User Satisfaction on Food Delivery Application (FDA) in Klang Valley

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Abstract. The Food Delivery Application (FDA) have been widely adopted by catering businesses and customers as an emerging online-to-offline mobile technology. Food Delivery Application (FDA) have been widely regarded in the restaurant industry as innovative channels for reaching customers and providing high-quality services. The goal of this study is to extend the UTAUT2 model framework to determine the interrelationship between the independent variables which chiefly include end-user interface, information quality, and service quality with its user satisfaction on Food Delivery Application (FDA) as a dependent variable through quantitative method. A total of 259 respondents were responding to this study. Throughout this study, a statistical tool called Statistical Package for the Social Science (SPSS) version 23 was used to analyse the collected data. Hence, descriptive statistics and Kendall correlation were applied to this study as well. The results of this study were clearly shown that the independent variables (end-user interface, information quality, and service quality) had a positive impact on the dependent variable (user satisfaction) on Food Delivery Application (FDA). Also, it suggested for future research to conduct this similar study to be extended to determine other determinants factor that influence perceived service value in the Food Delivery Application (FDA).

Keywords: User satisfaction, food delivery application (FDA), end-user interface, information quality, service quality, information management.

1 Introduction

The advancement of technology and smartphones is altering our way of life. Online food delivery applications are the means through which eateries deliver food straight to

consumers' homes. Because of the growing working population and their demanding work life culture in metro centers, the concept of meal delivery is fast expanding. This situation has resulted in fierce rivalry between online Food Delivery Application and eateries that provide free home delivery services (Anupriya Saxena, 2019). Jyotishman Das (2018) investigated customer perceptions of online food ordering and delivery services in his study, with the goal of examining consumers' perspectives on the various services they receive from different portals. Food Delivery Application (FDA) is a subset of the online food delivery services market. It also refers to the procedure of ordering food through a mobile application (s). According to Statista Reports (2018), the Food Delivery Application (FDA) generated 95.41 million USD in income in 2018. Despite the substantial income, sources in the media indicate that Food Delivery Application (FDA) did not turn a profit.

New government rules enforced in response to the COVID-19 epidemic have caused a disturbance in the supply chain network, causing several eateries to close temporarily. Food delivery services are the preferred method of acquiring meals due to the obligation to stay at home or the preference to stay at home (Marcellus, 2020). There was a significant shift in how consumers spent their money and how e-commerce began (H. Akram, A. Khan 2020). The food industry is experiencing a significant drop in customer base as businesses and restaurants are forced to close and rely on alternate methods of getting meals, such as online ordering (Scott R. Baker, et al 2020). The COVID-19 pandemic had a profound effect on consumers' attitudes toward food and eating (Byrd et al., 2021).

These developments are enabled by advancements and development in electronic commerce, sometimes referred to as the "online to offline" (O2O) model (Cho et al., 2019; LI & Mo, 2015; Liu et al., 2017a, 2017b). O2O refers to online platforms that enable users to purchase products or services from brick-and-mortar businesses (LI & Mo, 2015). Food Delivery Application (FDA) evolved from the concept of O2O. Food Delivery Application (FDA) serve as a link between restaurants and consumers, enabling food to be delivered to their homes. Thus, many behavioural changes induced by the pandemic may persist beyond the stabilisation phase (Blumtritt, 2020), such as the use of Food Delivery Application (FDA), if consumers develop trust and contentment with mobile transactions (Gao et al., 2015).

According to prior research, most users are comfortable purchasing food through Food Delivery Application (FDA), however there is a substantial reluctance to utilise Food Delivery Application (FDA) owing to concerns such as health difficulties (Maimaiti et al., 2018). The Food Delivery Applications market is not mature yet and possesses various challenges, says Hong Lan et al., 2016. They also believe that the future of the market will be in the form of a mobile-based delivery system.

In Malaysia, there are a number of major key players in the Food Delivery Application (FDA) business, including GrabFood, Heyho, Dahmakan, Bungkusit, Foodpanda, and DeliverEat. For example, various remarks about late delivery, order cancellation, and poor experiences can still be found on Malaysian meal delivery application providers. Malaysia likewise had a surge in the food delivery service market in 2017, with many new businesses opening up, but this swiftly faded due to the deaths of those businesses and a decrease in investment. Although many consumers have used the services,

there is no guarantee that they will continue to use the applications in the future. This issue could arise as a result of inconsistency of application service quality: some of the findings found that the complexity, inconsistency, and capability effect on the acceptance of Food Delivery Application (FDA and end-user interface: when it comes to application, design user interface is a priority area because user see the interface first and they will continue it on the regular basis. However, some of the Food Delivery Application (FDA) has unattractive user interface, complex, too much information and not user friendly.

2   Research Background

These are the top ten most significant biological demands in one's life (followed by sex and sleep) (McLeod, 2018). Nowadays, consumers may easily purchase food by visiting a real store or ordering online. Food delivery services are available in Malaysia via online ordering or mobile applications (apps.) According to Dazmin and Ho (2019), Malaysian food delivery services are provided by retailers and restaurant Intermediaries. Within the last few years, there has been an exponential growth of Food Delivery Application (FDA) in Malaysia, and it is regarded as a restaurant liaison that provides delivery services for a wide range of restaurants. Figure 1 depicts the 18.6 percent increase in the Malaysia Food Delivery Application (FDA) Market from 2017 to 2020, (USD Million). This implies that the driving force of the Online food delivery services industry may be due to technological adoption and changes in consumer lifestyle, which support market growth.
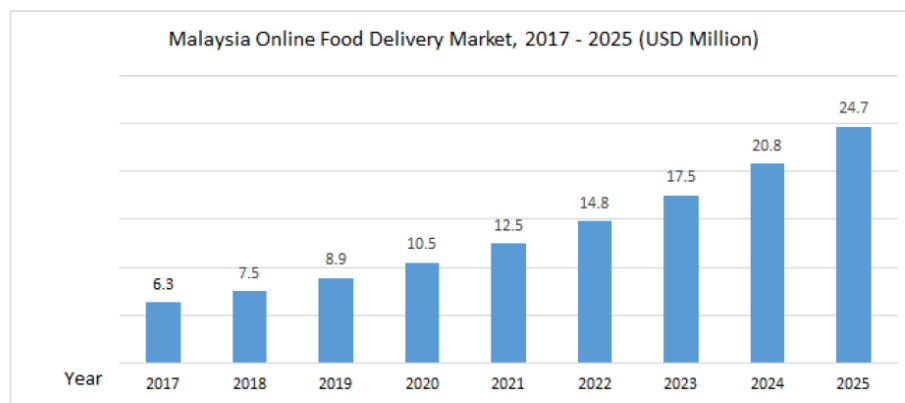
Source : Adroit Market Research (2019)

Figure 1: Adroit Market Research

Today many people, especially college students and employees, prefer to stay at home and surf the web all day long when they have free time. They might have a hard time cooking food. They will just go to a vending machine to buy food, get food when it is easy to get, or order online food delivery as an alternative.

2.1 Overview of Food Delivery Application (FDA)

Food Delivery Application (FDA) are a new mobile technology that connects catering businesses and clients via an online-to-offline integration delivery service. Customers buy online through third- party web middlemen, and the catering businesses deliver the meal to the customers' doorsteps. Customers will receive contactless delivery as a result of the entire procedure. Smartphone-based food delivery services rely largely on technology. The apps are downloaded in a matter of seconds, and order processing is completed in a matter of minutes (Gupta, 2019; Parashar & Ghadiyali, 2018). Technology is contributing in the creation of new dining experiences, and it is vital that people change their dining habits. The Food Delivery Applications industry has a tremendous potential as a result of technology, and great opportunities and problems are appearing as a result of the industry's many rivals. Food delivery companies must adapt to changing consumer patterns as they are passed down through generations (Kwong & Shiun-Yi, 2017).

2.2 Assessing Food Delivery Application (FDA) Use and Effectiveness

The rise of mobile technology has resulted in an increase in the number of smartphone users. Because of the rapid evolution of technology and its impact on smartphones, continual advances in mobile technologies have resulted in a wide range of smart phone applications. With the increasing expansion of mobile devices, mobile phone application-based business is widely regarded as a powerful driving force (Satwinderjit S., 2018). Food Delivery Application are a cutting-edge and convenient platform that can be downloaded as a smartphone mobile app. It enables smartphone users to order and pay for food from a wide range of establishments. Food Delivery Applications are accessible on both Android and iOS platforms, and they play an essential role in the food and beverage business. Users will boycott their application if the information they upload on it is not true and credible. Restaurants who outsource their delivery services to the platform lose a considerable amount of money since users do not trust them.

Food Delivery Application modifies the consumer-food relationship by changing the way individuals' access, prepare, and consume food. As a result, these changes have an impact on human-to-human connections, sparking a heated discussion regarding whether Food Delivery Application increases or lowers customer pleasure.

2.3 User Satisfaction on Food Delivery Application (FDA)

For the commerce that delivering services, Mentzer, Flint, and Hult (2001) mentioned that the customers play the most vital part in the industry of courier service. This is because customers as one of the main stakeholders in organizations or companies' success due to the user satisfaction as a priority for viable growth (Abel, 2013). According to Sharmin et al. (2016), satisfaction refers to the user expression regarding the outcome of an evaluation process to compare what was received from the service and what was perceived throughout their experience accessing the quality of service. The

justification has also supported by Hunt (1977) which stated that satisfaction as a process of measuring the experience of where the expected services are compared with the end results and also, it can be interpreted from an accumulative view (Boulding et al., 1993). Thus, the satisfaction which determined from this point of view would clarify more on users' behavioural intentions towards the service perceived by them (Jones & Suh, 2000). User satisfaction is reflected as one of the primary targets in running the business of delivering food services. This is because, in the present marketplace, the organizations tend to lose customers to other competitors if failed to provide high-standard service quality (Cheng, 2013).

When it comes to online food delivery, many elements, such as food availability, ratings by other customers, payment mode, and human connection, have a key impact in consumer experience and pleasure (Kwong & Shiun-Yi, 2017). To attain maximum customer pleasure, service providers must prioritise service quality, and the ultimate goal of Food Delivery Application services should be maximum user satisfaction rather than profit (Nicolaides, 2008; Andaleeb & Conway, 2006). A new study by Suhartanto et al. (2019) validate the direct influence of food quality on online loyalty but not e-service quality. They reveal the partial mediation function of customer satisfaction and perceived value on the connection between food quality and e-service quality. It was important to keep existing customers happy and to increase revenue and expand client base.

A recent study found that user satisfaction is important to understand the performance of the organization service from the user perception among respondents. Based on this study, user satisfaction is important on Food Delivery Application services to understand the performance of the Food Delivery Application services from the customers" perception. This is because customer satisfaction is essential to the survival of the organization (Bradic, Kosar, & Kalenjuk, 2013).

2.4 Food Delivery Application Upon the Perceived Value

Mobile apps are bits of software designed specifically for small, mobile devices like tablets and smartphones. They represent some of the fastest growing markets for downloaded enterprise applications/software. Users can rate and review products after installing apps. One of the most important triggers for app discoverability and installation is user ratings and reviews. Consumers' perceived value is defined as the ratio of perceived benefits gained to perceived sacrifices made. Value can be considered as a trade-off of all major give and receive components, which are understood as interactions between meaningful benefits and sacrifices. Researchers have found consumer evaluations of product or service quality as a crucial predictor of good perceived value. Practitioners in the Food Delivery Application market must understand how mobile clients' perceived app quality qualities influence their considered worth. A favourable association between the five-dimensional characteristics of food delivery app quality and user value perception is proposed in the Food Delivery Applications business.

2.5 End-User Interface

End-User Interface design is concerned with the application emotional appeal, balance, uniformity, and aesthetics. Colour, shapes, photography, and even font style are examples (Garrett, 2003). The majority of empirical studies show a positive relationship between enjoyable user experience and end-user interface. A customer who has difficulty searching for and obtaining the necessary information is likely to leave the application, according to McKinney et al. (2022).

2.6 Information Quality

The most basic communication skill between internet users is information quality. The underlying thought in building trust is regarded to be information quality (Kim et. Al., 2017). Improved information quality may result in enjoyment and positive behavioural intentions (Ahn, T et. Al, 2007). Product information that is more comprehensive leads to better purchasing decisions and higher levels of user satisfaction. The availability of information shortens search times, allowing for more informed decision-making. Kim and Park (2003). The amount of information provided may decide whether internet commerce succeeds or fails (Yang, 2001). There are numerous thoughts and interpretations of the dimension of information quality in the literature. In this article, the study focusses on the issue of the quality of information that is available to consumers.

The accuracy of information is a critical factor in determining user satisfaction with the service quality provided by Food Delivery Applications. Information quality is defined as the variable that provides precise information that is useful and valuable enough to be used as a reference by customers regarding their orders. Food Delivery Application users were given insufficient information about the product, services, and delivery information. This issue will provide users with incorrect directions for tracking their orders and may result in incorrect orders being received by the user. The most common issue for user satisfaction of Food Delivery Application was that users were not given enough information about what they were receiving. On a website, quality information can have a significant impact on customers, especially during a pandemic when customers are more sceptical and apprehensive about online sellers (Khan et al. 2015). Customers are more satisfied with a website that provides accurate, up-to-date, and consistent information (Park and Kim, 2003).

2.7 Service Quality

Due to users are the patrons of the products or services, service quality is vital for user satisfaction. Various organisations utilise the SERVQUAL tool, which assesses service quality characteristics, to assess customer satisfaction and loyalty (Landrum, et al., 2009). According to the findings of the study, the quality of service provided by Food Delivery Applications (FDA) has a substantial impact on user satisfaction. User satisfaction is critical because it is the consumers who are the patrons of the products or services. As a result, effective tools for assessing service quality are critical for

businesses that get a portion of their revenue or all of their revenue from service delivery.

In general, quality has been defined as "fitness for use" and "those product characteristics that match consumer expectations and hence offer customer happiness" (Juran and Godfrey, 1999). Gravin (1984) asserts that the definition of quality differs according to the methodology used to approach transcendental experience, product, manufacture, value, and user. On the other hand, service refers to an intangible activity or benefit offered by the services provider to the consumer, which may include tangible products and anything that is added to the intangible service, as well as something that exists independently of the intangible service (Kotler, 1991).

3   Methodology

This study adopted a quantitative approach for data collection. The unit of analysis is current and potential adopters of Food Delivery Applications (FDA) services among Malaysia Productivity Corporation (MPC) employees. The data were collected using a self-administered questionnaire survey via Google Forms and direct distribution to respondents among Malaysia Productivitiy Corporation (MPC) employees. The questionnaire was designed using simple and unbiased wording so that the respondents could understand the questions easily. Questions items were adapted from earlier studies with minor modifications. Items that measured in this study, user satisfaction on Food Delivery Applications (FDA) and information quality were adopted from Ye-Eun Song1 (2017), perceived value and service qualiy from Meehee Choa (2019) and end user interface from Ja Young (Jacey). All the constructs were measured using a 5-point Likert scale of 1- strongly disagree to 5 - strongly agree.

4   Findings

In this study, respondents" demographic profile that consists of questionnaires regarding gender, religion, age, marital status, and status of the study have been obtained by the researcher. The first factor was a gender that indicates 77.2% (200 respondents) were females and 22.8% (59 respondents) were males. Next factor was respondents" religion which includes Islam, Buddha, Hindu, Christian, and others. Most of the respondents were in the Islamic religion, with 91.9% (238 respondents) followed by the respondents were in the Buddha, with 5.4% (14 respondents), followed by the respondents were in the Christian, with 1.9% (5 respondents), Hindu religion, with 0.4% (1 respondents) and others, 0.4% (1 respondents). The third factor was the age of respondents that classified into four levels, which are 18-25, 26-33, 34-41 and 42-50. Most of the respondents were in the age range of 18-25, with 61.4% (159 respondents), followed by respondents were in the age range 26-33, with 28.2% (73 respondents), and respondents were in the age range 42-50, with 8.1% (21 respondents). Lastly, respondents were in the age range of 34-41, with 2.3% (6 respondents). The fourth factor was the marital status of respondents. There were two marital statuses represented, which were single

and married status. Single status indicates the highest percentage with 81.5% (211 respondents), followed by married status with 18.5% (48 respondents).

Table 1: Demographic profile

Items	Categories	Frequency	Percent (%)
Gender	Female Male	200	77.2
	Total	59	22.8
		259	100.0
	Islam	238	91.9
	Buddha Christian	14	5.4
Religion	Hindu	5	1.9
	Others	1	0.4
	Total	1	0.4
		259	100.0
	18 – 25 years old	159	61.4
Age	26 – 33 years old	73	28.3
	34 – 41 years old	21	8.1
	42 – 50 years old	6	2.3
	Single	211	81.5
Status	Married	48	18.5
	Total	259	100.00

In this study, the researcher was used Cronbach's alpha reliability test to analyse the variables which include end user interface, information quality and service quality as independent variables meanwhile perceived value on user satisfaction on food delivery application (FDAs) as the dependent variable. Cronbach's alpha was used as a reliability coefficient to test data goodness. According to Nunnaly and Bernstein (1994), if Cronbach's alpha is less than <0.6 is considered as "poor", meanwhile the range of 0.6 to <0.7 are considered as "moderate". The range of 0.7 to <0.8 are considered as "good" and the range of 0.8 to <0.9 are considered as "very good". Otherwise, if more than >0.9, it is considered as "excellent" which represents the most strength of alpha in the results of the reliability test.

Thus, the results showed Cronbach's alpha for the independent variable of end user interface, is 0.866, information quality is 0.908, service quality is 0.871. Meanwhile, the results of Cronbach's alpha for the dependent variable of perceived value are 0.784 and in addition, Cronbach's alpha for user satisfaction is 0.895. The dependent variable is considered as "very good", while the independent variables are considered "good" to "very good". Therefore, these results meet the rule of thumb which represents a correlation between the items are reliable at a value of 0.6 or higher.

Table 2: Cronbach's alpha Perceived Value

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.784	.798	5

Table 3: Cronbach's alpha End User Interface

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.866	.867	5

Table 4: Cronbach's alpha Information Quality

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.908	.909	5

Table 5: Cronbach's alpha Service Quality

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.871	.874	5

Table 6 to Table 7 below show the mean and standard deviation scores obtained for the independent and dependent variables.

4.1 User Satisfaction

User satisfaction is the dependent variable presented in this study. The variable used the ordinal scale with responses ranging from "Strongly Disagree" (1) to "Strongly Agree" (5) on a five-point Likert Scale and in which, all 5 items of personnel quality variable were mean of 4.03 to 4.09. Referred to Table 4.5 (d) below, it shows the item 1, "I am satisfied with the food delivery applications I am currently using." is the highest mean with 4.09 meanwhile, the least mean was scored by the item 1 which is "I am rating a good experience of using food delivery applications services." with 4.03. For standard deviation, it shows the item 3, "I will keep using the delivery applications I'm currently using." as the highest score with 0.869 while the item 1 shows the least score for standard deviation with 0.750.

Table 6: Cronbach's alpha Service Quality

Items	N	Mean	Std Deviation
1	259	4.09	0.750
2	259	4.03	0.773
3	259	4.05	0.869
4	259	4.03	0.817
5	259	4.08	0.805

4.2 Percieved Value

Throughout this study, Table 4.5 (e) below also represents the mean scores and standard deviations for the dependent variable, perceived service quality. This variable also used the ordinal scale with responses ranging from "Strongly Disagree" (1) to "Strongly Agree" (5) on a five-point Likert Scale. From the results, it shows the item 3, "Food delivery applications are more convenient to use." is the highest mean with 4.17 meanwhile, the least mean was scored by the item 1 which is "I feel that the food offered in the food delivery applications is sell with a reasonable price." with 3.17.

For standard deviation, it shows the item 1, "I feel that the food offered in the food delivery applications is sell with a reasonable price." as the highest score with 1.105 while the item 3 shows the least score for standard deviation with 0.760.

Table 7: Cronbach's alpha Service Quality

Items	N	Mean	Std Deviation
1	259	3.17	1.105
2	259	4.16	0.851
3	259	4.17	0.760
4	259	3.85	0.839
5	259	4.15	0.856

4.3 Service Quality

Service quality is the third independent variable presented in this study. The variable used the ordinal scale with responses ranging from "Strongly Disagree" (1) to "Strongly Agree" (5) on a five-point Likert Scale and in which, all 5 items of information quality variable were mean of 3.66 to 4.15. Referred to Table 4.5 (c) below, it shows the item 4, "Food delivery applications allow user to acquire the status of the order." is the highest mean with 4.15 meanwhile, the least mean was scored by the item 1 which is "Food delivery applications provides a punctual delivery time." with 3.66.

However, the result shows item 1 has the highest score with 0.976 for standard deviation compared to item 4, "Food delivery applications allow user to acquire the status of the order." shows the least score of standard deviation which is 0.739.

Table 8: Descriptive Statistics of Service Quality

Items	N	Mean	Std Deviation
1	259	3.66	0.976
2	259	3.83	0.872
3	259	3.93	0.813
4	259	4.15	0.739
5	259	4.02	0.816

The main tests for the assessment of normality are Kolmogorov-Smirnov (K-S) test, Lilliefors corrected K-S test, Shapiro-Wilk test, Anderson-Darling test, Cramer-von Mises test, D'Agostino skewness test, Anscombe-Glynn kurtosis test, D'Agostino-Pearson omnibus test, and the Jarque-Bera test. Among these, K-S and Shapiro-Wilk is a much-used test and were used to measure statistical tests for this study.

Table 9: Tables of Normality Test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
UserSatisfaction	.100	259	.000	.949	259	.000
PerceivedValue	.092	259	.000	.970	259	.000
EndUserInterface	.102	259	.000	.943	259	.000
InformationQuality	.133	259	.000	.942	259	.000
ServiceQuality	.122	259	.000	.960	259	.000

a. Lilliefors Significance Correction

As a rule of thumb, we conclude that a variable is not normally distributed if "Sig." < 0.05. So, both the Kolmogorov-Smirnov test as well as the Shapiro-Wilk test results shows that Normality testing are significant. The tests mentioned above compare the scores in the sample to a normally distributed set of scores with the same mean and standard deviation; the null hypothesis is that "sample distribution is normal." If the test is significant, the distribution is non-normal. For small sample sizes, normality tests have little power to reject the null hypothesis and therefore small samples most often pass normality tests. The K-S test is an empirical distribution function (EDF) in which the theoretical cumulative distribution function of the test distribution is contrasted with the EDF of the data. The Shapiro-Wilk test is based on the correlation between the data and the corresponding normal scores and provides better power than the K-S test. According to Hendry C. Thode recommend the Shapiro-Wilk test as the best choice for testing the normality of data. The normality assumption also needs to be considered for validation of data presented in the literature as it shows whether correct statistical tests have been used.

4.4 Skewness & Kurtosis

Table 10: Skewness and Kurtosis

	User satisfaction	Perceived value	End user interface	Information quality	Service quality
Skewness	2.26	0.85	3.82	2.54	2.91
Kurtosis	1.37	2.04	1.64	0.76	0.54

We try to accept distribution that fall within ±1.96

Kendall's tau-b (b) correlation coefficient (abbreviated Kendall's tau-b) is a nonparametric measure of the degree and direction of relationship between two ordinal scale variables. When your data violates one or more of the Pearson's product moment correlation's assumptions, it is regarded a nonparametric alternative to the Pearson's product-moment correlation. Additionally, it is regarded as a viable substitute for the nonparametric Spearman rank-order correlation coefficient (especially when you have a small sample size with many tied ranks).

Thus, the assumption of parametric (Pearson) are not met. Hence, the analysis is continued with alternative analysis (non-parametric).

Table 11: Correlation coefficient

	1	2	3	4
Correlation coefficient	0.599	0.487	0.543	0.557
Sig (*p* value)	<0.001*	<0.001*	<0.001*	<0.001*

1. Perceived Value
2. End User Interface
3. Information Quality
4. Service Quality
*Sig at p<0.001 (two-tailed)

Kendall's tau-b indicated that there was a significant positive correlation of user satisfaction with perceived value, T=0.599, P< 0.001, end user interface, T=0.487, p<0.001, information quality, T=0.543, p< 0.001 and service quality, T=0.557, p<0.001 (N= 259). All 4 item are significantly associated with user satisfaction.

5   Discussions

The study examines factors that influence user satisfaction to use Food Delivery Applications (FDA). The factors examined in this study are based on the existing theory of UTAUT, namely the unified theory of use and acceptance of technology (UTAUT) which involved end user interface, information quality, and service quality towards

level of user satisfaction on Food Delivery Applications. Data analysis showed that end user interface, information quality, and service quality positively affect the level of user satisfaction towards Food Delivery Applications (FDA). These results supported by Hypothesis 2, Hypothesis 3, and Hypothesis 4 where there the variable positively influences the user satisfaction on Food Delivery Applications. Essentially, perceived value refers to the evaluation made by customers on overall service quality based on the gap between expectations and perceptions of actual performance levels (Parasuraman et al., 1985). Also, many pieces of research of the literature are concerning the quality of service especially in the food and beverage industry which showed that this subject matter is still up to date.

Referring to the Objective 1, in measuring the level of user satisfaction on Food Delivery Applications (FDA), the perception of end user interface has been measured because it was one of the indicators that influence user satisfaction on Food Delivery Applications (FDA). These results supported by Hypothesis 2 where the variable positively influences the user satisfaction on Food Delivery Applications (FDA). Most of the researchers also justify that there is a positive relationship between end user interface and perceived value (Kok, & Teh, 2012). This is because user is more attracted with a friendly and interesting interface.

Next is the perception of information quality. On this study, it shows that the information quality was not shown to be a strong factor influencing the perceived value of the Food Delivery Applications (FDA). This is because user have been provided with incomplete information details of the Food Delivery Applications (FDA). It shows a contrast to previous findings where Dodds (2002) mentioned that good quality of information helps to generate effective market place between customers and providers. Hence, track and trace information details could be given to the users to locate their orders.

The perception of service quality also includes as the indicator that influences the level of user satisfaction of Food Delivery Applications (FDA). Most of the researchers have identified that there is a positive relationship between personnel quality and perceived value because communication between two parties which include the customer and personnel is vital to enhance the perception of customers'' expectations during the service operation (Parasuraman et al., 1985).

According to Roslan, Wahab, and Abdullah (2015), user satisfaction refers to the item of services provided by the organization to fulfil user expectation. Thus, user could express their experience either satisfy or upset after perceiving the services provided by the Food Delivery Applications (FDA. Throughout this study, user satisfaction is reflected through customer evaluations on the service performance of Food Delivery Applications (FDA) to determine whether the quality of services delivered in a positive way or not to the user. Moreover, when the level of perceived value on service quality increased, so the level of user satisfaction also increased. Hence, it enhanced the level of user loyalty as well because us er will reutilize the services again when they were satisfied with the services.

Therefore, this study aimed to determine the interrelationship between the independent variables which chiefly include end user interface, information quality, and

service quality of Food Delivery Applications (FDA) with its perceived value among Food Delivery Applications (FDA) user as a dependent variable.

6 Conclusions

Overall, this study aims to determine the level of user satisfaction which includes end user interface, information quality, and service quality that contribute to perceive value of Food Delivery Application (FDA). The findings of this study show that the most influential independent variable on perceived value of Food Delivery Application (FDA) is information quality. End user interface and service quality were also shown as the significant variables on perceived value of Food Delivery Applications (FDA). Unlike previous research, the information quality was not shown to be a factor influencing the level of user satisfaction, showing a contrast to previous findings where Dodds (2002) mentioned that "good quality of information helps to generate effective marketplace between customers and providers".

With the rise of smartphones and Food Delivery Application (FDA), people are more likely to order a meal from outside and eat it at home. When restaurants use online Food Delivery Applications (FDA), they can make more money. This research paper gave some ideas about how that might work. The paper also talks about how restaurants manage their inventory in today's world. To sum up, this review has made three important changes. A lot of people use Food Delivery Applications (FDA), and it has talked about the opportunities and problems that these changes can have. This study shows how all stakeholders, including Food Delivery Applications (FDA), industry practitioners, policymakers, consumers, and academics, can work together to both maximise its positive and minimise its negative effects.

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