

Promoting Online Food Delivery Service In Vietnam: A Foody.vn Study

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Abstract

In the internet age, with digital technology has swept over everything like a storm, with the demand for online food delivery has risen dramatically among Vietnamese people in recent years, especially during the recent outbreak of the Covid-19 pandemic. Although, this field of online food has a lot of potential, in order to succeed, businesses really need to understand consumer psychology. This study aims to identify and analyze the factors affecting the desire to use the online food delivery service at Foody.vn. The research sample consisted of 417 people representing consumers in HCMC including people aged 15 years and older, who were surveyed through an online Questionnaire. The research results show that there are six factors that affect the desire to use the online food delivery service of Foody.vn & the level of impact is, respectively, as follows: (1) "Risk perception" (Beta= -0.311), (2) "Subjective norm" (Beta= 0.309), (3) "Reliability" (Beta=0.290), (4) "Perceived usefulness" (Beta = 0.198) , (5) "Price expectations" (Beta=0.187), & (6) "Perceived ease of use" (Beta=0.119). The authors have also proposed management implications to help Foody in particular and online businesses in general improve and promote their online food ordering delivery in Vietnam in the coming years.

Keywords: online shopping, shopping behavior, shopping decision, online marketing, purchase intention.

INTRODUCTION

According to the 2020 survey results by Savills, with a population of over 100 million people, 65% of population use the internet, 72% participate in online shopping, the purchasing power of an online shopper this year is estimated at over \$220, B2C (business-to-consumer) e-commerce sales reaches \$8.11 billion, up 43% compared to the previous year, accounting for about 6.9% of total retail sales of consumer goods and services nationwide. Along with the growth in the number of internet users and online purchases, online food delivery service businesses such as Foody.vn, PasGo, and Flyfood were opened and the number is constantly increasing in Vietnam over the years. Due to the impact of the Covid-19 pandemic, the implementation of social distancing, social isolation and avoiding crowded places by local governments, people tend to use food delivery services through intermediate network. Therefore, online delivery apps appear more and more to serve the needs of customers. Shoppers can order their favorite food anywhere, anytime, with a multitude of options available via laptop or smartphone.

During Covid-19 pandemic in Vietnam (March 3, 2020 - June 6, 2021), the number of people ordering through online food delivery websites had increased like never before. The most prominent is Foody.vn with more than 38 million domestic and foreign users and more than 600,000 check-ins, topping many lists of online food delivery websites in Vietnam. Vietnam is currently a potential market in this field. Recently, many online businesses such as Foody.vn are preparing to jump into the markets of Ho Chi Minh City and Hanoi. They have high expectations that if they succeed in Ho Chi Minh City and Hanoi, they will serve as a springboard to expand the market to many other regions across the country. Therefore, in order to stand firm & develop in the market, businesses like Foody.vn need to assess the current situation and improve their competitiveness to have a sustainable development strategy in the coming time.

LITERATURE REVIEW AND RESEARCH MODEL

Literature Review

In their empirical studies, Taylor and Todd (1995b) found that, to predict the desire of intermediary service users by digital technology

and the actual usage has been supported by many research. These two scholars have proposed a C-TAM-TPB model by combining TPB (Theory of Planned Behavior) and TAM (Technology Acceptance model, Davis, 1989). That study concluded that the factors affecting the intention to use online shopping services include the following main factors: perceived usefulness, perceived ease of use, perceived risk, consumer attitudes. However, these authors also believe that, in addition to the factors included in these models, there are other factors which affect the purchasing desire of consumers such as attitude, trust, social factor trust (subjective norm)... Therefore, many studies have extended the combination and development of the above models by adding more factors into these models depending on each field.

These scholars also assert that “trust” is a central factor in exchange relationships involving unclear risk and is a very important factor influencing purchasing desire of consumer participated in intermediary transactions. Previous studies have shown that trust is an important factor affecting consumers' willingness to conduct intermediary transactions. The study also showed that consumers also trust the reviews of other consumers and found that trust in the intermediary system is a factor influencing consumers' decision to use the service or also know as social factors (subjective norms). In addition, the study also proves that “perceived risk” is a factor that has a negative impact on consumer trust in online transactions. In the online shopping system, “perceived risk” is defined as the negative perception of consumers such that online service providers will not fulfill their security requirements when transacting, therefore, consumers may incur losses when entering transactions. They may personally face some risks associated with transactions on the internet. Grabner-Kruter and Kaluscha (2003) divide risks into two categories. Systemic uncertainty associated to financial risk (e.g. theft of customer's credit card information, personal information) and uncertainty from the behavior of suppliers (e.g. the disclosure of consumer information). Perceived risk creates many barriers, preventing consumers from using or considering to use the service. If something negative happens, consumers believe they will lose control of their personal data and more importantly, consumers fear that their details may be used inappropriately. Therefore, security and privacy issues are important elements of perceived risk.

Research hypothesis and research model

The relationship between “Perceived usefulness” and the intention to use the service

Perceived usefulness is the degree to which a person believes that using an intermediary system will improve his or her job performance (Davis, 1989). An online food ordering service is useful if it provides a service that meets consumer expectations. Users can continue to use the service if they find it useful, even if they are not satisfied with their previous use (Bhattacharjee, 2001a). In previous studies, Davis (1986) suggested that perceived usefulness is the degree to which a person believes that using specific application systems will increase their productivity for a particular job. Thus, this is considered an opportunity for the online shopping industry compared to the traditional shopping industry in general, and buying food online like Foody compared to buying food by traditional methods in particular.

Hypothesis H1: “Perceived usefulness” has a positive effect (+) on the intention to use Foody.vn’s services.

The relationship between “Perceived ease of use” and the desire to use the service

Perceived ease of use is the degree to which an individual believes that using the services of a particular intermediary system will be effortless” (Davis, 1989). Digital systems which are perceived as easier to use and less complex are more likely to be accepted and used by potential users (Davis et al., 1989). Perceived ease of use is obtained when consumers feel that the electronic payment system is not difficult to understand, easy to learn and use. Therefore, ease of use is considered as one of the important factors affecting the acceptance and use of new technologies by consumers. An easy to use online trading system needs friendly interfaces such as clear and conspicuous steps, appropriate content and graphical layout, useful functions, clear and easy to understand error messages, commands.

Hypothesis H2: “Perceived ease of use” has a positive (+) impact on the desire to use Foody.vn’s services.

The relationship between “Perceived risk” and the desire to use the service

Perceived risk is related to uncertainty and the consequences related to consumer behavior (Bauer 1960). According to The Theory of

Planned Behavior (TPB), perceived risk can reduce the behavioral control of uncertain consumers and will have a negative impact on the behavioral decisions of shoppers. Conversely, if the perceived risk associated with online transactions is reduced and consumers have more control over their behavior in the online environment, they are more willing to transact (Pavlou,2001). Perceived risk has a definite impact on consumer decision making.

Hypothesis H3: “Risk perception” has a negative impact (-) on the intention to use Foody.vn services.

The relationship between “Price expectations” and the desire to use the service

In many studies, scholars have come to the conclusion that price and customer satisfaction are deeply related (Patterson et al., 1997). Therefore, if this factor is not taken into account, the research on customer satisfaction will be defective. When buying products and services, customers have to pay a certain cost in exchange for the value they need. Thus, that cost is called the trade-off price to get the desired value from the product or service. If the price is quantified in relation to the obtained value, the customer will have a sense of whether the price competitiveness is satisfactory or not. Only when customers perceive the quality of service to be more than the cost of use, the price is considered competitive and customers will be satisfied. On the contrary, customers are not satisfied because they feel they have to pay more than what they receive and the price in this case will have a negative impact on customer satisfaction. This is the relationship between “price level”, “value” and “perceived value”.

Hypothesis H4: “Price expectation” has a positive effect (+) on the desire to use Foody.vn's services.

The relationship between “Trust” and the desire to use the service

Reliability or trust is important for consumers to decide to use an online shopping service. If the system is not trusted by users, it will be extremely difficult to develop and expand the service (Yousafzai et al., 2003). In the online shopping decision process, customers spend time analyzing information about the seller, often concern about information security issues, network security incidents,... Customer's trust for the company's products, services and brands can help them overcome these

worries and decide to use the service. Therefore, trust is one of the main factors affecting online purchase intent.

Hypothesis H5: “Reliability” has a positive effect (+) on the desire to use Foody.vn's services.

The relationship between “Subjective standards” and the desire to use services

Subjective standards can be described as subjective personal perceptions, societal pressures on performing or not performing a behavior (Ajzen, 1991). The subjective standards relationship and behavioral intention are the foundation of the Theoretical Model of Reasonable Action (TRA) and Theory of Planned Behavior (TPB). Philip Kotler (2012) also confirmed that factors belonging to the group of “relatives, friends, colleagues and social network communities” have a certain influence on the buyer's decision. Research by Hossein Rezaee et al. (2011) shows that social influence not only has an impact on customers' purchase intent but also has a significant impact on consumers' attitude towards using online services.

Hypothesis H6: “Subjective standards” have a positive effect (+) on the intention to use Foody.vn's services.

RESEARCH METHODS

This study is carried out with a combination of 2 research methods, namely qualitative & quantitative research, with three specific research steps as follows. In the first step, the authors use qualitative research methods to conduct group discussions, consult experts to select variables and groups of observed variables to include in the research model. Step two, based on the group of factors affecting the desire to use the online food delivery service at Foody.vn, the authors designed a survey questionnaire to collect opinions from 440 consumers used to represent buyers in Ho Chi Minh City. The results obtained 417 valid samples. The research model includes: 06 scales, 33 observed variables (measurement questions). Use a 5-point Likert scale. Survey results were entered into SPSS version 20.0 and then run. The sampling method of this study was convenience sampling, through online survey submission. According to Hair (2006), the sample size is determined based on the following formula: $N = \sum_{j=1}^m kP_j$. Therefore, the size of the sample is based on the minimum (minimum) and the number

of variables included in the analytical model. Minimum (Min) = 50, the ratio of sample to variable analysis (k) is 5/1 or 10/1. That means a variable in the questionnaire requires a relative 5 or 10 samples. The scale for this study is 26 observed variables, the sample size must be at least $n: 26 * 5 = 130$ (n is the sample size, m is the number of observed variables). According to Lee (2012), depending on the research object, the research objective and the survey object, the number of samples can be increased to increase the reliability of the data. After testing the reliability by Cronbach's Alpha coefficient, the authors conducted exploratory factor analysis to reduce and summarize the data of the scales (Dinh Phi Ho, 2010). This method is based on factor extraction ratio (Eigenvalue), according to which only factors with factor extraction ratio (Eigenvalue) greater than 1 will be kept, and less than 1 will not summarize information better than an original variable, because after normalizing each original variable has a variance of 1. The method of extracting the main components (Principal components) and the method of primitive rotation of factors (Varimax Procedure) is used to minimize the number of variables with large coefficients at the same factor, increasing the ability to explain factors. Step three: Use the above results to analyze multiple linear regression to test the model's assumptions, thereby considering the impact of the factors on the desire to use the online food delivery service at Foody.vn.

RESEARCH RESULTS

The results of the analysis of the scale's reliability

Table 1: Cronbach's Alpha test results

Component scale	Number of original observed variables	Cronbach's Alpha coefficient	Coefficient of correlation of total variables
Perceived risk	4	0.807	≥ 0.651
Subjective standards	4	0.954	≥ 0.762
Reliability	5	0.820	≥ 0.676
Perceived usefulness	6	0.916	≥ 0.839
Price expectations	5	0.901	≥ 0.876
Perceived ease of use	6	0.863	≥ 0.797
Desire to use the service	3	0.871	≥ 0.749

Research results in Table 1 show that all scales have Cronbach Alpha reliability coefficient greater than 0.6. The correlation coefficients of all observed variables are greater than 0.3. Therefore, all 30 observed

variables belonging to the component scale and 03 observed variables belonging to the "Desire to use" scale are reliable.

Results of exploratory factor analysis (EFA)

Table 2: Result of exploratory factor analysis EFA

Factors	KMO coefficient	Sig	Total variance extracted	Factor Loading Coefficient
Independent variables	0.865	0.000	82.730	
Perceived risk				0.642 – 0.891
Subjective standards				0.743 – 0.872
Reliability				0.660 – 0.824
Perceived usefulness				0.819 – 0.826
Price expectations				0.785 – 0.882
Perceived ease of use				0.765 – 0.873
Dependent variable	0.749	0.000	81.324	
Desire to use the service				0.844 – 0.872

The exploratory factor analysis results for the independent variables in Table 2 show that, there are 6 factors extracted, all 30 observed variables have factor loading coefficients larger than the allowed standard (Factor Loading > 0.5). At the same time, the Bartlett test shows that there is a correlation between the variables in the overall (significance level sig = 0.000 < 0.05) with the KMO coefficient = 0.865 (0.5 < KMO < 1). The total variance extracted is 82,730 which means that it explains 82.730% of the variability of the data.

Results of regression analysis and hypothesis testing

Research results in Table 3 show that R² has a very small Sig value (Sig. = 0.000), showing that the regression model is appropriate. All 6 variables help explain 70% of the variation in consumer satisfaction with the business. The Tolerance coefficients are quite high from 0.374 - 0.786; and the VIF coefficients are all below 10. This result proves that the collinearity between the independent variables is very low, consistent with the assumptions in this study that the variables are independent of each other.

Table 3: the factors affecting the desire to use the online food delivery service

Model	Non- standardized coefficients		Standardized coefficients	Level of significance	Multicollinearity testing coefficient	
	B	Standard error	Beta		Tolerance	VIF
(Constant)	-0.971	0.601		0.001		
Perceived ease of use	0.072	0.033	0.119	0.009	0.527	1.323
Perceived risk	0.259	0.061	- 0.311	0.000	0.374	2.002
Subjective standards	0.128	0.071	0.309	0.000	0.605	1.342
Reliability	0.124	0.088	0.290	0.000	0.710	1.123
Perceived usefulness	0.612	0.073	0.198	0.000	0.713	1.030
Price expectations	0.043	0.044	0.187	0.003	0.786	1.933

The research results in Table 3 show that the equation describes the variation of the factors affecting the desire to use the food delivery service of consumers in Ho Chi Minh City. The normalized regression equation has the following form: $YDSD = -0.311*RR + 0.309*SI + 0.290*TR + 0.198*PU + 0.187*PR + 0.119*PE$. The results show that all the independent variables affect the dependent variable (consumer's desire to use the service) with statistical significance with 95% confidence level, including: 1) “Perceived risk” ($\beta = -0.311$), (2) “Subjective standards” ($\beta = 0.309$), (3) “Reliability” ($\beta = 0.290$), (4) “Perceived usefulness” ($\beta = 0.198$), (5) “Price expectations” ($\beta = 0.187$), (6) “Perceived ease of use” ($\beta = 0.119$). In which, the variable "Perceived risk" ($\beta = -0.311$) has a negative impact on the dependent variable (consumer's desire to use the service), this is true with the original hypothesis.

The research results show that the factor "perceived risk" is the factor that has the strongest impact ($\beta = -0.311$) on the desire to use the service of consumers. This shows that consumers are still afraid of the risks when using Foody's online services. This result also reflects the current situation of online shopping behavior of consumers in Vietnam. This is the basis for Foody to put more effort in and innovate more so that consumers are satisfied and improve their decision to use its service in the future.

SOLUTION

Firstly, the factor "buyer's perceived risk" has the strongest impact on the desire to use Foody's shopping services ($\beta = -0.311$). This means that consumers are worried about the safety of payment, the security of personal information. The higher the perceived risk, the lower the desire to use the service. Therefore, Foody needs to have policies to

protect consumers such as ensuring information security, ensuring a safe online payment system. In addition, businesses need to provide a flexible and effective product return policy, and ensure that the card payment process is completely accurate and secure.

Second, the factor “Subjective standards” also known as the factors belonging to the group of “Social influence” has a great impact on the desire to use Foody's services ($\beta = 0.309$). In other words, relatives, friends, colleagues, online community all have an impact on the desire to use Foody's services. When consumers are influenced by social factors, the desire to use the service will increase. This is consistent with the social reality in Vietnam today. The smart online businesses that follow the flow of this event such as increasing the frequency of appearance and influence on social networks will be the ones that will gain more market share than their competitors.

Third, customers' trust in the business is very important ($\beta = 0.290$), affecting the desire to use Foody's services. When consumers have higher trust, the desire to use the service will increase. Online shopping has higher risks than traditional shopping, so businesses like Foody and its partners need to have focused strategies to minimize customers' perceived risk or customers' risk in order to increase trust and thereby convince consumers to use its online services such as ensuring the company's food is safe and of good quality.

Fourth, Consumers always have and find the perceived usefulness when deciding to buy. The higher the perceived usefulness, the higher the desire to use the service. The descriptive statistical results in this study show that the measured variables belonging to the group of factors "perceived usefulness of variables" have the lowest mean value (3.42), which shows that Foody should invest more for “perceived usefulness” factors such as strengthening the delivery network so that food can reach customers quickly with the best possible quality. GrabFood, the rival company, has surpassed Foody in terms of delivery speed. Competing in the field of online food delivery is a competitive advantage worth considering.

Fifth, the majority of consumers have price expectation. The higher the price, the lower the desire to use the service. The fact that Foody has different freight rates in different regions makes it difficult for customers to compare prices between other online food delivery applications.

Sixth, compared to many other online food delivery applications, the Foody application has many unsolved problems, for example, Foody's application interface is quite confusing. Currently, the field of online sales has made long strides in Vietnam, leading to easy-to-use application design becoming popular. Let's build easy-to-use applications, minimizing the necessary steps when using the service to attract customers from many age groups, in tandem with integrating a lot of information, displaying dishes with price details, delivery time, promotions... so that customers will have an easier time choosing.

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