

The Pandemic of COVID-19 and the Behavior of Consumer Using Food Delivery Service via Grab Food Application in Bangkok, Thailand

Sauwaluck Koojaroenprasit

Associated Professor, Department of Economics, Kasetsart University, Thailand

Received: 16 April 2022
Revised: 11 May 2022
Accepted: 11 June 2022
Publication: 15 September 2022

To cite this article

Koojaroenprasit, S. (2022). The Pandemic of COVID-19 and the Behavior of Consumer using Food Delivery Service via Grab Food Application in Bangkok, Thailand. *Asian Journal of Economics and Business*, Vol. 3, No. 2, pp. 291-301. DOI: <https://doi.org/10.47509/AJEB.2022.v03i02.06>

Abstract: Due to Covid-19 pandemic, Thailand has been shut down to prevent the spread of the virus. The delivery food application has received more interest from the consumers. Grabfood delivery food application played the major role in the food delivery market with the market share 76 percent in 2019. The aim of this research was to study consumers' behaviors in the Bangkok area ordering delivery food via GrabFood application during the pandemic of COVID-19. Sample size was 385 collected via online questionnaires. The result showed that most of the observations were female, aged 20 to 30 years old, and most of them were single. Their education level were bachelor's degree which mostly were private employees with monthly income 15,001-25,000 Baht. For the customers' behavior toward using GrabFood delivery application, the average spending was 151-300 Baht each time. The popular type of food and period ordered was Fast Food at 6:01 - 9:00 p.m. on Saturday. Most of the respondents know GrabFood from online advertisement.

Keywords: Grabfood, COVID-19, behavior, Bangkok

Problem Statement

Nowadays, Thai society enters the globalization era. Technology played an important role in our society, making society more accessible due to the exponential development of technological innovation. The internet is one of the mediums that most people use alongside technology. The internet has become very important to economic, social, and cultural systems because it is convenient and high speed. This makes it become a part of people in everyday life around the world. This can be shown from statistical data that "Global number of mobile phone users from 2015 to 2020 is increasing every year and expected to reach 4.77 billion, and there are more than 4.17 billion internet users around the world out of the world population of approximately 7.69 billion people" (Worldometers, 2019). The Internet has influenced human behavior and daily life in society.

Most of Thai people's behavior has changed with the development of technology. Technology is used for facilitating daily life activities such as

Smartphone, Television, and Computer. The capital city of Thailand, Bangkok, was mentioned that people are the most addicted to the internet (Brand Buffet, 2018). Due to Bangkok being a big city that is also a major economy in Thailand, people may be concerned with time and do not want to spend much time on something else such as to reserve some time in case of traffic jams or to wait in line. Many applications are created to help people's life easier and become a part of their life. For example, food delivery applications which were created to help people to save their time. Moreover, the growth rate of food delivery applications continually increased in the past five years with an average of 10 percent per year, which is higher than the restaurant that grew 3 to 4 percent per year (Plonmechai, N., 2019).

Furthermore, at the beginning of 2020, there is a COVID-19 pandemic which is the world's largest epidemic. Thailand has been shut down to prevent the spread of the virus, then everything in the country was closed, including shopping malls, schools, and restaurants. These cause almost all types of businesses to be stuck. In the case of a restaurant business that cannot be opened for customers, what helps the food business to be continued in this situation is the delivery service which has received good feedback from customers. This can be observed from 1,638 Thai people living in Bangkok area, found that 38 percent of Bangkok people order food via Food Delivery service more than before the epidemic of COVID-19 (Pran Suwannatat, 2020). In the first half of 2020, the volume of ordering food via food delivery applications grew by around 150 percent compared to the same period of last year (kasikornresearch, 2020). This represents a more active role in the food delivery business, which can be seen nowadays that there are many food delivery applications in the market such as Grab Food, Food Panda, Line Man, Get Food, etc. As shown on the pie chart in figure 1 among these various applications, the application with the highest market share is "Grab Food" which has about 76 percent of market share in the market, followed by FoodPanda that have market share about 20 percent of total market. In the first four months of 2019, Food panda has about 1 million orders compared with Grabfood which has more than 4 million orders. This shows the increased 110 times growth rate, compared with the whole year of 2018 which had 3 million food orders (Positioning, 2019).

The revenue of GrabFood has been increasing from 104.13 million baht in 2016 to 3,193.18 million baht in 2019 (figure 2). In addition, the head of Grab Thailand, Mr. Tarin Thaniyavarn has announced the massive growth of Grab Food, showing that Grab Food is the top of food ordering applications

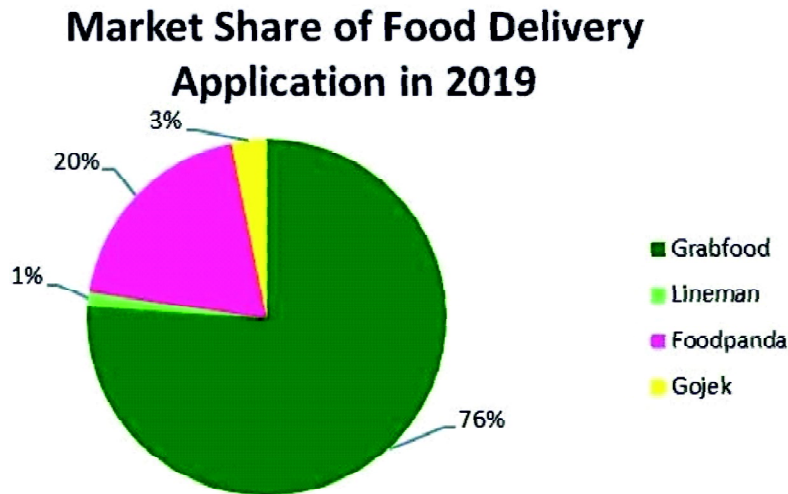


Figure 1: Market Share of Food Delivery Application in 2019

Source: Thansettakij Multimedia (2020)

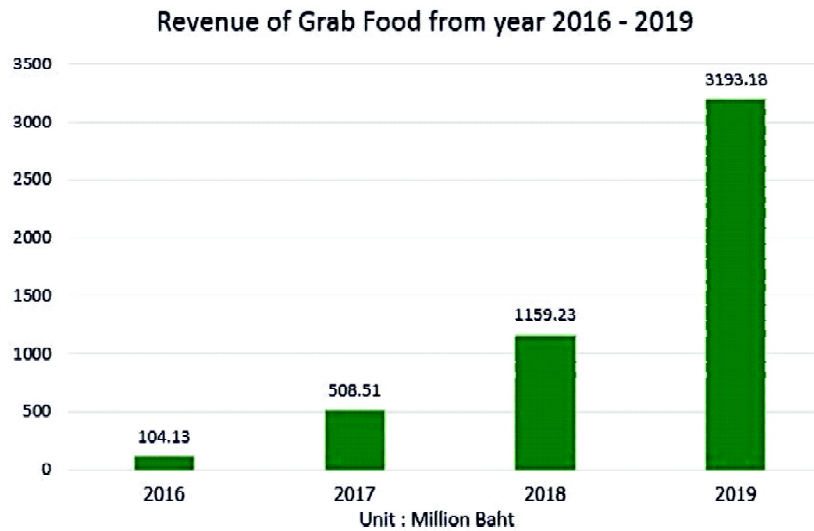


Figure 2: Revenue of GrabFood in 2019

Source: ThaiSMEsCenter (2019)

in Thailand. From April 2019, Grab Food started from two cities which are Bangkok, capital city of Thailand, and Chiangmai, a tourist attraction city of Thailand. In October in 2019, Grab Food has grown to have operations in 14 cities. This shows that Grab Food is growing rapidly (figure 3).



Figure 3: Expansion of GrabFood in 2019

Source: Marketingoops (2019)

Objective

The aim of this research is to study consumers' behaviors in the Bangkok area that order delivery food via Grab Food application during the pandemic of COVID-19.

Benefit

Grab Food's application and other online food delivery applications such as Line Man, Food Panda, etc. can use the result of this research to improve their services and develop their applications to stimulate consumer demand for ordering food delivery through applications.

Scope

This research targets people who use the services from food delivery application "Grab Food" in the Bangkok Metropolitan during the period of COVID-19 pandemic.

Literature Review

Panse, C. *et al.* (2019) in their research "Understanding consumer behavior towards utilization of online food delivery platforms", the objective is to provide a comprehensive relationship between consumer attitudes toward online food ordering. The study adopted the quantitative research with primary data collected

through a questionnaire with online food delivery platforms and customers based on their knowledge, attitudes, perspectives, and needs of online food delivery services. Hypothesis testing was applied for analysis. The result showed that factors like Convenience, Control, Technology Anxiety & Ease of Information significantly affect Consumer Satisfaction.

Phopipat, Anusorn (2017) studied the influence of mobile foodie applications on restaurant selection decisions. The secondary data collected from credible sources including university journals, the Department of Business Development (DBD), the Electronic Transactions Development Agency (ETDA), Euromonitor International, the Royal Thai Embassy, newspapers, and websites. The research conducted both exploratory research and descriptive research to ensure that all the objectives were achieved. Likert scale was applied for the data analysis. The results showed that the mean score of Appropriate price was the highest and followed by Variety of menus and Location, respectively.

Kitthanadeachaorn, Thanakrit (2016) mentioned about the customer buying decision process using an online platform for online food delivery in Thailand by using the primary research consisting of 25 in-depth interviews and 3 focus groups. The respondents could be divided into current users (who have used online food delivery service within the past 3 months) and non-users (who have never used online food delivery service). The process starts from the customers recognizing their problems, which created the need for the product/service. In another dimension, the consumers are aware of products/services currently available in the market. If the product/service matches with the customers' needs, they will have an intention to purchase that product/service. Once the consumers have an intention to purchase, they will do a final evaluation before making an actual purchase, which is to evaluate the risks involved. If the risks are acceptable, they will make a purchase. Therefore, there is a market for online food delivery services as consumers seek for ways to solve their problems. To be successful in the market, business owners must understand the needs of their customers and provide the services that match their needs. Sale promotions and word of mouth play significant roles in encouraging service trials.

Positioningmag.com (2016) mentioned about the consumer behavior toward food delivery platforms that most online food delivery services do not have physical stores. Therefore, these companies communicate with their customers is through online platforms. Since consumers do not get to see the real products, 58 percent of consumers rely on and are enticed by online food pictures, 26

percent prefer online reviews and 9 are enticed by video clips posted online. Based on the survey conducted by the Economic Intelligence Center on consumers aged between 20 to 40 years old, over 20 percent of consumers have purchased food online and half of those do it on a regular basis. The majority are office workers and business owners. However, some operators only offer their services in Bangkok and major cities. The spending for each online food delivery transaction can be as low as 200 Baht or as high as 1,000 Baht. Consumers perceive that online food delivery is more convenient and give them an opportunity to try special or unusual food. This rising trend is supported by the significant growth in this online market.

Sakulrattana, Sanaporn (2015) mentioned about the study that is a contemporary topic in applied marketing in an area of technology. The key objectives are to explore the overview of existing food delivery services provided in Bangkok, to identify consumer segments and current user profiles, and lastly, to understand buying behaviors and key adoption factors and barriers toward delivery food among Thai people in Bangkok. The research approaches are exploratory and descriptive research, using secondary research, in-depth interviews, and a questionnaire-based survey. Despite, the delivery food was basically served for convenience purpose, the convenience term nowadays has shifted and evolved in the context meaning. Not only are the quick and easy choices consumers are looking for, but also the high quality and with superior benefits.

The Concept of Consumer Behavior

From the study of the concept of Consumer Behavior (Worakulathane, K., & Sampattavanich, P. 2010), Consumer Behavior refers to activities related to the thoughts and feelings occur in 3 forms which are

First, the consumer behavior can be changed (Dynamic) due to the change of the external environment such as communication, technology, society, etc., causing an impact on the factors of thinking and consumer feelings too. Since consumer behavior is affected by internal and external factors, the consumer behavior does not stop as before but may change movement at any time.

Second, consumer behavior is related to interaction between thoughts, feelings and actions with the external environment. Therefore, to understand consumer behavior, it is necessary to study both internal and external factors that consumers decide What, How, and Why they consume goods and services.

Third, consumer behavior is related to exchanges, meaning that consumers behave in exchange for certain values with someone. In this case, it is an exchange between the buyer (consumer) and the seller (owner of the goods) to meet their own needs. From these ideas mentioned above can be noticed that the change of technology affects the consumer behavior.

Methodology

This study employed primary data collecting from the questionnaire.

Population and Sample

The population of study were the people who have used the services from Grab Food application in the Bangkok Region, Thailand.

Sample Size

Population in this study were people have used the services from Grab Food application in the Bangkok Region, Thailand. Due to large and unknown number of population, W.G. Cochran (1963) was employed to calculate the sample size.

$$n = \frac{z^2}{4e^2}$$

Where n is sample size

Z is equal to 1.96 at 95 percent confidence level

e is error

$$n = \frac{1.96^2}{4(0.05)^2} = 384.16 \approx 385$$

As a result, the sample size was 385. A random sampling was used.

Result

From 385 observations, there were 152 males which equal to 39.48 percent. There were 233 females which equal to 60.52 percent. The majority were aged between 20 to 30 which were 244 observations or 63.38 percent. The majority of the respondents was single which were 331 observations or 85.97 percent, had income between 15,001-25,000 baht per month. 68.05 percent of the respondents had bachelor's degree, private employees accounting for 57.40 percent.

Customers' Behavior toward using GrabFood delivery application can be summarized as followings;

Table 1: Average Spending per Time

<i>Average Spending per Time (Baht)</i>	<i>Number of observation</i>	<i>Percentage</i>
Less than 150	87	22.6
151 - 300	203	52.73
301 - 500	66	17.14
501 - 800	15	3.90
801 - 1,000	11	2.86
More than 1,000	3	0.78
Total	385	100

From 385 observations, the highest group of observations which were 203 observations or 52.73 percent had the average spending between 151-300 baht per time. The second is 87 observations or 22.6 percent had the average spending less than 150 baht per time. The third was 15 observations or 3.90 percent had the average spending between 501-800 baht per time. The fourth was 11 observations or 2.86 percent had the average spending between 801-1000 baht per time. The last one was 3 observations or 0.78 percent had the average spending more than 1,000 baht per time.

Table 2: The Day that People Ordering the Most

<i>Use Grab Food (Day)</i>	<i>Number of observations</i>	<i>Percentage</i>
Sunday	96	24.94
Monday	33	8.57
Tuesday	24	6.23
Wednesday	36	9.35
Thursday	23	5.97
Friday	44	11.43
Saturday	129	33.51
Total	385	100

From 385 observations, the observations used GrabFood the most popular day on "Saturday" which had 129 observations or 33.51 percent. The second popular day was "Sunday" which had 96 observations or 24.94 percent. The third popular day was "Friday" which had 44 observations or 11.43 percent.

The fourth popular day was “Wednesday” which had 36 observations or 9.35 percent. The fifth popular day was “Monday” which had 33 observations or 8.57 percent. The sixth popular day was “Tuesday” which had 24 observations or 6.23 percent. And the least popular day was “Thursday” which had 23 observations or 5.97 percent.

Table 3: The Period of Time Using Grab Food

<i>Period (Using Grab Food)</i>	<i>Number of observations</i>	<i>Percentage</i>
6:01 - 9:00 a.m.	2	0.52
9:01 - 12:00 a.m.	50	12.99
0:01 -3:00 p.m.	111	28.83
3:01 - 6:00 p.m.	79	20.52
6:01 - 9:00 p.m.	125	32.47
9:01 - 12:00 p.m.	14	3.64
0:01 - 6:00 p.m.	4	1.04
Total	385	100

From 385 observations, the most period of time that people used GrabFood is at 6:01- 9:00p.m. which had 125 observations or 32.47 percent. The second period people using Grab Food was at 0:01 -3:00 p.m. which has 111 observations or 28.83 percent. The third period people using GrabFood was at 3:01 - 6:00 p.m. which had 79 observations or 20.52 percent. The fourth period people using Grabfood was at 9:01 - 12:00 a.m. which had 50 observations or 12.99 percent. The fifth period people using Grabfood was at 9:01 - 12:00 p.m. which had 14 observations or 3.64 percent. The sixth group uses GrabFood at 0:01 - 6:00 p.m. which had 4 observations or 1.04 percent. And the least period people using Grabfood was at 6:01 - 9:00 a.m. which had only 2 observations or 0.52 percent.

Table 4: Type of Food Ordered the Most

<i>Type of Food</i>	<i>Number of observation</i>	<i>Percentage</i>
Fast Food	141	36.62
Thai Food	109	28.31
Japanese Food	69	17.92
Chinese Food	8	2.08
Dessert	16	4.16
Beverage	41	10.65
Total	385	100

The most favorite type of food ordered via GrabFood application was fast food account for 36.62 percent. The second favorite type of food was “Thai Food” which had 109 observations or 28.31 percent. The third favorite type of food was “Japanese Food” which had 69 observations or 17.92 percent. The fourth favorite type of food was “Beverage” which had 41 observations or 10.65 percent. The fifth favorite type of food was “Dessert” which had 16 observations or 4.16 percent. The least favorite type of food was “Chinese Food” which had 8 observations or 2.08 percent.

Table 5: Influencer

<i>Know Grab Food from</i>	<i>Number of observations</i>	<i>Percentage</i>
Friends	97	25.19
Family	22	5.71
Online Advertisement	239	62.08
Offline Advertisement	20	5.19
Bloggers	7	1.18
Total	385	100

From 385 observations, the most channel that people know GrabFood was “Online Advertisement” which had 237 observations or 62.08 percent. The second channel was from “Friends” which had 97 observations or 25.19 percent. The third channel was “Family” which has 22 observations or 5.71 percent. The fourth channel known GrabFood from “Offline Advertisement” which had 20 observations or 5.19 percent. And the last channel was “Bloggers” which had only 7 observations or 1.18 percent.

Conclusion

With the Covid-19 pandemic, Thailand has been shut down to prevent the spread of the virus. One of the restrictions is social distancing, therefore, people cannot have a meal at the restaurant. Food delivery application helps them to continue staying in the economy without risk involved. The feedback of the food delivery application is better than before the pandemic. Grab Food which has the highest market share in 2019, has continued to grow as the pandemic has changed people’s behavior to use online food order services. This study aimed to study consumers’ behaviors in the Bangkok area ordering delivery food via GrabFood application. This study employed 385 observations who lived in the Bangkok area and have ever used the GrabFood delivery application.

The result showed that most of the observations were female, aged 20 to 30 years old, and most of them were single. Their education level is Bachelor degree which mostly were private employees with monthly income 15,001-25,000 Baht. For the customers' behavior toward using GrabFood delivery application, the average spending was 151-300 Baht per time. The popular type of food and period ordered was Fast Food at 6:01 - 9:00 p.m. on Saturday. The channel that they largely know GrabFood was from online advertisement.

Limitations of the Study

This research was done during the COVID-19 pandemic in Thailand, so we have to collect the data through the online questionnaire (google form) that limited our ability to interview the respondents directly face to face.

References

- Israel, D. J. (2019). Consumer's Intention to Continuous Use of Mobile Food Delivery Aggregator App, 11(7). Retrieved September 16, 2021, from https://www.researchgate.net/publication/338450276_Consumer's_Intention_to_Continuous_Use_of_Mobile_Food_Delivery_Aggregator_App
- Iyer, B. (2019). A Study of Consumer Behaviour towards Food Ordering through Mobile Apps, 5(4). Retrieved September 16, 2021, from <https://www.ijaruit.com/manuscripts/v5i4/V5I4-1283.pdf>
- Jiravarnsirikul, P. (2016). Thai Consumers' Behavior And Attitude Towards Purchasing Products From Social Enterprises. Retrieved September 17, 2021, from http://ethesisarchive.library.tu.ac.th/thesis/2016/TU_2016_5802040443_6004_4547.pdf
- Kitthanadeachaorn, T. (2016). Customer Buying Decision Process Using Online Platform for Online Food Delivery in Thailand. Retrieved September 17, 2021, from http://ethesisarchive.library.tu.ac.th/thesis/2016/TU_2016_5802040971_6042_4649.pdf
- Panse, C., Rastogi, S., & Sharma, A. (2019). Understanding Consumer Behaviour Towards Utilization of Online Food Delivery Platforms. Retrieved September 17, 2021, from https://www.researchgate.net/publication/335739176_Understanding_Consumer_Behaviour_Towards_Utilization_of_Online_Food_Delivery_Platforms
- Phopipat, A. (2017). A Study on the Influence of Mobile Foodie Applications on Restaurant Selection Decisions. Retrieved September 17, 2020, from http://ethesisarchive.library.tu.ac.th/thesis/2017/TU_2017_5902040483_8423_6789.pdf
- W.G. Cochran. (1963). Sampling Techniques. New York: London.