

Online Booking of Cabs in Delhi and NCR: Perceptions of Consumers

*Arvind Kumar Bhatt

ABSTRACT

The app-based taxi business has emerged as a fast-growing business in the Indian transportation sector. The way the app-based taxi business is running today is awe-inspiring. It acts as an intermediary between the customer and the taxi drivers. The motive of the study is to explore the app-based taxi industry in India, the perception of consumers towards this sector of transportation, and the various factors which result in customer satisfaction in the app base taxi sector. The study also includes how this sector runs through different business models and, at the same time, the opportunities for the existing and potential players in the industry. The study shows that factors which affect the customer perception and purchase intentions for cab services are safety, price, service quality, transparent charges, and cashless option.

Key Words: Online, Cabs, Service quality, Cashless, Consumers, Taxi, Transportation

1. Introduction

The transportation industry has undergone drastic changes by introducing application-based taxi and car service-hailing systems. Like uber and ola, new industry entrants have made structural changes to an old industry. Unfortunately, that functioned much as it did decades ago, with individuals needing a cab having to either physically wave at a taxi at the street corner or call a local car service to reserve a car at least half an hour prior to the pickup time.

However, with the arrival of Uber and Ola, all the primitive issues seem solved, and it seems to give the end-user peace of mind and a little luxury, especially to the Indian middle class who always aspired to own a car and are now at least getting an affordable cab ride.

One of the best examples that can be quoted of disruptive innovation that the industry witnessed very recently is cab aggregation using the mobile application, which is a result of technological progress, making transportation, especially within the city limits, affordable and trouble-free for all categories of people. With the arrival of Uber and Ola, these services became very popular in all the major cities.

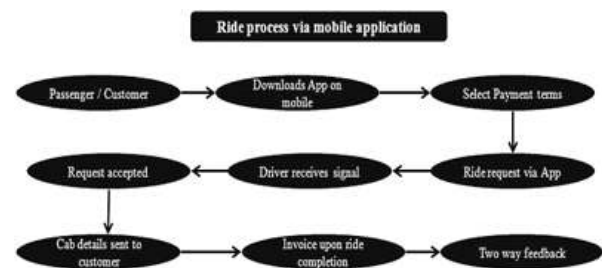
The increase of smartphones in India and the higher mobile internet usage made the task easier for aggregators. This is one of the thought triggers that made them think innovatively to build the mobile application, where the users can book a cab with just a finger touch.

The cab will usually appear in a few minutes based on availability. The taxi transportation industry in India was much unorganized and not so affordable. With their ground-breaking business models, Uber and Ola

primarily concentrated on matching the demand and supply, thus creating a win-win situation for drivers, customers, and aggregators.

Initially, when these companies started, their primary business model was to connect the drivers and customers, gaining some commission from the transaction. Then the major challenge that these two companies realized was that many drivers signed up for both Uber and Ola to get the rides. To avoid this trend, both Uber and Ola are now trying to shift their business model to partly inventory, where it will own some of the cabs lending them to its drivers who work exclusively for them.

CURRENT BUSINESS MODEL OF TAXI AGGREGATION



The user has to initially download the mobile application on his data-facilitated smartphone to book a Cab. Then he has to enable the location tracker so that the application can trace the user's location. The next step s/he has to choose the payment terms out of the available ones like Credit cards, Cash, discount coupons, and even mobile wallets. Further they can confirm the ride by looking at the availability of the cabs; everyday experience is that it will be in a few minutes. Upon booking, the driver receives the details of the request. Then, the customer receives details of the cab, even with a photograph, cab

*Professor, GL Bajaj Institute of management & Research, PGDM Institute, Greater Noida.

number, and expected arrival time, for easy identification. This can be tracked online till the cab arrival and ride completion. After the ride is complete, if the payment option is selected as Cash, the customer needs to pay by hand; otherwise, it will be automatically deducted for other options like credit cards or mobile wallets. Therefore, it is always recommended to have non-cash options to save time, safety, and clarity and avoid issues like change tendering.

Finally, the important thing is the feedback - Uber and Ola both genuinely take this. As soon as the ride is completed, the customer is requested to provide feedback through the app, and the driver is also provided the option to give feedback. In a way, this has been made mandatory, and if in case this is not given immediately when the app is opened for the next Booking, it will block the screen to feedback. Uber will consider all this feedback, and for a specific driver, if the feedback is less than that value, say 4.7 (assumption here for better understanding), he will be asked to leave the network. Ola treats this differently; if the feedback is not ok or any complaints are received, they will cancel the incentives accumulated for that week. This way, both companies try to maintain the standards to serve and benefit the customer better.

OBJECTIVES OF THE STUDY

- To assess the marketing potential of an app-based passenger transportation system.
- To identify the key factors which influence customer satisfaction in app-based taxis.

2. Literature Review

Shukla and AI (2017) study OLA VS UBER: The battle of domination and points out that the main attraction of India is the size of its market and the increase in purchasing power that leads to uplifting lifestyles. On the other hand, Indian consumers are brilliant, very demanding, and very sensitive to prices, and without brand loyalty, managing this market is not an easy task. Companies must stay alert and continue designing new packages and offers to attract customers for a long time, which sometimes leads to too much money. Therefore, it would not be easy for Ola and Uber companies to operate in that environment. You must optimize your costs at all levels; it has to be more customer-oriented and goal-oriented; Highly innovative Hanif and Sagar (2016) found that taxi services in Mumbai have enormous growth potential as the needs of the business world increase around the world and even the middle class and the rich are developing day by day.

As Mumbai faces major parking problems, many residents prefer to call a taxi service to visit a shopping center, attend special events or even attend a night party. This service scores higher points when it takes time to find

a parking spot for your vehicle or negotiate hassles on a quiet weekend. The study shows that customer satisfaction is very high. This is a positive point for growth and expansion. Sarvepalli and Prakash (2016) have tried in their paper to cover precisely the taxi aggregation industry in India since innovators have innovated by providing solutions using technology. In addition, it covers the current scenario and the problems of companies and customers. Ola and Uber have changed the face of the industry. In summary, it has affected consolidation, which is slow in the industry. Only the analysis of companies that focus on the best quality of service will only do so in the future.

This article has highlighted the innovative way in which aggregators such as Ola and Uber have entered the Indian market with the help of smartphone technology. They identified the problems of urban transport in the subway of India and then turned them into commercial opportunities. In addition, they have dominated their efforts. Research on service supply chains continues to evolve. The unique nature of the services contributes to the complexity of the provision of the service. However, technology can significantly improve the quality of service. After success, taxi aggregators should focus on performance measures to ensure the business model's sustainability. With the increase in service quality, customer expectations can only grow in the future. The performance metrics allow the comparative evaluation of the service and focus on the continuous improvement of the service quality. Taxi aggregators should also focus on innovation to develop the business. Joshi and Mehta (2015) found that a large amount of money has been invested in building shopping centers to acquire fleets of new vehicles and integrate the latest technologies into their vehicles. It was a win-win situation for the government, the major taxi companies, the drivers, and the passengers. The change of mentality was the most critical factor in the growth of the radio taxi market. However, some other aspects impede the development of the radio booth market, such as high tariffs and limits on the Indian telecommunications regulator (TRAI) for SMS and the Internet. No availability of parking spaces.

Radio taxi companies have to find a perfect balance between growth engines and challenges for further development. Kumar and Kumar (2016) noted intense competition in the organized taxi service, which is why the organization has to motivate consumers through coupons. Innovative consumer behavior helps to download mobile apps and motivates them to use coupons while booking cabs. The results of this study are in line with previous research studies since it has been found that price-conscious consumers can buy coupons. Modern consumers are innovative and, at the same time,

sensitive to prices, so the exchange of coupons contributes to customer loyalty. The brand also plays an essential role in customer retention and offers coupons. Shi Lian (2016) examined the passenger queue taxi system at two ends.

They identified the relationship between optimal thresholds and optimal arrival rates for taxis and passengers, analyzed government policies, and determined the conditions under which the government should subsidize or tax taxi drivers. Slavulj et al. (2016) examined the demand for the Uber service in Zagreb to compare prices with the large taxi companies and explore the possibilities of improving the legislation regarding the taxi service. Skok& Baird (2005), a case study from London, illustrates how a newcomer to the industry, Delta Cabs, could break traditional entry barriers and innovate with emerging technologies and redefine the competitive nature of the industry. Peter Abelson (2010) examined the regulation, performance, and reform of the taxi industry in Sydney, which governs the entry of Sydney, the structure of the industry, the quality of service, and the prices of the taxi industry. He finds that few social or efficiency reasons for these regulations are responsible for the poor performance of taxis. Neelam Kumari (2012) examined the radio market in Delhi through several interviews with taxi drivers. She points out that although rates are higher than local taxis and public transport, the taxi service is very reliable. The introduction of GPS technology has radically changed the traditional approach to managing the taxi fleet. However, reengineering and training end-users are essential to improve service quality and develop sophisticated public transport systems (Liao, Z.,2001).

3. Research Methodology

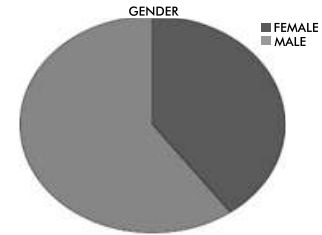
This study is descriptive in nature and mainly utilizes a qualitative approach. Therefore, it will be necessary to conduct a detailed review of available literature related to app-based passenger transportation services worldwide. The primarily questionnaire-based survey method collects data from passengers-a structured questionnaire designed to measure consumers' perceptions. The primary data is collected through structured questionnaires, and secondary data is gathered through journals, magazines, reliable websites, etc.A simple random sampling methodology is used for collecting primary data. The respondents for this study should have consumed cab services in the last six months, and they should have booked the cab through the mobile app on their smartphones.

No. of respondents:255 Sample area: Delhi/NCR

4. Data Analysis and Interpretation

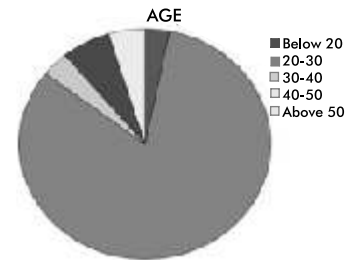
DEMOGRAPHIC PROFILE OF THE RESPONDENTS' GENDER

Interpretation: It is visible from the above pie-chart that out of 255 respondents, 153 were males. i.e., 60% are fonder of using cabs than 102 females, representing 40% of the total respondents.



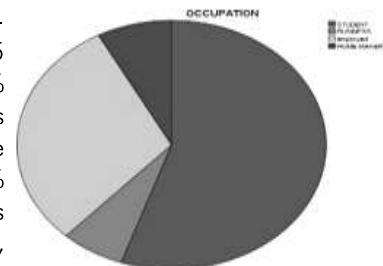
1. Age

Out of the total respondents who use the cab service, the majority of the respondents, i.e.,82.4%, belong to the young generation between the age of 20-30. On the other hand, 3.1% of the respondents are below the age of 20, 3.5% are between 30-40, 6.3% are between 40 to 50, and the rest are above 50 years of age.



2. Occupation

It can be interpreted from the above pie-chart that out of 255 respondents, 55.3% of the respondents who use cabs are students, and 30.2% of the respondents are self-employed, followed by homemakers who account for 7.8% and the least which is 6.7% are business class people who use the cab services the least.



3. How Frequently Do You Book a Cab?

	Frequency	Percent	Cumulative Percent
Daily	18	7.1	7.1
2-3 times a week	86	33.7	40.8
Once in 2 weeks	44	17.3	58.0
Once a month	33	12.9	71.0
Occasionally	74	29.0	100.0
Total	255	100.0	

After the survey, it has been found that 29% of respondents travel by cabs only on an occasional basis, 33.7% of the respondents are regular travelers, i.e., they travel 2-3 times a week by cabs, 17.3% of the respondents travel once in 2 weeks by cabs, 12.9% traveler's travel once in a month and only 7.1% travel every day by cabs.

3. Preference For Cab Service

	Frequency	Percent	Cumulative Percent
Uber	106	41.6	41.6
Ola	149	58.4	100.0
Others	0	0	100.0
Total	255	100.0	

From the table, it can be seen that 58.4% of the respondents' avail of the services of Ola, followed by 41.6% for Uber, and none of the respondents have opted for others. Hence it is found that Ola is the most popular app-based taxi. Also, it can be concluded that Ola and Uber dominate the app-based taxi sector in the region since significantly fewer people traveling by cab use any cab service other than Ola or Uber.

4. Purpose of Usually Using the Cab

	Frequency	Percent
DAILY COMMUTE TO WORK	50	19.6
MEETINGS	20	7.8
AIRPORTS & RAILWAY STATIONS	56	22.0
PERSONALTRIPS	129	50.6
Total	255	100.0

Nearly half of the respondents, i.e., 50.6%, use the cab service for personal trips, followed by cabs to go to airports and railway stations, i.e., 22%. 19.6% of people use cabs to travel from home to the office and back. The cabs are the least used to go to meetings.

5. Rank (1-5) the following, indicating the strength of importance of values you consider when you hire cab services.

Ranking	Frequency	Percent
1	58	22.7
2	59	23.1
3	55	21.6
4	44	17.3
5	39	15.3
TOTAL	255	100.0

Out of 255 respondents, 22.7 % and 23.1 % ranked security as the prime reason for booking a cab, followed by 21.6%, 17.3%, and 15.3%, so it can be interpreted that most of the respondents think that cab services are more secure.

6. Ranking of Accessibility

Ranking	Frequency	Percent
1	46	18.1
2	59	23.1
3	77	30.2
4	45	17.6
5	28	11.0
TOTAL	255	100.0

Out of 255 respondents, 23.1% and 25.8% ranked price 2nd and 3rd, whereas only 18% of the respondents ranked price first. So it can be interpreted that respondents do not prioritize price as their first preference while booking a cab.

7. Ranking of Quality service

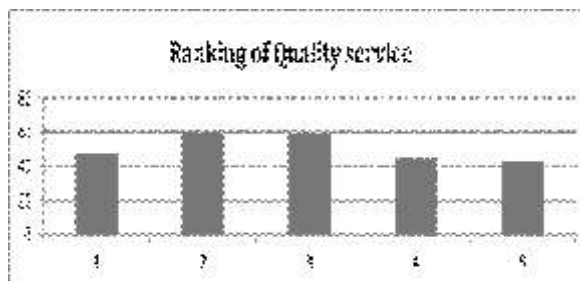
The graph shows that quality service is essential to people when booking a cab because 23.5% of respondents have given second and third rank to quality service. In comparison, 18.4% of respondents have given the first



rank to quality service. Very few people have given a low ranking to this variable.

8. Ranking of Comfort

According to the graph, most respondents have given 3rd rank to the comfort factor, which influences their choice while booking a cab. 16.6% and 17.6% of respondents have given 1st and 2nd rank to comfort, followed by 18.8% (4th rank) and 18.4% (5th rank). It shows that respondents are moderate towards comfort level while hiring cab services.



Occupation * Frequency of Booking A Cab

Count

		FREQUENCY OF BOOKING A CAB					Total
		Daily	2-3 times a week	Once in 2 weeks	Once a month	Occasionally	
	STUDENT	14	62	28	17	20	141
	BUSINESS	0	0	0	0	17	17
OCCUPATION	EMPLOYED	4	24	12	12	25	77
	HOMEMAKER	0	0	4	4	12	20
Total		18	86	44	33	74	255

From the above table, we get a clear understanding of the relation between the occupation of a respondent and his/her frequency of booking a cab. Out of 141 student respondents, the maximum number of students, i.e. 62 (approximately 44%), book a cab 2 to 3 times a week, and very few students, i.e., around 10%, also book a cab daily. The business class respondents are the minor taxi service users, and they occasionally book a cab. Among the employed respondents, we have mixed responses: very few book a cab daily, whereas mostly they use cab services occasionally or 2-3 times a week. Also, respondents book cabs once in 2 weeks or once a month. The homemakers are also not very regular users of taxi services. Mostly the homemakers use the cabs very occasionally. Only some of them book cabs once or twice a month.

5. Findings

The overall findings of the study are:

- Maximum cab users belong to the younger generation between the age of 20-30, which is a mixed group of students and employed professionals.

- Ola and Uber dominate the app-based taxi sector in the region since very few people traveling by cab use any cab service other than Ola or Uber. Also, Ola is a more preferred app-based taxi service than Uber.
- It has been observed that maximum users of cab services book cabs for their trips, and some others use cabs for commuting to their workplaces or traveling to airports and railway stations.
- After the analysis, it can be said that the following factors affect the customer perception and purchase intentions for cab services: safety, price, service quality, transparent charges, and cashless options.
- It has been observed that cash backs do not entice all the customers, and hence, cash backs do not form an essential basis for customers' choice of taxi service.
- Out of all the factors, safety and convenience (quick availability) are the factors which highly affect the customer's purchase intention.

- It has been observed that although the price is an essential factor, it is not the first factor that the consumers consider while opting for a cab service.

6. Conclusion and Recommendations

The business is booming in India with versatile private operators, both national and international investing tremendous money in setting up the call centers, acquiring fleets of new cars, and incorporating the latest technologies into their vehicles.

It has proved to be a win-win situation for the government, app-based cab companies, and, most importantly, passengers. The study involves a detailed discussion of why people use application-based taxi services. After conducting the study, the results showed that all fundamental reasons are important and statistically significant when tested.

As expected, the reasons such as safety, price, easy availability of taxis, cashless option, and transparent charges are the main reasons to use app-based taxis. The visitors have not given much importance to cashback as a factor in choosing the app-based taxi service. In brief, app-based taxi companies such as Ola and Uber must consider the aspects highlighted above while improving their services. Increasing prices or removing service quality parameters may probably disconnect their travelers from them. Similarly, the availability of taxis and safety assurance is also equally important.

However, the study concludes that app-based taxis are becoming very popular day by day due to the many benefits provided to travelers. Change in people's mindsets has been the most significant factor in the growth of the radio cab market. However, consistency in quality will make them able to survive in the future. Therefore, taxi companies have to strike a perfect balance between growth drivers and challenges to move ahead.

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