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## **The electronic service quality structural equation model for customer satisfaction and loyalty in online food purchases through Grab Food application in Thailand.**

Sujira Vuthisophon

King Mongkut's Institute of Technology Ladkrabang, Thailand

*\*Corresponding author. E-mail: [vuthisopons@hotmail.com](mailto:vuthisopons@hotmail.com)*

### **Abstract**

The objective of this study was to study the influence of Electronic Service Quality on Customer Satisfaction and Loyalty in online food purchases through the Grab Food application, as well as developing and validating a model of structural equations developed with empirical data consisting of key latent variables. 3 variables: Electronic Service Quality, Customer satisfaction and Loyalty in online food purchases through Grab Food using quantitative research methods, empirical research and questionnaires were used as a tool to collect information from customers who used the service 260 people were shopping online through Grab Food. The statistics used for data analysis were descriptive statistics. One-way analysis of variance and analysis of structural equation models from the research results it was found that the e-service quality structural equation model on Customer Satisfaction and Loyalty in online food purchases through Grab Food was consistent with empirical data. The chi-square is 784.25 at the degrees of freedom (df) 395, the probability (p-value) is 0.485, the relative chi-square ( $X^2 / df$ ) is 2.879, the degree of harmony index (GFI) is 0.796 value. The parameter RMSEA is 0.025, with Electronic Service Quality having both direct and indirect positive influences on Customer Loyalty. And Customer Satisfaction has a direct positive influence on Loyalty. The samples with different frequency of purchasing food online through Grab Food had statistically different levels of Electronic Service Quality.

**Keywords:** Electronic service quality, Customer Satisfaction, Customer Loyalty.

### **Introduction**

The rapid growth and popularity of food ordering apps have enabled the Food Delivery market to create value that drives many new players in the high-value market. 33,000–35,000 million baht. Popular survey results from Marketeer Research in collaboration with Kadence International (Thailand) show that Grab is the most popular food delivery platform. With numbers up to 52.9%, which has occupied the minds of consumers across the country In the midst of fierce competition Fight with promotions, prices and number of shops. How Grab managed to get more than half of the popular ratings from consumers across Thailand.

This is a key factor contributing to the growth of Food Delivery, coupled with the recent lock-down period, causing more people to stay at home and order Food Delivery. 33,000–35,000 million baht and growth of approximately 14%. The reason

why the food delivery market has grown so much is due to many factors. Such as expanding service areas or increasing the number of restaurants on the platform For Grab Food itself. We now have more and more restaurants joining the platform. As well as expanding its services to other provinces Grab Food in 2018 only opened in Bangkok. In the following year, Grab Food has served 10 provinces, and in June 2020, we opened more than 30 provinces and plans to expand our services to new provinces.

Being number one in the minds of consumers not just staying for a long time not just the most income Have the most orders In fact The delivery platform has to be more than that, and this is the Key Success that makes Grab become the number one popular among Thais.

1. Wide Selection, there are various restaurants and menus on the platform. With the number of restaurants participating as partners increased 2.5 times in the first six months of 2020.

2. Best Deal has a campaign that excites consumers all the time. Grab Food stands for creating campaigns and deals that will keep consumers excited throughout the year, such as the Grab Food Mega Sale, Grab Food Signature menu, or menus that are sold exclusively on Grab Food.

3. Reliability of confidence Order Grab and get food fast. Because we have the largest number of partner drivers. This is the main thing Grab wins in this game.

4. Service Quality of products and services. We have a customer satisfaction survey after using the service. In addition to safety, Grab is the first Food Delivery to introduce Contactless measures in recent times, such as having a partner driver wear a mask all the time while working and washing their hands with alcohol gel. Or organizing promotions for consumers if spending with Grab Pay Wallet.

What makes us successful today. It may not be something that will make us successful in the future. With the changing market context effects of COVID-19. The past may reduce the ability of consumers to spend. Therefore, Grab's next strategy is affordability competitive prices, such as Grab's latest promotion of free food delivery in the first 3 kilometers, to encourage everyone to use Grab Food's Food Delivery service. E-commerce or online businesses are different from businesses with physical stores. Consumers have a physical purchase decision-making process that appears through websites such as e-commerce. CPQ is consumer perception of the quality of conducting business using electronic media. The factors used to measure are consumer expectations of the service compared with the perceptions of the service after receiving the actual service, identifying 6 dimensions (1) quality performance (2) providing Consumer Services (3) Control Process (4) Ease of Use (5) Quality Information (6) Beautiful Website Design Compliance with Sebora, Lee and Sukasame (2009) says Electronic Service Quality (E-Service Quality) is that products and services are transformed in digital form and transmitted over the Internet. In addition, the Internet helps to keep in touch with customers, enabling E-Services to be at the forefront of technology, including (1) reliability, trust, as well as order accuracy. Delivery availability accurate payment notification (2) Responsiveness Consumers of the Internet have a need for a fast response,

including at the time of the transaction or after the transaction if any problems arise. It should be corrected promptly. The ability to deal with complaints and speed of service (3) Ease of Use format of display and reports from the system that are clear and meet the needs of the user. And the system must be easy to use, while previous researches of Zeithaml, Parasuraman and Malhotra (2000), Loiacono, Watson and Goodhue (2002), Liljander, Riel and Pura (2002), Fassnacht and Koese (2006). Park and Gretzel (2007), Sebora, Lee and Sukasame (2009) who have studied the dimensions of electronic service quality. This includes the development of dedicated electronic service quality measures such as the E-Commerce success metrics (Delone & McLean, 2003) and the ES-QUAL and E-RecS-QUAL electronic service quality assessments. There is still limited research on E-commerce quality measurement and its influence on satisfaction and repeat purchase in online food purchases through Grab Food. To study the influence of electronic service quality on customer satisfaction and loyalty in online food purchases through Grab Food. By using the Electronic Service Quality Dimension (E-S-QUAL) in the study.

### Research Objectives

1. To study the influence of electronic service quality on customer satisfaction and loyalty in online shopping through Grab Food.
2. To develop and verify the consistency of the electronic service quality structural equation model on customer satisfaction and loyalty in online food purchases via Grab Food with empirical data.

### Research hypothesis

Hypothesis 1: Different overall Electronic Service Quality has different effects on Customer Satisfaction when purchasing food online through Grab Food.

Hypothesis 2 : Electronic Service Quality has different influences on Customer Loyalty when purchasing food online through Grab Food.

Hypothesis 3: Customer Satisfaction affects different Customer Loyalty when purchasing food online through Grab Food.

## Research scope

The researcher developed a conceptual framework for this study by developing a structural equation model for the influence of Electronic Service Quality on Customer Satisfaction and Customer Loyalty in purchases in food purchases online through Grab Food. The researcher selected the variables. For research from literature reviews, theories and concepts in Electronic Service Quality, Customer Satisfaction and fidelity. It consists of an external latent variable, Electronic Service Quality. The variable gauges of Zeithaml, Parasuraman and Malhotra (2000), Yang, Peterson, and Huang (2001) were applied. Electronic Service Quality Concept (e-SQ). Provide seller service or an online service provider by Can be divided as follows There are 11 dimensions to measure, but the researcher has used only 5 areas: 1) Ease of use 2) Efficiency 3) Personalization 4) Website design 5) Privacy.

## Literature Reviews

### Electronic service quality

E-Service quality refers to the customer's perception in which the customer measures the impression level electronically. By comparing what we think with the actual service received And for the company to gain a reputation from its services, it requires constant service at the perceived level of its customers. Or more than what the customer expected And also mentioned the level of impression Had stated that though By creating a tool used to measure service quality called SERVQUAL (Service Quality), but has developed a new electronic service quality meter called (E-Service quality) with 11 dimensions (Zeithaml, Parasuraman and Malhotra, 2000) is 1) Reliability 2) Responsiveness 3) Access 4) Flexibility 5) Ease of navigation 6) Efficiency 7) Assurance/Trust 8) Privacy 9) Price Knowledge 10) Site Aesthetics 11) Customization/Personalization. From all of the above meanings in summary, the definition of electronic service quality (e-SQ) can be said that the seller's service efficiency. An online service provider can be divided as follows: 1) easy access to use (Ease of use) 2) efficiency of the system (Efficiency) 3) services according to individual needs. (Personalization) 4) Beauty (Website design) 5) Security (Privacy)

### Customer Satisfaction

Customer satisfaction according to the definition of the dictionary of psychology, it means first feeling. When motive goals are achieved and the consequences of individual involvement in it, A positive attitude indicates a state of satisfaction, and a negative attitude indicates a state of dissatisfaction (Vroom, 1964). Zeithaml (2000) says that satisfaction with e-commerce is the most important thing in the world. e-satisfaction is the result of a perception of convenience in the purchasing process (shopping convenience) and the presentation of information and products. (merchandising), site design and reliability in the areas of financial security (Security of financial security) and information and communication (Informativeness) e-Satisfaction is the result of the specific characteristics of the website (Web site). characteristic) is the ease of use and style of the service, for example, the delivery process. Customer service According to a study by Parasuraman et al. (2005), Customer Satisfaction is not only a positive experience when dealing with a seller, but also having a good experience with the use of the facilities. The episodes on that website are also assessed by assessing the performance of the overall service quality based on clients' past experiences in trading and using services from vendors and websites. Customer satisfaction has been shown that customer satisfaction can be measured by having the customer assess the overall performance of the seller. Through the dimensions of service quality and service processes that customers receive from the use of service providers.

From the literature review on satisfaction In conclusion, there is a point of satisfaction. In the main issue are The researcher therefore summarized the issue of 4 important parameters of satisfaction: 1) Consumer Experience 2) Location and Facilities 3) Service Processes and Procedures 4) Marketing Communications.

### Customer Loyalty

Loyalty refers to a contented attitude toward a brand's effect in order to be more consistent with the brand than time. Reliability and trust have all positive attitudes of customers towards service. Causing the re-use of the service (Matell and Jacoby, 1972)

Ajzen and Fishbein (1980) say that attitude is one of the most important elements that affect purchase and service intentions. Which trust It is considered a form of attitude. Past research has suggested that trust has an impact on positive for the long-term relationship between customers and businesses in the same way If the service provider is

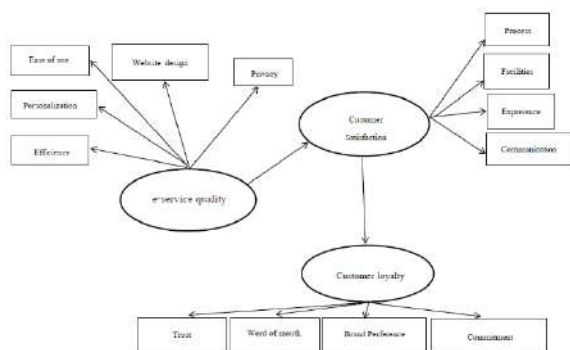


more reliable or trusted by customers. It is an important component that makes consumers or users turn to use more services.

Brady, Bourdeau and Heskell (2005) said attitudes are measured. From our understanding of feelings, behaviors and actions. The influence of attitude loyalty is service quality. Customer satisfaction value perceived by customers and trust. While productive or behavioral loyalty is measured by presence special consideration, saying about being firm in what you like and the coexistence of this effective loyalty protection. It is influenced by attitude loyalty. Attitude loyalty as a variable. Passed between other variables in a model to productive or behavioral loyalty test results the importance of loyalty.

From all of the above meanings summarizing the definition of loyalty, the consumer has a positive attitude towards a brand, whether it is caused by confidence, consideration, and being directed to the consumer. And there have been repeated purchases over time for the reuse of low-cost airline passengers, which will result in the use of the services in the future.

According to a review of the literature on loyalty, it can be concluded that the main issues of loyalty are: The researcher then summarizes the key variables of loyalty into four main variables: 1) trust 2) word of mouth 3) engagement 4) brand. According to the study concept in Figure 1, there were 3 main groups of independent variables: (1) Electronic Service Quality (2) Customer Satisfaction and (3) Customer Loyalty.



**Figure 1-** Conceptual framework for Electronic service quality structural equation model for customer satisfaction and loyalty in online food purchases through Grab Food application in Thailand.

## Materials and Methods

### Sampling and data

This research uses survey research data using questionnaires to collect data by the population used in this research is customers using the service Buying food online through Grab Food, specifying sample sizing for structural equation model data analysis (Hair, J. F., Black, & Tatham, 2010), suggests that samples should be 200 or more samples. The case for the model was not as complicated as (Peterson, R. A. (1994). Referenced in Kline, 2011) suggested that the sample count should be 10 times the observed variable. This research contains all observable variables.

Therefore, the sample size of this research should be at least  $13 \times 20 = 260$  samples. The researcher collected the complete data and can be used to analyze a total of 260 data sets. Purposive sampling using the university's online entrepreneurial qualification assessment system respondents, where researchers created an online questionnaire via Google form and sent email based on the account database. A list of respondents from March to June 2020 for descriptive statistical analysis and statistical hypothesis testing with structural equation model analysis. The researcher used the statistical package SPSS version 22 and AMOS version 20 in this study.

The tools used for data collection and quality verification were the questionnaires divided into 4 parts, part 1 was demographic data and general information of respondents, part 2, electronic service quality. Part III Customer Satisfaction and Loyalty and Part 4 Feedback section of the Electronic Service Quality questionnaire. Customer Satisfaction and Loyalty Use a 5-level Likert Scale, in which respondents are most likely to take into account the online store website that you use the service to complete the Electronic Service Quality questionnaire. And fidelity, the researcher examines the accuracy Reliability of the questionnaire before the release ( $n = 30$ ) and the actual retained data of the customer ( $n = 260$ ). All questions passed the criteria determined by the Cronbach's Alpha coefficient of the variable, between 0.751 and 0.943, which is more than 0.70.

## Conclusion and Discussion

The objective of this research is to study the influence of electronic service quality on customer satisfaction and repeat purchase in online food purchases through Grab Food. Satisfaction and repeat purchases are critical to growth and success. Sustainability of business Seborra, Lee and Sukasame (2009) According to research, The overall electronic



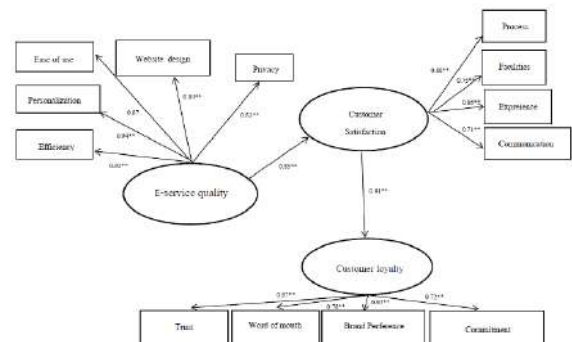
service quality had a statistically significant influence on customer satisfaction and repeat purchase intent, with path coefficients of 0.87 and 0.74, respectively, consistent with past research, Pong and Yee. (2001), Koskela and Howell (2002), Williams and Aaker (2002). Customer satisfaction leads to loyalty when it comes to the quality of the website.

1. Analysis of general data from the survey data of 260 samples with demographic characteristics of the sample, it can be concluded that the majority of the sample were female 60.2 percent. Aged between 20-25 years 34.6 percent, There is a bachelor's degree accounting for 46.2 percent, Most of them are students as a percentage 35.8 and when considering the frequency of buying food online through Grab Food, Most of them use the service 1-2 times a month accounted for 47.6 percent, The most frequently bought products being food and beverages accounting for 34.6 percent.

2. Verification of the Measurement model with confirmation element analysis. (Confirmatory factor analysis). A measure of the research model was examined. It consists of 3 main latent variables which are Electronic service quality, Satisfaction and Loyalty. The electronic service quality latent variable is characterized by the 2nd order factors of the electronic service quality latent variable, the number is divided into 5 areas 1) Ease of use 2) System Efficiency 3) Personalization 4) Website design 5) Privacy. In the analysis of confirmation elements of this research. The investigators tested the first and second order of all variables at one time (CFA) according to Awang (2015) recommendations. Standard component values. The standardized loading factor of each observable variable was greater than 0.5. The Average Variance Extracted (AVE) of each latent variable was greater than 0.5, indicating both convergent validity and linear precision. Classify (Discriminant validity) (Hair, et al., 2010) In addition, the component weights of all variables were statistically significant (p-values less than 0.01), indicating that all observed variables were important indicators. Electronic service quality, Satisfaction and Loyalty. The variable has a element weight between 0.777 and 0.897.

3. Electronic service quality structural equation model analysis on customer satisfaction and loyalty in online food purchases via Grab Food, conformity test of electronic service quality structure equation model connected to Customer satisfaction and loyalty when purchasing food online through Grab Food was based on assumptions and empirical data. The model was consistent with the empirical data by looking at the statistical values of the

harmony of the model with the empirical data. The e-service quality structural equation model toward customer satisfaction and loyalty in Grab Food's online food purchase was consistent with the empirical data, a chi-square value of 784.25 at degrees. The independent (df) 395, the probability (p-value) was 0.485, the relative chi-square ( $X^2 / df$ ) was 2.879, the consistency index (GFI) was 0.976, and the estimation error index. The parameter (RMSEA) was 0.025. The criterion for checking the model consistency with the empirical data was statistically insignificant chi-square value (p-value greater than 0.05), relative chi-square value ( $X^2 / df$ ). ) Less than 3.0, GFI greater than 0.9 and RMSEA value less than 0.05 (Hair, et al., 2010).



**Figure 2-** Conceptual framework for E- service quality structural equation model for customer satisfaction and loyalty in online food purchases through Grab Food application in Thailand after fit Model.

In addition, the research results showed that Electronic service quality has a direct and indirect effect on customer loyalty through a statistically significant factor of customer satisfaction. The correlation is positive and the path coefficient is 0.74 (TE = 0.787; DE = 0.65; IE = 0.98). If Electronic service quality of the website in the customer's view is higher, the tendency of customer loyalty will be higher. It can be concluded that the quality of electronic services has a direct effect on customer loyalty and has an indirect effect on customer satisfaction. In line with research by Delone and McLean (2003), Lawson-Body and Limayem (2004), Lee and Lin (2005), loyalty is one of the business goals that entrepreneurs want. The researcher suggested that electronic business operators should take into account the service quality of the website in terms of efficiency of use. System availability



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Achieving goals and privacy, electronic business operators can create switching cost for customers, such as customer loyalty programs, whether it is accumulating points from ordering. Buying products online This privilege is offered to customers who have been active through Grab Food for a long time or who have used a lot. Electronic operators also increase the cost of changing the online restaurant website.

### Suggestion

The researcher studied electronic service quality using the ES-QUAL model of Zeithaml, Parasuraman and Malhotra (2000), Yang, Peterson, and Huang (2001), Maignan and Ralston (2002), Loiacono, Watson and Goodhue (2002). A Study of Service Quality, grab Food online shopping and their Influence on Satisfaction and Loyalty Using the list of respondents, the online entrepreneurship attribute assessment system was a sample framework. Which is a sampling limit of this research due to the limited budget and time spent on research, however, this study remains useful in both academic and private sectors. To guide electronic business operators in improving the quality of their website electronic services for the satisfaction and loyalty of their customers. The researcher suggested for the next study as follows: (1) Comparative study using other electronic service quality models such as SITE-QUAL WebQual and E-S-QUAL model to study the efficiency of the electronic service quality model. It is also possible to add other causal factors that are expected to affect satisfaction and loyalty, which will lead to the expansion of the causal relationship of the variables and improve the electronic service quality of the purchase. (2) Conduct a study using a larger and more diverse sample framework (3) to analyze the findings that are relevant to the customers' needs in the future. Other interesting additions such as other demographic information come in to analyze together

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