

# An Empirical Study on the Perceive Severity, Perceive Ease of Use and Information Quality on the SME Businesses in China

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## ABSTRACT

During the new normal of the COVID-19 pandemic, online food delivery services became widely implemented, especially in the developing countries. The purpose of this study was to determine the relationship between the perceive severity, perceive ease of use and information quality (IV) towards the customer satisfaction in using online food delivery apps during the new normal of COVID-19 in China. The data was gathered up through on online survey questionnaires of 158 respondents relating to people who have experience using online food delivery apps. The results show that perceive severity, perceive ease of use and information quality has positive effect toward satisfaction in using food delivery app. Through this study, the researcher gains a further accurate explanation and understanding of factors that affect satisfaction in using food delivery apps.

**Keywords:** customer satisfaction, perceive severity, perceive ease of use, information quality

## I. INTRODUCTION

Mobile food online application can be defined as “mobile apps that smartphone users download and use as an innovative and convenient channel to access restaurants, view food menus, place food orders, and make payments without any face to face with restaurant staff”. (Okumus et al., 2014, as cited by Alalwan ,2020). By utilizing these applications, customers are capable request their food effectively and adequately from an assortment of restaurants at times and areas accessible to the customers. Such apps also provide customers with more comprehensive, up-to-date, and precise data about the restaurants and the menu alternatives. Customers are able to track their order progress through the information provided in all its stages. (Aksenova et al.,2017, as cited by Alalwan ,2020). Moreover, purchasing steps become easier in online food delivery apps nowadays because it has also been furnished with digital payment instruments. (Prasetyo et al.,2021).

This research is about satisfaction in online food delivery apps uses theory of planned behaviors to identify correlation of between the dependent variable and independent variables. There are three types of model proposed which are perceived severity, perceived ease of use and information quality. The major specific objective

of this study is to examine the effect of perceive severity on the customer satisfaction in online food delivery apps, to observe impact of perceive ease of use on the customer satisfaction in online food delivery apps, and to identify how information quality effect customer satisfaction in online food delivery apps. Thus, this study is significant to discover the consumer behavior towards satisfaction in online food delivery apps and disclose on variables which is perceived severity, perceived ease of use, and information quality significantly affect towards satisfaction in using online food delivery apps.

Before the Covid-19 pandemic, online food delivery in China was mainstream inside city regions, with the assistance of innovation organizations, for example, Grab and Food panda. The service was famous among recent college grads yet battled to arrive at the other, more aged demographics. But during the pandemic COVID-19, people are hesitant to eat out and all the restaurants were closed due to introduction of movement control order (MCO). The new environment has driven customers to change of direction by order their favorite food via online food delivery platforms. (The Edge Market, 2020). This study is to find customers' viewpoint of how such portable food delivery applications can be amazingly useful in fulfilling their food craving and simultaneously to keep away from openness to COVID-19. This study can address customers' anxiety in regards to such applications dependent on their experience of utilizing them.

## **II. LITERATURE REVIEW**

### **A. Theory of Planned Behaviour**

This study aims to explore the theory to examine the relationship between the factors that might impact the customer satisfaction using online food delivery apps. This study's underpinning theory is the theory of planned behaviors. Initially, this theory was founded in 1978 by Ajzen and Fishben. The theory of planned behaviour is defined as theory that suggests that actions are immediately influenced by behavioural intentions and under certain conditions, consider behavioural influence. It is utilized to identify and predict behaviours. Attitudes toward the action, subjective norms, and perceive behavioural command are generally factors that impact behavioural intentions. In this study, perceive severity, perceive ease of use and information quality are essential determinants for explaining behavioural intention. During the pandemic customer intent and satisfy to use food delivery apps to avoid from openness to infection of COVID-19. Past research recommended that consumers' behavioural intention and actual use may be impacted by situational factors (Ghani et al., 2013; Zhang et al., 2015 cited by Al Amin et al., 2021)

Customer's satisfaction can be defined as "Customer satisfaction is described as a positive emotional reaction to a person's perception of his or her situation." Kondou (1999) as cited by Uzir et al., 2020. As mentioned in the paper by Yogi Tri Prasetyo (2021) customers are willful pay more if they appreciate the conceptual value of the services, which is known as the experience economy. The Interaction between consumers and business providers generates experiential value. This relationship occurs when people use or use resources directly. In the case of the current research, it occurs when people use an online food delivery system. The actual use of an online food

delivery system is essential in order to gain loyal clients who will use the services again in the future. As a result, customer satisfaction and loyalty will improve significantly.

Perceived severity can be defined as “perceived threat in a term which is more applicable to the resulting health-related behaviours than an individual consideration of any of these causes. It is characterised as a combination of perceived susceptibility and severity. According to studies, perceived severity is difficult to estimate before it reaches such extremes that it becomes unstable”. Sangeeta Mehroliya (2020). As mentioned in the paper by Yogi Tri Prasetyo (2021) During COVID-19, Social restrictions on a wide scale during covid restaurants which does not meet safety requirements are in place. To avoid risk of exposure to covid 19, restaurants that are willing to open must adopt social distancing procedures. Since there is a risk of being infected, the technique known as social distancing is being used to stop the spread of the Covid-19. Regardless of the fact that restaurants already follow to strict social distancing policies, there is still a chance that a person or an individual will become infected. Therefore, ordering food from the website is a smart option. As a result, utilizing on the online food delivery apps during this pandemic is a savvy approach to help keep away from the infection from spreading.

Perceive ease of use can be defined as how much the forthcoming users anticipates that the target system should be easily (Choi, 2020). As mentioned in the paper by Mat Nayan and Hassan (2020), ease of use is “one of the significant factors of the intention to use the food delivery service system”. To support this statement, a study by Chotigo and Kadono (2021) indicated that user experience will positive if they using a superb apps that can be simply and speedily accesses and is beneficial, easy to use, and quick to react.

Information quality can be defined as the “updated information about menu, discount and offers, accuracy, comprehensiveness, presentation should be attractive, design and app should be informative” (Preetha,2019). A study by Mat Nayan and Hassan (2020) indicated that the importance of information quality as variables in rouse clients' consistently have a sincere goal to utilize food delivery applications. On top of that, as mentioned in a study by (Chotigo and Kadono,2021) the successful methods of acquiring customer dependability by giving great food data and top notch food delivery service as better customer experience with the applications.

### **III. RESEARCH METHODOLOGY**

As mentioned in the paper by Putra and Sentosa (2018), a quantitative approach was used to study the predictor. The study carries the quantitative method via a survey questionnaire in its research nature. The measurement items were established based on the journal's adoption, mainly from (Prasetyo et al., 2021). The measurement items for each variable were slightly improved in relation to the theory of planned behaviour to achieve content validity in the current study. The survey model includes the perceive severity, perceive ease of use, information quality, and the satisfaction in using online food delivery apps with 20 measurement items. The measures were evaluated with a four-point Likert-type scale, ranging from "strongly disagree" (1) to "strongly

agree" (4) to indicate the extent to which the respondent agrees and disagrees. The questionnaires were further improved to increase comprehensibility and clarity based on the respondents' feedback.

The population identifies in this researched was mobile food delivery apps user. The sample in this study is located in Beijing of China and has used mobile food delivery apps. The sampling method used in this study is probability sampling, which is simple random sampling. The data collection was outsourced from the questionnaire in Google Form were sent via social networking app and social media platforms. There are two parts contain in the questionnaire. Part one consists of different personal and demographic variables where it was acquired the respondent's details on gender, age, areas, occupation and experience using food delivery apps. Part two consists the latent variables which are necessary in this study. The variables are perceived severity, perceived ease of use, information quality, and customer satisfaction in online food delivery apps. This data were collected throughout a week. A total of 158 responses were collected.

The quantitative data collected will be analyzed in the structural equation modeling software via the SmartPLS version 3.0 and IBM Statistical Package for Social Science (SPSS) version 26. The technique used in IBM SPSS to analyze the data was a descriptive technique in frequency and crosstabulation. Structural equation modeling (SEM) partial least squared was established via the SmartPLS software to test and validate the proposed model. The statistical analysis is used to gain insight into how the theory of planned behaviors asserted that actions are immediately influenced by behavioural intentions are the precise predictor of user satisfaction in using online food delivery apps.

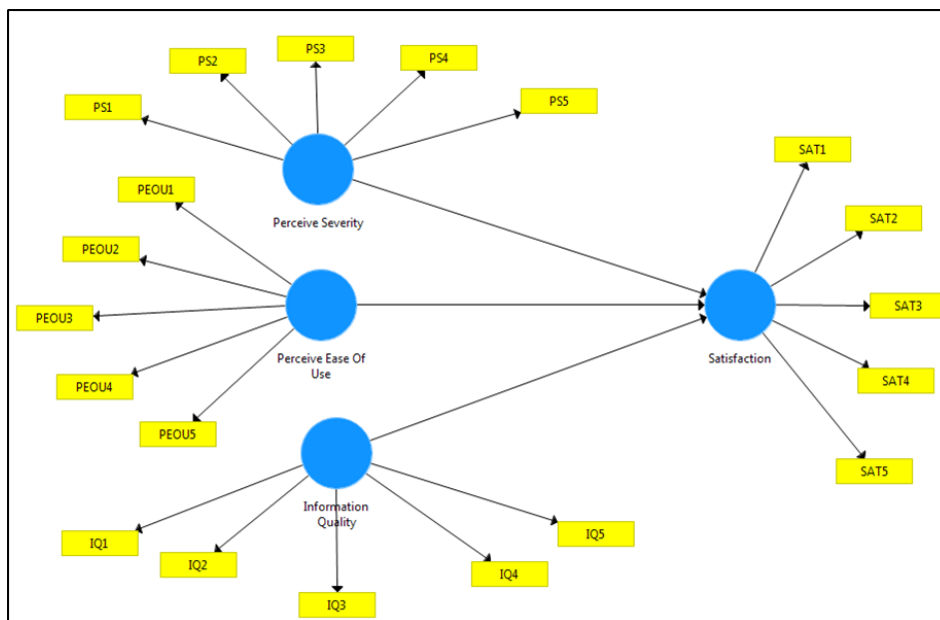


Figure 1. Hypothesis Model Framework

### IV. FINDINGS & DISCUSSIONS

The study discovered the greater number of respondents who answered the questionnaire were female (75.9%) compared to male respondents which is (24.1%) Meanwhile for age, the range of age was less than 20 years old which the percentage is (6.3%) followed by the range of age average 21-30 years old that is (86.7%), the range of age average 31-40 years old which is (4.4%) and the range of age above 40 which is (2.5%). As a further matter, the respondents were coming from urban or city due to the highest percentage (70.3%) meanwhile respondents who came from rural area is (15.2%) and the least location of respondent’s suburban is (14.6%). Moreover, for the occupation of the respondents, the percentage range of student is (48.7%), the range percentage of entrepreneur is (5.1%), the percentage range of employee is (39.2%), the percentage range of household wife is (4.4%) and the percentage range of unemployed is (4.4%). Apart from that, most of the respondents have an experience regarding to online food delivery application as the respondents who answered for yes is (98.1%) and only (1.9%) of respondent’s answers no. This was an equitable portrayal specified to the target population. This nearly corresponding to distribution of the respondents.

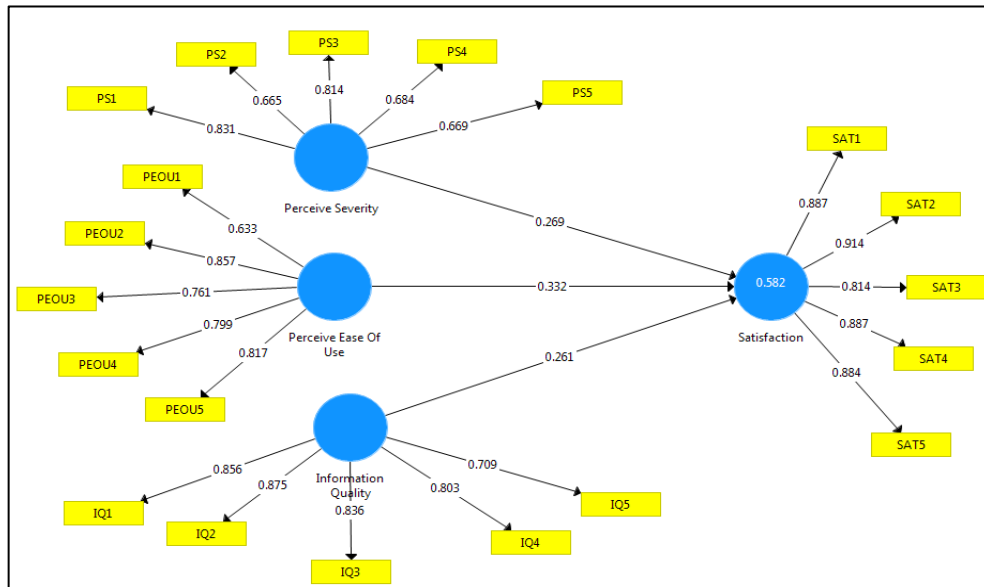


Figure 2. Re-Specified Model

A hypothesized model configured 20 measurement items as the measurement with a detailed range from 0.633 to 0.914 as valid and significant measurement variables. The path coefficients and R square values were determined from the structural analysis. The hypothesis testing results in Table 1 also confirmed a positive direct significant effect of perceive severity ( $\beta=0.269$ ), perceive ease of use ( $\beta=0.332$ ), and information quality ( $\beta=0.261$ ) on the satisfaction in using online food delivery apps. In general, the proposed model contributes to the R-square correlations for 58.2% of the variance in the satisfaction in using food delivery apps. This indicates a good level of satisfaction from the consumer to use food delivery apps.

Without a doubt, to construct reliability and validity, Cronbach’s Alpha, Composite Reliability, and Average Variance Extracted (AVE) were used to validate the model. Cronbach’s Alpha is used to test the reliability of the

questionnaire. A Cronbach's Alpha of 0.7 was regarded as acceptable (Ariffin et al., 2020). Concerning from the table below, Cronbach's Alpha and Composite Reliability's results are all greater than 0.7. However, the Average Variance Extracted has higher results than 0.5. Thus, the test result from the current study can conclude the good reliability of all the items.

**Table 1.** Validation of Variable and Measurement

Variables	Pathway	Cronbach's Alpha (>0.7)	Rho_A	Composite Reliability (>0.7)	Average Variance Extracted (AVE) (>0.5)	R- Square
Satisfaction in Using Online Food Delivery Apps	-	0.925	0.931	0.944	0.771	0.582
Perceive Severity	0.269	0.787	0.814	0.854	0.542	
Perceive Ease of Use	0.332	0.834	0.850	0.883	0.604	
Information Quality	0.261	0.874	0.874	0.909	0.669	

There are twenty items for both independent variable and dependent variable that used as a measurement for those variables. Referring to the standardized regressions weight of measurements table which is (>0.05), all the factor loading is more than 0.05 as the highest factor loading is 0.914 for customer satisfaction of items (SAT2) while the least is only 0.633 for perceived ease of use of items (PEOU1).

The result findings in this research found that among the three positive factors, path coefficient for perceive ease of use is higher than perceive severity and information quality. The result indicated that perceive ease of use was the main factor affecting the customer satisfaction in using food delivery apps. So, to reach customer satisfaction the developer of mobile food delivery apps must make sure the usage of perceived ease of use must have in the mobile food delivery application's interface. Other than that, the developer must care on the informative button to help consumer using the apps and also must make sure the user can easily navigate into and back to other pages in online food delivery apps. It is because these two items was highest value of factor loading compare to issue payment and organized.

Furthermore, the lowest factor loading is 0.633. So, food delivery apps developer must pay attention about need of consumer in easily find food in online food delivery application. It is indicated that mobile food delivery

apps users are mainly concerned about the easily find food. This environment might reduce the satisfaction in using food delivery apps and lead consumers to form a negative approach towards using this technology. Therefore, this factor might influence the consumer to neglect to engage in food delivery apps and they would prefer to go out buy food during this Covid-19 pandemic. The research by Jamaludin et al. (2019) stated that “customers wants the food delivery apps to provide information in easy way so that it would not be hard for them looking for the information they want such as always inform customer by social media” .This is the part that the developers of mobile food delivery apps have to improve in the interface so that we can reduce crowded people in the restaurant and increase social distancing between human.

**Table 2.** Standardized Regressions Weight of Measurements

<b>Variable</b>	<b>Items</b>	<b>Factor Loading</b>
Customer Satisfaction	SAT1	0.887
	SAT2	0.914
	SAT3	0.814
	SAT4	0.887
	SAT5	0.884
Perceive Severity	PS1	0.831
	PS2	0.665
	PS3	0.814
	PS4	0.684
	PS5	0.669
Perceive Ease Of Use	PEOU1	0.633
	PEOU2	0.857
	PEOU3	0.761
	PEOU4	0.799
	PEOU5	0.817
Information Quality	IQ1	0.856
	IQ2	0.875
	IQ3	0.836
	IQ4	0.803
	IQ5	0.709

## V. CONCLUSIONS AND RECOMMENDATIONS

The proposed model in this study will be used to study the factor that influences customer satisfaction in using food delivery apps. This research confirmed that perceive severity, perceive ease of use, and information quality significantly impact customers' satisfaction in using food delivery apps. The result of this study is recommending can be used as a reference for the developer of mobile food delivery apps to improve their apps that was used by consumer to buy food. However, our study has several limitations. Due to covid-19 pandemic, this study was conducted by quantitative method by online survey and we highly recommend for the future researcher to do qualitative method such as face-to face data collection so that they can get large sample size compared to us only 158 respondents. Lastly, current study discussed limited to three independent variables only. Next researcher could find more independent variable or may add a mediating variable so that they will more understanding about others factors which can influence satisfaction in using food delivery as an SME e-business application.

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