

Exploring User Acceptance and Intention towards App based Cab Aggregators using Integrated TAM and TPB Model

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ABSTRACT

Rapid internet penetration and increasing smartphone usage in India and the world has changed the consumer behaviour and has altered traditional business paradigms. Online services have replaced a number of traditional offline activities today. The acceptance of digital technology has by far changed the needs and expectations of consumers in today's competitive scenario. One of such major change is the birth of the sharing economy, which is defined as "an economic system in which assets or services are shared between private individuals, either free or for a fee, typically by means of the internet" (Oxford dictionaries, 2016). Application Based Cab Aggregators (ABCA) aggregates cabs for the ease of customers by providing cabs at their destination for rates set by the service. Some of the key players in this new emerging market in India are Uber India Technology Private Limited, ANI Technologies Private Limited, Meru Cab Company Pvt. Ltd., Carzonrent (India) Pvt. Ltd, Zoomcar India Private Ltd, Saavari, Fast Track Call Cab Private Limited.

Given the rising success of the sharing economy in the digital age, this research work studies the key factors which influences the passenger's acceptance and intention of using this new technology of ABCA services by developing an integrated model of Theory of Planned Behaviour and The Technology Acceptance Model.

The outcomes of the study showed that the commuters have a positive attitude towards the ABCA services and the attitude towards ABCA should be a strong predictor for the intention to use the services. The results also indicated that perceived ease of use and perceived usefulness positively influence the attitude towards ABCA services. Perceived behavioural control was found to have a positive influence on the intention to use the services whereas subjective norm had no effect on the intention to use the services.

Keywords: Technology Acceptance Model (TAM); The Theory of Planned Behaviour (TPB); ABCA; Sharing Economy.

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INTRODUCTION

Taxis are an important transportation mode alternative which is used across the world. Taxis are preferred over other modes of transportation in India and other developed countries primarily because of inadequate public transportation system.

Several factors such as increasing demands from the corporate sectors, increase in income, changing lifestyles of ever-increasing middle class especially in Tier I & Tier II cities, and government's failure in addressing the demand-supply requirement of citizens has been instrumental to the emergence of a contemporary model of taxi aggregation industry.

The growing traffic troubles are also fuelling the growth of cab aggregators and bike taxis in India. A report by India Brand Equity Foundation (IBEF) states that currently Indian roads carry close to 90 percent of the passenger traffic and 65 percent of the freight.

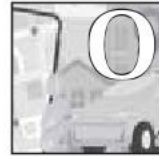
In the recent past, Indian taxi industry has seen a paradigm shift from the traditional way of booking taxis to online taxi booking. Today, everyone is equipped with smartphones, laptops, tablets, and are connected with seamless internet connection. The expectation that everything should be available with just a click at their comfort is also increasing.

According to Statista, the number of smartphone users in India is predicted to reach the figure of 340 million and could even reach 468 million by 2020. In India, an estimated figure of 320.57 million accessed internet using their smartphones in 2017 and this figure is estimated to reach a whopping number of 462.26 million in 2020 as reported by Statista. Citizens are looking for a one-stop easy solution to the problem of transportation and therefore they are switching to the cab aggregators. These numbers as mentioned above supports the fact that more and more people in future will prefer using their mobiles to book cabs online.

Further, we function in the age of sharing economy which defines the concept of "sharing" human as well as physical resources for the convenience and benefit of the socio-economic ecosystem. The concept of shared economy is gaining popularity in India. Thus, the online segment of cab aggregators is increasing the volume of business. The increasing internet and smartphone penetration are catering to the growth of the shared concept.

Statista in their study states that the revenue generated from the Ride Sharing segment amounts to US\$371m in 2018 in India and it is expected to show an annual growth rate (CAGR 2018-2022) of 19.6%, resulting in a market volume of US\$761m by 2022. The user penetration in 2018 is approximately 2.5% and is expected to reach 3.9% by 2022.

Though, online taxi booking is at a very nascent stage, but it is growing at a very fast pace. Young entrepreneurs are finding this as a golden opportunity and are formulating new models in synchronization with the latest technology to attract the masses. People are looking for booking convenience through apps or websites, in addition to providing other add-on features for a hassle-free travel experience.



VIEW OF INDIAN TAXI AGGREGATION INDUSTRY

An aggregator is an entity or an individual who gathers and classifies things into different subsets on the basis of the similarities in their characteristics.

Application Based Cab Aggregators (ABCA) aggregates cabs for the convenience of customers by providing cabs at their convenience for rates which are set by the service provider. Cab aggregators do not own vehicles but they act as a link between the riders and the drivers using GPS/GPRS. ABCA through their real-time data help riders to locate the driver, shows the number of drivers in the nearby area and also informs the wait time for the closest driver, all through their apps.

ABCA appeals to masses because of their cheap fares, safety, easy booking, proficient staff, vehicle tracking, GPS enabled vehicles, accessibility and this builds trust and confidence of the passengers.

The rise of the Cab aggregation industry has made it very simple for the passengers to book their rides and at the same time it has provided start-ups and young entrepreneurs, a good business model to invest in.

The ABCA players started entering into this sector from 2000, but it saw an initial boom in 2010 with the launch of Ola and Taxi. Soon, in 2013 the world leader in Cab Aggregation industry Uber entered India. The market is facing good competition as players try to better their services every day by providing attractive offers, free rides and whopping discounts. ABCA's also provide several personalized options to the riders in choosing their rides including the option of cab sharing which appeals to the passengers who want to share the expense of their rides with the others.

Delhi is the world's fastest growing city. With Delhi's rapid development and growth, there is a substantial increasing pressure on improving its transportation infrastructure. The public transport in Delhi is inadequate in terms of safety and approachability. There is a constant complaint for haggling for fares and taxi /auto drivers denying rides to the passengers. This was seen as a huge opportunity by the private players who took advantage of Delhi's market for app-based cab services. With the increasing population due to urbanization in Delhi, people want easy options for commuting. Online cab booking services are increasing at a rapid pace in Delhi and in other metropolitan cities because the professionals, tourists and the young are seeking for faster and hassle-free transport system and they don't mind paying a little extra for these services. The current study tries to identify the factors affecting the choice of ABCA in Delhi and NCR.



LITERATURE REVIEW

Erasmus, Rothmann & van Eeden (2015), acclaim that the most common models used to depict the linkages between the factors of beliefs, attitudes and the usage of new technology, are the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1975) the Theory of Planned Behavior (TPB)

(Ajzen, 1985; Ajzen and Madden, 1986) the diffusion of innovations (Rogers, 1995) and the technology acceptance model (TAM) (Davis, 1986).

Fishbein and Ajzen in 1975 proposed TPB. According to the TPB model, attitude towards the behavior, subjective norm and perceived control determines the intentions to perform certain behaviours. (Ajzen 2005). Similarly, Davis (1989) studied the Technology Acceptance Model in which the perceived ease of use and perceived usefulness affects the attitude towards a new technological invention, and then effects behavioural intention to use it.

Chen et al., (2017) undertook an empirical study on WeChat, which is China's one of the most popular mobile social network. Factors from social and mobile perspective were incorporated into the conventional TAM and thus a new TAM model was developed.

Lule et al., (2012) applied Technology Acceptance Model to examine the factors that influence the adoption of Mobile-banking in Kenya and took the special case of MKesho, an M-banking application in Kenya. From their study, it was revealed that Perceived Usefulness, Perceived Self Efficacy, Perceived Credibility and Perceived Ease of Use are the key factors that influences customers' attitude towards Mobile-banking.

Various studies showed that neither TAM nor TPB were found to provide a complete explanation of behavior (Taylor & Todd, 1995; Venkatesh et al., 2003) since factors that influence consumers' adoption of a new technology can vary as it depends on the target consumer, type of technology, and context. Dishaw & Strong (1999) in their study suggested that an integrated model formed out of TPB and TAM may provide more explanatory power than any of these models used alone.

Lien et al., (2019) studied the factors influencing air travellers' intentions to adopt fast air travel services using the integrated TAM and TPB model. It was found that benefits of air travel services positively and significantly influence perceived ease of use, perceived behavioural control and perceived usefulness. Perceived usefulness was found to predicts the attitude of air travellers and intentions to use fast air services for travel. Perceived behavioural control was found to positively influence intentions to adopt these services.

Hassan et al., (2018) in their study examined the factors that affect the adoption of the growing concept of internet banking in Pakistan using the integrated TAM and TPB model. Through the results, it was confirmed that the integrated TAM and TPB frameworks is fit to be used for predicting the adoption of internet banking by customers.

Safeena et al., (2013) from their study on online banking adoption found that some of the important determinants of online banking adoption are perceived ease of use, perceived usefulness, attitude, subjective norm and perceived behavioural control. Integrated TAM and TPB model were used to analyse that all these factors have an important effect on attitude.

Gamal et al., (2010) established an integrated research model using TPB and TAM models to understand intention to use e-procurement technology. The findings highlights that

intention to use e-procurement technology majorly depends on user's attitude and also influenced by perceived usefulness and subjective norm.

Lee et al., (2009) proposed the use of integrated model combining technology acceptance model (TAM) and theory of planned behavior (TPB) model to explain customers' intention to use online banking. It was revealed that the intention to use online, primarily e banking is affected by the financial and privacy risk. It is also positively affected by attitude, perceived benefit and also by perceived usefulness.

Chen et al. (2007), studied the motorists' intention of ETC adoption by combining both Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB). Data was collected from highway drivers who had not installed on-board units for ETC service in Taiwan. It was found that perceived ease of use, system attributes and perceived usefulness is shown to effect motorists' attitude towards ETC service adoption positively. This study also disclosed that perceived behavioural control, attitude and subjective norm positively influence the intention to adopt ETC system.

The current study employed, a research framework integrating constructs derived from both TAM and TPB is proposed.

In the context of ABCA service adoption, TPB suggests that a passenger is more willing to adopt ABCA service if he or she has a more positive attitude towards using ABCA (Attitude), also, the passenger wants to comply with other important people's opinions on the use of ABCA (Subjective Norm), and has the requisite resources, skills, or opportunities of using this new technology of ABCA services (Perceived Behavioural Control).

In additions, the constructs of TAM are used in this study, which defines that perceived usefulness and perceived ease of use, will positively influence passengers' attitude towards ABCA service. Furthermore, perceived usefulness directly effects attitude towards the ABCA services, and perceived ease of use directly effects perceived usefulness of ABCA services. The proposed model is presented in Figure 3 and the hypotheses are derived in the next section.

The current study proposes to study these parameters in the context of ABCA services.



OBJECTIVE:

To measure user acceptance and intention towards the services of App Based Cab Aggregators (ABCA)

(H1): Perceived ease of use of the ABCA services has a positive and significant impact on perceived usefulness of the ABCA services

(H2): Perceived ease of use of the ABCA services has a positive and significant impact on the attitude towards the ABCA services.

(H3): Perceived usefulness of the ABCA services has a positive and significant impact on the attitude towards the ABCA services.

(H4): Perceived usefulness of the ABCA services has a positive and significant impact on the intention to use the ABCA services.

(H5): Attitude towards the ABCA services has a positive and significant impact on the intention to use the ABCA services.

(H6): Subjective norm towards the ABCA services has a positive and significant impact on the intention to use the ABCA services.

(H7): Perceived behavioural control towards the ABCA services has a positive and significant impact on the intention to use the ABCA services.

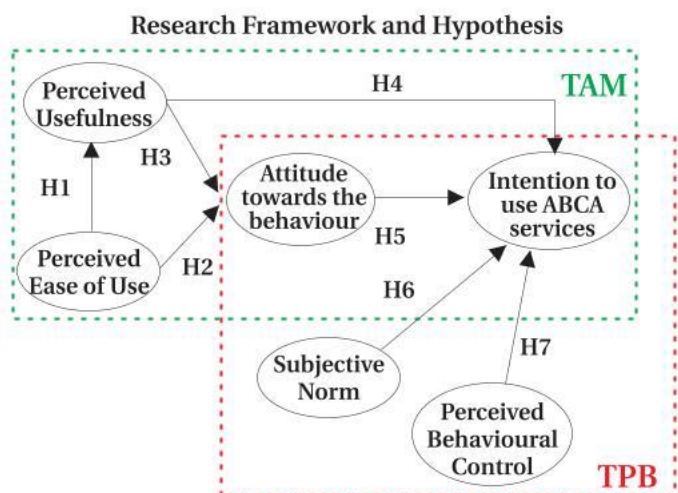


Figure 1: Research Framework (Adapted from Chen et al., (2007))



RESEARCH METHOD

Questionnaire Design

Francis et al., (2004) developed a step by step guide about the construction of a TPB questionnaire was adopted in the paper. In addition to the framework given by Francis et al., (2004), several existing questionnaires containing TPB, (Promtosh&Sajedul, 2011; Jesse, 2015) TAM, (Delikan, 2010) and a combination of both models (Chen et al., 2007) were used for the development of the questionnaire. The constructs of the questionnaire will be

based on the integrated model from TPB and TAM (Figure 15). All the five constructs, perceived usefulness, perceived ease of use, attitude, subjective norm, and perceived behavioural control were covered in the questionnaire. Also, the questionnaire will include demographic information and questions pertaining to ABCA trends. Table 1. summarizes the sources that were used for reference in the development of present constructs

Research Design

The research design used for this study is Exploratory and Descriptive. The sample size is 240 and the sampling area is Delhi NCR. The technique used for drawing sample from population is convenience sampling. A questionnaire was administered with a five-point Likert's scale, with 'strongly agree' rated as 5 and 'strongly disagree' rated as 1. The collected data was coded in the SPSS 21. Exploratory Factor analysis was used for analysis. A simple linear regression analysis was conducted separately for each of the seven hypotheses to test the relationships between the dependent and independent variables. In addition, a correlation matrix was depicted to show all relationships within the model.



ANALYSIS

Out of 240 responses, 39.6% of respondents were aged 26-40, followed by 32.1% were aged 41-60 and 28.3% belonged to 18-25 years of age group. 52.9% were male and remaining were females. Majority of the respondents (45%) were Salaried (Private Sector) whereas 24.2% were students. 50.4% of the respondents earned monthly income more than 25,000. 55.4% of the respondents were single. 53.8% owned a personal vehicle. 50% started using App based cab services in past few years whereas 31.7% started using these services in last one year. When asked about the frequency of using cabs, 42.1% reported to use cabs at least once a week. Around half of the total respondents preferred Ola as their cab service provider, followed by Uber, which is preferred by 38.3% of the respondents. Majority preferred Shared cabs (58.8%) over Personal cabs. Next, 58.3% of the respondents rated their experience of using App-based Car Service Providers as excellent. 77.9% of the respondents said that they will recommend App-based cab services to their family and friends.

Table 1: Questionnaire Design and Factor Loadings

Construct	Items	Factor Loading	Source	Internal Reliability*
Perceived Ease of Use	ABCA has a user-friendly interface	.873	Bhattacharjee, 2000; Chen et al., 2007	.915
	Learning to use the Taxi-hailing app on mobile phone was easy for me.	.835		
	The payment process of ABCA is effortless	.820		
	Rating of an ABCA's driver after the ride is easy	.817		
	It is easy for me to use the ABCA's application	.781		
	It is easy to get accustomed to ABCA	.703		
	ABCA interface helps me in tracking the cab.	.677		

Construct	Items	Factor Loading	Source	Internal Reliability*
Perceived Usefulness	Using ABCA helps me get better service.	.913	Moore and Benbasat, 1991; Chen et al., 2007	.969
	ABCA improves my travel convenience.	.896		
	It is easier to get a taxi using ABCA than picking up a cruising cab.	.881		
	Using ABCA enables me to reach my destination faster	.867		
	Using ABCA is beneficial for me in financial terms	.827		
Perceived Behavioural Control	I trust ABCA's screening of the drivers	.766	Taylor and Todd, 1995; Chen et al., 2007	.922
	I have the resources to use ABCA services	.761		
	I have the knowledge to use ABCA services	.757		
	I have the ability to use ABCA services	.747		
	I feel secure connecting my credit card to the ABCA services	.722		
	I trust the rating system of ABCA	.654		
Subjective Norm	It is important for me what my close friends think about ABCA	.901	Taylor and Todd, 1995; Chen et al., 2007	.910
	The public opinion about ABCA in general is positive	.890		
	It is important for me what the public thinks about ABCA	.854		
	The media attention ABCA receives affects my willingness to use the service	.793		
	My close friends think I should use ABCA	.864		
Attitude	Using the taxi-hailing app is a pleasant experience for me.	.843	Taylor and Todd, 1995; Chen et al., 2007	.959
	I have a generally favourable attitude towards using taxi hailing app.	.749		
	Overall, I enjoyed using taxi-hailing app.	.689		
	I feel using taxi-hailing apps is a wise choice.	.642		
Intention	I would consider using ABCA when having a night out	.688	Yu et al., 2005; Chen et al., 2007	.877
	I would consider using the ABCA services the next time I need a taxi	.654		
	I would consider using ABCA when visiting a new city	.624		

Exploratory Factor Analysis

To test the reliability of various constructs of the questionnaire, the Cronbach alpha (equivalent to the average of all the split half correlation coefficients) was used. It was found to be 0.930 which implies that the data is consistent in nature and can be relied upon.

Exploratory factor analysis was applied using SPSS V 21. For this, pool of 30 items were subjected to exploratory factor analysis. It reduced items to six factors. Kaiser- Meyer-Olkin measure of sampling adequacy came out to be 0.844, which is above 0.65 (the acceptable level). The factor analysis generated six components with eigenvalues above 1 with total variance explained being 76.188%. The varimax rotation clubbed the items into six components as shown in Table 1.

Correlation Analysis

The Pearson correlation coefficients measures the strength of the linear association between two variables and the values lie between -1 and 1 (Anderson et al., 2013). After conducting the Reliability Analysis, the correlation analysis was conducted to discover the relationships between the six factors and to investigate the hypotheses of the research model. Cohen (1988), posits that a correlation coefficient between 0.10 – 0.29 signifies a small correlation, 0.30 – 0.49 is seen as a medium correlation, and 0.50 – 1.00 as a large correlation.

Table 2 depicts the correlation analysis. The table above shows that the correlations between Perceived Usefulness, Perceived Ease of Use, Intention and Attitude are positive whereas the correlation between Subjective Norm and Perceived Behavioural Control was found to be negative.

and Hypothesis 3 are supported.

Next, H4, H5, H6 and H7 posited that Perceived usefulness, Attitude, Subjective norm and Perceived behavioural control respectively has a positive and significant impact on the intention to use the ABCA services. The standardised coefficients (β) shows that Perceived Behavioural Control ($\beta = 0.385$) have larger impact than Attitude ($\beta = 0.361$) and Perceived Usefulness ($\beta = 0.100$) on Intention to use ABCA services. Also, the Sig value indicates that both predictors had a significant and positive impact on Intention scores at the 0.001 level.

The subjective norm ($\beta = 0.039$) which is referred to as perceived social demand to execute a particular behaviour was found to have positive but insignificant impact on

Table 2: Correlation Analysis

		Subjective Norm	Perceived Usefulness	Perceived Ease of Use	Perceived Behavioural Control	Intention	Attitude
Subjective Norm	Pearson Correlation	1	.002	.014	-.002	.077	.108
Perceived Usefulness	Pearson Correlation	.002	1	.346**	.588**	.495**	.466**
Perceived Ease of Use	Pearson Correlation	.014	.346**	1	.480**	.397**	.306**
Perceived Behavioural Control	Pearson Correlation	-.002	.588**	.480**	1	.650**	.570**
Intention	Pearson Correlation	.077	.495**	.397**	.650**	1	.631**
Attitude	Pearson Correlation	.108	.466**	.306**	.570**	.631**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

To further enhance these findings, a regression analysis was also conducted. Table 3 summarises the result of regression shows below:

H1 posited that perceived ease of use of the ABCA services has a positive and significant impact on perceived usefulness of the ABCA services. It can be concluded from Table 3 that Perceived Ease of Use (PEU) ($\beta = 0.346$) had a positive and significant effect on Perceived Usefulness of ABCA services (PU). Thus, hypothesis 1 is supported.

H2 proposed that Perceived Ease of Use of the ABCA services has a positive and significant impact on the attitude towards the ABCA services and H3 proposed that Perceived usefulness of the ABCA services has a positive and significant impact on the attitude towards the ABCA services. The standardised coefficients (β) shows that Perceived Usefulness ($\beta = 0.410$) have larger impact than the Perceived Ease of Use ($\beta = 0.164$) on Attitude towards ABCA services. Also, the Sig value indicates that both predictors had a significant and positive impact on Attitude scores at the 0.001 level. Thus, Hypothesis 2

Intention to use ABCA services. There is a weak relationship between subjective norms and intentions because of which inconsistencies in the significance of subjective norms is often reported.. Sheppard et al. (1988) and Van den Putte's (1991) meta-analyses of the TRA found that the subjective norm component was the weakest predictor of intentions (Godin & Kok, 1996). Therefore, several authors have removed subjective norms from analysis (e.g. Sparks, Shepherd, Wieringa, & Zimmermanns, 1995). Armitage & Conner (2001) in their meta-analysis also supported the view that subjective norm is one of the weakest components of the TPB model which relates to intention. Many researchers such as Trafimow & Finlay (1996) and Cialdini and Trost (1998) have also discussed the relatively weaker impact of subjective norm in TPB.

Eckhardt (2009) defines subjective norms as related to the individual's perception of social pressure from others who are important to them (e.g. family, friends, colleagues, and others) to behave (or not) in a certain manner and their motivation to comply with those people's views. Sedikides (1993) mentioned that the subjective norm was more relevant to the individuals who could access the collective self in a prominent

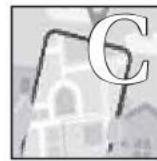
Table 3: Summary of Hypothesis Testing

Hypothesis	Specifications	Results
H1	Perceived ease of use of the ABCA services has a positive and significant impact on perceived usefulness of the ABCA services	Supported ($\beta = 0.346, p < 0.001$)
H2	Perceived ease of use of the ABCA services has a positive and significant impact on the attitude towards the ABCA services.	Supported ($\beta = 0.164, p < 0.001$)
H3	Perceived usefulness of the ABCA services has a positive and significant impact on the attitude towards the ABCA services.	Supported ($\beta = 0.410, p < 0.001$)
H4	Perceived usefulness of the ABCA services has a positive and significant impact on the intention to use the ABCA services.	Supported ($\beta = 0.100, p < 0.001$)
H5	Attitude towards the ABCA services has a positive and significant impact on the intention to use the ABCA services.	Supported ($\beta = 0.361, p < 0.001$)
H6	Subjective norm towards the ABCA services has a positive and significant impact on the intention to use the ABCA services.	Rejected ($\beta = 0.039, p < 0.001$)
H7	Perceived behavioural control towards the ABCA services has a positive and significant impact on the intention to use the ABCA services.	Supported ($\beta = 0.385, p < 0.001$)

manner. The collective self is dependent upon interpersonal bonds to others which are obtained from common and from some sort of symbolic identification with a group. The author of TPB model, IcekAjzen (1991), explains this with the fact that intentions are heavily influenced by personal factors, such as attitudes and perceived behavioural control. According to Ajzen (2002), questions have an injunctive quality but the responses have low variability because important others are supposed to approve desirable behaviours and dislike undesirable behaviours. Ravis and Sheeran (2003) distinguished between injunctive and descriptive norms as separate sources of motivation, with the subjective norm's component of the theory of planned behaviour being injunctive social norms, since it relates to the opinion of significant others, and descriptive norms referring to perceptions of significant others' own attitudes and behaviour in the domain. Further research will reveal the extent of influence of injunctive and descriptive norm to enable us to understand which of these norms is influencing the subjective norm taken up in the study.

In order to validate these results, step-wise regression was also applied. Table shows the result of step-wise regression.

Result of Step-wise regression validates the results derived earlier i.e. Perceived Behavioral Control and Attitude have highest impact on Intention to use the ABCA services.



CONCLUSION

This study on App Based Cab Aggregators added to the theory of behavioural research by using an integrated model of TPB and TAM. The model used is inspired by the study conducted by Chen et al., (2007), has been applied in the context of App Based Cab Aggregators. To the knowledge of the authors, such a study has not been conducted before, which adds valuable insights to behavioural theory related to technology-based services of the digital age. The results showed that attitude towards the use of the ABCA services was the most important predictor for the intention to use them and that the subjective norm had the lowest influence, contrary to the existing theory, the results of the present study show that consumers are less influenced by the subjective norm than expected, which makes it a subject for further investigation.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.650 ^a	.422	.420	.5916671955 19454	.422	171.806	1	235	.000
2	.723 ^b	.523	.519	.538716918 316546	.101	49.466	1	234	.000
a. Predictors: (Constant), PBC									
b. Predictors: (Constant), PBC, A									



IMPLICATIONS

The outcomes of this study offer wide range of implications for managers as well as for governmental policy makers. Insights from this study can be useful to App Based Cab

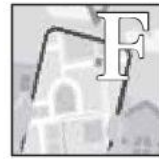
Aggregators as they can optimize their marketing efforts according to the most important factors that influence the intention of consumers to use online cab services. To increase users' acceptance level, product managers and developers should be able to identify a wide range of user's preferences, attitudes and intentions towards the usage of ABCA. They should be able to integrate these factors into the development process.

The outcomes of the study showed that the commuters have a positive attitude towards the ABCA services and that the attitude towards ABCA is a strong predictor for the intention to use the services.

Furthermore, the results suggest that perceived ease of use and perceived usefulness positively influence the attitude towards ABCA services. Hence, the service providers ought to focus on communicating the easy handling of Cab Aggregator's mobile application as well as the various benefits of services to the users.

Perceived behavioural control also positively influences the intention to use ABCA services significantly, offering the possibility for ABCAs to showcase the control and safety features of their services. It was found that the subjective norm is shown to have no effect on the intention to use the ABCA services.

Companies within the sharing economy/digital service providers and governmental agencies could use the research framework to conduct their own studies to examine the attitudes, perceptions, and intentions of their clients. The framework could be used to investigate the opinions of individuals towards certain areas to improve strategic decisionmaking. Also, organizations can design longitudinal studies to examine the impact of changes in the service offerings in relation to the intentions of consumers to use their services.



FUTURE RESEARCH

The execution of this study offers various possibilities for future research. Future researchers could conduct a similar investigation in other settings, for example, by including different countries and cultures. A comparative study between different ABCA's can be conducted to get deeper insights on the consumer intention to use these services. Besides the model which was used in the present study, other models which predict the behaviour of consumers could be used for future studies. Future research could also be conducted in the form of a longitudinal study. In addition, an exploratory approach could be used to examine the topic from a broader perspective. This integrated model of TPB and TAM can be used by researchers to investigate other services of the sharing economy, or it can also be used in the framework of new emerging technology-based services.

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