The Service Quality Affecting Customer Loyalty toward Food Delivery Service in Thailand

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An Independent Study Submitted in Partial Fulfillment of the Requirements
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ภาณุวรรณ ชาติชวลิตสกุล : คุณภาพการบริการที่ส่งผลต่อความภักดีของลูกค้า สำหรับบริการจัดส่งอาหารใน
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ในช่วงห้าปีที่ผ่านมามูลค่าตลาดของธุรกิจบริการจัดส่งอาหารเติบโตขึ้นโดยเฉลี่ย 10 เปอร์เซ็นต์ต่อปี ผู้มีบทบาท
สำคัญในการขับเคลื่อนการเติบโตของตลาดนี้คือผู้ให้บริการผ่านแอปพลิเคชัน อีกทั้งการเข้ามาของคู่แข่งรายใหม่ทำให้ตลาดมี
การแข่งขันสูงขึ้น ดังนั้นผู้ให้บริการจึงพยายามรักษาลูกค้าโดยการเพิ่มความภักดี ด้วยคุณภาพการบริการที่สูงขึ้น เพื่อให้ลูกค้าพึง
พอใจและเลือกใช้บริการต่อเนื่อง การศึกษานี้จึงมีวัตถุประสงค์เพื่อศึกษาผลกระทบของคุณภาพการบริการที่มีต่อความภักดีของ
ลูกค้าต่อบริการจัดส่งอาหารในประเทศไทย ซึ่งการศึกษานี้เป็นการวิจัยเชิงปริมาณโดยใช้ข้อมูลปฐมภูมิจากการสำรวจลูกค้าเจ
เนอเรชั่นวาย จำนวน 310 คนที่มีประสบการณ์กับการบริการจัดส่งอาหารและอาศัยอยู่ในเขตกรุงเทพฯและปริมณฑล และใช้
การถดถอยพหุคูณในการวิเคราะห์และตีความข้อมูล ผลจากการศึกษาแสดงให้เห็นว่าความภักดีของลูกค้าได้รับผลในเชิงบวกจาก
คุณภาพการบริการและความเหมาะสมของเวลาในการจัดส่ง ซึ่งเป็นปัจจัยย่อยจากคุณภาพการบริการ

สาขาวิชา	เศรษฐศาสตร์ธุรกิจและการจัดการ	ลายมือชื่อนิสิต ....
ปีการศึกษา	2563	ลายมือชื่อ อ.ที่ปรึกษาหลัก ....

Panuwan Chartchawalitsakul : The Service Quality Affecting Customer Loyalty toward Food Delivery Service in Thailand. Advisor: Asst. Prof. RATIDANAI HOONSAWAT, Ph.D.

Over the past five years, the market value of food delivery services business has grown by an average of 10 percent annually. The key player for this market growth is service providers through application. Moreover, the entry of new players has made the market more competitive. Therefore, service providers keep their customers by increasing loyalty with a higher service quality to make customers satisfied and continue to use the service. In consequence, the objective of this study is to examine the impact of service quality on customer loyalty toward food delivery service in Thailand. The study method is quantitative, using primary data from the survey of 310 Generation Y customers who have experience with food delivery service and live in Bangkok and vicinity. Multiple regression analysis was performed to analyze the data. The outcome presents that customer loyalty is positively affected by service quality and sub-factor from service quality, that is delivery time suitability.

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CHAPTER 1 INTRODUCTION

The food delivery service business is one of the fastest-growing businesses in Thailand. According to Economic Intelligence Center, SCB (2019), the market value of the food delivery industry has grown by an average of 10 percent annually over the past five years, which is higher than the market value of the food service industry growing by percent of 3. Especially, the introduction of food delivery service providers through online application becomes a key player in driving business growth which they do not have their own restaurant and act as an intermediary between the restaurant and the consumer by accepting food orders from consumers via online channels and delivering food to consumers by their partners.

The market value of food delivery service business in Thailand
(in billion Thai baht)
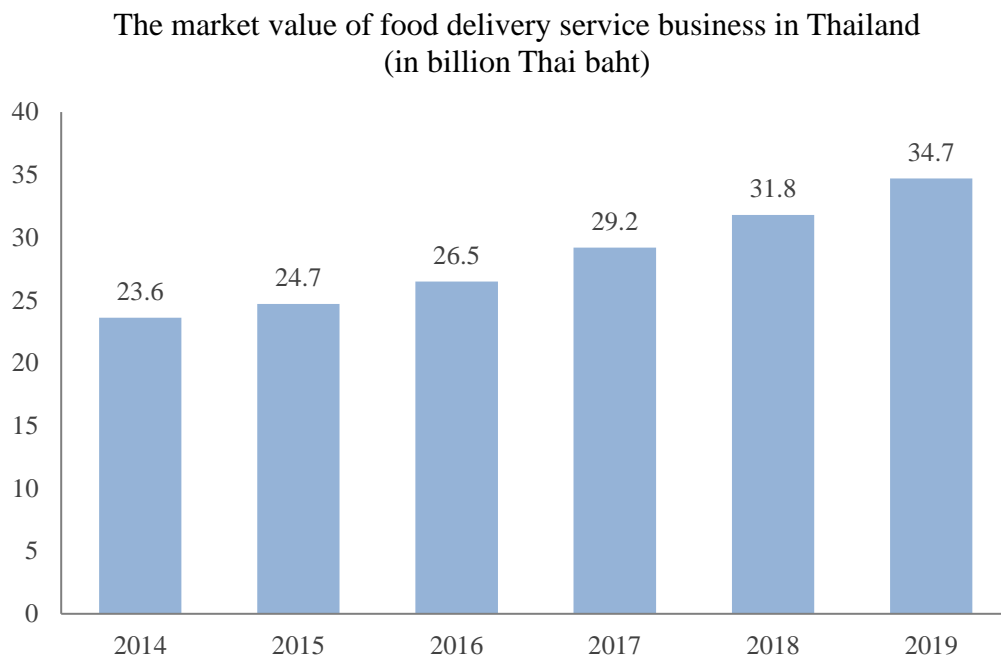
Figure 1: The market value of food delivery service business in Thailand
Source: Kasikorn Research Center (2020)

The reasons for the growth of the food delivery service through the application are resizing the population structure with smaller household size (National Statistical Office of Thailand, 2010 and The Bureau of Registration Administration, 2019), changing consumer behavior and lifestyle on convenience and time-saving, accessing technology and using smartphones more widely, expanding service areas by service providers, increasing in the number of restaurants on the platform and implementing

marketing strategies in terms of prices and promotions. During the Covid-19 pandemic situation, food delivery service through application is even more popular. The service has become one of the main channels widely used by consumers under the state of lockdown and social distancing. The rapid growth of this business has continuously attracted new players, both Thai and foreigners, to the market. They can come from the same industry or from outside the industry, for example, Siam Commercial Bank develops their food delivery application, Robinhood, to support small local restaurants. This will further enhance the competition in the market that is originally driven by four main players: Grab, Line Man, Foodpanda, and Gojek (Get). Kasikorn Research Center (2020) predicts that the market value of the food delivery industry in 2020 will be 41,000 million baht, and the number of food delivery times will grow by 80 percent compared to 2019, 37 million times. Although the market is continually growing, no brand has ever been profitable.

The challenge of this business is if service providers are not different, customers will immediately switch to other brands that offer better prices and sale promotions. That is why it is important to build customer loyalty. Each service provider has to create the tools and strategies apart from prices and promotions to build customer loyalty and make the brand becomes top of mind or top of choice for the customers. Accordingly, several service providers are focusing on their service quality development, for example, adding the new and different feature, developing the design and functionality of the application, providing more updated information, improving the delivery time by establishing the pooled kitchen, and increasing the number of their partner including restaurant, driver and payment channel, to satisfy customer need and gain the competitive advantage, making them differentiate from competitors and have the chance to gain loyalty from the customer. Therefore, it is interesting to study the service quality that affects customer loyalty to food delivery services. The researcher believes that differentiation on good service quality can increase customer loyalty.

The purpose of this study is to understand and identify the service quality measured by efficiency, system availability, fulfillment and privacy can attract customer and make them become loyalty with food delivery service in order to make the food delivery service grows sustainably over the long term.

This research is a quantitative research that studies the service quality affecting customer loyalty to food delivery service in Thailand. The study will only look at the food delivery service providers that act as mediators between customer and restaurant through online application and do not have their own restaurant, and it also excludes the restaurant that offers its own food delivery service. This study uses primary data through a questionnaire survey. The samples used in the study are the Generation Y consumers (born between 1980 to 1996) living in Bangkok and vicinity who have used food delivery service via the application.

This study will contribute to the literature by providing empirical evidence of the relationship between service quality and customer loyalty to food delivery service, which currently has limited study related to this topic in Thailand. Furthermore, the result from this study can inform and advise food delivery service providers about the importance of service quality, which they have to improve and develop this factor to make more loyalty for the customers under the intense competition which always has new service providers into the market.

The outcome of this study presents that customer loyalty is positively affected by service quality. In other words, higher service quality leads to higher customer loyalty. Furthermore, this study also provides evidence of the relationship between sub-factor from service quality and customer loyalty. The result shows that customer loyalty is positively influenced by delivery time suitability.

In this regard, this study firstly begins with the introduction, which explains the research background, the objective, the methodology, the research contributions, and the result of this study, respectively. Secondly, it continues with the literature review that is relevant to this study. Thirdly, it demonstrates the theoretical framework. Fourthly, this study illustrates the conceptual framework, the empirical framework, and the hypothesis, which describe the relationship between service quality and customer loyalty. Fifthly, it follows with data collection and data analysis. Sixthly, this part explains the estimation result of this study. Lastly, it reports the conclusion and policy implication of this study.

CHAPTER 2 LITERATURE REVIEW

In this part, the literature review presents the empirical evidence from the related study of the relationship between service quality and customer loyalty and the effect of customer loyalty from other factors as follows.

Estalami, Esteban, Martín-Consuegra, Maxwell and Molina (2007), studying the relationship between price fairness, customer satisfaction, and customer loyalty toward the service industry, found that price fairness has a positive and significant relationship with customer satisfaction and customer loyalty. Price fairness plays an important role in managing customer satisfaction and customer loyalty. The study noted that price fairness occurs when the value that the customer receives is greater than or equal to the value that the customer spends. Therefore, the service providers have to ensure that the prices offered are consistent with the value of the product. Moreover, there is a significant relationship between customer satisfaction and customer loyalty as well. The study mentioned that satisfied customers are more likely to have more loyal with repeated purchasing behavior. A quantitative approach and primary data are used in this study. The survey was conducted to collect the data from 721 customers of the international airline with the convenience sampling method. The structural equation model is the method selected by the authors to analyze data and test the hypothesis. The result of this study provides the confirmation of the relationship between price, customer satisfaction, and customer loyalty that similar to several studies and align with the researcher's belief.

According to Cho, Choi, Lee, Park and Seol (2008), the study of the factor affecting customer satisfaction and customer loyalty toward mobile commerce in South Korea, the five factors that can affect customer satisfaction and customer loyalty were determined in this study, including content reliability, transaction process, availability, perceived price level of using mobile internet and customization. The study found that customer satisfaction and customer loyalty are significantly influenced by only two factors that are content reliability and transaction process, respectively. In addition, there is no significant relationship between the remaining three factors and customer satisfaction or customer loyalty. Rich and informative content and quick processes

cause higher customer satisfaction and customer loyalty. The study mentioned that there is a positive and significant relationship between customer satisfaction and customer loyalty in the mobile commerce business as well. The stronger customer loyalty result from higher customer satisfaction. This is a quantitative research using the primary data. The survey was conducted to collect data from 247 digital music users in South Korea. This study uses the structural equation model as a tool to analyze and interpret the data and hypothesis. This study provides evidence of the importance of some indicator affecting customer loyalty for mobile commerce business that matches with the researcher assumption, and the researcher can apply this information to answer the research question as well.

Chang, Wang and Yang's (2009) study on the interdependence of service quality, customer satisfaction, and customer loyalty on online shopping business in Taiwan found that service quality has a significant effect on customer satisfaction and customer loyalty. This research used electronic service quality to determine the service quality of online shopping consisting of website design, reliability, security, and customer service. These dimensions are important tools to satisfy online shopping customers. Furthermore, the study noted that there is a positive and significant relationship between customer satisfaction and customer loyalty. Customer satisfaction acts as an important link between service quality and customer loyalty. Also, good service quality tends to satisfy customers and make customers loyal. Recommendation and repeat purchases are part of the behavior of loyal customers for online shopping. A quantitative approach and primary data are used in this study. The authors conducted an online survey to collect data from 330 customers who have used online shopping platform in Taiwan. The structural equation model is the method selected by the authors to analyze data and test the hypothesis. The result reveals a strong relationship between service quality and customer loyalty that is consistent with several studies and what the researcher expects. This result is very useful to use as a reference because it is the result of studying the online service business.

A study of what factor impacts customer loyalty in fast-food restaurants in Malaysia by Asgari, Kuan and Nezakati (2011) found that there is a positive and significant relationship between product quality and customer loyalty. On the other

hand, other factors, namely product attribute, brand name, service quality, promotion, and price, are not significantly associated with customer loyalty. The study also mentioned that most Malaysian customers expect good product quality offered by the restaurant. If the performance perception is greater than the expectation, customers will have satisfaction. Therefore, higher product quality can satisfy the customer and enhance customer loyalty. The quantitative research method is used in this study, and the questionnaire survey was conducted to collect the primary data from 196 Malaysian customers who have experience with a fast-food restaurant. Multiple regression is a tool used to analyze and interpret data and hypotheses. The result of this study is similar to several studies that provide evidence of the importance of products on customer loyalty corresponding to what the researcher has expected. However, other conclusions of this paper do not match the researchers' assumptions, but these outcomes can be utilized as different indicators.

In the view of Eid (2011), the study of the factor impacting customer satisfaction, customer trust, and customer loyalty on business-to-consumer electronic commerce in Saudi Arabia found that customer satisfaction is significantly influenced by website user interface quality and information quality, and customer trust is significantly affected by website user interface quality, privacy, and security. Moreover, there is a significant relationship between customer loyalty and two factors that directly impact customer satisfaction that is website user interface quality and information quality. The study noted that only customer satisfaction influence customer loyalty, while customer trust does not affect it. As a result of this, the study suggested that the relationship between website user interface quality and information quality, and customer loyalty has customer satisfaction as the mediator of connection. Improving website and information quality can enhance both customer satisfaction and customer loyalty. The quantitative approach is used with the primary data in this study. The survey was conducted to collect data from 218 customers who have experience with electronic commerce in the eastern province of Saudi Arabia. The structural equation model is the method used to analyze data and test the hypothesis. The study provides the important conclusion of the relationship between quality and customer loyalty

according to the researcher's expectation, and the researcher can use the result of this study as an additional source for the research.

As indicated by Oyeniyi's research (2011), the study of the role of sales promotion on customer loyalty toward mobile telecommunication service in Nigeria found that customer loyalty is positively and significantly affected by sales promotion. There are four sales promotion tools described in this study consisting of piece promotion, free gift, sample, and special event. All of the sales promotion tools have a positive and significant relationship with customer loyalty. The author noted that sale promotion is the weapon used to attract new customers and keep the customer with the brand in the future, especially for the business with highly competitive. A quantitative approach and primary data are used in this study. The author conducted the survey to collect data from 310 Nigerian mobile phone users with simple random sampling and used multiple regression to analyze and interpret data and hypotheses. The result of this study evident the positive effect of promotion in terms of sales promotion on customer loyalty aligning with the researcher's expectation, and the four sales promotion tools can be used as a good reference in the research.

Ahasanul, Selim and Zulkarnain's (2015) study on the website quality and service quality affecting customer loyalty on online food ordering companies in Malaysia found that website quality and service quality are significantly related to customer loyalty. Higher quality of website and service lead to an increase in customer loyalty for online food ordering companies. The study separates the quality of online food delivery service into two parts that are website quality, including information quality, website design, and payment system, and service quality, including delivery, customer service, and food quality. The study noted that both website quality and service quality are essential tools that must be used together in building customer loyalty. The quantitative approach is used with the primary data in this study, and the data is collected through the questionnaire survey from 353 customers who use to have the transaction with online food delivery service in Malaysia. The study uses a structural equation model to analyze data and test the hypothesis. The result of this study provides the necessary dimension of quality that significantly affects customer

loyalty to online food ordering companies. This result is very useful to use as a reference because it is the result of studying the online food delivery service.

A study of the element of service marketing mix affecting customer loyalty toward telecommunication company in Algeria, by Ameur, Keltouma and Souar (2015), found that from all seven elements of the service marketing mix, there are only three elements comprising product, process, and promotion, which significantly affect customer loyalty. Product has the strongest effect on customer loyalty. This means that product is an important key that telecommunication service providers should focus on to satisfy customers and keep customers from switching to other service providers. While, there is no significant relationship between the four remaining elements consisting of people, physical evidence, price and place, and customer loyalty. This study is a quantitative research using the survey to collect the primary data of 255 telecommunication customers from all regions of Algeria and applying partial least square method to analyze the data and hypothesis. The result reveals that not all elements of the service marketing mix affect customer loyalty. This conclusion is different from other studies and inconsistent with the researcher's assumption. However, the result is useful to be an important reference.

Khatrine and Krisnanto (2016), who study what factor influencing customer loyalty on Indonesian electronic commerce, found that customer loyalty is directly influenced by the service marketing mix. However, each element of the service marketing mix has different effects on loyalty. The most important element of the service marketing mix to increase customer loyalty is the process in terms of order and payment process following by people, price, and place, respectively. The study noted that when customers are satisfied with what the company offers, customers tend to purchase goods and services repeatedly and recommend the company to others. The quantitative approach and primary data are used in this study. The survey was conducted to collect data with a convenience sampling method from 175 electronic commerce shoppers in Jakarta, Indonesia, and the data is analyzed by a structural equation model. The result of this study proves that there is a positive and significant relationship between service marketing mix and customer loyalty for online service

business. The researcher can use this reliable outcome as the reference for the researcher's study.

According to Lee and Wong (2016), the study of the factor in term of service quality and customer satisfaction affecting customer loyalty toward mobile commerce in Malaysia, service quality of mobile commerce in this study was measured by electronic service quality consisting of efficiency, system availability, fulfillment, and privacy. The study found that customer satisfaction and customer loyalty are significantly determined by each service quality element. The most significant element of service quality that impacts customer satisfaction and customer loyalty is efficiency. The efficiency of mobile commerce shows the performance of the mobile website, which well-responds to users. The study also mentioned that customer loyalty is significantly associated with customer satisfaction for mobile commerce retailers. When customers have high satisfaction, customers are more likely to become loyal customers. Therefore, customer loyalty can be influenced by service quality through a mediator like customer satisfaction. This research is a quantitative research using the primary data. An online survey of 214 Malaysian mobile commerce users was conducted to collect the data. A structural equation model is utilized to analyze and interpret data and hypotheses. The result of this study reveals the importance of each service quality dimension to customer loyalty for mobile commerce business that aligning with the researcher's assumption. The researcher can use this outcome as the reference for the researcher's study.

In the view of Ilham (2018), the study of customer loyalty influenced by service quality through customer satisfaction toward online delivery service in Indonesia found that service quality is significantly associated with customer loyalty and it also has a significant effect on customer satisfaction, in other words, customer satisfaction and customer loyalty can be enhanced with the service quality. This study has five indicators, including security, communication, reliability, responsiveness, and delivery, which are adapted from the electronic service quality model to evaluate the service quality of online delivery service. In addition, the study noted that customer satisfaction significantly influences customer loyalty, and customer satisfaction also acts as the mediator in the relationship between service quality and customer loyalty. Higher

service quality of online delivery service can improve customer loyalty resulting from higher customer satisfaction. This study is quantitative research, and primary data is needed. The online questionnaire survey was conducted to collect the data from 320 Go-jek customers in Indonesia using purposive sampling. The data and hypothesis are analyzed and tested by using the partial least square method. The result of this study supports the researcher's expectation that is service quality has a positive effect on customer loyalty. The researcher can use this outcome as the reference for the researcher's study because it is the result of studying the online food delivery service.

Harun, Kadhim, Kassim, Nazeer, Othman and Rashid (2019) who study service marketing mix relating customer loyalty toward Umrah travel service providers, found that all of service marketing mix, namely product, price, place, promotion, physical evidence, people, and process are significantly associated with customer loyalty. Physical evidence and people have the positively strongest effect on customer loyalty. The study mentioned that understanding customer needs helps to develop and improve all elements of the marketing mix. Effective service marketing mix can satisfy the customer and make them stay with the brand in the long-term. This study is a quantitative research using the primary data that is collected through a questionnaire survey from 384 Malaysian customers who have experience with Umrah travel service. The method used to analyze data and hypothesis is the partial least square method. The result from this study provides evidence of the positive and significant relationship between service marketing mix and customer loyalty for the service business aligning with researcher expectation.

As indicated by Helmi, Kusdibyo, Sjahroeddin, Suhartanto and Tan's research (2019), the study of the role of service quality and food quality on customer loyalty toward online food delivery operated by the restaurant in Indonesia found that only food quality has a significant effect on customer loyalty. The meaning of food quality is food variety, food attribute, and food condition. On the other hand, customer loyalty is not influenced by service quality. Service quality that was used to measure in this study is the electronic service quality model comprising system availability, efficiency, fulfillment, and privacy. A quantitative approach and the primary data are used in this study. The data was collected through a questionnaire survey from 405 Indonesian

customers who have experience with online food delivery service, and this study uses the partial least square method to evaluate the result. The result of this study gives a different conclusion about the relationship between service quality and customer loyalty. Although this conclusion is not similar to what the researcher has expected, the results of this research can still apply as an important reference.

Johnson, Le, Nguyen-Phuoc, Su and Tran (2020), studying the factor affecting customer loyalty for online ride-hailing services in Vietnam, found that customer loyalty is influenced by the benefit of application, service quality, and sales promotion in term of reward program. Service quality is the most dominant factor to improve customer loyalty for online ride-hailing services. When customers often receive higher service quality from the service provider, customer loyalty will be higher. The study mentioned that the reward program is an effective tool to encourage the customer to use the service frequently as well. This is the quantitative research using the primary data that is collected through the survey of 559 customers who have used this service in Vietnam. This study uses a structural equation model to analyze data and hypotheses. The outcome of this study provides the confirmation of the positive and significant relationship of product, promotion, service quality, and customer loyalty that is consistent with what is expected.

In a study of service quality affecting customer loyalty toward the online food delivery service industry in Indonesia by Leo, Purwaningsih, Setiawati and Suhartanto (2020), it was founded that customer loyalty can be increased by service quality. This paper uses an electronic service quality model consisting of four dimensions that are system availability, privacy, efficiency, and fulfillment for measuring the service quality of online food delivery. However, the only service quality element that has a substantial effect on customer loyalty is efficiency, while other elements, system availability, privacy, and fulfillment, are the irrelevant factors affecting loyalty. The meaning of efficiency is user-friendly, fast loading, well-organized, and informative of application. The study suggested that service providers should pay more attention to improve the efficiency of their service to gain a competitive advantage and make the customer more loyal. A quantitative approach and primary data are used in this study. The authors conducted a survey to collect data from 405 online food delivery service

customers in Bandung city, Indonesia and used the partial least square method to evaluate the result. The result of this study provides evidence of only one element of service quality positively impacting customer loyalty that supports the researcher's expectation partially. However, the researcher can use this outcome as the reference for the researcher's study because it is the result of studying the online food delivery service.

Suryawardani and Wulandari's (2020) study on the factor based on customer switching behavior influencing customer loyalty toward online transportation service in Bandung, Indonesia found that the factor that has a significant effect on customer loyalty is price and promotion, while service quality is an insignificant factor to customer loyalty for online transportation service in Indonesia. The study uses electronic service quality for measuring the service quality of online transportation services, comprising efficiency, fulfillment, privacy, responsiveness, contact, and design. Moreover, the study suggested that a price increase can lead to less customer loyalty. Customers will switch to other competitors that offer a lower price. This study is quantitative research using primary data collected through a survey of 400 Indonesian online transportation service users. The data and hypothesis are analyzed and tested by using the structural equation model. This study reveals the result of the relationship between service quality and customer loyalty that is inconsistent with the researcher's expectation. On the other hand, the result provides evidence of the positive effect of price and promotion on customer loyalty aligning with the researcher's belief. Therefore, this study is a useful source for the researcher's study.

In accordance with the literature review above, most studies mention that service quality has a positive and significant relationship with customer loyalty, and customer satisfaction can act as a mediator between this relationship. The higher service quality will satisfy customers and make the customers have more loyalty. The elements of service quality may be different depending on the type and the character of the business. On the other hand, some studies have different conclusions that service quality does not significantly affect customer loyalty. Apart from the service quality factor, there are service marketing mix factors that can affect customer loyalty as well. Some researchers conclude that every component of a service marketing mix affects

customer loyalty, but other studies note that only a few elements of a service marketing mix affect customer loyalty.

CHAPTER 3 THEORITICAL FRAMEWORK

According to Griffin (2002), customer loyalty is the behavior and feeling of customers toward a particular brand resulting from all dimensions of goods and services that are able to respond to the customer needs and create customer satisfaction continuously. This also causes a good long-term relationship between the customers and the company. In addition, there are no other competitors that can deliver better value to customers, therefore, the competitors are not considered through customers purchasing decision. Loyal customers are more likely to purchase repeatedly and continually and always consider goods and services from a particular brand as their first choice. Moreover, loyal customers also act as representatives for recommending goods and services to others. The customer loyalty development process can be described through the customer buying behavior cycle as follows.

Firstly, the awareness stage, this stage is very important. Goods and services must be unique and different from competitors to become one of the choices of customers. At this stage, customers are already aware of the existence of goods and services, but the customers will not have any relationship with the brand at all. Therefore, customers can change their minds at any time when customers find something more interesting and attractive to them.

Secondly, the initial purchase stage, goods and services that customers purchase play an important role in this stage since the impression of the customer from the first purchase depends directly on the goods and services. The first impression gives the opportunity to the brand to start building more relationships with customers.

Thirdly, the post-purchase evaluation stage, when the customers already have the experience with goods and services, customers will compare what the customer receives from those goods and services with the customer's expectations. Moreover, customers can also make an evaluation to compare with other competitors. Maintaining the standard of goods and services is an important consideration for the brands because the customer's assessment for each of using goods and services will affect the overall outcome.

Fourthly, the decision to re-purchase stage, when customers are satisfied from using goods and services for a while resulting from what customers receive is consistently higher than what customers expect, and other competitors are unable to respond to customer needs, customers are more likely to make decisions to repeat purchase the same goods and services. This shows the better relationship between brands and customers. In addition, repeat purchasing behavior of customers can be achieved by showing customers the additional costs of switching to use goods and services from other competitors. The cost of this switching can take the form of money, time, risk, etc.

Fifthly, the re-purchase stage, continuously repeat purchase behavior demonstrates the behavioral loyalty that customers have with the brand. Loyal customers are always willing to continually use goods and services in the future and often refuse to buy goods and services from other competitors because customers are highly affiliated with the brand.

Sixthly, the recommend stage, apart from repeat purchase, the recommendation of goods and services to others is another behavior for loyal customers which shows attitudinal loyalty with the brand. Loyal customers who use goods and services continuously will act as a mouthpiece to tell the good stories that they perceive from using goods and services. Furthermore, loyal customers will advocate and persuade others to try goods and services from the same brand.

Building customer loyalty is very important to the business. It can be seen from the 80/20 rule that 20 percent of all customers generate 80 percent of all sales. Therefore, loyal customers are an essential asset for the company that needs to be retained and increased as much as possible. Loyal customers also help the company save costs, such as marketing costs, and the company does not have to face price competition as well.

CHAPTER 4 EMPIRICAL FRAMEWORK

According to the theory and relevant researches, this study has applied the result from the literature review to define the conceptual framework. The conceptual framework below demonstrates the positive relationship between service quality and customer loyalty toward food delivery service in Thailand. More service quality that is well-responded to customer needs leads to higher customer loyalty. The dimension used to measure service quality in this study is electronic service quality, consisting of efficiency, system availability, fulfillment, and privacy. However, there are other factors that can also positively influence customer loyalty, including product, price, place, promotion, physical evidence, people, process, and the most often used brand.


Figure 2: The conceptual framework

Based on the conceptual framework, the empirical model has been developed for this study shown as below.

Customer Loyalty (Y_i)

$$= \beta_0 + \beta_1(SERVICEQUALITY_i) + \beta_2(PRODUCT_i) + \beta_3(PRICE_i)$$

$$+ \beta_4(PLACE_i) + \beta_5(PROMOTION_i) + \beta_6(PHYSICALEVIDENCE_i)$$

$$+ \beta_7(PEOPLE_i) + \beta_8(PROCESS_i) + \beta_9(GRAB_i) + \beta_{10}(LINEMAN_i)$$

$$+ \beta_{11}(FOODPANDA_i) + \beta_{12}(GOJEK_i) + \varepsilon_i$$

The regression model illustrates that customer loyalty as the dependent variable is positively influenced by service quality, product, price, place, promotion, physical evidence, people, process, and the most often used brand as the independent variables. The most often used brand can be split into four variables which are Grab, Line man, Foodpanda, and Gojek. Customer loyalty is the behavior and feeling of customers to a particular brand that can be well-respond and satisfied with customers. Loyal customers have high brand preferences, and they tend to buy goods and services from that brand first. In addition, loyal customers also have a repeat purchasing behavior and usually recommend goods and services from that brand to others (Aaker, 1991 and Kotler, 2000). Consequently, the more these factors can respond to the needs of the customers, the loyalty of the customer will increase. However, these are the main factors that have a number of sub-factors, and the sub-factors can affect customer loyalty of food delivery service as well. Another empirical model is shown below.

Customer Loyalty (Y_i)

$$= \beta_0 + \beta_{101}(INS_i) + \beta_{102}(INA_i) + \beta_{103}(APP_i) + \beta_{104}(TRS_i) + \beta_{105}(TRA_i)$$

$$+ \beta_{106}(SYR_i) + \beta_{107}(SYS_i) + \beta_{108}(DES_i) + \beta_{109}(DTS_i) + \beta_{110}(DFA_i)$$

$$+ \beta_{111}(DFQ_i) + \beta_{112}(CRS_i) + \beta_{113}(MEA_i) + \beta_{114}(SES_i) + \beta_{115}(INH_i)$$

$$+ \beta_{201}(PRV_i) + \beta_{202}(PRU_i) + \beta_{203}(BRR_i) + \beta_{301}(PRR_i) + \beta_{302}(DFS_i)$$

$$+ \beta_{303}(PRC_i) + \beta_{401}(SEA_i) + \beta_{402}(SEH_i) + \beta_{501}(SAP_i) + \beta_{502}(ADV_i)$$

$$+ \beta_{503}(CIE_i) + \beta_{601}(APV_i) + \beta_{602}(APC_i) + \beta_{701}(DRW_i) + \beta_{702}(DRC_i)$$

$$+ \beta_{703}(DRK_i) + \beta_{801}(UNP_i) + \beta_{802}(VOP_i) + \beta_{803}(VPP_i) + \beta_{901}(GRAB_i)$$

$$+ \beta_{902}(LINEMAN_i) + \beta_{903}(FOODPANDA_i) + \beta_{904}(GOJEK_i) + \varepsilon_i$$

A three-digit subscript in the model represents as explained, the first digit describes the factor group, and the last two digits represent the sub-factor in each group. For example, factor group one is service quality, which has fifteen sub-variables, illustrated by β_{101} to β_{115}.

Refer to the regression model above, firstly, customer loyalty can be positively contributed by service quality to food delivery service. Quality is extremely important to a service business. It not only makes customers satisfied but also makes the brand more different from other competitors. The customers who are offered the service quality that exceeds customer expectations will decide to use the service from a particular brand continually. Those customers will become regular customers with high brand loyalty. Even though service quality can be measured in several dimensions, but this study has used four dimensions, namely electronic service quality, to assess the service quality for food delivery service. Electronic service quality consisting of efficiency, fulfillment, system availability, and privacy was designed to measure the quality of service for the businesses mainly providing online platform services. Efficiency is a positive contributor to customer loyalty. Efficiency is the performance of the application that can respond well to customers containing platform, information searching, information accuracy, transaction speed, and transaction accuracy. A good application must be convenient for the customer and attract the customers to use them consistently. Therefore, customer loyalty is positively affected by application platform (APP), information searching (INS), information accuracy (INA), transaction speed (TRS), and transaction accuracy (TRA). Fulfillment is a positive contributor to customer loyalty. Fulfillment is what service providers can do as notified or promised in terms of the delivery speed, the delivery time suitability, the delivered food accuracy, the delivered food quality, the menu availability, and the complaint and refund system. When the service provider is able to do as notified to the customer, for example, the customer receives the food as ordered, and the food is in good condition or the delivery time is suitable for the distance and not over than that stated, the customers will have higher satisfaction. The more satisfied customers are, the more loyal customers will be. Therefore, customer loyalty is positively determined by the delivery speed (DES), the delivery time suitability (DTS), the delivered food accuracy (DFA), the delivered food

quality (DFQ), the menu availability (MEA), and the complaint and refund system (CRS). System availability is a positive contributor to customer loyalty. System availability is the stability and readiness of the system that makes customers can use service at any time that they want. A stable and ready-to-use system is a key factor in building a good customer experience. If customers frequently encounter the system problems such as broken system during use, customers will be dissatisfied and resort to competitor service. Therefore, customer loyalty is positively influenced by the system stability (SYS) and the system readiness (SYR). Privacy is a positive contributor to customer loyalty. Privacy is the level of security and protection of customer personal information. Moreover, privacy is an important concern of the customers, especially for purchasing goods and services through an online channel. Consequently, the customers will choose the service provider that has an efficient data protection system and does not distribute customer information externally to buy goods and services. As a result of this, customer loyalty is positively impacted by security systems (SES) and information hiding (INH).

Secondly, customer loyalty can be positively contributed by product to food delivery service. Products are the main tools that can make the brand attractive. The product should be diverse to satisfy the different needs of the customers and should be unique in order to differentiate itself from other competitors. For food delivery service, the variety of restaurants and menus will attract more customers and make the customers use the service continuously because customers have many options within one application, and the uniqueness and specialty of menus and restaurants that other service providers do not have will make the customers order food from particular brands regularly. Furthermore, the reputation of the service provider is essential to the customer purchasing decision as well. The famous service provider, which is widely known by the consumers, is more likely to attract customers to stay with the brand in the long term better than the general service provider because customers tend to believe that reputable service providers are more reliable. Therefore, customer loyalty is positively determined by the product variety (PRV), the product uniqueness (PRU), and the brand reputation (BRR).

Thirdly, customer loyalty can be positively contributed by price to food delivery service. Customer perception on the suitability of food prices can affect customer satisfaction. The reasonable price is the price that corresponds to the value that the customer receives and the price acceptance of the customer. If price is lower than or equal to the value or acceptance, the customer will be satisfied and will repeatedly purchase in the future. Customer's price acceptance for food delivery service usually depends on the restaurant's food price, which the customer may have previously perceived, therefore, the service provider should not set the price too high. Additionally, the pricing should not be more expensive than other service providers' pricing because customers can easily compare the food prices of each service provider. When food prices are more expensive than competitors where other factors are not different, customers will immediately order food through another service provider. Apart from price reasonability and price comparison, delivery fee can also influence customers purchasing decisions and customer satisfaction. Customers are willing to pay when delivery fee is distance-based and not too expensive. Service provider with the affordable delivery fee is more likely to have more opportunities to retain their customers. Therefore, customer loyalty is positively affected by the price reasonability (PRR), the price comparison (PRC) and the delivery fee suitability (DFS).

Fourthly, customer loyalty can be positively contributed by place to food delivery service. As food delivery service does not have its own location, place is service area and service hour. Service areas should be spread as wide as possible to serve the customer need and increase customer usage in all areas. Wherever the customer is, the customers can use the food delivery service from the service provider, which will make the customers very satisfied, and the service provider will become the top choice that customers think of. Service hour should be set according to the customer's perception and needs. Usually, customers tend to use the service hour of the restaurant as the basis of the service hour of the food delivery service. The service provider can respond to customer needs every time cause the customers want to use the service from that service provider again in the future. Therefore, customer loyalty is positively impacted by the service area (SEA) and the service hour (SEH).

Fifthly, customer loyalty can be positively contributed by promotion to food delivery service. Promotion is a marketing communication tool that uses to inform and motivate customers. Currently, sales promotions such as discount, buy one get one free, and point redemption are the key weapons used by service providers in this business to attract customers. Sales promotion will encourage customers to use the service, and customers are more likely to continue to use services from service providers that offer better sale promotions. Advertising with interesting content can also stimulate the customer to use the service as well. Content of advertising that is relevant to the feelings of the customer can satisfy the customer. Moreover, advertising can act as a reflection of the brand image, and customers often select service providers with a good brand image that is suitable for them. Using a celebrity and influencer for endorsements is another tool to increase satisfaction and loyalty. Famous people are used to persuading customers to purchase goods and services from a particular brand. Therefore, customer loyalty is positively influenced by sales promotion (SAP), advertising (ADV), and celebrity and influencer endorsement (CIE).

Sixthly, customer loyalty can be positively contributed by physical evidence to food delivery service. Physical evidence is an additional component of service that can enhance customer experience and satisfaction. For food delivery service, the application that has a good visualization and up-to-date content can engage more customers. The better appearance of the application makes customers more willing to use the service and have more satisfaction. Therefore, customer loyalty is positively determined by application visualization (APV) and application content (APC).

Seventhly, customer loyalty can be positively contributed by people to food delivery service. The driver is the definition of people for the food delivery service. The drivers are the persons who directly interact and deliver service to customers, and they also are the representatives of the brand in building a good relationship with customers. Customers will satisfy or not partly depending on the driver service. Willingness, communication, and knowledge of drivers are the essential elements that the drivers should have in order to impress customers. Therefore, customer loyalty is positively affected by driver willingness (DRW), driver communication (DRC), and driver knowledge (DRK).

Eighthly, customer loyalty can be positively contributed by process to food delivery service. The effective process must not be complicated and should have various ways to use the service to make it more convenient for customers. Convenience makes customers satisfied and want to use the service again. Food delivery service providers are trying to improve their service processes, for example, various payment methods for the payment process, an additional feature for the order process. Therefore, customer loyalty is positively influenced by uncomplicated process (UNP), various methods for the payment process (VPP), and various method for the order process (VOP).

Lastly, customer loyalty can be positively contributed by the most often used brand, consisting of Grab, Line man, Foodpanda, Gojek, and other brands to food delivery service. For this study, the most often used brand is the dummy variable and other brand is decided to be the reference group. Therefore, the customers who often use Grab, Line man, Foodpanda, or Gojek should have a more positive effect on customer loyalty than other brands because the four mentioned brands are the main service providers, which actively penetrate the market by using marketing tools to attract customers and customers use the service widely.

Variables Group	Sub-variable	Direction effect to customer loyalty
1. Service Quality	1.1 Information searching (INS)	Positive
	1.2 Information accuracy (INA)	Positive
	1.3 Application platform (APP)	Positive
	1.4 Transaction speed (TRS)	Positive
	1.5 Transaction accuracy (TRA)	Positive
	1.6 System readiness (SYR)	Positive
	1.7 System stability (SYS)	Positive
	1.8 Delivery speed (DES)	Positive

Variables Group	Sub-variable	Direction effect to customer loyalty
1. Service Quality	1.9 Delivery time suitability (DTS)	Positive
	1.10 Delivered food accuracy (DFA)	Positive
	1.11 Delivered food quality (DFQ)	Positive
	1.12 Complaint and refund system (CRS)	Positive
	1.13 Menu availability (MEA)	Positive
	1.14 Security systems (SES)	Positive
	1.15 Information hiding (INH)	Positive
2. Product	2.1 Product variety (PRV)	Positive
	2.2 Product uniqueness (PRU)	Positive
	2.3 Brand reputation (BRR)	Positive
3. Price	3.1 Price reasonability (PRR)	Positive
	3.2 Delivery fee suitability (DFS)	Positive
	3.3 Price comparison (PRC)	Positive
4. Place	4.1 Service area (SEA)	Positive
	4.2 Service hour (SEH)	Positive
5. Promotion	5.1 Sales promotion (SAP)	Positive
	5.2 Advertising (ADV)	Positive
	5.3 Celebrity and influencer endorsement (CIE)	Positive
6. Physical Evidence	6.1 Application visualization (APV)	Positive
	6.2 Application content (APC)	Positive

Variables Group	Sub-variable	Direction effect to customer loyalty
7. People	7.1 Driver willingness (DRW)	Positive
	7.2 Driver communication (DRC)	Positive
	7.3 Driver knowledge (DRK)	Positive
8. Process	8.1 Uncomplicated process (UNP)	Positive
	8.2 Various method for order process (VOP)	Positive
	8.3 Various methods for payment process (VPP)	Positive
9. The most often used brand	9.1 Grab	Positive
	9.2 Line Man	Positive
	9.3 Foodpanda	Positive
	9.4 Gojek	Positive

Table 1: The independent variables summary

All of the mentioned variables above are used to construct the questionnaire. Apart from the variables affecting loyalty, customer behavior to food delivery service is also collected through questionnaires. This data will make the researcher better understand the behavior and the experience of using the food delivery service through online application of the customers, such as favored brand, usage frequency, and expense. Furthermore, customer demographic data consisting of gender, education, and income show a rough profile of what the sample looks like.

The literature has provided evidence that customer loyalty is significantly and positively contributed by service quality. In many businesses, service quality is an important factor to increase customer loyalty. Chang, Wang and Yang (2009) showed in their research that customer loyalty is positively affected by service quality in the online shopping business. Lee and Wong (2016) investigated that customer loyalty is significantly determined by service quality in mobile commerce. Johnson, Le, Nguyen-

Phuoc, Su and Tran (2020) indicated that customer loyalty is positively influenced by service quality in the online ride-hailing service business. Therefore, the researcher expects that customers will have more loyalty when customers receive higher service quality and hypothesizes that customer loyalty is positively contributed by the quality of service on food delivery service (H_1).

CHAPTER 5 DATA ANALYSIS

This study is quantitative research using primary data. The primary data is collected through the survey by using an online questionnaire as an instrument. The model used in this study comprises the main dependent variable, namely customer loyalty, and the main independent variables, which are service quality, product, price, place, promotion, physical evidence, people, process, and the most often used brand.

The questionnaire is divided into five main sections. Section one is the screening questions. There are three screening questions to be used to screen the respondents to match the qualification. Section two is demographic information of respondents consisting of gender, education, and income. Section three is customer behavior to food delivery service. In this section, the closed-ended question is used to generate a question. Respondents will be asked about what brands they have used, what brands they use most often, usage frequency, and the expense for each order. Section four is the respondent's opinion on service quality and service marketing mix of food delivery service that can affect loyalty. There are fifteen indicators for service quality, three indicators for product, three indicators for price, two indicators for place, three indicators for promotion, two indicators for physical evidence, three indicators for people, and three indicators for process. The last section is customer loyalty toward food delivery service, which has four indicators. Respondents will be asked about their behavior and attitude of loyalty to food delivery service. A five-point Likert scale ranging from strongly agree (5) to strongly disagree (1) is used to evaluate for both section four and section five.

The population in this study is the Generation Y customers born between 1980 to 1996 who have experience with food delivery service and live in Bangkok and vicinity. The Generation Y customers are specifically selected to be the sample in this study because this generation is the group of customers who order food through the food delivery application the most (Electronic Transactions Development Agency, 2020). This research uses multiple regression analysis, therefore, the sample size is determined based on the principles of Hair (2013) which the sample size should be five-time of the number of questions. There are 38 questions in the questionnaire; thus, the

number of samples for this study is 190 food delivery service customers. However, the sample size is decided to add from 190 to 250 respondents to prevent mistakes from incomplete questionnaire responses and reduce the errors from data analysis. The convenience sampling method is used to select the sample.

The data obtained from the questionnaire is used to analyze descriptive statistics. Using minimum, maximum, mean, standard deviation, and percentage to explain demographic information, consumer behavior and opinion on service quality, service marketing mix, and loyalty of food delivery service among respondents. In order to analyze inferential statistics, multiple regression analysis is used to investigate the relationship and effect size of each independent variable to the loyalty of food delivery service.

After completing the survey through the online questionnaire, there are a total of 320 respondents of this survey. However, after examining the respondent data, it was found that 10 respondents do not match the qualification of this study. Therefore, this research contains 310 respondents who meet the requirement that can be used for further analysis. The number of samples is greater than what this study initially determined. This larger number of samples will provide more accurate data analysis.

This survey provides the information of the demographic and behavior toward food delivery service and the opinion on service quality, service marketing mix, and loyalty to food delivery service. All information is explained by descriptive statistics as below.

Demographic	Number of samples	Percentage
1. Gender		
Male	109	35.2
Female	201	64.8
Total	310	100.0

Demographic	Number of samples	Percentage
2. Highest level of education		
Below bachelor degree	6	1.9
Bachelor degree or equal	177	57.1
Above bachelor degree	127	41.0
Total	310	100.0
3. Monthly income		
Less than or equal to 20,000 baht	24	7.7
20,001-40,000 baht	137	44.2
40,001-60,000 baht	89	28.7
60,001-80,000 baht	33	10.6
More than 80,000 baht	27	8.7
Total	310	100.0

Table 2: Number and percentage of the sample by demographic data
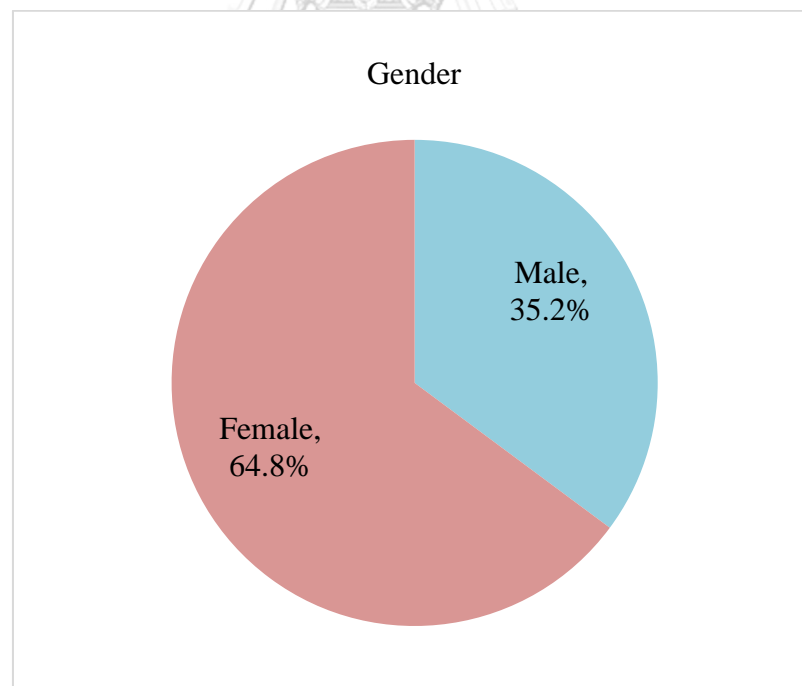
Figure 3: Ratio of the sample by gender

The highest level of education

Below bachelor degree, 1.9%

Above bachelor degree, 41.0%

Bachelor degree or equal, 57.1%
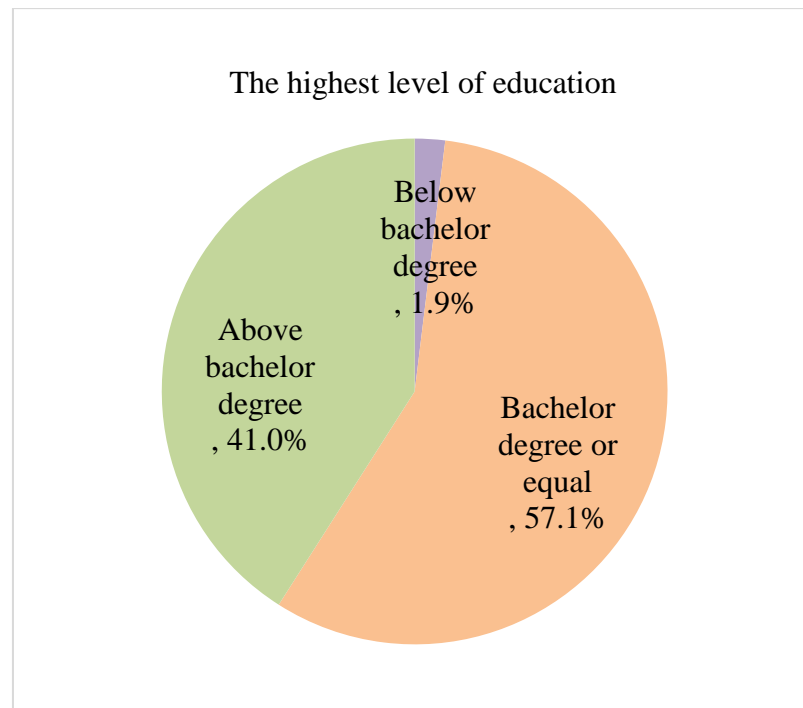
Figure 4: Ratio of the sample by the highest level of education

Monthly income

> 80,000, 8.7%

≤ 20,000, 7.7%

60,001-80,000, 10.6%

40,001-60,000, 28.7%

20,001-40,000, 44.2%
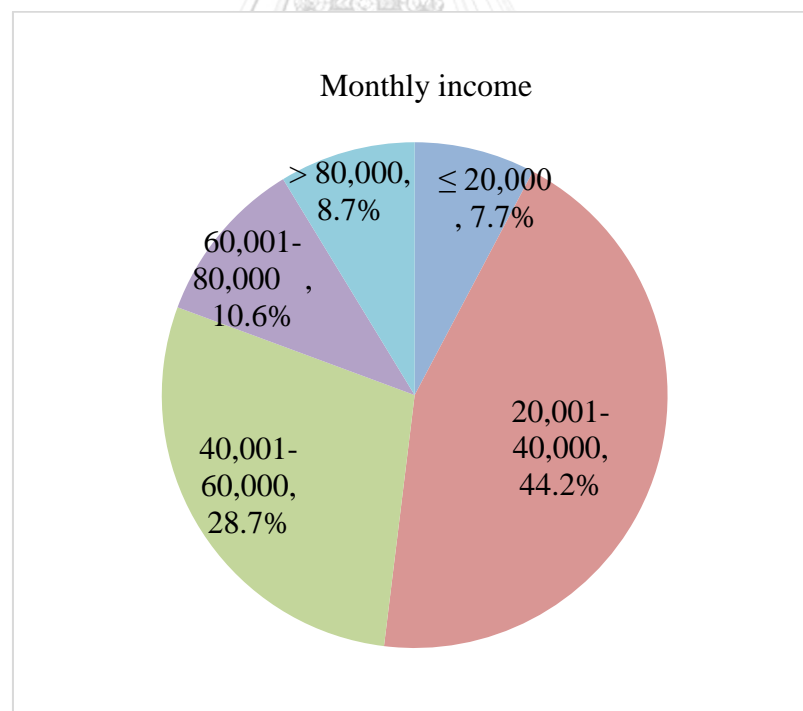
Figure 5: Ratio of the sample by monthly income

The table and figures above summarize the demographic data of the respondents. Most of the respondents are female with a percent of 64.8 and followed by the male respondent with a percent of 35.2. The highest degree of most respondents is a bachelor's degree or equal at 57.1 percent. For the monthly income, the income between 20,001 to 40,000 baht is the majority income of this sample group at 44.2 percent.

Brand	Number of samples	Percentage
Foodpanda	186	60.0
Gojek (Get)	119	38.4
Grab	299	96.5
Line Man	257	82.9
Other	26	8.4

Table 3: Number and percentage of the sample by used food delivery service brand
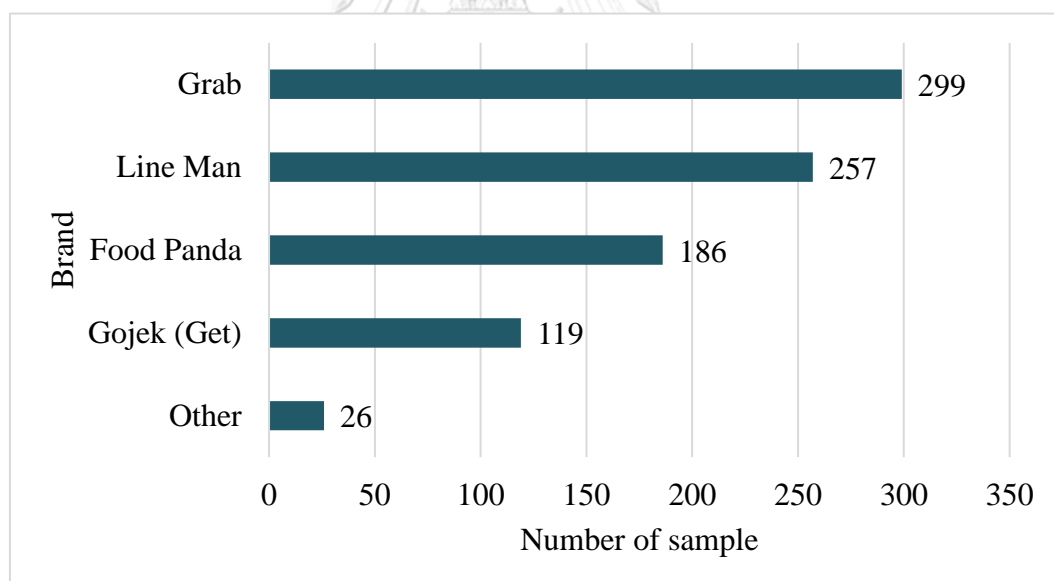
Figure 6: Food delivery service brand that respondents have used

Table three and figure six illustrate that Grab is the number one brand of food delivery service that respondents have experienced at 96.5 percent of respondents, followed by Line Man at 82.9 percent, Foodpanda at 60.0 percent, Gojek (Get) at 38.4 percent and other that is Robinhood at 8.4 percent respectively.

Brand	Number of samples	Percentage
Foodpanda	34	11.0
Gojek (Get)	9	2.9
Grab	219	70.6
Line Man	45	14.5
Other	3	1.0
Total	310	100.0

Table 4: Number and percentage of the sample by most often used brands
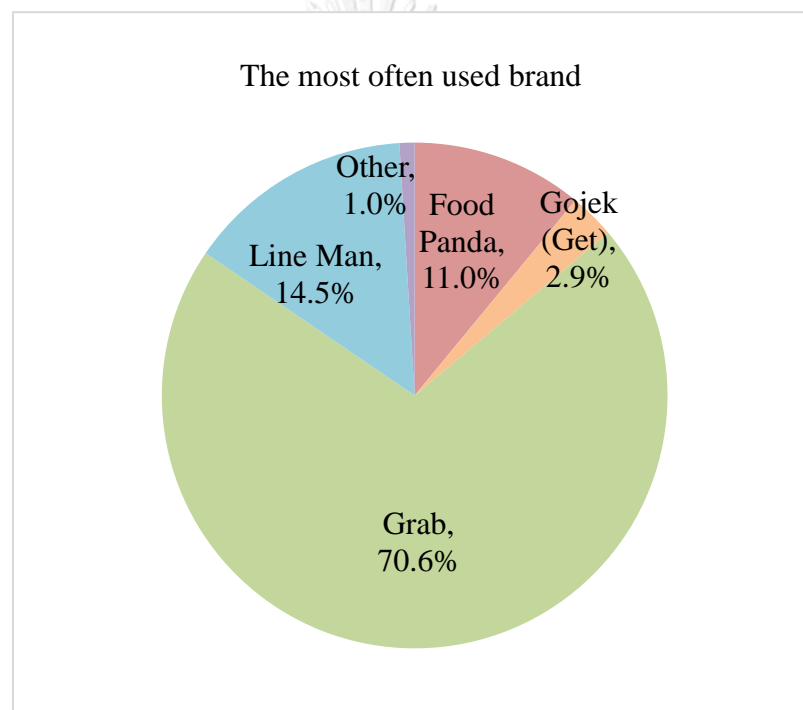
Figure 7: Ratio of food delivery service brand that respondents use most often

Table four and figure seven show that 70.6 percent of respondents picked Grab as the most often used food delivery service brand, followed by Line Man at 14.5 percent, Foodpanda at 11.0 percent, Gojek (Get) at 2.9 percent, and other which is Robinhood at 1.0 percent, respectively. Since the majority answer is Grab, respondent choices might be intervened by the most often used brand that respondents picked.

Usage frequency	Number of samples	Percentage
1-2 time per week	195	62.9
3-4 time per week	76	24.5
5-6 time per week	20	6.5
More than 6 times per week	19	6.1
Total	310	100.0

Table 5: Number and percentage of the sample by usage frequency
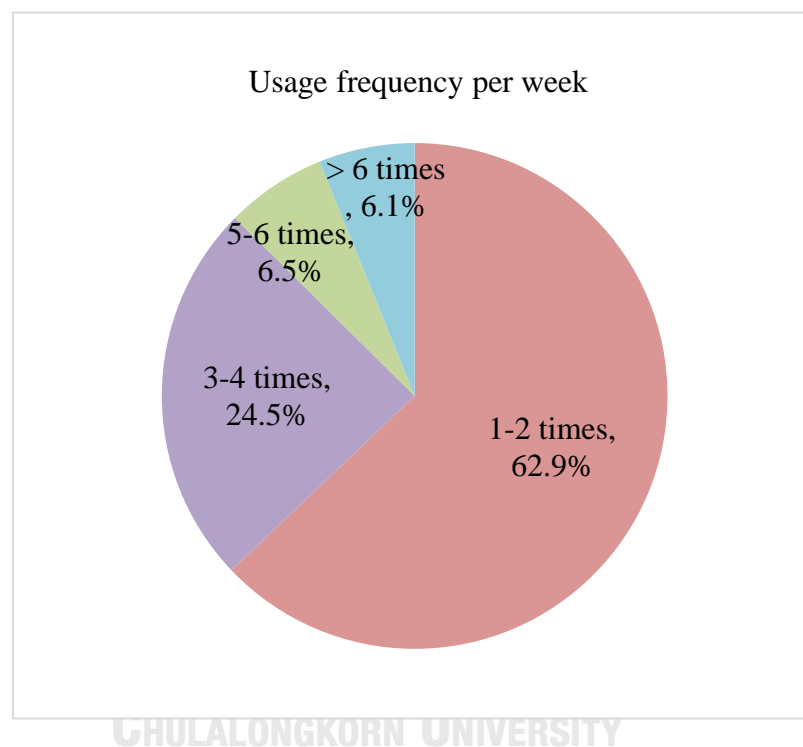
Figure 8: Ratio of usage frequency per week

Table five and figure eight explain that most of the respondent use food delivery service one to two times per week is about 62.9 percent of respondents followed by three to four times per week at 24.5 percent, five to six times per week at 6.5 percent, and more than six times per week at 6.1 percent. The frequency of using the food delivery service is still relatively low.

Average expense per order	Number of samples	Percentage
Less than or equal to 100 baht	13	4.2
101-200 baht	148	47.7
201-300 baht	94	30.3
More than 300 baht	55	17.7
Total	310	100.0

Table 6: Number and percentage of the sample by average expense per order
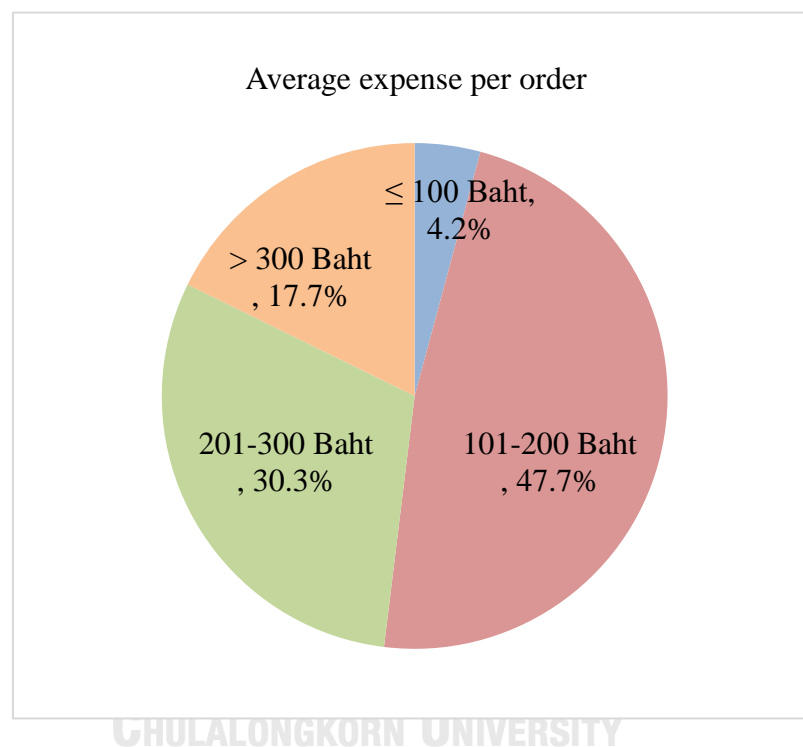
Figure 9: Ratio of average expense of using food delivery service per order

Table six and figure nine represent that percent of 47.7 of respondents have an average expense of 101-200 baht per order for using food delivery service followed by 201-300 baht per order at 30.3 percent, more than 300 baht per order at 17.7 percent, and less than or equal 100 baht per order at 4.2 percent.

| Factor	Minimum	Maximum	Mean	Standard Deviation
1. Loyalty	2.00	5.00	4.07	0.605
2. Service quality	2.67	5.00	4.38	0.501
2.1 Information searching	1.00	5.00	4.45	0.666
2.2 Information accuracy	1.00	5.00	4.28	0.778
2.3 Application platform	1.00	5.00	4.52	0.714
2.4 Transaction speed	1.00	5.00	4.59	0.631
2.5 Transaction accuracy	1.00	5.00	4.42	0.758
2.6 System readiness	1.00	5.00	4.61	0.617
2.7 System stability	1.00	5.00	4.42	0.705
2.8 Delivery speed	1.00	5.00	4.27	0.736
2.9 Delivery time suitability	1.00	5.00	4.41	0.675
2.10 Delivered food accuracy	2.00	5.00	4.45	0.708
2.11 Delivered food quality	1.00	5.00	4.48	0.652
2.12 Complaint and refund system	1.00	5.00	4.15	0.971
2.13 Menu availability	1.00	5.00	4.21	0.870
2.14 Security systems	1.00	5.00	4.25	0.817
2.15 Information hiding	1.00	5.00	4.14	0.945
3. Product	1.00	5.00	4.12	0.645
3.1 Product variety	1.00	5.00	4.37	0.751
3.2 Product uniqueness	1.00	5.00	3.58	1.126
3.3 Brand reputation	1.00	5.00	4.40	0.806
4. Price	2.00	5.00	4.03	0.836
4.1 Price reasonability	1.00	5.00	4.02	0.957
4.2 Delivery fee suitability	1.00	5.00	4.17	0.937
4.3 Price comparison	1.00	5.00	3.90	1.061
5. Place	2.00	5.00	4.27	0.686
5.1 Service area	1.00	5.00	4.19	0.892
5.2 Service hour	2.00	5.00	4.35	0.694

Factor	Minimum	Maximum	Mean	Standard Deviation
6. Promotion	1.00	5.00	3.59	0.819
6.1 Sales promotion	1.00	5.00	4.33	0.875
6.2 Advertising	1.00	5.00	3.48	1.099
6.3 Celebrity and influencer endorsement	1.00	5.00	2.96	1.208
7. Physical Evidence	1.00	5.00	4.12	0.773
7.1 Application visualization	1.00	5.00	4.03	0.904
7.2 Application content	1.00	5.00	4.20	0.789
8. People	2.33	5.00	4.37	0.608
8.1 Driver willingness	1.00	5.00	4.42	0.732
8.2 Driver communication	1.00	5.00	4.45	0.730
8.3 Driver knowledge	1.00	5.00	4.24	0.775
9. Process	1.00	5.00	4.17	0.646
9.1 Uncomplicated process	1.00	5.00	4.53	0.642
9.2 Various method for order process	1.00	5.00	3.61	1.135
9.3 Various methods for payment process	1.00	5.00	4.37	0.780

Table 7: Basic statistic summary of variables

Table seven describes the minimum, maximum, mean, and standard deviation of respondent opinion on service quality, service marketing mix, and loyalty of food delivery service. Loyalty for food delivery service has an average agreement level around 4.07. When considering on factor group, the factors with the top three highest average agreement level in descending order are service quality with a mean of 4.38, people with a mean of 4.37, and place with a mean of 4.27. Meanwhile, the factors with the bottom three lowest average agreement level in ascending order are promotion with a mean of 3.59, price with a mean of 4.03 and product and physical evidence with a mean of 4.12.

For all thirty-four sub-factors of service quality and service marketing mix that could affect the loyalty, the factors with the top five highest average agreement level in descending order are system readiness with a mean of 4.61, transaction speed with a

mean of 4.59, uncomplicated process with a mean of 4.53, application platform with a mean of 4.52, and delivered food quality with a mean of 4.48, respectively. Conversely, the factors with the bottom five lowest average agreement level in ascending order are celebrity and influencer endorsement with a mean of 2.96, advertising with a mean of 3.48, product uniqueness with a mean of 3.58, various method for order process with a mean of 3.61, and price comparison with a mean of 3.90.

When considering for each main independent variable, this table illustrates that system readiness has the highest mean at 4.61 for service quality factor group, brand reputation has the highest mean at 4.40 for product factor group, price reasonability has the highest mean at 4.02 for price factor group, service hour has the highest mean at 4.35 for place factor group, ales promotion has the highest mean at 4.33 for promotion factor group, application content has the highest mean at 4.20 for physical evidence factor group, driver communication has the highest mean at 4.45 for people factor group, and uncomplicated process has the highest mean at 4.53 for process factor group.

CHAPTER 6 ESTIMATION RESULT

To test the hypothesis of this study, which is customer loyalty toward food delivery service in Thailand is positively influenced by service quality, multiple regression analysis is the tool used to estimate this relationship. Multiple regression analyzes the data obtained from the survey to consider the impact on customer loyalty from service quality, service marketing mix, and the most often used brand for Thai food delivery service with a level of significance at 0.10. Two main regression models, which are the model with a total of twelve main independent variables and the model with a total of thirty-eight sub-independent variables, are analyzed in this study. The estimation results of the multiple regression analysis are as follows.

First, the estimation result of the model with twelve main independent variables shown below.

$Customer\ Loyalty\ (Y_i)$

$$= \beta_0 + \beta_1(SERVICEQUALITY_i) + \beta_2(PRODUCT_i) + \beta_3(PRICE_i)$$
$$+ \beta_4(PLACE_i) + \beta_5(PROMOTION_i) + \beta_6(PHYSICALEVIDENCE_i)$$
$$+ \beta_7(PEOPLE_i) + \beta_8(PROCESS_i) + \beta_9(GRAB_i) + \beta_{10}(LINEMAN_i)$$
$$+ \beta_{11}(FOODPANDA_i) + \beta_{12}(GOJEK_i) + \epsilon_i$$

OLS Regression Model		
Variables	OLS I	OLS II
Intercept (constant)	0.855** (2.024)	1.230*** (4.498)
Service quality	0.195** (2.005)	0.158* (1.934)
Product	0.141** (2.264)	0.156*** (2.802)
Price	-0.048 (-1.038)	
Place	0.009 (0.162)	

OLS Regression Model		
Variables	OLS I	OLS II
Promotion	0.013 (0.286)	
Physical evidence	0.035 (0.658)	
People	0.211*** (3.090)	0.217*** (3.346)
Process	0.112* (1.668)	0.135** (2.168)
Grab	0.399 (1.301)	
Line Man	0.226 (0.717)	
Foodpanda	0.319 (0.999)	
Gojek	0.255 (0.727)	
Adjusted R square	0.271	0.273
Observations	310	310
*** indicates at 1 percent significant level ** indicates at 5 percent significant level * indicates at 10 percent significant level		

Table 8: Multiple regression analysis result of the model with twelve main independent variables

The table above shows the result of the two models. For the first model, all independent variables consisting of service quality, product, price, place, promotion, physical evidence, people, process, and the most often used brand containing Grab, Line man, Foodpanda, and Gojek are included. The result illustrates that the adjusted R square equal to 0.271. This means that 27.1 percent of customer loyalty for food delivery service is explained by twelve independent variables, but 72.9 percent remains unexplained. When considering the p-value of each variable, the variables that can significantly affect loyalty must have a p-value less than a significance level at 0.10.

Accordingly, it can be concluded that customer loyalty is significantly influenced by four variables, which are service quality at 0.05 significant level, product at 0.05 significant level, people at 0.01 significant level, and process at 0.10 significant level. All four variables have a positive relationship with loyalty. However, among the four variables, the people variable has the most powerful effect around 0.211 on customer loyalty, followed by service quality at 0.195, product at 0.141, and process at 0.112.

The first model does not have a multicollinearity problem, the correlation between independent variables is smaller than 0.8, tested by Pearson's correlation coefficient. Therefore, the second model is developed by omitting the insignificant variables from the first model, which are price, place, promotion, physical evidence, and the most often used brand containing Grab, Line man, Foodpanda, and Gojek. The result shows that the adjusted R square equal to 0.273. This means that 27.3 percent of customer loyalty for food delivery service is explained by service quality, product, people, and process, but 72.7 percent remains unexplained. This model can explain the customer loyalty of food delivery service better than the first model because the adjusted R square is higher, and it also presents that the insignificant variables that are eliminated from the model are not relevant to loyalty. After considering the p-value of each variable, it found that customer loyalty is significantly and positively contributed by all of four variables, which are service quality at 0.10 significant level, product at 0.01 significant level, people at 0.01 significant level, and process at 0.05 significant level. For this model, the people variable still has the strongest effect on loyalty about 0.217, followed by service quality at 0.158, product at 0.156, and process at 0.135. Moreover, to prevent the occurrence of multicollinearity problem, there is a correlation among the independent variables at a relatively high level causing the variable is not independent of each other, all variables from second model are tested by Pearson's correlation coefficient. The testing found that the correlation value of each variable is not greater than 0.80, which means all variables are independent of each other. Also, Breusch-Pagan's test is applied to investigate the heteroskedasticity problem, the error variance is not constant. The hypothesis of this test is there is heteroskedasticity. The model has a p-value of 0.31, which is greater than the significance level at 0.10. Therefore, the hypothesis is rejected, meaning there is no heteroskedasticity.

Refer to the result, the service quality factor has a p-value of 0.054 that is less than the 0.10 significance level. Therefore, the hypothesis, which is customer loyalty toward food delivery service in Thailand is positively influenced by service quality, is not rejected in this study. It can be summarized that service quality is significantly and positively related to customer loyalty for food delivery service with a level of significance at 0.10. Service quality plays an important role for every service business to increase customer satisfaction; therefore, the main players in the food delivery service market are trying to keep their customer base by continually improving the service quality. Most customers expect a better quality of service. This will make them more satisfied with the service, and there will be more frequent use of the service. This result is consistent with the study of Leo, Purwaningsih, Setiawati and Suhartanto (2020), which found that customer loyalty of online food delivery service business in Indonesia is positively determined by service quality. Good service quality tends to satisfy customers and make customers loyal. Moreover, this outcome also aligns with the study of Lee and Wong (2016), which provided that service quality is the important factor that positively influences the loyalty for mobile commerce in Malaysia. Customer loyalty can be influenced by service quality through a mediator like customer satisfaction.

Furthermore, this analysis also provides evidence of a positive and significant relationship between other independent variables and customer loyalty, which are product, people, and process. Customers are more likely to use the service from the service provider who can offer products better suited to customer needs. Moreover, food delivery is a service business with relatively low customer interaction. The driver becomes the only one who directly communicates with the customer. Most customers would like to receive good service from the driver and this can increase customer satisfaction and loyalty. Besides, most customers would like to use the service from the service provider that provides an uncomplicated and convenient process. The process, which is easy to use and does not take a long time, can attract customers to use it again in the future. This conclusion is in accordance with the study of Khatrine and Krisnanto (2016), which found that customer loyalty is directly influenced by product, people, and process for electronic commerce business in Indonesia. When customers are

satisfied with what the company offers, customers tend to purchase goods and services repeatedly and recommend the company to others.

Second, the estimation result of the model with thirty-eight sub-independent variables shown below. This model provides a more evident analysis of the sub-factors that affect loyalty.

$Customer\ Loyalty\ (Y_i)$

$$= \beta_0 + \beta_{101}(INS_i) + \beta_{102}(INA_i) + \beta_{103}(APP_i) + \beta_{104}(TRS_i) + \beta_{105}(TRA_i)$$

$$+ \beta_{106}(SYR_i) + \beta_{107}(SYS_i) + \beta_{108}(DES_i) + \beta_{109}(DTS_i) + \beta_{110}(DFA_i)$$

$$+ \beta_{111}(DFQ_i) + \beta_{112}(CRS_i) + \beta_{113}(MEA_i) + \beta_{114}(SES_i) + \beta_{115}(INH_i)$$

$$+ \beta_{201}(PRV_i) + \beta_{202}(PRU_i) + \beta_{203}(BRR_i) + \beta_{301}(PRR_i) + \beta_{302}(DFS_i)$$

$$+ \beta_{303}(PRC_i) + \beta_{401}(SEA_i) + \beta_{402}(SEH_i) + \beta_{501}(SAP_i) + \beta_{502}(ADV_i)$$

$$+ \beta_{503}(CIE_i) + \beta_{601}(APV_i) + \beta_{602}(APC_i) + \beta_{701}(DRW_i) + \beta_{702}(DRC_i)$$

$$+ \beta_{703}(DRK_i) + \beta_{801}(UNP_i) + \beta_{802}(VOP_i) + \beta_{803}(VPP_i) + \beta_{901}(GRAB_i)$$

$$+ \beta_{902}(LINEMAN_i) + \beta_{903}(FOODPANDA_i) + \beta_{904}(GOJEK_i) + \varepsilon_i$$

OLS Regression Model		
Variables	OLS I	OLS II
Intercept (constant)	0.631 (1.362)	1.350*** (4.737)
Information searching (INS)	0.111* (1.796)	0.039 (0.772)
Information accuracy (INA)	0.038 (0.698)	
Application platform (APP)	0.066 (0.988)	
Transaction speed (TRS)	0.011 (0.143)	
Transaction accuracy (TRA)	0.056 (0.987)	
System readiness (SYR)	0.119 (1.632)	
System stability (SYS)	0.058 (0.939)	

OLS Regression Model		
Variables	OLS I	OLS II
Delivery speed (DES)	-0.044 (-0.673)	
Delivery time suitability (DTS)	0.132* (1.912)	0.126** (2.443)
Delivered food accuracy (DFA)	-0.024 (-0.427)	
Delivered food quality (DFQ)	-0.088 (-1.494)	
Complaint and refund system (CRS)	-0.053 (-1.297)	
Menu availability (MEA)	0.023 (0.496)	
Security systems (SES)	0.039 (0.632)	
Information hiding (INH)	0.001 (0.020)	
Product variety (PRV)	-0.025 (-0.463)	
Product uniqueness (PRU)	0.032 (0.930)	
Brand reputation (BRR)	0.133*** (2.814)	0.191*** (4.810)
Price reasonability (PRR)	0.031 (0.648)	
Delivery fee suitability (DFS)	0.081* (1.749)	0.083** (2.330)
Price comparison (PRC)	-0.066 (-1.502)	
Service area (SEA)	-0.001 (-0.027)	
Service hour (SEH)	0.018 (0.303)	
Sales promotion (SAP)	-0.014 (-0.293)	
Advertising (ADV)	-0.013 (-0.353)	

OLS Regression Model		
Variables	OLS I	OLS II
Celebrity and influencer endorsement (CIE)	0.036 (1.047)	
Application visualization (APV)	0.051 (1.034)	
Application content (APC)	-0.047 (-0.751)	
Driver willingness (DRW)	0.072 (1.151)	
Driver communication (DRC)	0.036 (0.576)	
Driver knowledge (DRK)	0.122** (2.503)	0.191*** (4.557)
Uncomplicated process (UNP)	0.013 (0.186)	
Various method for order process (VOP)	0.034 (1.034)	
Various methods for payment process (VPP)	0.017 (0.337)	
Grab	0.325 (1.010)	
Line man	0.205 (0.622)	
Foodpanda	0.226 (0.669)	
Gojek	0.202 (0.556)	
Adjusted R square	0.284	0.237
Observations	310	310
*** indicates at 1 percent significant level ** indicates at 5 percent significant level * indicates at 10 percent significant level		

Table 9: Multiple regression analysis result of the model with thirty-eight sub-independent variables

The table above represents the result of the two models. For the first model, all thirty-eight sub-independent variables comprising information searching (INS), information accuracy (INA), application platform (APP), transaction speed (TRS), transaction accuracy (TRA), system readiness (SYR), system stability (SYS), delivery speed (DES), delivery time suitability (DTS), delivered food accuracy (DFA), delivered food quality (DFQ), complaint and refund system (CRS), menu availability (MEA), security systems (SES), information hiding (INH), product variety (PRV), product uniqueness (PRU), brand reputation (BRR), price reasonability (PRR), delivery fee suitability (DFS), price comparison (PRC), service area (SEA), service hour (SEH), sales promotion (SAP), advertising (ADV), celebrity and influencer endorsement (CIE), application visualization (APV), application content (APC), driver willingness (DRW), driver communication (DRC), driver knowledge (DRK), uncomplicated process (UNP), various method for order process (VOP), various methods for payment process (VPP), and the most often used brand containing Grab, Line man, Foodpanda, and Gojek are included. The result shows that adjusted R square equal to 0.284. This means that 28.4 percent of customer loyalty for food delivery service is explained by thirty-eight independent variables, but 71.6 percent remains unexplained. The adjusted R square of the model with sub-independent variable is higher than the model with the main independent variable; in other words, this model can explain customer loyalty better than the previous one. From the result, there are five variables that have a p-value less than a significance level at 0.10. Consequently, customer loyalty is significantly determined by these five variables, which are information searching from service quality factor group at 0.10 significant level, delivery time suitability from service quality factor group at 0.10 significant level, brand reputation from product factor group at 0.01 significant level, delivery fee suitability from price factor group at 0.10 significant level, and driver knowledge from people factor group at 0.05 significant level. All five variables have a positive effect on loyalty. The most dominant variable affecting loyalty is brand reputation at 0.133, followed by delivery time suitability at 0.132, driver knowledge at 0.122, information searching at 0.111, and delivery fee suitability at 0.081.

The first model does not have a multicollinearity problem, the correlation between variables is smaller than 0.8, tested by Pearson's correlation coefficient. Consequently, the second model is established by omitting the insignificant variables from the first model. This model, therefore, consists of five independent variables, namely information searching, delivery time suitability, brand reputation, delivery fee suitability, and driver knowledge. From the result, when considering the p-value of each variable, it notices that customer loyalty is significantly and positively determined by only four variables, which are delivery time suitability at 0.05 significant level, brand reputation at 0.01 significant level, delivery fee suitability at 0.05 significant level, and driver knowledge at 0.01 significant level. While information searching does not significantly affect customer loyalty. For this model, brand reputation and driver knowledge are the most influential variables that have effect on loyalty at 0.191 followed by delivery time suitability at 0.126, and delivery fee suitability at 0.083. In addition, the result describes that adjusted R square equal to 0.237. This means that 23.7 percent of customer loyalty for food delivery service is explained by these independent variables, but 76.3 percent remains unexplained. Moreover, the model has been tested by Pearson's correlation coefficient to examine the multicollinearity problem. The result shows that the correlation value of each variable is not greater than 0.80, meaning there is no multicollinearity problem. Also, Breusch-Pagan's test is used to check the heteroskedasticity problem. The model has a p-value of 0.55, which is greater than a significance level at 0.10. Therefore, the hypothesis, there is heteroskedasticity, is rejected, meaning there is no heteroskedasticity problem.

According to the result, the delivery time suitability variable has a p-value of 0.015 that is less than the 0.10 significance level. Therefore, the hypothesis of this study is not rejected that mean delivery time suitability from service quality factor group is a significant and positive contributor to customer loyalty for food delivery service with a level of significance at 0.05. Usually, the customers have a period of delivery time in mind. The delivery time, which is relative to the distance and the time stated in the application, is what most customers expect. The service provider who is able to consistently respond this to their customers can make the customers satisfied and trust until the customers choose to use the service from that service provider continuously.

Food delivery services are designed to create time savings for customers. If the delivery time is longer than customer expectations, customer dissatisfaction will occur immediately.

On the other hand, other variables in service quality factor group consisting of information searching, information accuracy, application platform, transaction speed, transaction accuracy, system readiness, system stability, delivery speed, delivered food accuracy, delivered food quality, complaint and refund system, menu availability, security systems, and information hiding have a p-value more than 0.10 significance level. Therefore, the hypothesis is rejected, which means customer loyalty to food delivery service is not significantly determined by the variables from service quality group mentioned above. The factors related to the performance and function of the application and system do not affect the loyalty at all because the customers probably do not spend a long time with the application for each time to use the service. As a result, customers do not pay much attention to these matters. Furthermore, the food delivery service is simply a middleman between the restaurant and the customers. Customers may not expect much about the quality and accuracy of the food from food delivery service because the key person to deal with this is the restaurants.

Additionally, this analysis also provides evidence of a positive and significant relationship between other sub-independent variables and customer loyalty, which are brand reputation, delivery fee suitability, and driver knowledge. Since food delivery service is a business where customers do transactions primarily through the application. Reliability and trust are important to the customer consideration. A famous and widely recognized service provider become the top choice of the customers to use the service continually because customers think that this service provider is likely to be highly reliable. Moreover, customers often select for service provider that offer a reasonable delivery fee. Many times, customers will not use the service from a service provider that has too high a delivery fee even if the service provider may have a wider variety of restaurants or menus or faster delivery. Providing suitable delivery fee which corresponds to the distance and expectations of the customer will keep the customer with the brand in long term. In addition, most customers expect to receive the service from a knowledgeable driver about locations and routes. This expert driver can create

more convenience and satisfaction for the customers because customers do not have to spend time answering questions about locations and directions. Furthermore, the analysis result provides that sales promotion is not associated with customer loyalty. Because each brand of food delivery service is completely replaceable, sales promotion is used to encourage customers to use the service. The customer will continue to use the service if the service provider has a good sales promotion, but whenever another service provider offers a better sales promotion, customers will turn to use the service from that service provider immediately. Sale promotion can generate an only short-term relationships with customers.

CHAPTER 7 CONCLUSION AND POLICY IMPLICATION

The study of service quality affecting customer loyalty to food delivery service in Thailand is the research to investigate the positive relationship of service quality and customer loyalty by conducting the survey to collect the primary data from 310 food delivery service customers who was born between 1980 to 1996, the Generation Y, and live in Bangkok and vicinity and using multiple regression analysis to interpret the data.

According to the result, when considering the model with twelve main independents variables, it found that customer loyalty for food delivery service is significantly and positively contributed by people, service quality, product, and process, respectively. Service quality is not the only factor that affects customer loyalty, but people, product, and process also play a crucial role in making customers more loyal to the service provider. Providing the good and different product with the higher service quality and effective process that satisfy customer needs and wants through the efficient driver is what the customers want from service providers. If the service provider can do these things, customer loyalty will increase. In addition, when considering the model with thirty-eight sub-independents variables, it found that customer loyalty for food delivery service is significantly and positively affected by brand reputation, driver knowledge, delivery time suitability, and delivery fee suitability, respectively. The reputation of the brand can guarantee the credibility of the service provider to the customers. Customers are more confident to use the services from reputable service providers and will recommend this service provider to others. The more the driver knows about the route and location, the service will be smoother. Customers will not be bothered to be asked about directions. As a result, customers are more satisfied and willing to use the service regularly. Delivery time and delivery fee should be reasonable and consistent with the distance and the expectation of the customer. Customers tend to avoid the service provider that offer too long delivery times or too high delivery fee. A service provider who can respond well will receive the opportunity from the customers to continuously use their services.

Policy implication to increase customer loyalty for food delivery service provider can be proposed as follow. In terms of service quality, the service provider

should improve the performance of the application, including the stability and readiness of the system to better serve the customers and make the customer more convenient. Moreover, the service provider should have a high-security system to protect the customer's personal information and build confidence among customers to use the service. Besides, the service provider should regularly enhance the efficiency of delivery in terms of quality, accuracy, speed, and suitability because delivery is the core of this service. Regarding product, the service provider should expand the variety of restaurants and menus to meet the needs of different customers completely, create a special menu by collaborating with the famous restaurant to differentiate from other service providers, and keep their reputation well known through various marketing tools. For people, the service provider should provide the training and guidance in every scope of work to establish proper service standards for drivers which they have to deliver to customers and make the customer impress. Also, the drivers should be evaluated for service improvement. In view of process, the service provider should provide a user-friendly service process that all customers can easily use with time-saving and offer the various method of order and payment process.

In order to suggest the service provider in more details, this study presents recommendations for each sub-factor that can build customer loyalty. Firstly, the service provider should make the brand more recognizable and reputable through various marketing tools such as advertising, event, celebrity and influencer endorsement, and sales promotion. Although the result of this study concluded that sales promotion, advertising, and celebrity and influencer endorsement do not affect customer loyalty, these tools can build more brand awareness and encourage more customers to use the service. Having a good reputation will strengthen the confidence of customers. When customers have more trust, customers will use the service continuously. Secondly, the service provider should recruit the driver with the knowledge of routes and locations. In addition, training on locations and routes may be provided to the drivers to make the driver more knowledgeable. Besides, the service provider may create a function that the drivers can define areas where they are inconvenient or inexperienced to take orders. Thirdly, the service provider should set the delivery time shown on the application to suit the distance or situation. When there

is a situation that may increase the delivery time, for example, there are a lot of queues at the restaurant, the service provider should immediately notify the customer of the reason for the delay. Moreover, the service provider should review a function that allows the driver to accept more than one order when the delivery point is in the same area because the suitability of delivery time of the customer usually does not include the time to deliver an order to another customer. This function may help drivers earn more but make customers less satisfied because customers have to wait longer for the reason that is not related to their order in any way. Lastly, the service provider should offer a suitable delivery fee to customers. Therefore, delivery fee determination should be in accordance with the distance between the restaurant and the delivery point. Also, the delivery fee should not be too expensive because customers always compare the delivery fee with other brands, and value for money is what customers expect. As a result, the service provider should usually explore delivery fees from other brands in the market, including customer opinions to improve this fee to gain a more competitive advantage.

However, there are some limitations to this study. The number of samples is relatively small, and the sample group is only from the Generation Y food delivery service customers who live in Bangkok and vicinity. Moreover, there probably be other factors that could influence customer loyalty and are not considered in this study. The suggestions for further study are as follow. Firstly, the number of samples should be increased to reduce the errors from analysis as much as possible. Secondly, the sample group should be various to collect information and opinions for more effective inference. Thirdly, the tools used to collect data should be added, such as in-depth interviews and focus groups, to gain more insights and specific information. Lastly, other factors, such as demographic factors, should be considered to be one of the factors that could affect customer loyalty.

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APPENDIX

Questionnaire

The service quality affecting customer loyalty to food delivery service in Thailand

      This questionnaire is the part of individual study of master's degree students, business and managerial economics program (MABE), faculty of economics, Chulalongkorn university with the aim of studying the service quality affecting customer loyalty to food delivery service in Thailand. Respondent's information will be kept confidential for the research purpose only. The questionnaire contains 5 important parts as follows.

- Part 1 Screening Question
- Part 2 Demographic Information
- Part 3 Customer behavior to food delivery service
- Part 4 Service quality and service marketing mix affecting customer loyalty
- Part 5 Customer loyalty on food delivery service

Part 1: Screening Question

Q1.1: Have you ever used food delivery service through online application?

[   ] Yes   [   ] No (end of questionnaire)

Q1.2: Is your age in the range of 24-40 years (born in 1980-1996)?

[   ] Yes   [   ] No (end of questionnaire)

Q1.3: Do you live in Bangkok and vicinity?

[   ] Yes   [   ] No (end of questionnaire)

Part 2: Demographic Information

Q2.1 What is your gender?

[   ] Male   [   ] Female

Q2.2 What is your highest level of education?

[   ] Below bachelor degree [   ] Bachelor degree or equal [   ] Above bachelor degree

Q2.3 What is your average monthly income?

[   ] Less than or equal to 20,000 baht [   ] 20,001-40,000 baht [   ] 40,001-60,000 baht

[   ] 60,001-80,000 baht   [   ] More than 80,000 baht

Part 3: Customer behavior to food delivery service

Q3.1 Which brands of food delivery service have you ever used?

[ ] Food Panda   [ ] Gojek (Get)   [ ] Grab

[ ] Line Man   [ ] Other (please specify…………….)

Q3.2 Which brands of food delivery service do you use most often?

[ ] Food Panda   [ ] Gojek (Get)   [ ] Grab

[ ] Line Man   [ ] Other (please specify…………….)

Q3.3 How often do you order food through food delivery service?

[ ] 1-2 time per week   [ ] 3-4 time per week

[ ] 5-6 time per week   [ ] More than 6 times per week

Q3.4 How much do you spend on average for each order?

[ ] Less than or equal to 100 baht   [ ] 101-200 baht

[ ] 201-300 baht   [ ] More than 300 baht

Part 4: Service quality and service marketing mix affecting customer loyalty

In this part, please think about the online food delivery service brands you use most often to evaluate the service quality, product, price, place, promotion, physical evidence, people, and process that could affect your loyalty based on your opinion with the following evaluation criteria.

- Strongly agree is 5
- Agree is 4
- Neutral is 3
- Disagree is 2
- Strongly disagree is 1

Item	Level of Agreement				
	1 (Strongly disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly agree)
Service Quality					
Q4.1 Application is easy to search the information					
Q4.2 Application always shows results match what is searched.					
Q4.3 Application has a user-friendly platform					
Q4.4 Application can complete the transaction quickly					
Q4.5 Order status is shown and updated accurately in every transaction					
Q4.6 Application is always ready to use					
Q4.7 Application is consistently stable and does not crash during use					
Q4.8 Quick delivery					
Q4.9 Delivery within the suitable time frame					
Q4.10 The delivered food is exactly as ordered					
Q4.11 The delivered food is in good condition					
Q4.12 Application has a clear complaint and refund system when customers don't get the food as ordered.					
Q4.13 Always have the items as stated on the application					

Item	Level of Agreement				
	1 (Strongly disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly agree)
Service Quality					
Q4.14 Application has security systems that protect personal information such as credit card number					
Q4.15 Application does not publish customer information externally					
Product					
Q4.16 Variety of restaurant and menu					
Q4.17 Specialty and uniqueness of restaurant and menu					
Q4.18 Online food delivery brand is well-known					
Price					
Q4.19 Food price is reasonable and fairness					
Q4.20 Delivery fee is suitable for the distance					
Q.4.21 Price is not expensive than other service providers.					
Place					
Q4.22 Variety of service area					
Q4.23 Service hour matches with the customer needs					
Promotion					
Q4.24 Sales promotion is various and attractive such as discount, buy 1 get 1 free, point redeem					
Q4.25 Advertising is interesting					

Item	Level of Agreement				
	1 (Strongly disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly agree)
Promotion					
Q4.26 Endorsement by famous celebrity and social influencer					
Physical Evidence					
Q4.27 Application has good visualization					
Q4.28 Application has up to date content					
People					
Q4.29 Driver is willing and enthusiastic for service					
Q4.30 Driver politely communicate and has good manner					
Q4.31 Driver has more knowledge on the route					
Process					
Q4.32 Every process of service from the beginning to the ending is not complicated					
Q4.33 Order process is able to share order with others					
Q4.34 Payment process has various payment method					

Part 5: Customer loyalty on online food delivery service

In this part, please think about the online food delivery service brands you use most often to evaluate your loyalty; loyalty is the behavior and feeling of customers to a particular brand such as high preference, top of mind brand, repeat purchase, and recommendation based on your opinion with the following evaluation criteria.

- Strongly agree is 5
- Agree is 4
- Neutral is 3
- Disagree is 2
- Strongly disagree is 1

Item	Level of Agreement				
	1 (Strongly disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly agree)
Q5.1 When you want to order food, you always think of this brand of online food delivery service first					
Q5.2 Your preference for this brand of online food delivery service would not change over time					
Q5.3 You repeatedly use this brand of online food delivery service					
Q5.4 You will recommend this brand of online food delivery service to others when you are satisfied and have a positive experience					

VITA

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