เศรษฐศาสตร์และบริหารธุรกิจปริ
BUSINESS ADMINISTRATION AND ECONOMICS REVIEW

# Factors affecting customer satisfaction of dark red line Skytrain system for undergraduate students living in Pathumthani province

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## Abstract

**Purpose** – This research study aims to find the key components in personal profiles, purchase decisions, and Skytrain operation that affect customer satisfaction with the dark red line Skytrain system.

**Methodology –** With the quantitative method, the survey technique is used to collect data from 400 respondents who are undergraduate students in Pathumthani province. The data analysis uses both descriptive and inferential statistics: frequency, percentage, mean, standard variation, t-test, F-test, and correlation.

**Findings -** The results show that customer satisfaction is affected by a personal profile that is the year of study. In addition, customer satisfaction is affected by purchasing decisions: the reason to purchase, ticket types, channels to buy a ticket, the amount of money put in Rabbit cards, and influencers. Customer satisfaction is affected by Skytrain

operation with the SCOR model: plan, source, make, deliver, and return.

**Research limitations -** This study is sectional research as one period of time for data collection. It cannot reveal the trend of changing in the main factors impacting customer satisfaction. This research study's findings cannot be used for other transportation modes as the data are collected from Skytrain customers.

**Practical implications** - Focusing on main factors, transportation service operators can implement the right strategies to increase customer satisfaction.

**Originality/ value** - This paper focuses on creating scales for customer satisfaction. The main factors affecting customer satisfaction are in the scope of this study.

***Keywords:*** *Personal profiles, purchase decision, Skytrain operation, SCOR model, customer satisfaction, dark red line Skytrain, Pathumthani.*

**Paper type -** Research paper

## Introduction

Public transportation of Pathumthani province is quite complicated. At this time, buses, minibusses, rural trains, and motorcycles are in service. During peak hours, some areas in Pathumthani province have traffic congestion, such as schools, universities, industrial estates, high traffic roads. However, people have many selections of transportation to reach their destinations.

Skytrain will be another option for people living in Pathumthani province. In 2021, the dark red Skytrain line will be ready in service (Table 1 and Figure 1). The route of the

dark red Skytrain line is from Bang Sue to Rangsit stations. It is constructed in parallel to Vibhavadi road. The length of this line is 26.3 kilometers. The number of passengers using the dark red line is expected around 300,000 people each day. Comparing with other future skytrain lines in the number of passengers, this skytrain line is ranked number three.

**Table 1** Skytrain lines and the number of passengers

| **Skytrain lines** | **Number of passengers (Present)** | **Skytrain lines** | **Number of passengers (Projected)** |
|---|---|---|---|
| Green (dark and soft) | 740,000 | Blue (new phase) | 490,000 |
| Blue | 400,000 | Green (dark) | 330,000 |
| Airport rail link | 75,000 | Red (dark and soft) | 300,000 |
| Purple | 50,000 | Yellow | 220,000 |
| | | Pink | 120,000 |
| | | Orange | 110,000 |

Source: BLT Bangkok, 2020

The dark red line Skytrain project has the following purposes (Realist Solution, 2018). The government has budgets to improve the transportation system of Bangkok and suburb areas. Bang Sue station has a high capacity for passenger transit. This line has both on the ground and underground passes through many areas. It also connects to other train lines so that passengers can save costs and time. Interestingly, this line offers both regular (stop all stations) and speed (stop only main stations) trains.

**Table 2** Fees for traveling on the Skytrain

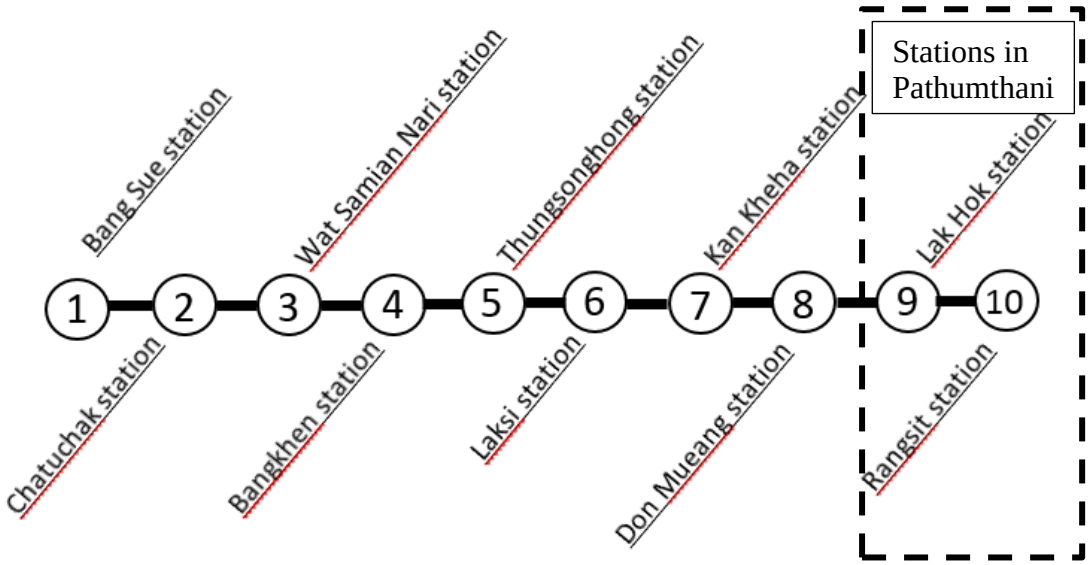


**Figure 1** Dark red line Skytrain route
(http://www.realist.co.th/blog/)

Lak Hok and Rangsit stations are in Pathumthani province. The students living or studying in this province have more chances to get on the Skytrain at these stations. If the students' journey starts from these stations to the Bang Sue station, they need to pay 43 baht (Table 2). The train passes around 8 stations to reach the destination. The fee for this journey is close to traveling with minibus services.

Many ticket types are offered for skytrains. A single journey card is used for a one-way trip (the price range from 15 to 58 baht). It is valid on the day of purchase only. A one-day pass is unlimited rides on the day of purchase (the price of 140 baht). Rabbit card is an electronic payment system that can be used to pay for Skytrain pass and other transportation fees. Standard Rabbit card has three types. Adult Rabbit card is for adults. Student Rabbit card is for full-time students in schools and universities in Thailand and foreign countries on the Ministry of Education list. They must be under 23 years old. Senior Rabbit card is for Thai senior

people who are 60 years old or over. Passengers can add money to the cards for both monthly tickets and one-way tickets. They can save time as they do not have to buy a ticket every time before getting on the Skytrain. Many stores give a special offer to cardholders. The card has no annual fees (Bangkok Smartcard System, 2020).

Most undergraduate students commute by public transportation to go to University and get back home. Deciding on routes and vehicles is essential as saving time and costs. They will not be late for the class and have more money to pay for meals, groceries, and clothes. This study focuses on the dark red Skytrain line as a new project that is nearly complete. This Skytrain line is close to many universities in Pathumthani province. The researcher aims to find all of the main factors that affect the dark red Skytrain line's customer satisfaction. The Skytrain operator can bring these research results to improve its facilities and services before the opening date.

## Objectives of Research

1. To identify personal profiles of students living in Pathumthani province who give an opinion about the dark red line Skytrain.

2. To reveal the purchase decision elements and the perception of students living in Pathumthani province on dark red line Skytrain operation.

3. To investigate the effects of personal profiles and related factors on the dark red line skytrain system's customer satisfaction.

## Research Hypotheses

In this research, three hypotheses need to be investigated. These hypotheses are shown as follows.

**H1:** Personal profiles affect customer satisfaction.

**H2:** Purchase decision affects customer satisfaction.

**H3:** Skytrain operation with the SCOR model has a relationship with customer satisfaction.

All hypotheses are also presented in the conceptual framework (Figure 2). These hypotheses will be tested with statistical techniques. In this study, the significance level is 0.05. In case that the p-value of a selected statistical tool is less than 0.05. That means that the hypothesis is correct.

## Development of the Conceptual Framework and Research Hypotheses

The conceptual framework in this paper, as presented in Figure 2 is extracted from various theories and concepts in the literature review.

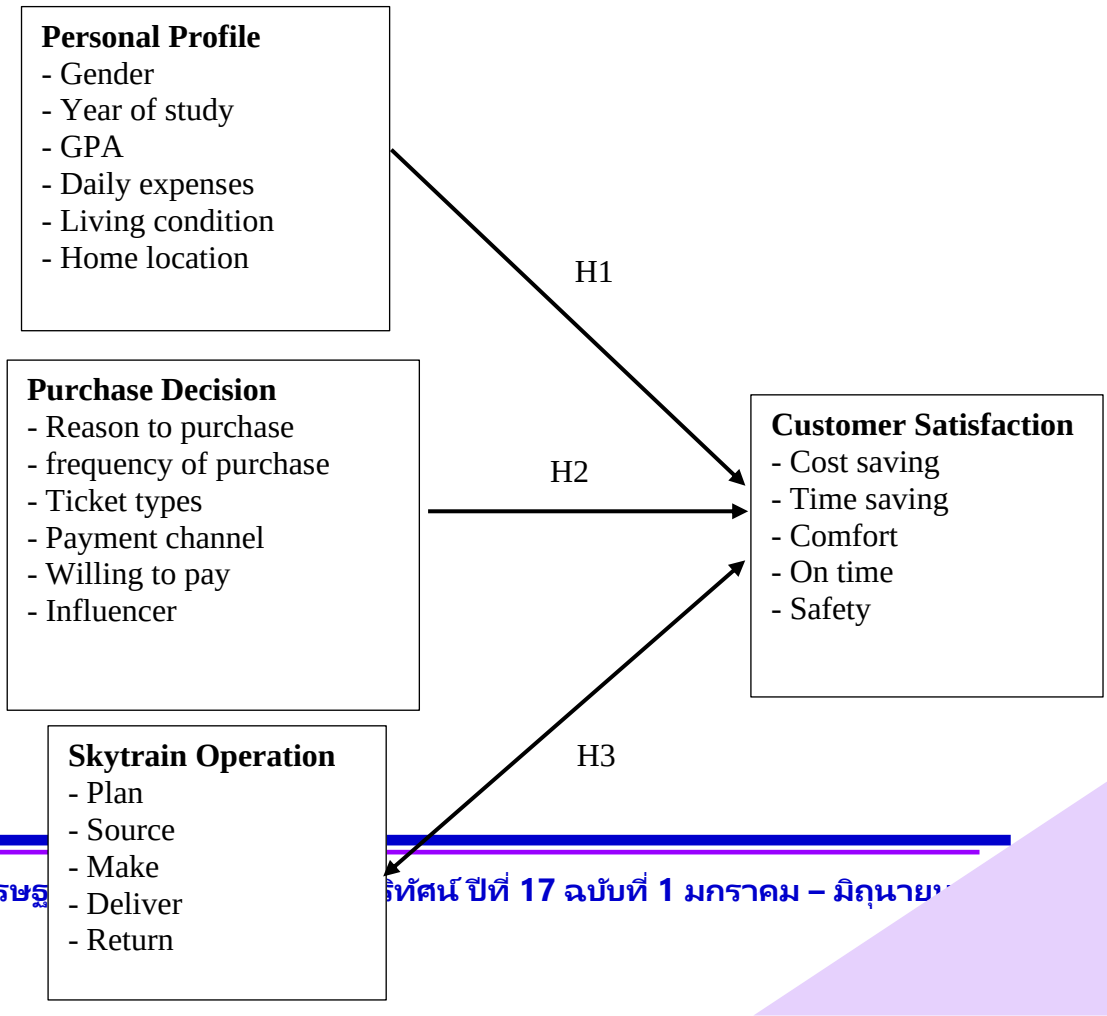

**Figure 2** Conceptual framework of this research

## Literature Review

The literature review in this study is about purchase decision, the SCOR model, and customer satisfaction.

## Purchase decision

A company in the market needs to understand consumer behavior. Consumer behavior is "the study of how individuals, groups, and organizations select, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and wants. Marketers must fully understand both the theory and the reality of consumer behavior" (Kotler & Keller, 2016).

The purchase decision is part of the consumer behavior demonstrated in the stimulus-response model in Figure 3. Marketing stimuli get into the consumers' minds. Consumer psychology, combined with consumer characteristics, affects the buying decision process and purchase decision. The company needs to understand its consumer awareness when they perceive the marketing stimuli and the purchase decision. This research study focuses on the purchase decision comprising product choice, brand choice, dealer choice, the purchase amount, purchase timing, and payment method (Kotler & Keller, 2016).

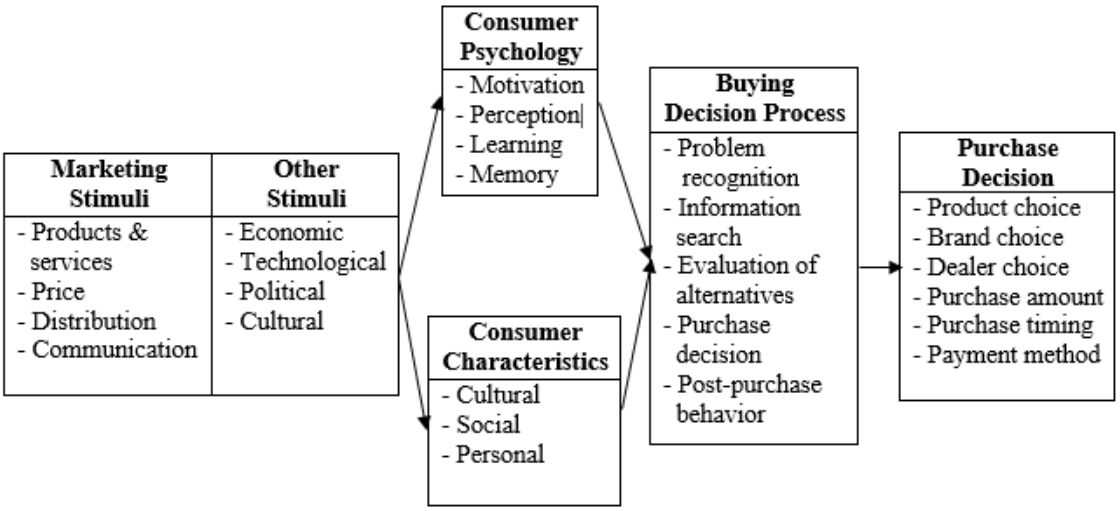


**Figure 3** Model of consumer behavior (Kotler & Keller, 2016)

## Supply Chain Operations Reference (SCOR) Model

The SCOR model comprises five processes: plan, source, make, deliver, and return (Coyle et al., 2010).

1. Plan focuses on the balancing of demand and supply. Other processes need to communicate with the planning process. The company needs to do inventory management, delivery, and performance assessment.

2. Source is about serving the following operation: make-to-stock, make-to-order, and assembly-to-order. The purchasing team of the buyer needs to work with the suppliers to receive raw materials or products. In addition, the warehousing team needs to communicate with them to prepare for receiving, storing, picking, and delivery.

3. Make transforms raw materials into finished products. The company's production process can be make-to-stock, make-to-order, and assembly-to-order. This process needs to follow the schedule, produce & test the products, and do the packaging.

4. Deliver is about bringing products to customers. This activity needs to serve the following operation: make-to-stock, make-to-order, and assembly-to-order. It needs to work with the warehouse team and management staff.

5. Return is part of the contract between a company and its suppliers. Also, it can be part of the contract between the company and its customers. When the company receives poor raw-materials, they can be returned to the suppliers. Also, when the customer gets poor products, they can be returned to the company.

The SCOR model has three levels. Level 1 is the model scope and its details. Targets of KPIs are presented. Level 2 is the way to serve customers' needs with supply chain management. Level 3 identifies the company's competencies and process elements. This also includes performance assessment, best approaches, and effective system.

## Customer Satisfaction

Customer satisfaction means "a person's feelings of pleasure or disappointment that result from comparing a product or service's perceived performance (or outcome) to expectation" (Kotler & Keller, 2016).

Dimensions of customer satisfaction of the transportation service company can come from its logistics performances as follows.

Logistics performances are defined as the effectiveness of product and service delivery in quantity and time that can meet the customers' needs. The logistics performances can be measured by five items that are speed of delivery, flexibility, order fulfillment, quick-responded, and delivery reliability (Bavarsad *et al.*, 2013).

As Chow et al. (1994) mentioned, the logistics performances are concerned with storing and delivering raw materials and finished goods among supply chain members. The measurement items of logistics performances are costs, sales, profits, contracts on production, customer satisfaction, order fulfillment, delivery time, CSR, serving the customers' needs, lowering costs, and flexibility (Piriyakul and Kerdpitak, 2011).

Logistics performances are measured by the capability of delivery, costs of logistics activities, and capital management. The capability of delivery is classified into delivery lead time and on-time delivery. Main logistics costs are transportation and inventory costs. Capital management is needed in most departments in any company, such as inventory of raw materials and finished products (Forslund, 2011).

Key performance indicators are an essential tool to make sure that the company can reach its long-term goal. Making employees pay more attention to important activities, top executives need to select and group effective indicators. It is necessary that the company needs to build strategies and objectives first, and then, KPIs can be developed. The company can use various performance frameworks to use KPIs for daily and policy management. Performance dashboards and scorecards can be used as well (Marr, 2012).

## Research Methodology

In this study, quantitative research is used. This allows using various statistical tools to obtain research results.

**Population and samples**

Population in this research study is undergraduate students living in Pathumthani province. However, the number of population cannot be found on any sources. So, calculation of the sample size needs to use the mathematics formula (El Hajjar, 2017 and Maple Tech. International, 2020):

$n = Z^2 P (1-P) / e^2 = 1.96^2 * 0.5 (1-0.5) / 0.05^2 = 384.16$

Where n = sample size
Z = Z score
E = margin of error
P = population proportion (Assume=0.5 )

So, 400 samples are collected with the convenience sampling technique.

**Measurement Instrument**

This paper uses a survey by questionnaire as a quantitative research technique. The questions in the first section of the questionnaire are respondents' personal profiles (using nominal and ordinal scales). The second section of the questionnaire covers the area of purchase decision (using nominal and ordinal scales). The third section is Skytrain operation with the SCOR model (using a five-point Likert scale ranging from 1 (lowest level) to 5 (highest level). The fourth section is customer satisfaction (using a five-point Likert scale ranging from 1 (lowest level) to 5

(highest level). An open-ended question is also used to gather more opinions from the respondents.

## Validation of Measures

Before testing the conceptual model, the value of reliability needs to be calculated. The reliability of measurement constructs is calculated by Cronbach's alpha that needs to exceed 0.7 (Hair et al., 2006). The results of Cronbach's alpha of the variables in the conceptual framework are more than 0.7, as presented in Table 3.

**Table 3** Cronbach's alpha of the variables in the conceptual framework

| Variables | Cronbach's alpha |
|---|---|
| Skytrain operation | 0.847 |
| Customer satisfaction | 0.809 |

## Data Analysis

Statistical tools are used for data analysis. Frequency, percentage, mean, and standard deviation are for descriptive analysis. F-test, t-test, and correlation as inferential analysis can test the research hypotheses. The correlation coefficient (r) between the independent variable (Skytrain operation with the SCOR model) and the dependent variable (customer satisfaction) is calculated. The levels of correlation are presented in Table 4.

**Table 4** Range of correlation coefficient values and the corresponding levels of correlation

| **Range of correlation coefficient values** | **Level of correlation** |
|---|---|
| 0.80 to 1.00 | Very strong positive |
| 0.60 to 0.79 | Strong positive |
| 0.40 to 0.59 | Moderate positive |
| 0.20 to 0.39 | Weak positive |
| 0.00 to 0.19 | Very weak positive |

Source: Meghanathan (2016)

## Research Results

Personal profiles are presented in Table 5. Most respondents have the following profiles. They are female and studying in the second year of the undergraduate program at the University. Their grade range is 3.00 to 3.49. The range of their expenses is 201 to 300 baht a day. They are not staying with their parents during studying at the University. Their home is located in Amphoe Mueang in Pathumthani province.

**Table 5** Personal profiles of the respondents

| | Frequency | Percentage |
|---|---|---|
| **Gender** | | |
| Male | 184 | 46.0 |
| Female | 216 | 54.0 |
| **Total** | 400 | 100.0 |
| **Study level** | | |
| Year 1 | 42 | 10.5 |
| Year 2 | 171 | 42.8 |
| Year 3 | 136 | 34.0 |
| Year 4 | 51 | 12.8 |
| **Total** | 400 | 100.0 |
| **Grade** | | |
| Less than 2.50 | 37 | 9.3 |
| 2.50 to 2.99 | 118 | 29.5 |
| 3.00 to 3.49 | 141 | 35.3 |
| 3.50 or higher | 104 | 26.0 |
| **Total** | 400 | 100 |
| **Daily expense** | | |
| Less than 100 baht | 4 | 1.0 |
| 100 to 150 baht | 99 | 24.8 |
| 151 to 200 baht | 110 | 27.5 |
| 201 to 300 baht | 115 | 28.7 |
| Higher than 300 baht | 72 | 18.0 |
| **Total** | 400 | 100 |
| **Living condition** | | |
| Stay with parents | 111 | 27.8 |
| Not stay with parents | 289 | 72.3 |
| **Total** | 400 | 100.0 |
| **Amphoe in address** | | |
| Mueang (Pathumthani) | 280 | 70 |
| Lamlukka | 58 | 14.5 |
| Khlongluang | 13 | 3.3 |
| Thanyaburi | 28 | 7.0 |
| Latlumkaeo | 7 | 1.8 |
| Samkok | 5 | 1.3 |
| Nongsua | 9 | 2.3 |
| **Total** | 400 | 100.0 |

**Table 6** Descriptive data of purchase decision

| Purchase decision | Frequency | Percentage |
|---|---|---|
| **Reasons of using Skytrain** | | |
| - Station location | 90 | 22.5 |
| - Fees | 79 | 19.8 |
| - Time table of Skytrain | 6 | 1.5 |
| - Reduce travel time | 203 | 50.7 |
| - Feel safe | 16 | 4.0 |
| - Others | 6 | 1.5 |
| **Total** | 400 | 100.0 |
| **Frequency of using Skytrain each day** | | |
| - Less than 1 time/day | 252 | 63.0 |
| - 1 time/day | 63 | 15.8 |
| - 2 time/day | 66 | 16.5 |
| - 3 time/day or more | 19 | 4.8 |
| **Total** | 400 | 100.0 |
| **Preference of ticket types** | | |
| - One-trip ticket | 277 | 69.3 |
| - One-day ticket | 19 | 4.8 |
| - Rabbit card | 102 | 25.5 |
| - Other cards | 2 | .5 |
| **Total** | 400 | 100.0 |
| **Channels to buy a ticket** | | |
| - Rabbit line pay | 105 | 26.3 |
| - Vending machines at Skytrain stations | 111 | 27.8 |
| - Shops | 16 | 4.0 |
| - Vending machines of private companies | 8 | 2.0 |
| - Banks and cards | 156 | 39.0 |
| - Others | 4 | 1.0 |
| **Total** | 400 | 100.0 |
| **Amount of money put in Rabbit cards** | | |
| - 1-100 baht | 115 | 28.7 |
| - 101-250 baht | 121 | 30.3 |
| - 251-500 baht | 131 | 32.8 |
| - 501-1000 baht | 29 | 7.2 |
| - More than 1000 baht | 4 | 1.0 |
| **Total** | 400 | 100.0 |
| **Influencers** | | |
| - Yourself | 301 | 75.3 |
| - Family | 26 | 6.5 |
| - Friend | 57 | 14.2 |
| - Internet | 16 | 4.0 |
| **Total** | 400 | 100.0 |

Table 6 demonstrates all elements of purchase decision presented as follows. For reasons of using Skytrain, reducing travel time is most selected (50.7%). Considering the frequency of using Skyrain each day, most respondents take the Skytrain less than one time (63.0%). In the preferences of ticket types, a one-trip ticket is the first choice (69.3%). Considering the channels to buy a ticket, buying on bank & credit card services is the most frequent (39.0%). For using the Rabbit card, most of them put money in the card about 251 – 500 baht (32.8%). Considering the influencers of their transportation selection, they decide by themselves (75.3%).

**Table 7** Skytrain operation with SCOR model

| Skytrain operation | Mean | SD. | Level |
|---|---|---|---|
| 1. Plan: Skytrain route | 4.05 | 0.695 | High |
| 2. Source: modern train & station | 3.96 | 0.716 | High |
| 3. Make: staff training & staff service | 3.83 | 0.801 | High |
| 4. Deliver: time table & number of trains | 3.85 | 0.753 | High |
| 5. Return: change & refund ticket | 3.51 | 0.904 | High |
| Total | 3.84 | 0.728 | High |

In Table 7, Skytrain operation with SCOR model is scored at the high level (mean = 3.84). All dimensions of Skytrain operation are scored at the high level: plan (mean = 4.05), source (mean = 3.96), deliver (mean = 3.85), make (mean=3.83), and return (mean=3.51).

Considering the customer satisfaction in Table 8, time-saving is scored at the highest level with a mean of 4.24. The rest dimensions of customer satisfaction (4 dimensions) are scored at the high level presented as follows: safety (mean = 4.15), comfort (mean = 4.04), on-time (mean = 3.96) and

cost-saving (mean = 3.79). The mean value of total customer satisfaction equals 4.04 as the high level.

**Table 8** Customer satisfaction

| Customer satisfaction | Mean | SD. | Level |
|---|---|---|---|
| 1. Cost saving | 3.79 | 1.045 | High |
| 2. Time saving | 4.24 | 0.781 | Highest |
| 3. Comfort | 4.04 | 0.816 | High |
| 4. On-time | 3.96 | 0.815 | High |
| 5. Safety | 4.15 | 0.713 | High |
| Total | 4.04 | 0.811 | High |

Hypotheses are tested with statistical tools in the computer software. This research has three hypotheses. The results are presented as follows.

**H1:** Personal profiles affect customer satisfaction.

Personal profiles comprise gender, year of study, GPA, daily expenses, living condition, and home location.

**Table 9** Effects of personal profiles on customer satisfaction

| Personal profiles | F | Sig |
|---|---|---|
| Gender | 0.812 | 0.368 |
| Year of study | 3.750 | **0.011*** |
| GPA | 0.864 | 0.460 |
| Daily expenses | 1.257 | 0.287 |
| Living condition | 0.798 | 0.372 |
| Home location | 1.691 | 0.122 |

Note: * is p-value < 0.05

In table 9, the year of study affects customer satisfaction (F = 3.750, Sig. = .011). From LSD method, the 2nd year students have higher satisfaction level than the 1st, 3rd, and 4th year students. Other personal profiles have no effect on customer satisfaction at the significance level of 0.05. Therefore, **H1 is true.**

**H2:** Purchase decision affects customer satisfaction

**Table 10** Effects of purchase decision on customer satisfaction

| Purchase decision | F | Sig |
|---|---|---|
| Reason to purchase | 3.881 | **0.002**** |
| Frequency of using Skytrain each day | 2.308 | 0.076 |
| Ticket types | 3.548 | **0.015*** |
| Channels to buy a ticket | 4.126 | **0.001**** |
| Amount of money put in Rabbit cards | 4.662 | **0.001**** |
| Influencers | 4.008 | **0.008**** |

Note: * is p-value < 0.05, ** is p-value < 0.01

In table 10, the reason to purchase has the effect on customer satisfaction (F = 3.881, Sig. = 0.002). Considering each dimension of the reason to purchase, cost-saving has a higher effect on customer satisfaction than station location and reduce travel time. The frequency of using Skytrain each day does not affect customer satisfaction (F = 2.308, Sig. = 0.076). The ticket types have the effect on customer satisfaction (F = 3.548, Sig. = 0.015). Considering each ticket type, Rabbit card users are more satisfied with Skytrain system than those buying a one-trip ticket. Channels to buy a ticket have an effect on customer satisfaction (F = 4.126, Sig. = 0.001). Considering each channel to buy a ticket, Rabbit line pay has a higher effect on customer satisfaction

than private companies' vending machines. The amount of money put in Rabbit cards has an effect on customer satisfaction (F = 4.662, Sig. = 0.001). Considering each level of the amount of money put in Rabbit cards, the range of 501-1,000 baht has less effect on customer satisfaction than the ranges of 100-250 baht, 251-500 baht, and more than 1,000 baht. The influencers have an effect on customer satisfaction (F=4.008, Sig. = 0.008). Considering each influencer, friends and internet channels have higher effects on customer satisfaction than their own. Therefore, **H2 is true.**

**H3:** Skytrain operation with the SCOR model has a relationship with customer satisfaction.

**Table 11** Relationship between Skytrain operation and customer satisfaction

| Skytrain operation | Customer satisfaction | | | | |
|---|---|---|---|---|---|
| | Cost saving | Time saving | Comfort | On-time | Safety |
| **Plan** | .283** | .462** | .465** | .358** | .445** |
| **Source** | .315** | .451** | .466** | .457** | .566** |
| **Make** | .276** | .358** | .477** | .434** | .496** |
| **Deliver** | .168** | .466** | .490** | .455** | .475** |
| **Return** | .269** | .296** | .282** | .372** | .277** |

Note: all p-values in this table are 0.000.

In Table 11, all five elements of skytrain operations have a significant relationship with all dimensions of customer satisfaction at 0.000 of p-value (at the significance

level of 0.001). The results of the correlation coefficient (r) are ranked as follows. Plan has moderate positive correlation with comfort (r = 0.465), time saving (r=0.462), and safety (r=0.445). Source has moderate positive correlation with safety (r=0.566), comfort (r=0.466), and on-time (r=0.457). Make has moderate positive correlation with safety (r=0.496), comfort (r=0.477), and on-time (r=0.434). Deliver has moderate positive correlation with comfort (r=0.490), safety (r=0.475), and time-saving (r=0.466). Return has weak positive correlation with on-time (r=0.372), time saving (r=0.296) and comfort (0.282).

In addition, Skytrain operation has a moderate positive correlation with customer satisfaction (r = 0.472) at the significance level of 0.001.

Thus, **H3 is true.** Skytrain operation has a relationship with customer satisfaction.

## Discussion and Managerial Implication

This research collects the profiles of students studying in undergraduate programs at the University. The responses come from male and female students attending different levels of the programs. Their grades in the University quite vary person by person. Their daily expenses are about 201-300 baht. Transportation fees can be a big part of these expenses. Students who live in Amphoe Mueang in Pathumthani province are relatively close to Rangsit station and Lak hok station. They can take the Skytrain to downtown or other places near the stations.

The data of purchase decision show that the respondents want to reduce travel time by taking the Skytrain. However, the Skytrain cannot take them to all

destinations, so they also need to get on other vehicles such as minibus, motorcycles. Most respondents choose to buy one-trip tickets. They do not want to pay too much for transportation fees at one time because they need to buy other kinds of stuff. Rabbit line pays as the top three of the respondents' responses is a new way to put money into the Rabbit card. This is very convenient for Line program users. The respondents do not want to put money more than 500 baht in the card. This answer can support the research result of their card-type selection. The influencer of using the Skytrain is himself or herself.

Skytrain operation in this study explained by the SCOR model's concept is scored at a high level. All dimensions of Skytrain operation comprising plan, source, make, deliver, and return are also scored high. The details are as follows. The plan for Skytrain route quite reaches all crucial destinations of Pathumthani and nearby provinces. The sourcing of trains and stations is evaluated as a relatively good process. The operator uses modern trains in service and has all of the main service units in the station. The additional opinions of some respondents are that the service from the staff is quite impressive. This can imply that they have high discipline and are well trained. The delivery process of the Skytrain system is quite smooth. This means that the timetable contains the right departure time, and the number of trains matches the number of passengers all day. The process of changing and refunding tickets is acceptable for passengers.

Customer satisfaction is at a high level. All dimensions of customer satisfaction also are at a high level and above. Time-saving is scored at the highest level. Because travel

time decreases, students can wake-up late or have more time to do other activities. Other dimensions get a high level. The passengers on the train and in the station feel safe. The train speed is not too fast to be dangerous. The station has enough security guards to inspect at the entrance. The passengers feel comfortable when they travel on the train. This can imply that the cabins' temperature is comfortable, seats are comfortable, and standing spaces on the train are enough. The trains arrive and depart from the station at the right time, especially peak hours. Interestingly, the passengers can save money for traveling on Skytrain comparing with other transportation services. It can decrease the transit points during their journey. This research study also reveals the effects of personal profiles, purchase decision, and Skytrain operations on customer satisfaction. Considering personal profiles, the year of study, especially the second-year students, affects customer satisfaction. The students at this level said that the Skytrain construction would finish soon so that they can take the Skytrain to the University and downtown areas. On the opposite, the students in the third and fourth years are likely no chance to use it because they almost graduate. Dimensions of the purchase decision, except the frequency of using SkyTrain each day, affect customer satisfaction. This means the Skytrain service operator can introduce the marketing program that fits the passengers' purchasing decision. The operator needs to promote how much passengers can save money with Skytrain services. Many passengers use Rabbit cards. Increasing the channels for putting money on the card is still important. The benefit of this card is able to pay for many products and services. Most

students are willing to put money in the card less than 500 baht. So, the marketing promotion should be within these passengers' budgets. The influencers of this service are themselves. So, the advertisement should be direct to the current and potential passengers. After deciding to use the Skytrain service, they seem to keep using the service for a long time.

The respondents also give other opinions. Regarding ticket prices, they think that it is too expensive. So, the operator should provide special offers if the ticket prices still do not change. Some respondents want to have more services at the Skytrain station. For example, more parking lots should be arranged. It is important that the stations having many passengers a day need to build the parking facilities nearby. This can reduce traffic congestion around the station area. Pickup services are important for students or other passengers. The Skytrain operator should work closely with the pickup drivers or minibusses to flow the passengers in and out of the station. They also want the Skytrain line extended to Thammasat University (Rangsit Campus). This can increase the number of passengers a day.

## Limitations and Further Research Directions

This study is sectional research as one period of time for data collection. Some researchers can do longitudinal research. They can reveal the trend of changing in the main factors impacting customer satisfaction. Some findings of this research study cannot be used with other Skytrain lines as the data are collected from students in Pathumthani province who will use the dark red line Skytrain. Other

researchers focusing on customer satisfaction can use the same approach to study other Skytrain lines or different transportation modes. Further study can use qualitative research techniques. An in-depth interview is a useful tool. Transportation service operators can implement the right strategies to increase customer satisfaction.

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