Determinant of Influencing Customer Loyalty and Repurchase Intention toward Mobile Application Food Delivery Service in Bangkok

Tinnapat Donsuchit [1*]; Chompu Nuangjamnong [2]

[1]Master of Business Administration, Graduate school of Business and Advanced Technology Management, Assumption University of Thailand, Bangkok, 10240, Thailand
* Corresponding author. Email: tinnapat_sprite@hotmail.co.th
[2]Lecturer, Innovative Technology Management Program, Graduate School of Business and Advanced Technology Management, Assumption University of Thailand. Email: chompunng@au.edu

Abstract

The purpose of this research is to investigate the influence of E-service quality, perceived value, and customer satisfaction on customer loyalty and the influence of customer loyalty on repurchase intention. This research are using secondary data analysis and an archival study approach to investigate the factors that influence customer loyalty and repurchase intention. The data was gathered from 385 customers using a mobile application food delivery service. Moreover, to construct a new conceptual framework, this research adopted four frameworks from previous research. This research examined the factors that influence customer loyalty and the influence of customer loyalty on repurchase intention. The research's findings revealed that E-service quality has an impact on perceived value and customer satisfaction. Furthermore, E-service quality, perceived value, and customer satisfaction affected customer loyalty. Finally, customer loyalty has an influence on repurchase intention.

1. Introduction

This study examines relevant influencing factors of customer loyalty and repurchase intention toward mobile application in food delivery services. In recent years, the majority of people have used online food delivery services, particularly through a mobile application. People usually use food delivery application because it is a convenient and have a variety of option to choose in many restaurants. Moreover, they do not have to go out and wait for the food at the restaurant, which is time-wasting.

Over the last few years, food delivery application users have grown at an annual rate of 8-10% approximately, and the COVID-19 pandemic accelerated the growth of food delivery application users by restricting Thai people from dining in restaurants (Sirikeratikul, 2020). Due to the growing number of smartphones and internet users in Thailand, the number of mobile food delivery application users are significantly increased. According to Sirikeratikul (2020), Food delivery services are becoming increasingly popular among Bangkok residents, particularly among time-conscious office employees and middle-class households.

Repurchase intention is defined as a consumer's choice to purchase a product or a use service from the same company in the future. According to Kumar and Anjaly (2017), Customers evaluate e-commerce platforms' efficiency after buying their products in online shopping and then make repurchase selections based on that assessment. The repurchase intention is significantly crucial to assess an organization's success and

profitability, particularly on online platforms that have less consumer engagement, which is hard to determine whether the customer has a willingness to repurchase with the company or not.

Customer loyalty is defined as satisfied clients who have a positive relationship with the company, which are likely to trust the company that, lead to buying goods and services repeatedly from the same company rather than the competitor company. The concept of loyal clients as a people who consistently purchase products and, or services in a particular period is behavioral loyalty (Suhartanto et al., 2019). Customer loyalty is essential for a variety of reasons, customer loyalty can keep the customer engaged with the organization, and these customers can help spread word of mouth about the organization that can help attract a new customers like friends and family. Moreover, Customer loyalty can also encourage the consumer to buy from same company instead of a competitor that provides a similar product or service. Customer loyalty can affect and determine the repurchase intention of the consumer. As a result, the purpose of this study is to investigate the factors that affected customer loyalty and repurchase intention toward mobile application food delivery service in Bangkok. The factors influencing that impact customer loyalty are E-service quality, customer satisfaction, and perceived value. Moreover, customer loyalty is a factor that has effect on repurchase intention. Therefore, this study is to explore the related factors that are affecting customer loyalty and repurchase intention of customers using mobile application food delivery services in Bangkok.

2. Literature Review and Hypotheses Development

2.1 E-service quality, Customer satisfaction, Customer Loyalty, and Perceived value

E-service quality is crucial in retaining client loyalty, particularly in company ecosystems with a high level of online engagement (Amin, 2016). The previous research confirms the importance of e-service quality in increasing customer loyalty, particularly among online meal delivery service clients (Hernando & Gunawan, 2021). According to Suhartanto et al. (2019), this previous study discovered a significant impact of e-service quality on customer loyalty. Consumer loyalty has been proved to be a significant factor of e-service quality, which is critical for the success of any company, regardless of industry (Minimol, 2018). Customer desire to refer will be positively influenced by service quality, and recommendation intention is a key indicator of customer loyalty (Parasuraman et al., 2005; Nuangjamnong, 2021).

Customer satisfaction is a measure of a customer's perception of the likelihood that service will result in a favorable experience (Udo et al., 2010). Service quality must be sustained to provide perceived value and strong customer satisfaction to boost a company's competitiveness and make it sustainable (Sidharta et al., 2021). The overall quality of an e-service has an impact on both perceived value and customer satisfaction (Hapsari et al., 2016). Moreover, the quality of e-services has a direct and indirect positive effect to customer satisfaction (Udo et al., 2010). Furthermore, based on online buying experiences in Taiwan, the impact of e-service quality on online loyalty and discovered that system quality and e-service quality had substantial effects on perceived value (Tsao et al., 2016; Chanthasaksathian & Nuangjamnong, 2021). As a result, to explore the impact of service quality on customer satisfaction, loyalty, and perceived value, the following research hypotheses are presented:

Hypothesis 1: There is significant influence of E-service quality on perceived value using mobile application in food delivery services.
Hypothesis 2: There is significant influence of E-service quality on customer satisfaction using mobile application in food delivery services.
Hypothesis 3: There is significant influence of E-service quality on customer loyalty using mobile application in food delivery services.

2.2 Perceived Value and Customer loyalty

The development of customers' perceived value initiatives is critical for attracting new consumers, developing and maintaining a good relationship with them, and establishing customer loyalty (Wang et al., 2004). Perceived value has been found to be a factor of consumer loyalty in previous studies (Nasution & Mavondo, 2008). As a result, it is a general belief that by increasing customers' perceived value among target

customers, there is a greater chance of increasing trust and commitment, which leads to increased customer loyalty (Javed & Cheema, 2017). The research hypothesis is as follows, based on the above discussion:

Hypothesis 4: There is significant influence of Perceived value on customer loyalty using mobile application in food delivery services.

2.3 Customer satisfaction and Customer loyalty

Satisfaction influences a user's behavior and evaluation of the service, which influencing loyalty (Zhang & Von Dran, 2000). Customer loyalty is established through the customer's constant satisfaction, which entails an emotional tie for both service providers and vendor (Alok & Srivastava, 2013). Customer satisfaction is an essential aspect in establishing a secure and solid relationship with the customer, ultimately leading to customer loyalty (Dominici & Guzzo, 2010). According to Abdullaeva (2020), the previous study shows that customer satisfaction and loyalty have a favorable relationship. In light of these data, the following research hypothesis is proposed:

Hypothesis 5: There is significant influence of customer satisfaction on customer loyalty using mobile application in food delivery services.

2.4 Customer loyalty and Repurchase intention

Repurchase intents reflect how likely a customer is to buy from the same company again (Seiders et al., 2005). This customer loyalty is crucial in gaining and sustaining a competitive advantage, and thus in making a repurchase decision (Chinomona & Dubihlela, 2014). The main determinant of repurchase intent was customer loyalty (Deng et al., 2010). Repurchase intention was proven to be significantly influenced by customer loyalty in previous studies (Frooghi, 2019; Savila et al., 2019). Customers became loyal to the service provider and as a result, it appears that loyalty leads to repurchase intent (Chinomona & Sandada, 2013). The following research hypothesis is proposed based on the foregoing:

Hypothesis 6: There is significant influence of customer loyalty on repurchase intention using mobile application in food delivery services.

2.5 Conceptual Framework

The conceptual framework is built using prior research literature reviews, existing literature, and theoretical concepts that describe the influence of variables such as E-service quality, perceived value, customer satisfaction, customer loyalty, and repurchase intention. This study's conceptual framework has been assembled. The first theoretical framework from E-service quality perceptions of millennials and non-millennials on online to offline delivery applications by (Zhuang et al., 2021). Hernando and Gunawan (2021) in Loyalty among online food delivery customers: Extended scale of e-service quality is the second theoretical framework. Customer Loyalty Analysis on Online Food Delivery Services by Sidharta et al. (2021) is the third theoretical framework. As a result, Figure 1 illustrates the conceptual framework of Determinants of Influencing Customer Loyalty and Repurchase Intention toward Mobile Application Food Delivery Service in Bangkok.
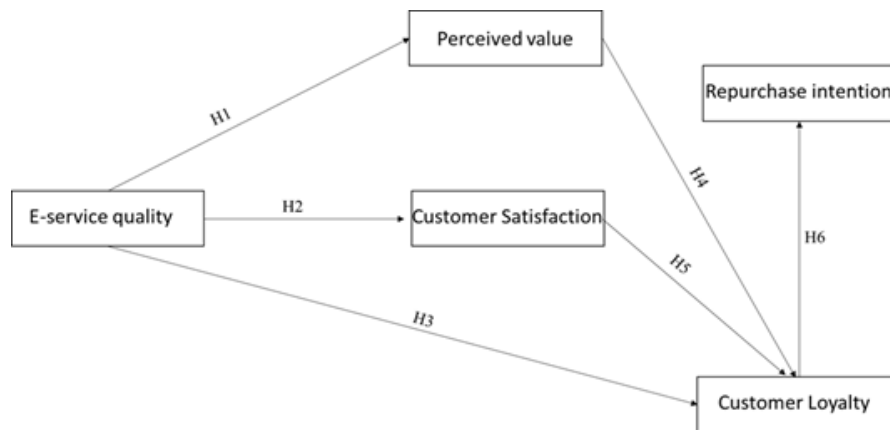
Figure 1. The Conceptual Framework
Source. Authors

3. Methods and Materials

The researcher used non-probability sampling method by using convenience sampling and snowball sampling to collect information as the respondents will be screened beforehand based on the research purpose. Researchers chose to adopt a non-probability sampling strategy in this research due to the limited time available and present situation that required social distancing. In this research, the target population is people who are living in Bangkok and have used the mobile application food delivery service. According to Worldpopulationreview.com (2021), the population of Bangkok is 10,722,815 people, which is the city that have highest population in Thailand. The sample size for this study is 385 Thai nationality respondents who live in Bangkok and have used mobile application of food delivery at least once. The questionnaire is organized into three parts, with a total of 28 questions relating to five research model variables, two items connected to screening questions, 20 questions related to measuring variables, and six items linked to demographic information. The researcher used five-points Likert Scale to assess respondent's attitude and their level of agreement towards each variable. The statistical level has been set as follow: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree. The researcher decided to run a pilot test with 50 people to see whether there were any discrepancies or flaws in the questionnaire's variables. Cronbach's alpha is one approach to quantify consistency, and it's used to evaluate the reliability of any measurement variable. According to the Cronbach's Alpha and Internal Consistency Rules, > 0.9 indicates excellent, 0.8 indicates good, 0.7 indicates acceptable, 0.6 indicates dubious, 0.5 indicates bad, and 0.5 indicates unsatisfactory (Cronbach, 1951).

Table 1. The Value of Each Item and Variable's Reliability Analysis in this Study

Variables/Measurement Items	Cronbach's Alpha	Strength of Association
E-Service Quality	.816	Good
Perceived Value	.799	Acceptable
Customer Satisfaction	.731	Acceptable
Customer loyalty	.922	Excellent
Repurchase intention	.858	Good

(n = 50)

4. Results

4.1 Descriptive Analysis of Demographic Data

The researchers evaluated demographic data of respondents who are using mobile application food delivery service in Bangkok using descriptive analysis in the SPSS program. The researcher collected

demographic information about gender, age, education level, current income per month, purchasing from food delivery on weekly basis, spending on food delivery per time. The researcher utilizes the descriptive analysis to explain the respondent's characteristics.

Gender: from the total of 385 respondents, male respondents accounted for 57.9 percent of the total 385 respondents, compared to 42.1 percent for female respondents. The results of respondents for male and female are 223 and 162 respectively. *Age:* the majority of respondent in this researcher is age between 20 – 35 years old with 298 respondents with 77.4 %, follow by 38 respondent age between 36-45 years old with 9.9%, after that 24 respondents age between 46 – 60 years with a percentage 6.2%, 15 respondents who are age under 20 years old with 3.9%, and the age group over 60 years old has the lowest percentage of respondents at 2.6% with 10 respondents. *Education level:* most of respondents in this survey have completed a Bachelor's Degree with a total of 264 respondents, accounting for 68.6%, followed by 90 respondents who have education level lower Bachelor's Degree with 23.4%, 29 respondents who have completed Master's Degree with a percentage of 7.5%, and lastly 2 respondents who have completed Ph.D. or higher with 0.5%. ***Current income per month;*** among all 385 respondents, 218 respondents with 56.6% have income between 20,001 – 50,000 baht per month, following by 133 respondents who have income lower than 20,000 baht per month with a percentage of 34.5%, 23 respondents have income between 50,001 – 80,000 baht, accounted for 6% percent, 7 respondents who have income more than 100,000 baht with 1.8%, and the lowest respondent who have income between 80,001 – 100,000 baht with the percentage by 1%. ***Purchasing from food delivery on weekly basis:*** from the total of 385 respondents, 156 respondents who purchase from food delivery 1-3 times per week with 40.5%, follow by 140 respondents who purchase from food delivery 4-6 times per week with a percentage of 36.4%, 61 respondents who purchase from food delivery 7-9 times per week, accounted for 15.8%, and the respondents who purchase more than 9 times per week has lowest percentage of respondents at 7.3% with 28 respondents. ***Spending on food delivery per time (approximately):*** the majority of respondent in this survey spending on food delivery around 100 – 400 baht with 239 respondent, which accounted for 62.1%, following by 88 respondents who spending less than 100 baht with 22.9%, 44 respondents who spending between 401 – 700 baht with a percentage of 11.4%, after that 13 respondents who spending about 701 – 1,000 baht with 3.4%, and lastly 1 respondents who spending more than 1,000 baht with 0.3%.

4.2 Mean and Standard Deviation for Descriptive Analysis

In this section, the summary of the Mean and Standard Deviation for each group variable, including E-service quality, perceived value, customer satisfaction, customer loyalty, and repurchase intention. According to Moidunny (2009), The range of 4.21 – 5.00 labeled as "Very high," 3.21 – 4.20 indicated as "high," 2.61 – 3.20 indicated as "medium," 1.81 – 2.60 indicated as "low," and 1.00 – 1.80 indicated as "very low"

Table 2. The Mean and Standard Deviation Results**.**

	Mean	Std. Deviation	Interpretation
E-service quality			
EQ1: Online food delivery application made it easy for me to find my desired needs.	4.10	0.896	High
EQ2: Easy to complete transaction via application	4.29	0.904	Very high
EQ3: Online food delivery application are always available.	4.24	0.919	Very high
EQ4: Application protects personal or confidential information	3.98	0.870	High
Perceived value			
PV1: The prices offered by the online food delivery application are affordable.	3.94	0.926	High
PV2: It is convenient to order through online food delivery application.	4.40	0.942	Very high
PV3: Transactions on online food delivery application have good value.	3.92	0.849	High

PV4: Overall, the use of online food delivery application delivers good value.	3.98	0.780	High
Customer satisfaction			
CS1:I am satisfied with the use of the online food delivery application	3.94	0.895	High
CS2: The experience when using the application is as expected.	4.40	0.897	High
CS3: The online food delivery application meets all my expectations.	3.92	0.859	High
Customer loyalty			
CL1: I would like to continue to use online food delivery application to order food.	4.34	0.913	Very high
CL2: I encourage others to use food delivery application	4.02	0.863	High
CL3: I introduce the food delivery app to others.	4.03	0.918	High
CL4: I say positive things about the preferred application.	3.79	0.877	High
CL5: I continue to order from the online food delivery application even if there is a price increase.	3.68	0.905	High
Repurchase intention			
RI1: I have intention to repurchase from this online food delivery application.	4.24	0.882	Very high
RI2: I expect to repurchase from this online food delivery application in the future.	4.39	0.930	Very high
RI3: It is likely that I will repurchase from this online food delivery application rather than the competitor.	3.99	0.837	High
RI4: I will be recommended online food delivery application that I use to other people.	4.22	0.911	Very high

Table 2 displays the means for each variable in the question, including E-service quality, perceived value, customer satisfaction, customer loyalty, repurchase intention. The highest mean of E-service quality was "Easy to complete transaction via application" which is equals 4.29. Moreover, the highest mean of perceived value was "It is convenient to order through online food delivery application" which is equals to 4.40. In addition, the highest mean of customer satisfaction was "The online food delivery application meets all my expectations" which is equals to 4.19. Furthermore, the highest mean of customer loyalty was "I would like to continue to use online food delivery application to order food" which is equals to 4.34. Lastly, the highest mean of repurchase intention was "I expect to repurchase from this online food delivery application in the future" which is equals to 4.39.

4.3 Hypothesis Testing Results
4.3.1 Result of Simple Linear Regression for Hypotheses 1 and 2
Based on research hypothesis 1: there is a significant influence of E-service quality on perceived value using Mobile applications in food delivery services, therefore, the statistical hypothesis has been defined for hypothesis testing as detailed below.

H1n (null hypothesis): *E-service quality has no significant influence on perceived value using mobile applications in food delivery services.*
H1a (alternative hypothesis): *E-service quality has significant influence on perceived value using mobile applications in food delivery services.*

Table 3 shows that simple linear regression was conducted to examine whether E-service quality (H_{1n}) significantly influences on perceived value. The result from hypothesis 1 shows that the significant level was 0.000, which was less than 0.05. The null hypothesis was rejected. Thus, the result can be concluded that perceived value is affected by E-service quality. The result of regression showed that the model explained

77.3% of the variance and that the model was significant, $p < 0.05$. The R-square was 0.773 at a 95% confidence level, which indicated that E-service has a significant impact on perceived value.

Table 3. Simple Linear Regression Analysis Summary for Hypotheses 1

Variables	B	SE B	β	t-value	Sig.
H1: E-service quality	0.865	0.024	0.879	36.164	0.000

Noted. *$R^2 = 0.773$, Adjusted $R^2 = 0.773$, *$p < 0.05$. Dependent Variable = Perceived value*

Based on research hypothesis 2: there is significant influence of E-service quality on customer satisfaction using mobile application in food delivery services, therefore, the statistical hypothesis has been defined for hypothesis testing as detailed below.

H2n *(null hypothesis)* : *E-service quality has no significant influence on customer satisfaction using mobile applications in food delivery services.*
H2a *(alternative hypothesis)* : *E-service quality has significant influence on customer satisfaction using mobile applications in food delivery services.*

Table 4 shows that simple linear regression was conducted to examine whether E-service quality (H_{2n}) significantly influences on customer satisfaction. The result from hypothesis 2 indicated that the significant level was 0.000, which was less than 0.05. The null hypothesis was rejected. Thus, the result can be concluded that customer satisfaction is affected by E-service quality. The result of regression showed that the model explained 68.3% of the variance and that the model was significant, $p < 0.05$. The R-square was 0.683 at a 95% confidence level, which indicated that E-service has a significant impact on customer satisfaction.

Table 4. Simple Linear Regression Analysis Summary for Hypotheses 2

Variables	B	SE B	β	t-value	Sig.
H2: E-service quality	0.874	0.030	0.827	28.735	0.000

Noted. *$R^2 = 0.683$, Adjusted $R^2 = 0.682$, *$p < 0.05$. Dependent Variable = Customer satisfaction*

4.3.2 Result of Multiple Linear Regression for Hypotheses 3, 4, and 5

Based on research hypotheses 3, 4 and 5:
Hypothesis 3: *There is significant influence of E-service quality on customer loyalty using mobile application in food delivery services.*
Hypothesis 4: *There is significant influence of Perceived value on customer loyalty using mobile application in food delivery services.*
Hypothesis 5: *There is significant influence of customer satisfaction on customer loyalty using mobile application in food delivery services.*

Therefore, the statistical hypotheses have been defined for hypothesis testing as detailed below.
H *(null hypothesis)* : *E-service quality (H3n), perceived value (H4n), and customer satisfaction (H5n) have no significant influence on customer loyalty using mobile applications in food delivery services.*
H *(alternative hypothesis)* : *E-service quality (H3a), perceived value (H4a), and customer satisfaction (H5a) have no significant influence on customer loyalty using mobile applications in food delivery services.*

Table 5 shows that a multiple linear regression was used to see if E-service quality (H_{3n}), perceived value (H_{4n}) and customer satisfaction (H_{5n}) significantly predict customer loyalty. The result in table 5 shows that the significant level of all hypotheses E-service quality (H_{3n}), perceived value (H_{4n}), and customer satisfaction (H5n) was less than 0.05. Thus, the null hypotheses are rejected. Moreover, R-square was 0.713 at a 95% confidence level indicating that the independent variables (E-service quality, perceived value, and customer satisfaction) can justify dependent variables (customer loyalty) by 71.3% approximately.

Table 5. Multiple Linear Regression Analysis Summary for Hypotheses 3,4, and 5

Variables	B	SE B	β	t	Sig.	VIF
H3: E-service quality	0.256	0.062	0.247	4.118	0.000*	4.792
H4: Perceived value	0.434	0.070	0.416	6.162	0.000*	5.951

H5: Customer satisfaction	0.219	0.055	0.224	3.964	0.000*	4.254

Note. $R^2 = 0.713$, Adjusted $R^2 = 0.711$, *p < 0.05   Dependent Variable = Customer loyalty

4.3.3 Result of Simple Linear Regression for Hypotheses 6

Based on research hypothesis 6: there is significant influence of customer loyalty on repurchase intention using mobile application in food delivery services, therefore, the statistical hypothesis has been defined for hypothesis testing as detailed below.

H6n (null hypothesis): *Customer loyalty has no significant influence on repurchase intention using mobile applications in food delivery services.*
**H6a** (alternative hypothesis): *Customer loyalty has significant influence on repurchase intention using mobile applications in food delivery services.*

Table 6 shows that simple linear regression was conducted to examine whether customer loyalty (H_{6n}) significantly influences on repurchase intention. The result from hypothesis 6 indicated that the significant level was 0.000, which was less than 0.05. The null hypothesis was rejected. Thus, the result can be concluded that repurchase intention is affected by customer loyalty. The result of regression revealed that the model explained 70% of the variance and that the model was significant, p < 0.05. The R-square was 0.700 at a 95% confidence level, which indicated that customer loyalty significant impact on repurchase intention.

Table 6. Simple Linear Regression Analysis Summary for Hypotheses 2

Variables	B	SE B	β	t-value	Sig.
Customer Loyalty	0.834	0.028	0.837	29.919	0.000

Noted. $R^2 = 0.700$, Adjusted $R^2 = 0.700$, *p < 0.05. Dependent Variable = Repurchase intention
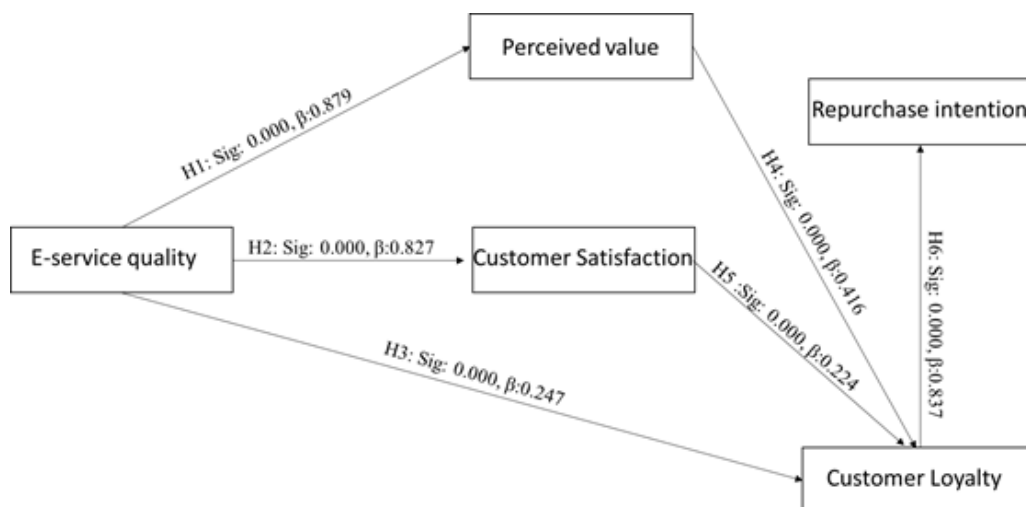
Figure 2. The result of structural model
Source. Authors.

5. Discussion and conclusion

Overall, 385 respondents, the majority of the people that took part in this survey was male (223, 57.9%), age group between 20 – 35 years old (298, 77.4%), Bachelor's Degree education level (264, 68.6%), income per month between 20,001 – 50,000 Baht (218, 56.6%), purchase 1 - 3 times per week (156, 40.5%), spending on food delivery 100 - 400 Baht per time (239, 62.1%). The hypothesis testing indicated that one

variable that is E-service quality have impact on perceived value and customer satisfaction. Moreover, there are three variables that are E-service quality, perceived value, and customer satisfaction which affect customer loyalty. Finally, customer loyalty has significantly influence repurchase intention as shown in table 7.

Table 7. Summary of the statistical hypotheses testing results

Statement of Hypothesis	p-value	Decision results
H1n *(null hypothesis)* : *E-service quality has no significant influence on perceived value using mobile applications in food delivery services.*	0.000*	Rejected
H2n *(null hypothesis)* : *E-service quality has no significant influence on customer satisfaction using mobile applications in food delivery services.*	0.000*	Rejected
H3n *(null hypothesis)* : *E-service quality has no significant influence on customer loyalty using mobile applications in food delivery services.*	0.000*	Rejected
H4n *(null hypothesis)* : *Perceived value has no significant influence on customer loyalty using mobile applications in food delivery services.*	0.000*	Rejected
H5n *(null hypothesis)* : *Customer satisfaction has no significant influence on customer loyalty using mobile applications in food delivery services.*	0.000*	Rejected
H6n *(null hypothesis)* : *Customer loyalty has no significant influence on repurchase intention using mobile applications in food delivery services.*	0.000*	Rejected

5.1 E-service quality, perceived value, customer satisfaction, and customer loyalty

The result of this research indicated that E-service quality had a highly significant influence on perceived value. The significant value of E-service quality and perceived value was 0.000, which is less than 0.05. This indicates that E-service quality of mobile application food delivery service has a significant impact to perceived value. Moreover, the findings of this study are consistent Hapsari et al. (2016) that perceived value is influenced by the overall quality of an e-service. Furthermore, the perceived value was significantly influenced by system and e-service quality (Tsao et al., 2016; Chanthasaksathian & Nuangjamnong, 2021; Nuangjamnong, 2021).

E-service quality had a highly significant influence on customer satisfaction. The significant value of E-service quality and customer satisfaction was 0.000, which is less than 0.05. This indicates that E-service quality of mobile application food delivery service has a significant effect to customer satisfaction. According to Udo et al. (2010), consumer satisfaction is directly and indirectly influenced by the quality of e-services. In addition, studies from Sidharta et al. (2021), Chanthasaksathian and Nuangjamnong (2021), and Nuangjamnong (2021) proved that to preserve a company's competitiveness and long-term viability, service quality should be maintained to provide high customer satisfaction.

Moreover, E-service quality had a highly significant influence on customer satisfaction. The significant value of E-service quality and customer loyalty was 0.000, which is less than 0.05. This indicates that E-service quality of mobile application food delivery service has a significant influence to customer satisfaction. Regarding to the previous study, it has confirm that in firm ecosystems with a high level of online involvement, e-service quality is critical in keeping customer loyalty (Amin, 2016). Furthermore, the relevance of e-service quality in building customer loyalty, particularly among online meal delivery service consumers, is confirmed by past study (Hernando & Gunawan, 2021).

The statistical data shows that the mean of E-service quality is 4.15, based on a descriptive analysis of E-service quality derived from four questions in the questionnaire that researcher collected. The lowest mean among the questions was "Application protects personal or confidential information" which is equals 3.98 that is lower than average means of E-service quality. However, the highest standard deviation are from question "Online food delivery application are always available" that is equal to 0.919. Therefore, the food delivery service company should maintain and improve the application, so that the application is always available for customer to use anytime and can protect customer personal information from leaking.

5.2 Perceived value and customer loyalty

The result of this research indicated that perceived value had a highly significant influence on customer loyalty. The significant value of perceived value and customer loyalty was 0.000, which is less than 0.05. This indicates that perceived value of mobile application food delivery service has a significant influence to customer loyalty. In addition, Previous research has revealed that perceived value is a determinant in consumer loyalty (Nasution & Mavondo, 2008). Furthermore, customers' perceived value initiatives must be developed in order to attract more customers, create and keep the positive relation with clients, and establish customer loyalty (Wang et al., 2004; Chanthasaksathian & Nuangjamnong, 2021).

The statistical data shows that the mean of perceived value is 4.40, based on a descriptive analysis of perceived value derived from four questions in the questionnaire that researcher collected. The lowest mean among the questions was "Transactions on online food delivery application have good value" which is equals 3.92 that is lower than average means of perceived value. However, the highest standard deviation are from question "It is convenient to order through online food delivery application" that is equal to 0.942. Thus, food delivery service company should consider making the application easy to use that make customer feel that it is convenient and have good value when ordering food.

5.3 Customer satisfaction and customer loyalty

The result of this research indicated that customer satisfaction had a highly significant influence on customer loyalty. The significant value of customer satisfaction and customer loyalty was 0.000, which is less than 0.05. This indicates that customer satisfaction of mobile application food delivery service has a significant impact to customer loyalty. In addition, according to Abdullaeva (2020), the previous research demonstrates a positive association between customer satisfaction and loyalty. Moreover, based on previous research, Customer satisfaction is critical in building a secure and stable relationship with customers, which leads to customer loyalty (Dominici & Guzzo, 2010).

The statistical data shows that the mean of customer satisfaction is 4.17, based on a descriptive analysis of perceived value derived from four questions in the questionnaire that researcher collected. The lowest mean among the questions was "The online food delivery application meets all my expectations." which is equals 3.92 that is lower than average means of perceived value. However, the highest standard deviation are from question "The experience when using the application is as expected" that is equal to 0.897. Therefore, food delivery service company should listen to customer complain and improve application to meet the customer expectation.

5.4 Customer loyalty and repurchase intention

The result of this research indicated that customer loyalty had a highly significant influence on repurchase intention. The significant value of customer loyalty and repurchase intention was 0.000, which is less than 0.05. This indicates that customer loyalty of mobile application food delivery service has a significant influence to repurchase intention. Moreover, the previous research indicated that customers developed a relationship with the service company, implying that loyalty increases the repurchase intention. (Chinomona & Sandada, 2013). In addition to Frooghi (2019), Customer loyalty has been shown to have a considerable impact on repurchase intent in prior studies.

The statistical data shows that the mean of customer loyalty is 3.97, based on a descriptive analysis of perceived value derived from four questions in the questionnaire that researcher collected. The lowest mean among the questions was "I continue to order from the online food delivery application even if there is a price increase" which is equals 3.68 that is lower than average means of perceived value. However, the highest standard deviation are from question "I introduce the food delivery app to others" that is equal to 0.918. Thus, food delivery service company should try to reduce the expense of the company instead of increasing the price.

6. Recommendations

According to the conclusions, the results of this study show that there are influencing factors in variables that greatly influence customer loyalty and repurchase intention. E-service quality has a significant effect on perceived value and customer satisfaction. Moreover, E-service quality, perceived value, and

customer satisfaction are all factors that have a significant influence on customer loyalty. In addition, customer loyalty has a significant impact on repurchase intention. From the Beta value in Table 5, the perceived value got the highest Beta (0.416) followed by E-Service quality (0.247) and customer satisfaction (0.224). Therefore, the recommendation for the food delivery service business should also increase perceived value and customer satisfaction, which will also increase customer loyalty. For example, the business should offer a reasonable price for a customer when using an application, and improve the application that makes it more convenient for a customer when ordering the food. Next, in terms of E-Service, the food delivery service business should maintain a good E-service quality for service performance to meet the customer expectations. Thus, the business should consider improving the application that makes the customer can find their desired needs easily and quickly, makes transactions simple to complete when using the application, maintain the application to always available for customers, and have high security that can protect customer's personal information from leaking outside the company, which will create a higher level of perceived value, customer satisfaction, and customer loyalty. For customer satisfaction, the business should understand the customer expectation and listen to complaints of the customer then determine which areas require attention to improve them to meet customer expectations and customer satisfaction. Finally, customer loyalty significantly affects repurchase intention, so the business should maintain a good relationship with the customer and the company should not raise the price but the company's expenses should be reduced, which will be more likely to rise the repurchase intention of the clients.

7. Further Study

In this research, there are several limitations. Due to time constraints, the researcher focused only on four variables consist of E-service quality, perceived value, customer satisfaction, and customer loyalty that affect repurchase intention in Bangkok. For the further research, a similar study is needed to determine whether other related factors that impact customer loyalty and repurchase intention should be included in order to obtain more comprehensive information and understanding of the factors. In addition, further study should be done with a larger sample size and population to improve the research's generalizability and credibility. Moreover, this study are based on Thais people using food delivery application and may not be entirely applicable to people from other cultural backgrounds. Therefore, another study could be conducted in other countries for more accurate result. Furthermore, this study primarily presented data on direct relationships between variables in this study, and the research model did not account for any potential mediating relationships.

References

Abdullaeva, M. (2020). Impact of customer satisfaction on customer loyalty in upscale ethnic restaurants. *Theoretical & Applied Science*, *86*(06), 372–375.://doi.org/10.15863/tas.2020.06.86.71

https Agustin, C., & Singh, J. (2005). Curvilinear effects of consumer loyalty determinants in relational exchanges. *Journal of Marketing Research*, *42*(1), 96–108. https://doi.org/10.1509/jmkr.42.1.96.56961

Al-dweeri, R. M., Obeidat, Z. M., Al-dwiry, M. A., Alshurideh, M. T., & Alhorani, A. M. (2017). The impact of e-service quality and e-loyalty on online shopping: Moderating effect of e-satisfaction and e-trust. *International Journal of Marketing Studies*, *9*(2), 92. https://doi.org/10.5539/ijms.v9n2p92

Alireza, F., Ali, K., & Aram, F. (2011). How quality, value, image, and satisfaction create loyalty at an Iran Telecom. *International Journal of Business and Management*, *6*(8). https://doi.org/10.5539/ijbm.v6n8p271

Alok, K. R., & Srivastava, M. (2013). The antecedents of customer loyalty: An empirical investigation in life insurance context. *Journal of Competitiveness*, *5*(2), 139–163. https://doi.org/10.7441/joc.2013.02.10

Amin, M. (2016). Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. *International Journal of Bank Marketing*, *34*(3), 280–306. https://doi.org/10.1108/IJBM-10-2014-0139

Amoako, G. K., Caesar, L. D., Dzogbenuku, R. K., & Bonsu, G. A. (2021). Service recovery performance and repurchase intentions: the mediation effect of service quality at KFC. *Journal of Hospitality and*

Tourism Insights. https://doi.org/10.1108/JHTI-06-2021-0141

Anser, M. K., Tabash, M. I., Nassani, A. A., Aldakhil, A. M., & Yousaf, Z. (2021). Toward the e-loyalty of digital library users: investigating the role of e-service quality and e-trust in digital economy. *Library Hi Tech*. https://doi.org/10.1108/LHT-07-2020-0165

Bardhoshi, G., & Erford, B. T. (2017). Processes and procedures for estimating score reliability and precision. *Measurement and Evaluation in Counseling and Development*, *50*(4). https://doi.org/10.1080/07481756.2017.1388680

Boshoff, C., & Gray, B. (2004). The relationships between service quality, customer satisfaction and buying intentions in the private hospital industry. *South African Journal of Business Management*, *35*(4), 27–38. https://doi.org/10.4102/sajbm.v35i4.666

Chanthasaksathian, S., & Nuangjamnong, C. (2021). Factors influencing repurchase intention on e-commerce platforms: A case of GET Application. *International Research E-Journal on Business and Economics June-November 2021*, *6*(1), 28–45. http://www.assumptionjournal.au.edu/index.php/aumitjournal/article/view/5312

Chinomona, R., & Dubihlela, D. (2014). Does customer satisfaction lead to customer trust, loyalty and repurchase intention of local store brands? The case of Gauteng province of South Africa. *Mediterranean Journal of Social Sciences*, *5*(9), 23–32. https://doi.org/10.5901/mjss.2014.v5n9p23

Chinomona, R., & Sandada, M. (2013). Customer satisfaction, trust and loyalty as predictors of customer intention to re-purchase South African retailing industry. *Mediterranean Journal of Social Sciences*, *4*(14), 437–446. https://doi.org/10.5901/mjss.2013.v4n14p437

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3). https://doi.org/10.1007/BF02310555

Deng, Z., Lu, Y., Wei, K. K., & Zhang, J. (2010). Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China. *International Journal of Information Management*, *30*(4). https://doi.org/10.1016/j.ijinfomgt.2009.10.001

Dominici, G., & Guzzo, R. (2010). Customer satisfaction in the hotel industry: A case study from Sicily. *International Journal of Marketing Studies*, *2*(2). https://doi.org/10.5539/ijms.v2n2p3

Frooghi, R. (2019). Does value co-creation impacts customer loyalty and repurchase intention ? *IBT Journal of Business Studies*, *15*(1), 1–18. https://doi.org/10.46745/ilma.jbs.2019.15.01.01

Gursoy, D., Chen, J. S., & Chi, C. G. (2014). Theoretical examination of destination loyalty formation. *International Journal of Contemporary Hospitality Management*, *26*(5), 809–827. https://doi.org/10.1108/IJCHM-12-2013-0539

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (1995). Multivariate data analysis (3rd ed). *New York: Macmillan*.

Hansemark, O. C., & Albinsson, M. (2004). Customer satisfaction and retention: The experiences of individual employees. *Managing Service Quality: An International Journal*, *14*(1). https://doi.org/10.1108/09604520410513668

Hapsari, R., Clemes, M., & Dean, D. (2016). The mediating role of perceived value on the relationship between Service quality and customer satisfaction: Evidence from Indonesian Airline Passengers. *Procedia Economics and Finance*, *35*(October 2015), 388–395. https://doi.org/10.1016/s2212-5671(16)00048-4

Hennig-Thurau, T., Gwinner, K. P., & Gremler, D. D. (2002). Understanding relationship marketing outcomes: An integration of relational benefits and relationship quality. *Journal of Service Research*, *4*(3), 230–247. https://doi.org/10.1177/1094670502004003006

Hernando, H., & Gunawan, W. H. (2021). Loyalty among online food delivery customers: Extended scale of e-service quality. *Jurnal Manajemen Maranatha*, *20*(2), 167–174. https://doi.org/10.28932/jmm.v20i2.3507

Hollebeek, L., & Rather, R. A. (2019). Service innovativeness and tourism customer outcomes. *International Journal of Contemporary Hospitality Management*, *31*(11). https://doi.org/10.1108/IJCHM-03-2018-0256

Javed, F., & Cheema, S. (2017). Customer Satisfaction and customer perceived value and its impact on customer loyalty : The mediational role of customer relationship management. *Journal of Internet*

Banking and Commerce, *22*(S8).

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*(3). https://doi.org/10.1177/001316447003000308

Kumar, A., & Anjaly, B. (2017). How to measure post-purchase customer experience in online retailing ? A scale development study. *International Journal of Retail & Distribution Management*, *45*(12), 1277–1297. https://doi.org/10.1108/IJRDM-01-2017-0002

Ma, K. X., Mather, D. W., Ott, D. L., Fang, E., Bremer, P., & Mirosa, M. (2021). Fresh food online shopping repurchase intention: the role of post-purchase customer experience and corporate image. *International Journal of Retail & Distribution Management*, *ahead-of-p*(ahead-of-print). https://doi.org/10.1108/ijrdm-04-2021-0184

Minimol, M. C. (2018). E-service quality and perceived value as predictors of customer loyalty towards online supermarkets. *Asian Social Science*, *14*(3), 71. https://doi.org/10.5539/ass.v14n3p71

Moidunny, K. (2009). The effectiveness of the national professional qualification for educational leaders (NPQEL). *Unpublished Doctoral Dissertation, Bangi: The National University of Malaysia.*

Nasution, H. N., & Mavondo, F. T. (2008). Customer value in the hotel industry: What managers believe they deliver and what customer experience. *International Journal of Hospitality Management*, *27*(2). https://doi.org/10.1016/j.ijhm.2007.02.003

Chanthasaksathian, S., & Nuangjamnong, C. (2021). Factors influencing repurchase intention on e-commerce platforms: A case of GET Application. *International Research E-Journal on Business and Economics June-November 2021*, *6*(1), 28–45. http://www.assumptionjournal.au.edu/index.php/aumitjournal/article/view/5312

Nuangjamnong, C. (2021). Investigation of Factors influencing students' intention to use banking services through smartphone devices during COVID-19 Pandemic. *International Journal of Economics and Business Administration*, *IX*(Issue 1), 331–346. https://doi.org/10.35808/ijeba/676

Parasuraman, P., VA, Z., & A., M. (2005). ES-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*, *7*(3), 213–233.

Ramadhan, L., & Siagian, Y. M. (2019). *Impact of Customer Perceived Value on Loyalty: In Context Crm*. *April*. https://doi.org/10.31227/osf.io/mu6fb

Ramos, K. (2021). Factors influencing customers' continuance usage intention of food delivery apps during COVID-19 quarantine in Mexico. *British Food Journal*, *2*. https://doi.org/10.1108/BFJ-01-2021-0020

Rashid, M. H. U., Nurunnabi, M., Rahman, M., & Masud, M. A. K. (2020). Exploring the relationship between customer loyalty and financial performance of banks: Customer open innovation perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(4), 1–19. https://doi.org/10.3390/joitmc6040108

Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, *5*(10), e02690. https://doi.org/10.1016/j.heliyon.2019.e02690

Santos, J. (2003). E-service quality: A model of virtual service quality dimensions. *Managing Service Quality: An International Journal*, *13*(3). https://doi.org/10.1108/09604520310476490

Savila, I. D., Wathoni, R. N., & Santoso, A. S. (2019). The role of multichannel integration, trust and offline-to-online customer loyalty towards repurchase intention: An empirical study in online-to-offline (O2O) e-commerce. *Procedia Computer Science*, *161*, 859–866. https://doi.org/10.1016/j.procs.2019.11.193

Seiders, K., Voss, G. B., Grewal, D., & Godfrey, A. L. (2005). Do satisfied customers buy more? Examining moderating influences in a retailing context. *Journal of Marketing*, *69*(4). https://doi.org/10.1509/jmkg.2005.69.4.26

Shams, G., Rather, R., Abdur Rehman, M., & Lodhi, R. N. (2020). Hospitality-based service recovery, outcome favourability, satisfaction with service recovery and consequent customer loyalty: an empirical analysis. *International Journal of Culture, Tourism, and Hospitality Research*, *15*(2), 266–284. https://doi.org/10.1108/IJCTHR-04-2020-0079

Sidharta, S. mario, Adityo, B. D., Iqbal, muhammad P., & Gunadi, willy. (2021). Customer loyalty analysis on online food delivery services. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, *12*(3), 4003–4013. https://doi.org/10.17762/turcomat.v12i3.1690

Sirikeratikul, S. (2020). *Thailand Online Food Delivery Market*. https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Thailand Online Food Delivery Market_Bangkok_Thailand_05-28-2020

Su, L., Swanson, S. R., & Chen, X. (2016). The effects of perceived service quality on repurchase intentions and subjective well-being of Chinese tourists: The mediating role of relationship quality. *Tourism Management*, *52*. https://doi.org/10.1016/j.tourman.2015.06.012

Suhartanto, D., Helmi Ali, M., Tan, K. H., Sjahroeddin, F., & Kusdibyo, L. (2019). Loyalty toward online food delivery service: the role of e-service quality and food quality. *Journal of Foodservice Business Research*, *22*(1). https://doi.org/10.1080/15378020.2018.1546076

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, *77*(2). https://doi.org/10.1016/S0022-4359(01)00041-0

Tsao, W. C., Hsieh, M. T., & Lin, T. M. Y. (2016). Intensifying online loyalty! the power of website quality and the perceived value of consumer/seller relationship. *Industrial Management and Data Systems*, *116*(9). https://doi.org/10.1108/IMDS-07-2015-0293

Udo, G. J., Bagchi, K. K., & Kirs, P. J. (2010). An assessment of customers' e-service quality perception, satisfaction and intention. *International Journal of Information Management*, *30*(6). https://doi.org/10.1016/j.ijinfomgt.2010.03.005

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly: Management Information Systems*, *36*(1), 157–178. https://doi.org/10.2307/41410412

Wang, Y., po lo, H., Chi, R., & Yang, Y. (2004). An integrated framework for customer value and customer-relationship-management performance: A customer-based perspective from China. *Managing Service Quality: An International Journal*, *14*. https://doi.org/10.1108/09604520410528590

Worldpopulationreview.com. (2021). *Bangkok Population 2021 (Demographics, Maps, Graphs)*. https://worldpopulationreview.com/world-cities/bangkok-population

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, *52*(3), 2. https://doi.org/10.2307/1251446

Zhang, P., & Von Dran, G. M. (2000). Satisfiers and dissatisfiers: a two-factor model for website design and evaluation. *Journal of the American Society for Information Science and Technology*, *51*(14). https://doi.org/10.1002/1097-4571(2000)9999:9999<::AID-ASI1039>3.0.CO;2-O

Zhuang, X., Lin, L., Zhang, R., Li, J. (Justin), & He, B. (2021). E-service quality perceptions of millennials and non-millennials on O2O delivery applications. *British Food Journal*, *123*(12), 4116–4134. https://doi.org/10.1108/BFJ-01-2021-0049