# **Factors Influencing Passengers' Purchase Intention Towards App-Cab Services in Metro Cities of India: A Study on Smartphone Users**

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### **Abstract**

This study aimed to find out that which were the factors influencing the passengers to purchase the app-cab services in metro cities of India. The responses were collected from smartphone users only. Stratified random sampling method was used, and 276 respondents participated in the study. The responses were collected from Kolkata, Delhi, Chennai, and Mumbai (the metropolitan cities of India). Exploratory factor analysis (EFA) followed by multiple regression analysis (MRA) were used to obtain the final results. The study results revealed that Availability & Convenience was the most influencing factor when passengers opted for app-cab services and it had a significant and positive effect on booking app-cabs by smartphone users. The results also revealed that the factor named Security did not have any impact on booking of app based cabs. The study revealed that the administrators need to keep an eye on driver's behavior and should train them properly. To increase their market share, the app - cab service providers need to provide coupons or discount options to attract riders.

Keywords: app-cab, purchase intention, security, availability, ambience, convenience

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evelopment of internet services throughout the country has brought rapid changes in the lifestyle of the people of our country (Reddy & Rao, 2019). With the advancement of internet services and smartphones, the mobile applications have also developed a lot. The app - cab services provided by various companies like Uber, Ola, Meru Cabs, etc. is one of the biggest examples of this. Today, in India, people are very much attached to their smart phones. In everyday life, the smartphone has become one of the most important parts of our life. India stands after China in terms of cell phone subscriber base throughout the world, and most of the people are using smartphones for various benefits. People are using various applications (apps) in smartphones to receive different services provided by various companies. Nowadays, especially in metro cities and class one/smart cities, various app based cab service providers have captured the market and very few offline taxis are available in the market. The app-cab service providers are providing various offers (like coupon, first ride free, etc.) with some special facilities (like pooling, mini cabs, etc.) to attract the customers. Indian consumers are interested to use coupons or offers provided by various app - cab service providers to minimize the cost of their journey (Kumar & Kumar, 2016). App based taxis are very much popular amongst the masses as they use GPS system and drivers can easily track them (Chan, Chang, Lau, Law, & Lei, 2016).

In India, the population is very high, and to supply enough number of taxis according to the demand is a huge task. This is the reason mobile apps have been developed and the gap between customers and vehicles

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has been reduced. Chan et al. (2016), in their research, mentioned that various factors like convenience, saving time, affordable price, etc. have an impact when consumers are choosing app based services. Lu, Geng, and Wang (2015) used the technology to establish the behavior of the consumers towards various app-cab service providers in their respective countries.

In a couple of years, the number of vehicles on the streets has increased, which has led to numerous issues, for example, traffic jams, contamination, natural debasement, and so forth. This is actually impacting the limited natural resources like petroleum, diesel, and flammable gas. The major issue is that due to the vehicles, our environment is getting contaminated everyday, and that is having an adverse effect on human beings.

Lately, on account of an increase in the vehicles on streets, the world is confronting the issue of Earth-wide temperature increase. To survive from this issue, a powerful arrangement is required, which can reduce the air pollution by the vehicles and the only solution for it is car-pooling. If in urban zones, users are increasingly using car-pooling or cab-pooling services, then automatically the environment will be less affected, which will actually help us to inhale better quality air (Dewan & Ahmad, 2007). It is also true that if the individuals are nowadays using one car for one person, then the traffic jams are also going to increase. Instead of that, the individuals should always opt for car-pooling, where they will get proper services at a cheaper rate.

Carpooling (otherwise called vehicle sharing, ridesharing, liftsharing) is the common utilization of a vehicle by a driver and one or more travelers, generally to drive. Taxis are useful in urban areas as well as they stretch out their support to rural zones. Clients also select the taxis for going out of station. Amid long travel, toll charges, stopping charges, and so on won't be incorporated into the client's bill. The expense for the outing will be evaluated by the place, number of days and evenings, sort of vehicle, kilometers, and so on. The charge for the excursion can be paid by various modes like cash, credit, and so on. Nowadays, payments can be done in installments through credit cards or Paytm, PhonePe, GPay, etc.

Some taxi aggregators offer the choice to the client to rate the driver as indicated by the drive experience. If a driver gets less appreciation from the riders, then he/she has to improve the services and if the driver's rating is high, then he/she will be remunerated for his/her execution. Some taxi aggregators give advantages to their drivers to inspire them. Some taxi aggregators provide offers to their clients to guarantee no worry rides. A good number of taxi service providers give offers at the introductory stage for successive use of the taxi services, referrals, and so on. In this context, I have identified the gap related to the adoption behaviour of consumers towards app-cab services and also ask a pertinent question: Why the customers are looking to adopt the services provided by different app-cab companies?

# **Literature Review and Development of Hypotheses**

In India, the app-cab service providers are providing various services and offers to attract consumers in different ways. Chan, Chang, Lau, Law, and Lei (2016) explained that app-cab is doing good business in the market and demand for their cabs was high. Even they were helping women employees by providing female taxi drivers to make them feel them secure enough inside the cab. According to Horsu and Yeboah (2015), the most important factor was driver's behavior when customers were choosing app - cab services in Ghana. Lu et al. (2015) illustrated that customers used mobile applications to enjoy the cab services throughout the city. According to Rahman (2014), the app - cab service providers in India are in high demand and the consumers are enjoying rides with several facilities. In case of a healthcare app, enjoyment, usefulness, and time were the most influential factors for consumers to adopt the app (Chakraborty, 2020).

Meru Cabs, which is one of the app-cab service providers, collected the responses from various respondents, and accordingly, they were trying to enhance the quality of services (Upadhyaya, 2012). Customers choose cabs due to various factors like easy access, reliable, etc., and satisfaction level towards these is quite high (Upadhyaya,

2012). In India, Ola & Uber are two big companies in the app-cab segment, and they are trying to expand their customer base with various offers. Both the companies are trying to provide satisfaction to diverse customers in a country like India. Customers in any country are very volatile in nature and they shift from one brand to another very fast, and this is the reason companies need to adopt innovative plans/strategies to conquer the market (Chan et al., 2016). Sarvepalli and Prakash (2016) explored that there is a demand of app - cab services in cities, and Ola & Uber are trying to capture the market share with better quality of services and innovative marketing strategies.

Consumers are mainly bearing the cost of technology, which has been invented by different organizations. In China, the SMS services were very popular when the price of SMS was quite low and the other applications of mobile services were quite high (Chan et al., 2016). According to Zeithmal (1988), the cost of the products/services will be determined after judging the quality of the products/services, and accordingly the marketers will react in the market. Dodds, Monroe, and Grewal (1991) also illustrated that the cost will be determined after seeing the benefits the customers will get from a product, and at the time of using, what are the costs that are needed to run those benefits. The price value has an impact on intention or using the technology, and it is positive in nature too (Venkatesh, Thong, & Xu, 2012). Price value has become one of the most important predictors compared to other predictors in various research studies when they are adopting or using any kind of technology (Tsu Wei, Marthandan, Yee - Loong Chong, Ooi, & Arumugam, 2009). Chakraborty (2019a) elaborated that customer satisfaction and quality of food had the strongest relationship when consumers were buying food from various food service apps.

According to Fishbein and Ajzen (1975), behavior intention is a factor (most of the times, latent in nature) which triggers an individual to show certain behavior. Behavioral intention always has an association with peoples' behavior, but according to the acceptance of technology context, behavioral intention is the most powerful factor compared to the other factors in terms of using that particular technology (Davis, 1989; Venkatesh, 2000; Venkatesh & Bala, 2008). Familiarity is the most influencing factor when consumers are buying services like SIM cards (Chakraborty, 2018). Various research studies have also shown that there is always a possibility to forecast few behaviors by human beings based on intentions (Ajzen, 2005). A moderator named 'control' is in between the intention and behavior; if the control is high, the effect will be better (Ajzen, 2005). With this, there are several theories that have been added in the behavior intention factor to determine the use behavior of the consumers – like decomposed TPB (Taylor & Todd, 1995). Behavioral intention is illustrated as the individual's possibility of displaying a certain behavior. It is different from the concepts like aspirations and forecasting; it is totally related to the behavior (Armitage & Conner, 2001). Ajzen (1991) also examined how an individual tries to or is motivated to do/perform a certain behavior. There is a direct, positive, and significant impact of behavioral intention towards actual use of technology/devices (Tarhini, Hone, & Liu, 2013).

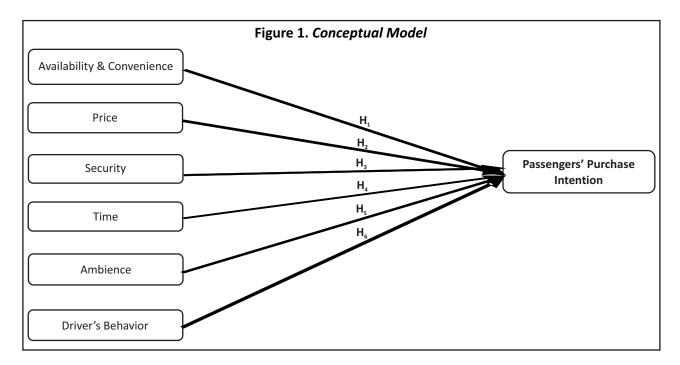
According to Chakraborty (2019b), attitude, behavioral control, usefulness, and ease of use had a significant and the most effective relationship towards intention to buy through grocery apps. It was also found that perceived convenience had a most significant impact towards adopting the m-banking service apps (Chakraborty, 2019c). Chan et al. (2016) observed that purchasers are nowadays tech savvy, demanding in nature, and exceptionally value conscious with no brand dedication.

Taxi companies have a huge potential for development in a city like Mumbai as the need of the hour is a four-wheeler. A city like Mumbai confronting colossal stopping issues, numerous occupants would want to call up a taxi service to visit a shopping center, going for some event, or even to go to a late-night party (Hanif & Nagada, 2016). Various examinations related to taxi services demonstrated that the consumers are very loyal towards their taxi service providers, which leads to a positive sign towards their development and business extension. The cutting-edge buyers are inventive, and they are value conscious consumers; consequently, coupon reclamation helps for client maintenance.

From the above literature, the following hypotheses have been developed:

- 🖔 H<sub>a1</sub>: Availability & Convenience have a significant impact on passengers' purchase intention.
- ♥ H<sub>01</sub>: Availability & Convenience do not have a significant impact on passengers' purchase intention.
- 🔖 H<sub>a2</sub>: Price has a significant impact on passengers' purchase intention.
- $\forall$  **H**<sub>02</sub>: Price does not have a significant impact on passengers' purchase intention.
- 🖔 H<sub>33</sub>: Security has a significant impact on passengers' purchase intention.
- ♥ H<sub>03</sub>: Security does not have a significant impact on passengers' purchase intention.
- 🔖 H<sub>24</sub>: Time has a significant impact on passengers' purchase intention.
- 🖔 H<sub>04</sub>: Time does not have a significant impact on passengers' purchase intention.
- 🔖 H<sub>as</sub>: Ambience has a significant impact on passengers' purchase intention.
- ♥ H<sub>os</sub>: Ambience does not have a significant impact on passengers' purchase intention.
- 🔖 H<sub>a6</sub>: Driver's behavior has a significant impact on passengers' purchase intention.
- 🖔 H<sub>06</sub>: Driver's behavior does not have a significant impact on passengers' purchase intention.

The conceptual model has been shown in Figure 1.



# **Research Methodology**

I used the descriptive research with cross-sectional analysis to select the respondents for the study. Though it is a cross-sectional research, I collected responses in one-shot or at one point of time (Kothari, 2004). I selected four

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metropolitan cities namely, Kolkata, Delhi, Mumbai, and Chennai; 320 questionnaires were distributed with the help of Google Forms, and 276 properly filled up responses were received, with a response rate of 86.25%. I also assured the respondents regarding the confidentiality of their responses. At first, the pre - test strategy was used, and 60 responses were collected to conduct the pilot test. Out of the 60 respondents, 46 provided a positive response and the remaining provided a negative response. So, here, to find out the ideal simple size : p = 67% and (1-p) = 23%. Next, I utilized the formula provided by Kothari (2004) for finding out the ideal size and that has been displayed below:

```
n = (Z_{c1}^2 p^* q) / E^2
=(1.96)^2(.77)(.23)/(.05)^2
=272.13
= 2.72
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Here, n stands for the sample size and p and q are the estimated proportion of success and failure. With the help of the formula, the ideal simple size for the study is 272, and I recieved 276 properly filled up responses. So, the ultimate simple size for the study is 276. The period of the study is from January – March 2019. All the responses were received with the help of Google Forms. The questions were made with the help of Google Forms and circulated to various respondents with the help of Whatsapp and Email. I chose the metro cities due to the availability of app - cab services. I used the 7 - point Likert scale ranging from 1 as "strongly disagree" to 7 as "strongly agree". The analysis has been done with the help of SPSS v 21 for finding the results from EFA and MRA.

### **Analysis and Results**

The reliability statistics of the overall study indicates that the Cronbach's alpha value of 23 items is 0.912 (Table 1). The Cronbach's alpha is usually used to find out the reliability of the data (Field, 2009). The Cronbach's alpha is the most used method whenever researchers are trying to find out the reliability among a dataset.

The value of Cronbach's alpha should be above 0.6, and if the value is below 0.6, then the dataset is not apt for the study (Hair, Black, Babin, & Anderson, 2010). If the value of Cronbach's alpha is more than 0.8, then it will be very much acceptable for a study (Nunnally & Bernstein, 1999). As depicted in Table 1, the value is 0.912, which is well above the value of 0.8. Hence, it proves that the data is reliable for the study. Table 3 also identifies that all the factor loadings are more than 0.7, which also shows the reliability of the data.

The EFA has been conducted with the help of SPSS V 21 and the KMO sampling adequacy value is 0.892

Table 1. Reliability of Items

Cronbach's Alpha	N of Items
.912	23

Table 2. KMO and Bartlett's Test

Kaiser–Meyer–Olkin Measure of Sampling Adequacy		.892
	Approx. Chi-Square	3562.727
Bartlett's Test of Sphericity	df	203
	Sig.	.000

(Table 2). The significance value of Bartlett's test of sphericity is 0.000 (Table 2), which is quite aceptable to conduct the study (Bartlett, 1950; Kaiser, 1970). The likelihood estimation of the Bartlett's test of sphericity is below 0.05 from the information gathered through the survey, and next it is prepared to perform the EFA (Bartlett, 1950).

The different factor loadings which are observed in Table 3 have been effectively extracted from various items. In the EFA, a couple of segments have been extracted from various items, and an Eigen value more than 1 has been used to make the ultimate factors (Kline, 2014). There are seven factors that have been extracted from 23 statements, where the factor loadings are above 0.5 (refer to Table 3). It can also be inferred from Table 3 that the

Table 3. Results of Factor Analysis

Variables				Factors			
	Availability & Convenience	Price	Security	Time	Ambience	Driver's Behavior	Purchase Intention
Q1	.931						
Q2	.897						
Q3	.862						
Q4	.823						
Q5		.871					
Q6		.815					
Q7		.788					
Q8		.761					
Q9		.729					
Q10		.701					
Q11			.862				
Q12			.721				
Q13			.707				
Q14				.858			
Q15				.746			
Q16					.916		
Q17					.875		
Q18					.743		
Q19						.847	
Q20						.734	
Q21							.901
Q22							.857
Q23							.763
Variance Explained	24.678	15.695	12.259	8.169	5.367	2.462	1.128
Cumulative	24.678	40.373	52.632	60.801	66.168	68.630	69.758
Cronbach's Alpha	.904	.917	.897	.891	.922	.898	.901

Note. Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 6 iterations.

cumulative variance explained is 69.758%. In Table 3, the estimation of Cronbach's alpha for every single factor is additionally given.

The seven factors that have been extracted from the EFA are: Availability & Convenience, Price, Security, Time, Ambience, Driver's Behavior, and Purchase Intention. Here, Purchase Intention has been used as a dependent variable and the six factors namely, Availability & Convenience, Price, Security, Time, Ambience, and Driver's Behavior have been used as independent variables.

Availability & Convenience, Price, Security, Time, Ambience, and Driver's Behavior are the independent variables and the purpose is to find out which are the factors having some impact towards the purchase intention of opting for the app-cab services.

Table 4 illustrates that the R - square value is 0.692 or 69.2%, which is acceptable for the study. The Durbin – Watson test also signifies that there is no auto-correlation among the variables as the value is below 2. Table 5 explains about the multicollinearity which has been checked with the help of variance inflation factor (VIF) and it should be below 3. The value of each and every factor is well below 3; so, it is free from multicollinearity as well.

Table 4. Summary of the Model

Model	R	<i>R</i> Square	Adjusted <i>R</i> Square	Std. Error of the Estimate	Durbin–Watson
1	.832	.692	.684	.830	1.198

Predictors: (Constant), Availability & Convenience, Price, Security, Time, Ambience, Driver's Behavior; Dependent Variable: Purchase Intention.

**Table 5. Summary of Coefficients** 

Model	Unstandardized		Standardized	t	Sig.	Colline	earity
	Coe	fficients	Coefficients			Statistics	
	В	Std. Error	Beta			Tolerance	VIF
(Constant)	.366	.288		1.271	.205		
Price	.248	.058	.249	4.288	.000	.563	1.776
Time	.241	.058	.246	4.168	.000	.544	1.839
Availability & Convenience	.373	.064	.352	5.868	.000	.528	1.894
Ambience	.026	.062	.027	.410	.002	.427	1.342
Security	002	.064	002	030	.176	.429	1.332
Driver's Behavior	.031	.048	.029	.642	.021	.958	1.044

Dependent Variable: Purchase Intention.

Table 5 also explains about the strength and direction of all the factors when Purcahse Intention is a dependent variable. Here, the most influencing factor is Availability & Convenience and the unstandardized coefficient value is 0.373. It proves that it has the highest impact towards Purchase Intention. The second most important factor is Price with 0.248 unstandardized regression weight. The factor named Time is very close to Price as it has 0.241 as an unstandardized regression weight. Driver's Behavior and Ambience are the least important factors, and Security has a negative non-significant affect towards Purchase Intention.

Availability & Convenience, Price, Time, Ambience, and Driver's Behavior impact smart phone users to buy the services of app-based cabs. It has been additionally discovered that all the five variables are quite significant at 1% or 5% significance levels (Table 6).

Table 6. Results of Hypotheses

Measurement Path			Hypothesis	Assessment
Price	-	Purchase Intention	$H_{\mathtt{a}\mathtt{1}}$	Accepted
Time	-	Purchase Intention	$H_{a2}$	Accepted
Availability & Convenience	-	Purchase Intention	$H_{a3}$	Accepted
Ambience	-	Purchase Intention	$H_{a4}$	Accepted
Security	-	Purchase Intention	$H_{a5}$	Rejected
Driver's Behavior	-	Purchase Intention	$H_{a6}$	Accepted

So, the equation can be expressed as:

Purchase Intention =  $0.366 + (.248)X_1 + (.241)X_2 + (.373)X_3 + (.026)X_4 + (-.002)X_5 + (.031)X_6$ 

[ Price =  $X_1$ , Time =  $X_2$ , Availability & Convenience =  $X_3$ , Ambience =  $X_4$ , Security =  $X_5$ , Driver's Behavior =  $X_6$ ]

### **Discussion**

This study tries to ascertain what are the factors which actually affect the purchase intention towards using app-cab services in India. As an inventive versatile trade application, the adoption of app based cab services relies upon numerous components. The results reveal that Availability & Convenience, Price, Time, Ambience, and Driver's Behaviour are the key elements which influence adoption of app based cab services. In addition, the results demonstrate that Security does not have any impact on passengers' purchase intention towards using app - cab services. The results also illustrate that Availability & Convenience is the most influencing factor and not Price. Price is the second most influencing factor. Availability & Convenience is the most important factor because there is high demand for app cabs in the metro cities even at late night or early morning. There is a variety of options like sharing the ride, small cabs, luxury cabs, etc. The passengers also feel that app based cabs are faster than the conventional cabs. Due to the recent hike in app cab charges due to several reasons, the passengers felt that app - cab charges are not cheaper as compared to the conventional cabs. Other than this, various coupons and discounts are available to attract the passengers, and they don't need to bargain before starting the ride. Time is also a very influential factor, and it is the third most important factor due to several reasons. The app based cabs always try to reach the destination as well as the source on time. Though, due to heavy traffic congestion, the timings may change, but still, there is another option to take an alternative route with GPS data. So, there is always a chance to reach the destination on time.

Driver's behaviour has been a major issue in recent times, and it is one of the less important factors. Though the hypothesis is significant & positive; still, the importance level of this factor is less compared to the other three factors. Sometimes, the driver's behaviour is not up to the mark, and the drivers misbehave with the passengers due to several reasons. Ambience is the least important factor and though the hypothesis is positive and significant, but people voted it to be the most unimportant factor compared to all other factors. It proves that inside the car, ambience does not create much effect on consumers' purchase decision. But yes, sometimes, it may create some impact (like using good fragrance inside the cab, music system to listen to songs, air conditioner, etc.) on purchase intention. Security is a factor which was not affecting consumers' purchase intention. The hypothesis also reveals that it is negative and insignificant. However, the app cab companies need to bear in mind that many complaints have been lodged by various passengers from different areas of India against the app - cab drivers, and that is why

most of the people do not feel safe. So, it is a major drawback for the administrators of the app-cab companies that people still do not feel secure inside the cabs.

### **Managerial Implications**

Biswas and Chakraborty (2019) opined that compassion towards employees had an impact on organizational culture; whereas, Chakraborty, Santra, and Dhara (2019) found that multi-skilled workers are always on demand. With the advent of advanced technologies and improvements in data innovation, the use of app based services has expanded (Chakraborty & Biswas, 2020a; Chakraborty & Biswas, 2020b). In any case, in spite of this enormous development and improvement, various app - cab companies are confronting misfortunes. To evade this, organizations need to enhance and improve their services to meet the expectations of clients, and they also need to bring down their inefficiency levels when they are serving the customers, which actually leads to "brand love" (Kumar et al., 2021).

Ola and Uber are observed to be the most generally utilized application based taxi administrations. They give advantages to their clients by giving offers, accommodation, minimal effort, and so forth. Taxis are most gainful as individuals can maintain a strategic distance from traffic issues, stopping issues, don't have to hang tight for public transport, and so on. Clients expect better nature of administration from the app-cab companies in territories of cleanliness, GPS utilization, availability issues, booking confirmation, and so on. The app-cab companies need to enhance their services on the above criteria, which at last is the way to maintain the clients. App-cab companies are trying to attract customers with car pooling services, which actually benefit the customers as well as the environment immensely. Taxi pooling helps the consumers, environment, and service providers in all ways. Consumers can pay less fare compared to the normal fare. In addition, the environment will not be impacted so much as 3–4 people are travelling in same car; so, the emission of fumes will be less. If they travel in 3 – 4 different cars, then the air pollution in the environment will be high.

Administrators of app - cab companies need to think more about the behaviour of drivers and their attitude towards passengers as several cases have been lodged in police stations against the app-cab drivers in the last 3 – 4 years. The administrators need to do a thorough background check of the drivers with the help of police, and they need to impart proper training to them. Maybe, some counselling sessions can be added when they are being provided with the training. Global positioning system (GPS) and various applications based services radically impact the vehicle rental industry. Consequently, various benefits provided by the app - cab service providers like coupons or rebates inspire the clients to avail the cab services. The users can see the cost and compare it with other service providers at the same time. There is stringent rivalry in the app - cab business, and many companies are providing coupons or attractive offers to the customers. The customers nowadays have also become pretty inventive, and they compare all the app - cab service providers' rates at the time of booking a cab.

Marketers are ready to deliver customer - oriented strategies, but are also trying to determine a balance between the expected services and actual services. Marketers need to design the applications in such a way so that consumers can easily understand the instructions and quickly become effective at using their applications. Ideally, marketers should develop an environment where consumers feel comfortable and empowered by using their applications. One critical aspect of app-cab usage is transparency, and consumers expect to know that they are not being cheated or taken advantage of, a consistent problem with the old, non-app based taxi cab service industry. Failing to do so or allowing the perception of cheating customers to come to fruition would be devastating to an app-cab service provider. Companies should also use local languages to improve the customer experience and increase the level of comfort and enjoyment.

As the results reveal, the influence of people on one another in Indian society has a strong impact toward app-cab service behavior intention and use behavior. People regularly take suggestions and advice from their

network of friends and family. Sometimes, individuals take inputs from their colleagues. Marketers can target the opinion leaders (influencers) or reference groups to penetrate the market. And since social influence has such a strong positive outcome, it appears that word of mouth is a great tool for the marketers to leverage their marketing campaigns. For instance, marketers could employ referral programs and other word of mouth oriented campaigns to increase their customer base. Furthermore, marketers need to recognize the importance of consumers having fun and gaining enjoyment from applications. They cannot be too concerned with efficiency and cannot ignore the consumer perspective and interaction with their app as daily users. The customers are receiving cash discounts, free coupons (i.e., marketers can design the programs so that consumers who use the wallet feature of the app will receive special offers), and individuals are using app-cab services practically everywhere they go.

#### Conclusion

The investigation examines from top to bottom the reasons because of which individuals actually utilize the application based cab services. It is discovered that all the essential motives are imperative. Not surprisingly, the reasons, for example, fast accessibility of the taxis, security, efficient than conventional cabs, appealing money back offers, and limits on rides are the most critical explanations behind utilizing the application based cab services by the respondents. The users did not give much importance towards payments through mobile wallets or cashless transactions, music inside the cab, wi-fi connection, etc.

Marketers need to design the applications in such a way so that consumers should experience fun or enjoyment from the applications. The customers are receiving cash discounts, free coupons (using wallet of these apps will provide the offers) etc. from the applications, and it is spreading fun or enjoyment to the riders. Individuals are using cab services whenever they are going out, and it also boosts up the image of that person in the society. Nowadays, using mobile phones and related apps has become a habit among individuals. Therefore, the marketers can utilize this kind of attitude of the consumers and attract them with some lucrative offers. It is true that cab - app services in India are not in an infancy stage; it is a growing market, and marketers should catch the opportunity.

# Limitations of the Study and Scope for Future Research

Firstly, the demographic variables can be used as a mediator to ascertain the impact of mediator vaiables towards the purchase intention of using app-cab services. Secondly, travelers were considered to be the clients of app-cabs in the examination, and the drivers were viewed as the representatives of the app - cab organizations. From an alternate point of view, cab drivers can likewise be viewed as clients of app-cabs, which can be a fascinating area for future research. Thirdly, the reason why hypothesis 3 is rejected because I simply presented the analysis of the metro cities and did not do additional inquiry about other cities. So, future research can be conducted in Tier 1 cities. Fourth, the study had a limited number of respondents. If we increase the sample size, then there is a chance of newer findings from the research. Fifth, there can be other factors which can motivate the customers to use the app - cab services which can be discussed in future research studies.

### **Author's Contribution**

Dr. Debarun Chakraborty generated the conceptualization, performed the literature review, and constructed the quantitative design for empirical investigation of the study. Methodology, formal analysis, and validation were also performed by him including project administration.

### **Conflict of Interest**

The author certifies that he has no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

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### Annexure 1. Questionnaire of the Study

Factors	Variables
Availability & Convenience	Q1. Application based taxi/vehicle is rapidly accessible.
	Q2. App based taxis are quicker than conventional cabs.
	Q3. There is an assortment of alternatives accessible on
	the off chance that I book an application based taxi.
	Q4. I don't have my own vehicle.
Price Consciousness	${\it Q5}.  {\it App based cabs are less expensive than conventional cabs}.$
	Q6. The charges of application based maneuvers are
	straightforward and reasonable.
	${\it Q7.} \ {\sf I} \ {\sf can utilize} \ {\sf the cashless} \ {\sf choices} \ {\sf while booking an app-cab}.$
	Q8.  I  amgenerally pulled in with cashbacks and discounts on rides.
	Q9. I need not do negotiations and bargaining.
	Q10. I can avail sharing/car pooling option.
Security	Q11. App based taxis are more secure.
	Q12. App based cabs always show the exact location.
	Q13. Security feature in the app based cab provides
	emergency button to passengers.
Time	${\it Q14}.$ App based cabs always reach the destination on time.
	${\it Q15}.$ App based cabs always reach the source destination on time.
Ambience	Q16. App based cabs are neat & clean.
	Q17. AC is working in every car.
	Q18. Music system is also available in all the cars.
Driver's Behavior	Q19. Drivers are polite and well behaved.
	Q20. Drivers always drop the passengers at the doorstep.
Purchase Behavior	Q21. App based cabs are rated high in social media.
	Q22. People are happy with the services of app cabs.
	Q23. Passengers are always looking for some extra features in
	apps or inside the cabs.

#### **About the Author**

Dr. Debarun Chakraborty is working as an Associate Professor in Symbiosis Institute of Business Management, Nagpur. His areas of interest are consumer behavior, services marketing, rural marketing, and marketing research. He has published five books with different publishing houses in management and has written various articles in different international journals, which are indexed with WoS (ESCI & SSCI), Scopus, ABDC, & ABS. He is also an Editorial Board Member of different journals under Taylor & Francis, Sage, Emerald, and IGI Global.