The Impact of Food Delivery Apps on Customer Perceived Value Among University Students

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ABSTRACT

The number of food delivery apps users has increased nowadays due to the recent global pandemic situation of the coronavirus outbreak. Food delivery apps bring many benefits to the students and catering business. This paper aims to study the impact of food delivery apps on customer perceived value among university students. A quantitative approach was used in this study. Cross-sectional design used as the design of the study and the data will be gathered at one point in a time. Questionnaires used to collect the data from all respondents. The respondents were university students with the number of samples as many as 101 people. The results found how food delivery applications had an impact on customer perceived value among university students in Malaysia during the pandemic and it can be said that respondents gave a lot of positive feedback on food delivery service, where they believed in the products and service provided.

Keywords: Convenience, Customer Perceived Value, Food Delivery Apps, Price, Trustworthiness, University Students

JEL Classification Codes: M10, O14, L84

INTRODUCTION

The recent global pandemic situation of the coronavirus outbreak has impacted majority of businesses. The coronavirus pandemic has a significant impact on the business sectors, most of businesses experiencing financial difficulties. Because of the Covid-19 pandemic, the nature of traditional business has been drastically altered, and all business sectors have been affected. People are on high alert because of this global challenge, and most of them avoid interacting with other people. This impact is also
experienced by students, they must do learning activity via online. This reality must be accepted by both students and business person, regard it as part as new normal.

Current technology advances make it easier for people to order food via online through food delivery applications and some restaurants and café around university have applied the applications. Consumers will pay more for good services, it shows phenomenon of business competition, forcing people to focus more on performance. In 2018, “online takeaway” revenue in Malaysia reached over US$353 million. This proves that people today prefer purchasing products by via online. In addition, the online ordering system allows customers to customize their orders with various options.

Food and transportation are crucial need for university students in Malaysia who live inside campus. One of the reasons students preferred to purchase food most of their time outside campus is due to unsatisfied food served by university canteens. Most of common factor is repetition of menu or dishes offered from the canteen itself. This left students with no option to purchase from outside university, but it will cause another problem as most students do not have vehicle to buy the food outside. Students who have access to transportation should be aware of the high cost of gasoline if they eat at a food court or restaurant outside of the university campus on a regular basis. In line with this problem, the aim of this research is to investigate the market demand and function requirements for the food delivery application and how students react toward the application services.

These mobile apps have a monitoring system that allows consumers to become more familiar with the stage of the delivery process. They make their order at the appropriate restaurant. Customers may also monitor their orders time by time. Payment also could be made in multiple options such as e-money or by cash-on-delivery (COD) scheme. Those applications also preserved a section where users can provide feedback and recommendation, giving a rate of serving food and satisfaction mood. There has been a significant increase in restaurant and food businesses since customers moved into food delivery to avoid any physical contact during a pandemic outbreak. Most users choose online apps because the food-on-click feature allows them to have food delivered right to their door and they are satisfied to use the apps. It proves that customer satisfaction is significantly influenced by the tangibility aspects of service, food quality, and food cost (Ha & Jang, 2010; Nicolaides, 2008). The impact of food quality on online loyalty, even though not on e-service quality, is a larger driver of customer satisfaction. It is also influenced by the importance of customer satisfaction as a mediating factor. In several ways, this also has improved the restaurant industry in general.

**Literature Review**

Malaysia have various firms that offers online food delivery services with their specific strategies either to launch website or mobile applications. Besides firms like Mamamam , Uber Eats, Shogun2U, Honestbee, DeliverEat, Running Man Delivery, FoodTime and DahMakan, there is also Food Panda, which is the pioneer in food delivery business that initiated successfully in Malaysia (Chai, Ng & Yat, 2019). The growing technology
makes the users of smartphone increased significantly. People use delivery food application almost every day, with just one tap, they get what they want (Santra, 2019). Online food delivery applications are intermediaries by which restaurants deliver food to their customers' doorsteps. Grøtnes (2009) mentioned that the most reliable explanation behind mobile apps is that it is comfortable to use to buy items. Due to the increasing number of university students living away from home, the concept of food delivery is rapidly gaining traction. As we know everyone need a convenient way to get what they need.

Perceived Ease of Use as the extent to which people believe that the use of technology makes someone easier to carry out daily activity (Davis, 1989). The information generated by companies from efficient devices has a substantial impact, thereby creating self-satisfaction for consumers. He in Alwaleed, AlHuawai, Singh, and AlMejhem (2019), stated that the appropriate and effective use of the technologies could reduce the wait time for the provision of services this would ultimately increase the quality of the services and the customer satisfaction. Some studies proved that convenience influences consumer’s satisfaction and behavioral intentions (Ribeiro, 2018). According to Kimes (2011), perceived control and perceived convenience related to online food ordering services, are important for users and non-users. Customer perceived value can be defined from the perspectives of quality, benefit, and social psychology. The Monetary perspective indicates that value is generated when goods have lower prices, such as using coupons or giving discount (Bishop, 1984). The benefit of perspective indicates that perceived value is customers’ overall evaluation of the utility of perceived interest and perceived sacrifices (Zeithaml, 1988). Perceived quality is the consumer’s assessment of the overall superiority of a product (Gill, Byslma, & Ouschan, 2007). It can be seen that a rapid urbanization and an endless migration of people from surrounding areas to towns, the restaurant segment and the food distribution industry have changed dramatically in recent years. With the number of smartphones and food delivery apps, ordering a meal from outside and consuming the meal at home has become a tradition, as using mobile apps is the fastest way nowadays to find or purchase items online.

RESEARCH METHOD

A quantitative approach was used in this. Cross-sectional design used as the design of the study and the data will be gathered at one point in a time. Questionnaires used to collect the data from all respondents. The respondents were university students with the number of samples as many as 101 people. This survey is divided into five parts. The first part is about respondents’ demographics information, consisting of gender, age, education program and year of study.

The sampling technique used in this study is non-probability sampling. The questionnaire was distributed through social media such as Instagram, WhatsApp Messenger, and Telegram in form of Google Forms. During the data collection, 101 participants voluntarily took part in this study and completed the survey questionnaire. Although certain individuals may not be the representative of the population as convenience
sampling used, those samples may provide useful evidence to address questions and hypotheses (Creswell & Guetterman, 2019). Likert scale is rating system used in questionnaires to measure people’s opinions or perceptions. The study employed a 5-point Likert scale, ranging from 1 “Very Poor” to 5 “Very Good.”

RESULTS AND DISCUSSION

This section will analyze data and present results based on the data obtained from the respondent on Google Form. The google form that we distributed through social media has reached 101 respondents although our target was only 100. This survey is regarding the impact of food delivery apps on customer perceived value among university students. There will be five parts in this result section which is respondents’ demographic, respondent satisfaction on using food delivery apps, price value, respondent habit on purchasing food by using apps and their awareness.

Table 1. Summary of respondents’ Demographics profile (N=101)

| RESPONSE                  | FREQUENCY | PERCENTAGE (%) |
|---------------------------|-----------|----------------|
| Gender:                   |           |                |
| Female                    | 56        | 55.5           |
| Male                      | 45        | 44.5           |
| Age:                      |           |                |
| 18-22                     | 74        | 73.3           |
| 23-27                     | 22        | 21.8           |
| 28-32                     | 5         | 5.0            |
| Education Program:        |           |                |
| Bachelor’s degree         | 73        | 72.3           |
| Diploma                   | 28        | 27.7           |
| Year of Study:            |           |                |
| Year 1                    | 30        | 29.7           |
| Year 2                    | 38        | 37.6           |
| Year 3                    | 20        | 19.8           |
| Year 4                    | 13        | 12.9           |

Table 1 above shows 101 respondents’ demographic information, the most respondents were dominated by female. As much as 73.3% respondents were in age 18-22 year. As much as 72.3% respondents were bachelor students, followed by diploma students as much as 27.7%, while as much as 37.6% were second year students.
Table 2. Summary on respondent satisfaction using food delivery apps

| RESPONSE | FREQUENCY | PERCENTAGE (%) |
|----------|-----------|----------------|
| **Which delivery app you like most?** | | |
| Food Panda | 65 | 64.4 |
| Grab food | 34 | 33.7 |
| Others | 2 | 2.0 |
| **How would rate the satisfaction of the apps you used?** | | |
| Very poor | 0 | 0.0 |
| Poor | 0 | 0.0 |
| Neutral | 12 | 11.9 |
| Good | 64 | 63.4 |
| Very Good | 25 | 24.8 |
| **It is important to you whether the foods arrived on time or not?** | | |
| Yes | 91 | 90.1 |
| No | 10 | 9.9 |
| **How would you rate the condition and quality of food that deliver by delivery apps?** | | |
| Very poor | 0 | 0.0 |
| Poor | 0 | 0.0 |
| Neutral | 17 | 16.8 |
| Good | 60 | 59.4 |
| Very Good | 24 | 23.8 |
| **Are you always satisfied with the food which ordered online?** | | |
| Yes | 80 | 79.2 |
| No | 21 | 20.8 |

From the table 2, majority of students participate in this survey used food panda (64.4%), followed by Grab food as much as 33.7%. As much as 63.4% respondents rated good, followed by 24.8% who rated very good for the satisfaction of the apps they used. From 101 respondents, 91.1% respondents agreed that it is important for the foods to be delivered on time. As much as 59.4% respondent rated the food are in a good condition, while 79.2% respondents feel satisfied with the food they ordered online. Here we can conclude that food delivery apps have a good impact on majority customer or respondent perceived value. More than half of the respondent (63.4%) are satisfied with food delivery apps.
Table 3. Summary of respondent's opinion about price value in food delivery apps

| RESPONSE                                                                 | FREQUENCY | PERCENTAGE (%) |
|--------------------------------------------------------------------------|-----------|----------------|
| Food featured in food delivery apps are reasonably priced.                |           |                |
| Yes                                                                      | 70        | 69.3           |
| No                                                                       | 31        | 30.7           |
| Does purchasing food by delivery app cheaper than dine in?               |           |                |
| Yes                                                                      | 27        | 26.7           |
| No                                                                       | 74        | 73.3           |
| Have you ever felt that quality of food lower than the price?            |           |                |
| Yes                                                                      | 61        | 60.4           |
| No                                                                       | 40        | 39.6           |

Table 3 shows the respondent opinion about price value in food delivery apps. Most of the respondent (69.3%) agreed that food featured in food delivery apps are reasonably priced, while as much as 26.7% of respondents agreed that purchasing food by delivery apps are cheaper than dine in. As much as 73.3% respondents feel that dine in would be cheaper, maybe there is no delivery charge applied when dine in. Meanwhile, 60.4% respondents acknowledge that quality of food ordered lower than the price, and 39.6% respondents choose to disagree with this.

Table 4. Summary of respondent's habits in using food delivery apps

| RESPONSE                                                    | FREQUENCY | PERCENTAGE (%) |
|--------------------------------------------------------------|-----------|----------------|
| How frequently you use food delivery apps?                   |           |                |
| Daily                                                        | 5         | 5.0            |
| Weekly                                                       | 39        | 38.6           |
| Monthly                                                      | 52        | 51.5           |
| Others                                                       | 5         | 5.0            |
| How do you determine a good service?                         |           |                |
| Fast Delivery                                               | 18        | 17.8           |
| Fast Delivery, Good manners                                  | 1         | 1.0            |
| Fast Delivery, Received in good condition                    | 18        | 17.8           |
| Fast Delivery, Received in good condition, good manners      | 37        | 36.6           |
| Good manners                                                | 4         | 4.0            |
| Received in good condition                                   | 16        | 15.8           |
| Received in good condition, Good manners                     | 7         | 7.0            |
Table 4 shows the result of respondent’s habits in using food delivery apps. As much as 51.5% respondents used food delivery apps every month, only 38.6% of them used food delivery apps every week. As much as 36.6% respondents determine good service as fast delivery, received in good condition and driver has a good manner. Next, 34.7% respondents neither agree nor disagree about using food delivery apps for the purchase of food. Meanwhile, 31.7% of respondents agreed they always use food delivery apps for the purchase of food. There is only 3% of different between respondents neither agree nor disagree and agree. Here we can conclude that most of the respondents are neutral on this statement of habit on using food delivery apps.

Table 5. Summary of respondent’s awareness in using food delivery apps

| RESPONSE                                      | FREQUENCY | PERCENTAGE (%) |
|-----------------------------------------------|-----------|----------------|
| Which mode of payment you use?                |           |                |
| Cash on delivery                             | 38        | 37.6           |
| Online payment                               | 63        | 62.4           |
| I believe online payment on food delivery apps are safe and secure. | | |
| Yes                                           | 89        | 88.1           |
| No                                            | 12        | 11.9           |
| I am likely to be influenced by offers available in food apps. | | |
| Strongly Disagree                             | 1         | 1.0            |
| Disagree                                      | 4         | 4.0            |
| Neither agree nor disagree                    | 25        | 24.8           |
| Agree                                         | 48        | 47.5           |
| Strongly Agree                                | 23        | 22.8           |
| Variety of restaurants in food apps effect my choice. | | |
| Yes                                           | 78        | 77.2           |
| No                                            | 23        | 22.8           |

Table 5 shows respondent’s awareness in using food delivery apps. More than half of the respondent which is 62.4% used online payment method and 37.6% used cash on delivery. As much as 88.1% of the respondent believe that online payment on food delivery apps is safe and secure, while only 11.9% do not feel safe with online payment. There for this led to the trusty of respondent towards food delivery apps. Next, the offers
available on food apps do influence 47.5% of respondents in this survey. Only 4% of respondents disagree with the statement.

Furthermore, 77.2% of respondents agreed that variety of restaurants in food apps effect their choices of food, while 22.8% respondents disagree with this statement. These show that most of the students are aware with the food delivery apps as we can see most of them trust this apps by paying their food using online payment.

Discussion
From the result of analysis, it was found how food delivery applications had an impact on customer perceived value among university students in Malaysia during the pandemic. The pandemic has affected all types of lifestyles. Both workers and students are required to work and study from home, this has resulted the increase in online delivery service. From the result of analysis, it can be said that respondents gave a lot of positive feedback on food delivery service, where they believed in the products and service provided. Believe in the context of service quality is defined as the satisfaction of all good customers, food delivery applications must provide proper service and deliver food on time so that customers avoid disappointment.

Respondents want the food delivery apps to provide information efficiently so that it would not be hard for them to find the information they want. From the survey, we found that as much as 64.4% respondents prefer to use food panda application. As much as 20.8% respondents were not satisfied with delivery time and 73.3% respondents think the meals have a high price when eaten dine-in.

The research found that sometimes the quality of food is lower in comparison to the price. Food delivery app in Malaysia try to give all customers better quality service. However, some respondents still feel unsatisfied. Delivery food application should pay more attention to food quality and service providers are able to resolve problems or complaints from customers. Due to all respondents were university students who are pursuing their career, they do not have much income. Therefore, they are very considerate of the prices offered by food delivery service application.

Food delivery applications should improve their services, especially regarding on time delivery. From the analysis, it was found that some respondents or customers often deal with delay delivery. During the pandemic, everyone must avoid contact with other people, therefore online payment method is applied. However, some respondents face problems in using payment online. Therefore, service providers must solve these problems as soon as possible so that customers feel comfortable when using food delivery which in turn to bring benefit to the company.

CONCLUSIONS
In conclusion, Food Delivery’s companies have a great growth since Movement Control Order (MCO) been held. MCO has made the demand for food increased since all people
are in quarantine condition. Since there is MCO, people have to order food from Food Delivery Apps, because they are not allowed eat food dine-in restaurant. There is a lot of improvement and feedback as well for the companies. This will made Food Delivery's companies know their weaknesses and strengths easily and made some improvement.

Sometimes, people are worried to order food online since they get the wrong order or the food is getting colder and having bad quality. During COVID-19 situation, the quality of food delivery application is getting better, many people give the best feedbacks since it is so helpful. However, some people are still not satisfied with service provided. Most of the companies are aware of their employees' health since they always make a contact with customers when delivering the food to customers' home. Thus, the company made policy, they told customer to prepared and open the gate or door and the driver leave the food in front of the door or hang them in a gate. As we can see from the questionnaire result, some people give positive feedback to food delivery companies. It means that people rely heavily on food delivery services during the pandemic, because they are not allowed doing any contact with other people. This Standard Operation Procedures (SOP) is efficient to break the chain of Covid-19 spread.

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Appendix

Customer satisfaction
1. It is easy to find high demand food on Food Panda.
2. Online food delivery service receives high satisfaction rate.
3. Condition, quality, and delivery time improve purchase experience.

Price value
1. Price of online food delivery service listed at reasonable amount.
2. Listed price for dine in is cheaper compare thru online food delivery service.
3. Food delivery by online delivery services need to be improve to gain price value.

Habit
1. Frequently customer only consumption once every month.
2. Good service determined by food delivery by online delivery service receive in good condition.
3. Food delivery app is main intermediary of food purchasing.

Awareness
1. Feel comfortable and secure to make purchasing by online payment.
2. Multiple choice of restaurant effect decision making.
3. Offer by food delivery app influence demand of food delivery service.