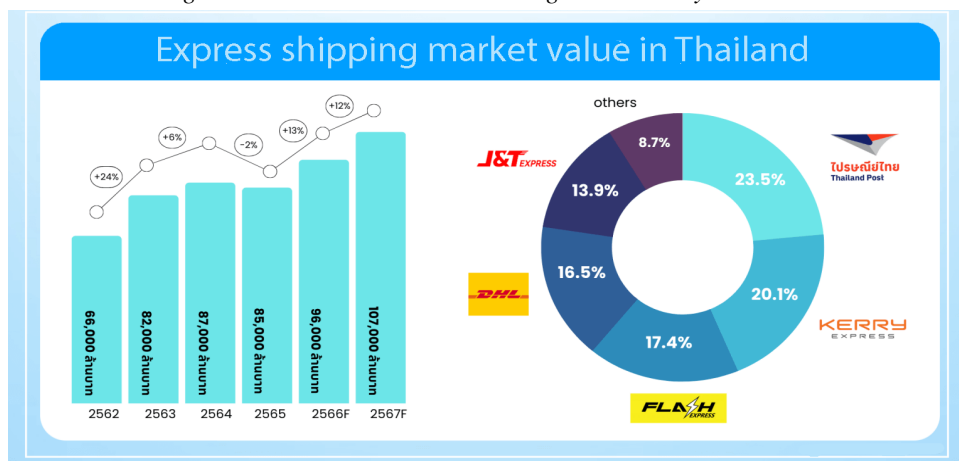
The parcel delivery business in Thailand is experiencing rapid and continuous growth. According to the TTB Economic Analysis Center (2024), the market value of this business exceeds 100 billion THB annually, with an average growth rate of 10–20% per year. This growth is driven by critical factors such as the continuous expansion of e-commerce and consumer behavior trends favoring online shopping.

The parcel delivery business in Thailand is highly competitive, involving not only domestic operators but also regional and global logistics companies entering the Thai market. Strategic collaborations between leading Thai parcel delivery providers and international logistics companies have been established to exchange strengths and expertise. Examples include developing customer care models, expanding parcel collection points, and forming partnerships with convenience stores to reduce costs and enhance the efficiency of logistics networks. Flash Express Co., Ltd. was founded in 2017 by Mr. Komsan Saelee and a team of Thai executives and employees. Today, the company is one of the leading logistics providers in Thailand, offering services across all 77 provinces, with more than 2,500 parcel collection points. Flash Express emphasizes fast, safe, and high-quality services. Unique features include free parcel pickup from the first item, 365-day service without holidays, and handling more than 1 million parcels per day. Additionally, the company offers a parcel protection program to ensure customer confidence, with compensation for damages or losses up to 50,000 THB ((Ketwadi Panthong. 2021).

Flash Express was established with the vision of creating affordable parcel delivery services for the domestic market, addressing the need for cost-effective solutions. The company prioritizes speed, safety, and service quality to satisfy customers while fostering sustainable shared value for all stakeholders. Despite its success in market expansion and brand recognition, Flash Express faces several challenges that may impact operational efficiency and customer satisfaction: Issues of Delayed and Backlogged Parcels Research indicates that a significant volume of parcels remains backlogged at distribution centers, leading to delivery delays that could undermine customer trust (Busakorn Ngamsappong, 2021). Employee Turnover Reductions in delivery personnel wages have contributed to high employee turnover, affecting the continuity and speed of services. Intense Competition in the Logistics Market The growing market value of the parcel delivery industry has attracted new entrants while existing players have increased investments to enhance logistics efficiency. Innovations include real-time parcel tracking systems and expanded services in rural areas.

Given the popularity and rapid growth of Flash Express Co., Ltd., the researcher is interested in studying the factors influencing customers' decisions to use Flash Express's parcel delivery services in Bangkok, a high-demand area. The findings from this study are expected to assist the company in planning strategies to strengthen its competitive advantages, improve operational efficiency, and meet the needs of target customers more effectively. Furthermore, addressing existing weaknesses could enhance customer confidence and ensure sustainable growth in the long term.

Figure 1: Thailand E-Commerce Logistics 2023 by SHIPPOP



1.1 Research Objective

1. To study the level of factors contributing to the success of logistics processes and analyze the level of transportation efficiency from the perspective of customers using the service: A case study of Flash Express Co., Ltd.

2. To analyze the relationship between factors influencing the success of logistics processes and the level of transportation efficiency from the perspective of customers using the service: A case study of Flash Express Co., Ltd.

3. To examine the influence of factors contributing to the success of logistics processes on the transportation efficiency from the perspective of customers using the service: A case study of Flash Express Co., Ltd.

2. Methods

Research Population and Sampling the population for this study consists of customers using the services of Flash Express Co., Ltd. Due to the inability to determine the exact population size, the researcher determined the sample size using Cochran's formula (1953) at a 95% confidence level with a margin of error of $\pm 5\%$. Based on the calculations, the required sample size was at least 400 respondents, including an additional 38,515 respondents to prevent inaccuracies due to incomplete responses. Convenience sampling was used to collect data effectively and appropriately.

Research Instrument the research instrument used in this study was a questionnaire developed based on relevant theories and concepts. The questionnaire consists of four sections: Personal Information this section includes 5 questions to gather general information about the respondents. Success Factors in the Logistics Process This section contains 20 questions, developed using a 5-point Likert scale based on the concepts of Porter (1980) and Logistics Corner (2009). Example question: "Does the company focus on developing cost-effective transportation methods to maintain its market share?" Transportation Efficiency this section consists of 15 questions, developed using a 5-point Likert scale and adapted from questionnaires by Thanawan Promngam (2022) and Thapanee Kaewsanain (2021). Example question: "Can the company deliver goods and parcels within the specified time frame?" Suggestions and Additional Comments this section includes open-ended questions to allow respondents to provide additional feedback.

Instrument Validation the questionnaire underwent validation for content consistency (IOC) by experts, yielding values between 0.67 and 1.00. Additionally, reliability testing was conducted, resulting in the following Cronbach's alpha coefficients: Success Factors in the Logistics Process: 0.81 Transportation Efficiency: 0.85 These reliability scores were deemed sufficient for collecting valid data.

Data Collection the data was collected through an online questionnaire using Google Forms, distributed via various channels such as email, Facebook, and Line.

Data Analysis Data analysis was performed using statistical software, employing the following methods: Descriptive Statistics Includes statistical measures such as frequency and percentage. Inferential Analysis Hypotheses were tested using Multiple Regression Analysis to examine relationships and the influence of variables within the study. This research process was designed to ensure reliable results that fully address the research objectives and provide valuable insights for future applications.

3. Results and Discussion

3.1 Results

3.1.1 Based on the analysis of the sample data, the majority of customers using the services of Flash Express Co., Ltd. are male. Most are between the ages of 20-30 years, hold a bachelor's degree, and primarily work as government officers or state enterprise employees. The majority have a monthly income of 15,001 - 30,000 THB.

3.1.2 Study on the Level of Success Factors in Logistics Processes

Table 1: Mean and Standard Deviation of Opinions on Success Factors in Logistics Processes

Success Factors in Logistics Processes	Mean (M)	Standard Deviation (SD)	Level
Cost Leadership	4.23	0.82	Highest
Differentiation	4.28	0.80	Highest
Quick Responsiveness	4.11	0.82	High
Workforce Management	4.27	0.79	Highest
Overall	4.22	0.81	Highest

From Table 1, it was found that the overall level of success factors in logistics processes was rated as very high ($M = 4.22$, $SD = 0.81$). When considered by specific aspects, the differentiation factor had the highest mean score ($M = 4.28$, $SD = 0.80$), followed by workforce management ($M = 4.27$, $SD = 0.79$), and cost leadership ($M = 4.23$, $SD = 0.83$). The quick responsiveness factor had the lowest mean score ($M = 4.11$, $SD = 0.82$), in descending order.

3.1.3 Study on the Level of Transportation Efficiency

Table 2: Mean and Standard Deviation of Opinions on Transportation Efficiency

Aspect of Transportation Efficiency	Mean (M)	Standard Deviation (SD)	Level
Speed	4.27	0.80	Highest
Cost Efficiency	4.30	0.77	Highest
Safety	4.30	0.77	Highest
Convenience	4.28	0.78	Highest
Reliability	4.29	0.77	Highest
Overall	4.29	0.78	Highest

From Table 2, it was found that the overall transportation efficiency was rated as very high ($M = 4.29$, $SD = 0.78$). When considered by specific aspects, cost efficiency and safety had the highest mean scores ($M = 4.30$, $SD = 0.77$), followed by reliability ($M = 4.29$, $SD = 0.77$) and convenience ($M = 4.28$, $SD = 0.78$). The aspect with the lowest mean score was speed ($M = 4.27$, $SD = 0.80$), in descending order.

3.1.4 Success Factors in Logistics Processes from the Perspective of Customers Influence the Transportation Efficiency of Logistics Service Providers: A Case Study of Flash Express Co., Ltd.

Table 3: Analysis of the Influence of Success Factors in Logistics Processes on the Transportation Efficiency of Logistics Service Providers: A Case Study of Flash Express Co., Ltd.

Predictor Variables	Predictor Variables	Predictor Variables	Predictor Variables	Predictor Variables
Constant	0.375	-	3.417**	0.001
Workforce Management	0.473	0.522	15.022***	0.000
Differentiation	0.310	0.332	8.442***	0.000
Quick Responsiveness	0.078	0.083	2.882**	0.004
Cost Leadership	0.057	0.062	1.857	0.064

R = 0.888 R² = 0.789 F = 370.078 p-value = < 0.000

Note **.at the significance level of 0.01; *** at the significance level of 0.001

From Table 3, it was found that the success factors in logistics processes significantly influence the transportation efficiency of logistics service providers in the case of Flash Express Co., Ltd. Specifically: Workforce management (Beta = 0.522; t = 15.022), Differentiation (Beta = 0.332; t = 8.442), and Quick responsiveness (Beta = 0.083; t = 2.882) All have a statistically significant impact on transportation efficiency. The predictive equation can be expressed as follows: $\hat{Y} = 0.375 + 0.522$ (Workforce Management) + 0.332 (Differentiation) + 0.083 (Quick Responsiveness)

The independent variables in this model can predict the transportation efficiency of logistics service providers in the case of Flash Express Co., Ltd., with an accuracy of 78.9% (R² = 0.789). The remaining percentage is attributed to other factors not included as predictors in this study.

3.2 Discussion

3.2.1 The research findings revealed that the level of success factors in logistics processes, from the perspective of customers using the services of Flash Express Co., Ltd., was rated as high. Overall, the success factors in logistics processes were rated at the highest level. When considered by specific aspects, the differentiation factor had the highest mean score, followed by workforce management, cost leadership, and the quick responsiveness factor, which had the lowest mean score. These findings align with the research of Narumon Taemkaew and Piyachat Jarutirasan (2024), which investigated the factors influencing the use of private parcel delivery services in Bangkok. Their study found that the overall factors affecting the use of private parcel delivery services in Bangkok were rated as high, with transportation cost being the most significant, followed by reliability, accessibility, and delivery time, all rated at high levels. Similarly, the findings also align with the research of Wiriya Boonmalert (2019), which studied logistics and distribution activities influencing customer satisfaction in logistics service businesses in Thailand. The study revealed that the overall level of success factors in

logistics processes was high, with human resource development being the highest-rated factor, followed by quick responsiveness, cost leadership, and differentiation.

3.2.2 The research findings revealed that the transportation efficiency of logistics service providers, as perceived by customers using the services of Flash Express Co., Ltd., was rated at a high level. Overall, the transportation efficiency was rated at the highest level. When considered by specific aspects, the factors with the highest mean scores were cost efficiency and safety, followed by reliability and convenience, while the factor with the lowest mean score was speed. These findings align with the research conducted by Supasit Wiphatwatee and Supasit Jarupatthiran (2024), which compared the express parcel delivery efficiency of online shopping between Shopee and Lazada. Their study concluded that overall opinions on transportation efficiency were rated at a high level, with safety being the most important aspect, followed by reliability, speed, convenience, and cost efficiency. Similarly, the findings are consistent with the research of Pakorn Opaswittayarak and Satawat Boonyasiriroj (2022), which investigated the problems and characteristics indicating the transportation efficiency of e-commerce logistics operators in the Samrong-Pu Chao Saming Phrai area, Samut Prakan Province. Their study found that a key characteristic indicating transportation efficiency in e-commerce logistics was the operator's responsibility for any loss or damage to goods and services. Safety was highlighted as a critical factor, with identified issues including problems with delivery vehicles and accidents.

3.3.3 The hypothesis testing results revealed that success factors in logistics processes significantly influence the transportation efficiency of logistics service providers from the perspective of customers using the services of Flash Express Co., Ltd. It was found that success factors in logistics processes have a statistically significant impact on the transportation efficiency of logistics service providers as perceived by Flash Express customers. Among the three factors, workforce management was identified as having the greatest influence, followed by differentiation and quick responsiveness, respectively. These factors collectively explained 78.9% of the variation in transportation efficiency, as perceived by customers of Flash Express Co., Ltd. This finding aligns with the research conducted by Niwarat Vijitkulwattana et al. (2024), which studied factors affecting the competitive advantage of small and medium-sized enterprises (SMEs) in Bangkok. Their study found that variables such as age, business lifespan, educational level, investment amount, and sources of funding did not significantly differ in terms of competitive advantage. However, gender differences were found to significantly impact the competitive advantage of SMEs, with a statistical significance at the 0.05 level.

4. Conclusion

4.1 The research findings indicated that quick responsiveness had the lowest mean score. This aligns with customer suggestions that the company should focus on delivering high-quality and efficient transportation services by streamlining work processes to make them faster. The researcher recommends that logistics companies prioritize efficient and speedy transportation to meet customer demands. Therefore, Flash Express Co., Ltd. should focus on improving service speed by reducing operational steps to better meet customer expectations.

4.2 The study found that speed had the lowest mean score. The recommendation is to enhance teamwork among employees to improve delivery speed. The researcher suggests that

the company should provide training programs to improve employees' efficiency and speed in performing their duties.

4.3 The study identified that the success factors in logistics processes—workforce management, differentiation, and quick responsiveness—significantly influence transportation efficiency. The researcher suggests the following recommendations for Flash Express Co., Ltd.:

4.3.1 Workforce Management: Enhance human resource management by developing and improving employees' skills and knowledge in logistics to better address customer needs and diversity.

4.3.2 Differentiation: Create unique value-added services to enhance customer satisfaction, such as offering customized delivery options or implementing environmentally friendly delivery methods.

4.3.3 Quick Responsiveness: Establish systems and processes that enable the company to respond to customer demands quickly and efficiently, such as adopting advanced tracking technology and optimizing operational workflows to reduce delivery time.

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