Impact of Factors on the Intention to Use Ride-hailing Technology Applications during the COVID-19 Epidemic in Vietnam

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ABSTRACT

This article aims to define the intent to use ride-hailing technology applications in the current Covid-19 translation situation and related factors such as: The usefulness of ride-hailing application, the attractiveness of private cars, the influence of the subjective norms and perceived behavior control factor. The study surveyed 342 questionnaires in Vietnam with a Likert scale. Hypothesis testing in this study uses the validity test, reliability test, multiple linear regression analysis, and the correlation between factors with SPSS version 22.0. The research results show that all 4 factors have a positive influence on the intention to use ride-hailing applications. Of which, the usefulness of ride-hailing application factor has the strongest impact on the intention to use ride-hailing technology apps, and the attractiveness of the private vehicle had the least influence on the intention to use ride-hailing technology applications during the COVID-19 season.

Keywords: Ride-hailing Technology Applications, Intention to Use, The Attractiveness of Private Cars, COVID-19, The Usefulness of Ride-hailing Application
JEL Classifications: N70, N75, R41

1. INTRODUCTION

To create a highlight between businesses, each business must choose and offer convenient methods to satisfy customers. Online ride-hailing service was born, which has helped and created many jobs for the employees. The ride-hailing applications were responsive to the needs of the people. However, besides these positives, businesses operating in the field of ride-hailing applications are also facing many difficulties.

To create a highlight between businesses, each business must choose and offer convenient methods to satisfy customers. Online ride-hailing service was born, which has helped and created many jobs for the employees. The ride-hailing applications were responsive to the needs of the people. However, besides these positives, businesses operating in the field of ride-hailing applications are also facing many difficulties.

Grab is developing its ecosystem very quickly, initially from online ride-hailing to shipping, now it's startup incubator, technology 4.0 and online payment. Joining Vietnam in February 2014, it took Grab 2 years to build its reputation with customers and together with Uber, dominate the taxi and motorbike taxi market in Vietnam. At the end of 2017, Mai Linh officially launched its first car calling app. Although Vinasun had an app at the end of 2015, it was not until mid-2017 that it could really operate the new model. This slowdown has forced the two firms to cut more than 15,000 employees, and must accept to recruit troops to the retail province to grab the last piece of market share.

In April 2018, Uber and Grab took a very long step when they shook hands to redistribute the market. Grab has become the monopolist in the Vietnamese ride-hailing market, ready to take over every corner of the territory of Vietnam. Uber withdrew from Vietnam as well as the Southeast Asian market, and instead officially competed

with Grab with Vato. Vato has a relatively rough journey when it was born in 2016 (under the name FaceCar, then renamed to Vivu), which is highly potential. However, the huge shadow of both Uber and Grab in Vietnam makes it difficult for the company to expand its market share. After that, Phuong Trang bus transportation company invested 100 million USD and changed its name to Vato so it became more widely known. At the moment, Vato has more than 100 thousand downloads on CH Play and ranks top 2 in the list of map and navigation applications. Vato is doing well in many big cities like Ho Chi Minh, Hanoi, Can Tho, Vung Tau, and so on. It has a friendly interface, but is almost a copy of Uber from the content layout showing the service options to the effects are all like Uber. The application for booking a car is very fast even though the number of drivers is not large. In addition to Vato Car, Vato Bike, Vato Taxi, this application also has a Plus service to serve different customers.

2. LITERATURE REVIEW AND RESEARCH MODEL

2.1. Intended Use
Intentions are to include motivational factors that influence an individual's behavior, which indicate the willingness or effort that an individual will put in to commit the behavior (Ajzen, 1991). The execution intent depends on the goal intent and defines the time, place, and method of achieving that goal. Implementation intent is intended to promote the achievement of future goals. The intent to perform a behavior is a predictor of the actual behavior (Passafaro, 2020). According to theory of planned behavior (TPB), behavioral control awareness, behavioral intent can be used to predict actual behavior.

Intent to use or purchase intent is the probability in the hands of customers who intend to buy or use a particular product. Schiffman and Kanuk (2009) find that a customer who decides to use or buy a product (intent) depends largely on the value of the product and the recommendations that other consumers have shared.

Vehicle use is one of the most important research areas in transport system construction and provision of associated services. Along with the development of information technology, to be able to compete and attract customers, administrators must have effective methods and timely to increase customer trust and create customer satisfaction. Research by Engel et al. (1978) states that "The intention to accept and use a service is the human thoughts and feelings during the shopping process and consumption process known as identification needs, search for information, evaluate options, purchase decision."

Theory of reasoned action - TRA: This theory was first developed by Fishbein and Ajzen (1975). This is considered a pioneering theory in the field of psychosocial research. This study argues that "The individual's intentions are based on two basic factors, the consumer's attitudes towards the consumer's behavioral performance and subjective norms." This theory also assumes that subjective standards will be judged through two basic factors: the degree of influence from the attitudes of people involved in buying products, and motivations of consumers to follow the wishes of the people concerned.

Theory of planned behavior - (TPB) (Ajzen, 1991): The TPB model is more complete than the TRA model in predicting and concretely explaining consumer behavior in the same research content and context.

Customer's intention to use products is one of very complex fields. It includes three main factors: attitudes, actions and reactions of customers. Thanks to these three factors, managers can predict almost exactly what customers want to have an effective business plan. The customer selection trend is different. It looks at each of the main areas such as financial ability (solvency), subjective factors impact from outside (weather, traffic conditions, etc.) objective factors (personality of the user, and so on). From this information, the enterprise will have marketing strategies, improve old services, and launch new products.

2.2. The Usefulness of Ride-hailing Application and Intention to Use Ride-hailing Applications
"Usefulness perception is the user's subjective ability that when using the services of a particular application system will increase his or her productivity" (Davis et al., 1989). When customers realize the usefulness of ride-hailing applications, it will be one of the deciding factors to use or not. Customers will accept to use products and services, it means that customers have found the usefulness that the product brings. The TAM - technology adoption model is a highly influential theory that will explain the theory of product user's actions. When a technology or service launches a new technology, this new technology will ensure factors such as convenience and ease of use with the old technology (Parasuraman, 1992). And when it launched, experts were always interested in consumer attitudes and behaviors. It requires on the one hand the intent to use a technology and the behavior of its use, on the other hand finding the ease of use and the usefulness in defining the intent to use. Furthermore, behavioral intent can be predicted by attitudes (Fishbein and Ajzen, 1975). Attitude can be defined as a psychological predisposition to be expressed by judging a particular entity with some degree of support or dissatisfaction (Eagly and Chaiken, 1993).

Hypothesis H1: The usefulness of ride-hailing application (UA) positively affects the intention to use the ride-hailing applications.

2.3. The Attractiveness of the Private Vehicle and Intention to Use the Ride-hailing Applications
The advantages of private vehicles are a barrier that affects a customer's intent to use ride-hailing apps. Beirão and Cabral (2007) gave the advantages of individual vehicle including factors such as freedom/no dependency, can go anywhere, convenient, fast, flexible, autonomous. When continuous and frequent daily activities will lead to a customer habit, so when developing moving services, businesses always carefully study this factor. Chen and Chao (2010) studies the effect of consumer private vehicle usage on public transport intentions in Kaohsiung City, Taiwan. Future intentions and behavior will be influenced by regular actions in the past (Ajzen, 1991). The cost of transportation is also one of the deciding factors (Balcombe et al., 2004).

Hypothesis H2: The attractiveness of the private vehicle (VA) positively affects the intention to use the ride-hailing applications.

2.4. Subjective Norms and Intention to Use the Ride-hailing Applications

Research by Venkatesh et al. (2003) shows that social influence is the degree to which an individual perceives their neighbors to think they should use. The benefits of ride-hailing applications are being improved day by day: Customers can pay via bank cards, incentives are added up, take measures to protect customers from evils when using the service, etc. Social influence will affect customers' intentions, especially those around them will have a significant impact.

Hypothesis H3: Subjective norms (SN) factors positively impact the intention to use ride-hailing applications.

Innovative popular theoretical model - IDT (Inovation Diffusion Theory): To build this model successfully, Rogers (1995) explained about innovation. From there, analyzing the benefits of that innovation will make customers accept and realize this difference. Rogers (1995) also said that this process will consist of five processes: know, care, evaluate, try, accept. These steps will be described by Rogers as follows: Consumers are first aware of the new product, but there is a lack of information about it. Consumers started to look for information about the product, about product innovations. After having information about the product, do consumers evaluate and consider whether to try it or not? Consumers try the product to evaluate the product more carefully. When the product has reached customer satisfaction, they will decide to use those products regularly.

Theory of consumer behavior - EKB (Engel, Kollat and Blackwell): This model emphasizes the social norms value factor affecting the buying behavior of customers. This model introduced factors related to consumer behavior including: input information, beliefs, individual characteristics and external environmental factors that influence intentions. Stage 1: Input, Stage 2: Information processing, Stage 3: Purchase decision phase, Stage 4: Influence of external factors on the purchasing decision process.

2.5. Perceived Behavior Control and Intention to Use the Ride-hailing Applications

Ajzen (1991) argues that the perception of behavior control reflects how easy or difficult it is to perform a behavior and whether the performance of the behavior is controlled or limited. The direct determinant of the individual's behavior is the intention to perform the act. The employee's intention is the fastest determinant of the actual behavior. Ajzen said that the intention was formed by three factors: attitude, subjective norms and perceived behavior control.

Hypothesis H4: Perceived behavioral control (PBC) factor positively affects intention to use the ride-hailing applications.

Based on the theoretical basis and the proposed hypotheses, the author proposes the research model as follows in Figure 1.

3. METHODOLOGY

3.1. The Topic Uses Qualitative and Quantitative Research Methods

Qualitative research is used to examine relevant literature to find out the factors that influence the intent to use ride-hailing applications. At the same time, the Study conducts qualitative surveys through expert consultation method to adjust, explore and supplement factors affecting the intention to use ride-hailing applications. During the discussion, the authors noted opinions on factors influencing the intention to use Brainstorming-based ride-hailing applications. Next, the authors systematized the information and suggested the results to rearrange so that together the participants discussed again to agree on the information exchanged during the interview and finally cooperate. We will adjust the questionnaire to suit the conditions and environment.

Quantitative research is conducted to determine the impact of factors affecting the intention to use ride-hailing applications in Binh Duong province. The official study was conducted by surveying 342 questionnaires who used ride hailing apps. This

Figure 1: Conceptual model
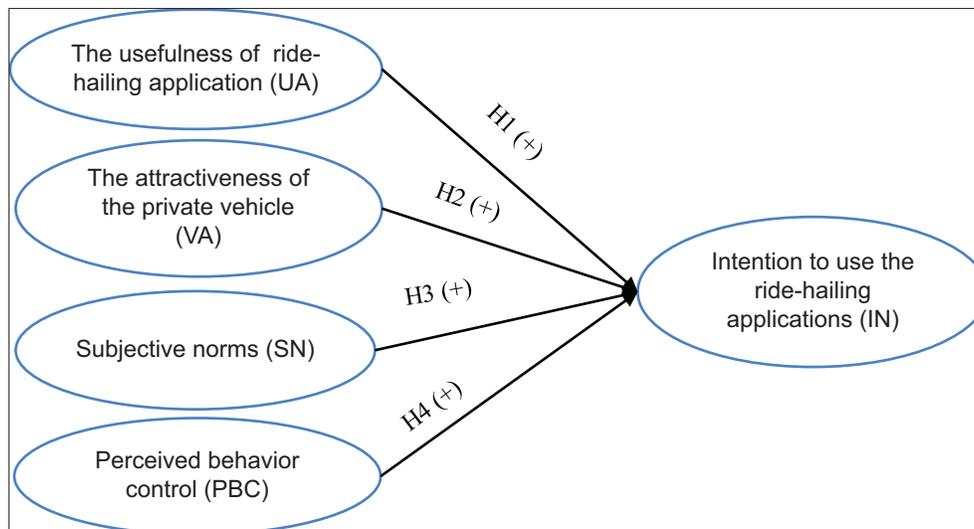
Source: Author's construct

study uses a number of data analysis methods applied quite commonly in socio-economic studies such as: assessing the reliability of the scales through Cronbach's alpha coefficient (α), Exploratory factor analysis (EFA - Exploratory factor analysis), regression analysis to determine the impact level of factors. T-test and ANOVA test to test the differences of demographic variables to the intent to use ride-hailing applications.

In the proposed theoretical model to study the factors affecting the intention to use ride hailing applications. These factors need to be assessed for scale reliability before further analysis can be performed. Specifically, apply Cronbach's alpha coefficients to evaluate the reliability of scales, and at the same time use to measure concepts in the research model (Hair et al, 2010). According to Tho (2013), Cronbach's alpha is the coefficient that has been used by many studies in evaluating the reliability of multivariate scales, because it can be used to evaluate the consistency of observed variables on the same scale to measure a concept.

In the socio-economic field, many researchers agree that when Cronbach's Alpha's 0.8 or higher is closer to 1.0, the scale is rated as good, with high component consistency. Cronbach's alpha coefficient from 0.7 to nearly 0.8, the scale is considered good, while from 0.6 or more can be used (Nunnally and Bernstein, 1994; Peterson, 1994). Besides, we can improve the coefficients of cronbach's alpha through the column "cronbach's alpha if variable type", we can improve α by eliminating that variable if in column "cronbach's alpha if variable type" has a value greater than α. If the variable has an important value in the study, it can be argued to retain it, although it is possible to eliminate it to improve the Cronbach's alpha's.

The study surveyed 400 people who used to use a ride-hailing app in Vietnam from December 2019 to July 2020 through an official survey with a questionnaire. The survey collected 342 valid survey forms. The questionnaire was designed on a five-point Likert scale. The questionnaire included 19 observed variables, of which 6 observed variables for the Usefulness of Vehicle Calling Application (UA1- UA6), 5 observed variables for Vehicle Attraction (VA1-VA5), 3 observed variables for Social Influence (SN1-SN3) and 2 observed variables for Perception of Behavior Control (PBC1-PBC2) and 3 observed variables for Vehicle Calling App Intent (IN1- IN3).

4. RESEARCH RESULTS

4.1. Descriptive Statistical Analysis
Among 342 interviewed people, men account for the majority with 236 people, accounting for 69%, and women accounting for

Table 1: KMO and bartlett's test independent variable

Eigenvalue = 1.304, Cumulative of variance = 67.352%		
Kaiser-Meyer-Olkin measure of sampling adequacy		0.834
Bartlett's test of sphericity	Approx. Chi-square	2459.951
	df	120
	Sig.	0.000

Source: Results of processing survey

31%; The majority of people in the age group are 18–25 years old, accounting for 51.5%, followed by the 26–30 year old group, accounting for 30.1%. The majority have university degrees with 121 people, accounting for 58.3%, followed by college degrees accounting for 22.8%, postgraduate degrees accounting for 12%, and high school qualifications 7%. The number of respondents in Ho Chi Minh City accounts for the majority with 26.3%, in Hanoi 26%, the Southeast accounts for 21.1%, the lowest is in the Southwest with 2.9%. The number of office workers accounts for the majority with 58.8%, students 21.3%, workers 15.2% of the survey number. Respondents' income from 5-10 million VND accounts for the highest rate with 38.6%, from 10-20 million accounts for 26.9%.

4.2. Analysis of Discovery Factors EFA
16 variables represent 4 important scales that are analyzed by EFA to really determine the factors that affect the intention to use a ride-hailing application.

The results from the EFA analysis are shown in Table 1, in which, Eigenvalue is greater than 1 and Cumulative of variance 67,352%. With the value KMO = 0.834 and Sig = 0.000 shown in Table 1 and based on the Bartlett test criteria, it can be said that the use of EFA in this study is appropriate.

The analysis results of the factor rotation matrix show that there are 4 groups of factors formed, the factor load coefficients of the observed variables on the factors it measures are satisfactory (> 0.5) (Table 2). After EFA analysis, perform CFA analysis to verify the values of the scale (convergent value, discriminant value, theoretical relationship value).

The results from the EFA analysis of the dependent variable are shown in Table 3, where Eigenvalue is greater than 1 and Cumulative of Variance 67,706%. With the value KMO = 0.695 and Sig = 0.000 shown in Table 3 and based on the Bartlett test criteria, it can be said that the use of EFA in this study is appropriate.

Table 2: Rotated component matrix[a]

Observed variable	Component			
	1	2	3	4
UA1	0.775			
UA2	0.763			
UA3	0.750			
UA4	0.742			
UA5	0.729			
UA6	0.684			
VA1		0.872		
VA2		0.819		
VA3		0.790		
VA4		0.745		
VA5		0.651		
SN1			0.921	
SN2			0.903	
SN3			0.893	
PBC1				0.864
PBC2				0.822

Source: Results of processing survey. Extraction method: Principal component analysis. Rotation method: Varimax with Kaiser Normalization.[a]

[a]Rotation converged in 5 iterations
Source: Results of processing survey

4.3. Regression

The study used the multivariate regression model method using SPSS software version 20.0. The author will first examine the variables that influence the intention to use the ride-hailing application for the regression results as shown in Table 4.

The results from the research model show that for all sig <0.05, all factors have an influence on the intention to use ride hailing applications. However, of which, the vehicle attraction (VA) factor has the least influence. This is explained during the survey, mostly from December 2019 to July 2020, during the COVID-19 translation, so the appeal of personal vehicles does not greatly affect the intent to use ride-hailing applications.

UA has the largest beta, showing that the Usefulness of Vehicle Calling Application element has the strongest influence on intent to use ride-hailing applications. It shows that when customers receive the usefulness of ride-hailing applications, they are more likely to use ride-hailing applications, affecting their intention to use ride-hailing applications.

It is followed by subjective norms (SN) which also have a similar impact on the intention to use ride hailing applications. Social influencers have a strong influence on the intention to use ride-hailing apps. It shows the impact from family, friends or agency that affects the intent to use ride-hailing apps.

The perceived behavior control (PBC) has the same effect on intent to use ride-hailing applications. The easier it is to use the applications and be determined by yourself will have a lot on your intention to use the ride-hailing applications.

4.4. Discuss Research Results

Table 5 shows that in the perceived useful of app scale, the "Price is determined before placing the car" is the highest agreed opinion with an average of 3.92 with a standard deviation of 0.929. This is also reasonable because customers love to know the price in advance so as not to be scammed or unexpectedly increased. In addition, the idea of "Using a ride-hailing application will save money" is the one with the lowest level of consent, in fact very suitable, because if you use ride-hailing applications, you will not save money like using a car. Use a private vehicle for frequently-moving roads. On this scale, the highest level of uniformity is of the opinion "I think use a convenient ride-hailing application" with a standard deviation of 0.872.

Table 6 shows that on the individual vehicle attractiveness scale, the "I'm used to using private vehicles" is the highest consensus with 4.18 average and 0.930 standard deviation. Because when something is ours we can freely use it, without the permission and consent of others. Therefore, having their own personal vehicles, customers can use and move according to their time and preferences.

Additionally, the "I think the cost of using Private car is lower than using a ride-hailing app" is the one with the lowest level of consent. When a customer uses a personal vehicle, the expenses are only for gasoline, oil, repairs, etc. There will be no running costs like the ride-hailing app. Because when the customer uses the car, the customer will run it by himself, so there will be no cost to pay for the carrier like the ride-hailing application. With the private car attractiveness scale, the factor "I'm used to using private vehicles" is the one with the highest level of uniformity with a standard deviation of 0.930.

Table 7 shows that in the social influence scale, the opinion "My family recommends that I use the ride-hailing app" is the highest agreed opinion with an average of 3.08 with a standard deviation of 1,189. This is also reasonable because the family is the place closest to the customer. If someone in your family uses a ride-hailing app and finds it suitable for the commute, referrals to family members are likely to be very high. In addition, the opinion

Table 3: KMO and Bartlett's test dependent variable

Eigenvalue=2.031, Cumulative of variance=67.706%		
Kaiser-Meyer-Olkin measure of sampling adequacy		0.695
Bartlett's test of sphericity	Approx. Chi-square	252.483
	Df	3
	Sig.	0.000

Source: Results of processing survey

Table 4: Coefficients[a]

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2,146E-016	0.044		0.000	1.000		
UA	0.458	0.044	0.458	10.452	0.000	1.000	1.000
VA	0.122	0.044	0.122	2.783	0.006	1.000	1.000
SN	0.302	0.044	0.302	6.885	0.000	1.000	1.000
PBC	0.193	0.044	0.193	4.402	0.000	1.000	1.000

Source: Results of processing survey

Table 5: Descriptive statistics of perceived useful of app

Code	Scale	Min	Max	Mean	Std. Deviation
UA1	I think use safety ride-hailing application	1	5	3.63	0.899
UA2	I think use a convenient ride-hailing application	1	5	3.70	0.872
UA3	Using a ride-hailing application will save money	1	5	3.41	0.969
UA4	Feel suitable to choose the options of the application	1	5	3.69	0.902
UA5	Price is determined before placing the car	1	5	3.92	0.929
UA6	There are many promotions and offers for familiar customers	1	5	3.69	1.035

Source: Results of processing survey

Table 6: Descriptive statistics of private car

Code	Scale	Min	Max	Mean	Std. Deviation
VA1	I think personal transport is more convenient than a ride-hailing app	1	5	3.80	1.058
VA2	Private vehicles help me go to places and paths in Binh Duong	1	5	3.82	1.096
VA3	I think private vehicles gives me more time autonomy than ride hailing apps	1	5	3.69	1.124
VA4	I think the cost of using Private car is lower than using a ride-hailing app	1	5	3.67	1.107
VA5	I'm used to using private vehicles	1	5	4.18	0.930

Source: Results of processing survey

Table 7: Descriptive statistics of subjective norms

Code	Scale	Min	Max	Mean	Std. Deviation
SN1	My family recommends that I use the ride-hailing app	1	5	3.08	1.189
SN2	My friends recommends me to use the ride-hailing app	1	5	2.99	1.129
SN3	Work/school recommends that I use the ride-hailing app	1	5	2.96	1.253

Source: Results of processing survey

Table 8: Descriptive statistics of perceived behavior control

Code	Scale	Min	Max	Mean	Std. Deviation
PBC1	For me, using the ride-hailing app is easy	1	5	3.85	0.889
PBC2	The use of a ride-hailing application is entirely my decision	1	5	4.17	0.844

Source: Results of processing survey

"Work / School recommends that I use the ride-hailing app" is the one with the lowest level of consent. The fact is very suitable, because during use will arise a lot of dissatisfaction and in some cases do not want to use car calling applications. Therefore, if the customer gets information from the institution / school, there will be two contradictory information flows. In this scale, the highest level of uniformity is of the opinion "My friends recommend me to use the ride-hailing app" with a standard deviation of 1.129.

Table 8 shows that on the cognitive scale of behavior control, the idea "The use of a ride-hailing application is entirely my decision" has a high degree of uniformity with a standard deviation of 0.844. The opinion "The use of the ride-hailing app is entirely my decision" is a higher consensus and has an average of 4.17. Everything from finding out information, ordering to use a ride-hailing application and whether to continue using it or not comes from the individual decision of the customer.

Table 9 shows in the scale of intent to use a ride-hailing application. The "I intend to use it" was the most highly agreed with an average of 3.86. The "I intend to use it regularly" is the one with the highest level of uniformity with a standard deviation of 0.962. The "I intend to use it often" opinion had the lowest level of consent of 3.48. From the two figures of the two opinions with the highest and lowest average, we can see that customers have received and realized the usefulness and convenience of using ride-hailing applications. However, due to a number of reasons for the price and so customers do not intend to use it regularly.

5. IMPLICATIONS OF GOVERNANCE AND RESEARCH LIMITATIONS

5.1. Administrative Implications

This study inherits theory from previous research that outlines the role of intent in future behavior and factors that will affect the

Table 9: Descriptive statistics of intention to use

Code	Scale	Min	Max	Mean	Std. Deviation
IN1	I intend to use it	1	5	3.86	0.963
IN2	I intend to recommend to everyone	1	5	3.51	1.030
IN3	I intend to use it regularly	1	5	3.48	0.962

Source: Results of processing survey

customer's intentions, especially those that affect the intentions of using ride-hailing apps.

From the results of factor analysis, the study has formed and pointed out three groups of factors that affect the intention to use ride-hailing applications, including: usefulness of ride hailing apps, social factors, behavior control elements. The survey was carried out a lot from January to July 2020. During this time, COVID-19 epidemic has significantly reduced the circulation, movement, travel, shopping in Binh Duong province. Especially in the field of schools, schools from kindergartens to students at universities in Binh Duong province are allowed to take a long break from translation. In the service phase, customers also have less mentality to go out and buy directly, customers prefer to use home delivery and home delivery services. Students who are on vacation should go home or stay at home to avoid translation, so they should have little or no use of ride hailing apps to move. Office workers are afraid that drivers who travel a lot of people are exposed to many people, so they also limit their use to work, most people will choose to go with acquaintances.

On the attractive factor of the ride-hailing application, the author proposes some improved methods to further improve the service. First, there is an additional alarm service that the customer can use in case the customer is in danger. Second, there is an additional health and life insurance package for people in the process of

using the service. Third, add preferential services and often have incentive programs for familiar customers, with additional ratings for customers. Fourth, always openly and regularly monitor the employee's background and working history to make customers feel secure.

In terms of the social influence on the customer's intentions, the author has proposed companies, enterprises that are and are about to invest in this service need to have an advertising strategy so that customers can see the convenience and utility that this service brings. There are additional services of a larger scale, such as booking services with more seats, and more distant locations. Regularly have reports on operations and revenue for customers to capture regularly.

On the macro scale, the author has the following suggestions: the State needs a strict management way to easily grasp the company's operations. In addition, the process of paying corporate income tax. Since this service activity is related to road traffic, there is a need to continue improving the traffic system in densely populated areas.

5.2. Limitations of the Study

The study has initially found out the factors affecting the intention to use ride-hailing applications in Vietnam. Thereby assessing the impact of each factor on the intention to use a ride-hailing application at different levels. However, the research still has a number of limitations and thus opens the research direction in the future:

First, the study sample was only examined for a short period of time, less than a year. Therefore, it is necessary to broaden the sample size and method of sampling in order to more accurately assess the impact of factors on the intent to use ride-hailing applications.

Second, in addition to the factors that the author has suggested, there may be other factors that influence the intent to use ride-hailing applications. Subsequent studies can be modified and supplemented to make the study more comprehensive and accurate for the study.

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