NAVIGATING THE ROADS OF CORPORATE STRATEGY: AN IN-DEPTH ANALYSIS OF MOBILE TAXI INDUSTRY FROM THE CUSTOMERS' LENS

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Abstract

This study aims to identify passenger preferences for mobile app-based taxi services in Dehradun, India, to ensure sustainable business growth. The Indian taxi industry is expected to reach USD38.90 billion by 2028, growing at a compound annual growth rate (CAGR) of 13.55% from its projected value of USD20.61 billion in 2023 (Mordor Intelligence, 2023). A structured questionnaire with 28 attributes was employed in a cross-sectional survey of 384 purposively selected respondents who have used Uber and Ola at least three times. Importance-performance analysis (IPA) was utilized for data analysis. IPA identifies improvement opportunities, guides strategic planning, and assesses a firm's competitive position in the market (Hawes & Rao, 1985; Martilla & James, 1977; Myers, 1999). The study found mobile app-based taxi services in Dehradun excelled in areas like app usability, availability of vehicles, precise locations, quick response time, multiple payment options, and the ability to call the driver through the app. The study also found that the drivers' communication skills, map familiarity, smooth driving, and passengers' security during the trip were satisfactory. However, the study recommends improvements in the availability and waiting time of the vehicles during odd hours, variation in taxi fares, drivers' cancellation of rides, and availability of discounts.

Keywords: Customer Satisfaction, Online Taxi Services, Mobile Apps, Importance-Performance Analysis, Cab Services

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1. INTRODUCTION

In the city transportation system, taxis perform the significant task of providing personalised service. One of the challenges of having an efficient taxi service is the balance between taxi supply and passenger demand. This makes it hard for the customers to be picked up on schedule, and taxicabs waste precious time to get the passengers, which deteriorates the present traffic congestion and increases air pollution (Shen et al., 2015). In addition, there are a lot of problems when it comes to taking transportation to go from one place

to another: some individuals do not own vehicles, some are not interested in taking public transport, and then there are taxi operators who are charging much higher fares (Vashistha et al., 2018).

Online taxi apps are one of the basic needs of people nowadays, especially in cities. It can help people who have access to a smartphone by giving them the option of a simple booking facility along with economical and enjoyable taxi rides. The online taxi app eliminates the distance between customers and taxi operators and also satisfies the needs of both parties by bringing them together on a single platform. It also removes the negotiation between



the customer and the taxi operator, as there are numerous online taxi service providers, and the customer can choose the one that provides the best service at the lowest price (Vashistha et al., 2018).

Travellers can search for taxis around them and make a booking using these apps. The drivers can effortlessly reach their customers by locating them through their Global Positioning System (GPS) locations or the location that they have typed (Rayle et al., 2016). Mobile technology is used to provide the value-added service of online taxis (Kuo et al., 2009). Online taxi apps have been around the world for quite some time now. The main companies in this business include Lyft and Uber. Among these, the most important is Uber, which was established in the United States (US) and covers 633 cities worldwide (Hawi, 2018, as cited in Bekele, 2019).

Smart et al. (2015) in Los Angeles and Contreras and Paz (2018) in Las Vegas, Nevada, demonstrated that ride-hailing services are both more economical and faster than traditional taxis, with shorter waiting times. According to research by Edelman and Geradin (2016) and Rogers (2015), using dynamic pricing in conjunction with a strong networks optimisation framework for road significantly lowers total trip expenses, which is a clear benefit over conventional taxi services. Additionally, the ability for passengers to track the real-time location of vehicles contributes to a reduction in anxiety and safety concerns, as per Edelman and Geradin (2016). Although app-based taxis have been well received in areas with few other transportation options because they are cost-effective and provide better transportation connections, some places like San Francisco have experienced increased traffic congestion as a result of the sudden growth of these services (Anderson, 2014).

Around the world, along with increasing smartphone penetration and cheaper as well as faster internet in many countries, Uber-like apps have been developed. In developing economies like India, app-based taxis have gained a substantial market share among urban commuters since their introduction 2010 (Muralidhar, in The Government of India has officially recognised app-based taxis in the National Urban Transport Policy (NUTP) (Ministry of Urban Development Government of India, 2014). Over the last decade, the widespread adoption of smartphone technology has fuelled the popularity of app-based taxi services. With a projected value of USD20.61 billion, the Indian taxi industry is anticipated to grow at a compound annual growth rate of 13.55% to reach a market value of USD38.90 billion by the end of the forecast period (Mordor Intelligence, 2023).

Dehradun is the capital of Uttarakhand state in India, and similar to many other cities around the world, Dehradun also faces issues related to transportation. Dehradun has seen a rise in population, which further puts a strain on the existing transportation network in the city. Following this, the usage of taxi services has considerably increased, and the recent emergence of app-based taxi services is a testimony to that.

As the number of online taxi apps grows, so will the competition. In a highly competitive environment, every company must have a clear understanding of the satisfaction of its customers with their services. Therefore, this research employs importance–performance analysis (IPA) to assess attributes related to mobile application-based

taxi services in Dehradun, India, focusing on instances where customer importance exceeds performance. The study company the absence of discussion on customer satisfaction factors with mobile application-based taxi services in the context of Dehradun and emphasises the overlooked potential of IPA in evaluating the competitive landscape. Using the IPA model as a theoretical framework, the research explores areas for improvement and strengths, offering strategic insights. The research adopts a descriptive survey design, utilising a close-ended questionnaire with a Likert scale to collect data from passengers who have used mobile app-based taxi services in Dehradun at least three times. Purposive sampling is employed, focusing on respondents with a bachelor's degree to ensure a certain level of education and maturity. The questionnaire's reliability is assessed using Cronbach's alpha coefficients, and the study involves a cross-sectional survey methodology.

The research is significant in addressing the growing importance of app-based taxi services in Dehradun, emphasising the need for understanding and improving customer satisfaction for sustainable growth amid rising transportation challenges. The key findings of the study include improving vehicle availability, reducing wait times, addressing driver cancellations, and enhancing consistency in pricing. The study contributes insights into the customer experience with mobile app-based taxi services in Dehradun, providing a foundation for future research and improvements in service offerings.

The rest of this manuscript is structured as follows. In Section 2, an exploration of pertinent literature is conducted, emphasising the pivotal role of customer satisfaction in achieving business success. Additionally, the IPA model, a strategic planning tool for assessing competitive status, is introduced, elucidating its four quadrants that categorise attributes based on their importance and performance. In Section 3, the research design and methodology are delineated. This section details the selection process of the sample population and the utilisation of a closed-ended questionnaire featuring a Likert scale to gather data. In Section 4, an analysis of the collected data is presented, and the findings are comprehensively discussed. The importance-performance matrix is also introduced, and a detailed discussion ensues regarding the attributes falling into each quadrant. Finally, Section 5 draws conclusions regarding the research's outcomes. The limitations of the study are acknowledged, and suggestions for future research are provided.

2. LITERATURE REVIEW

Services not only generate revenue but also play a role in fostering customer satisfaction (Wu et al., 2018; Xiao et al., 2022). Furthermore, Kandampully and Solnet (2020) propose that services are indispensable for organisations seeking a competitive edge, incorporating the human element into the customer experience. Clearly, services offer avenues for establishing emotional connections and promoting technological reliance, thereby bolstering an organisation's reliability and confidence. According to Barusman et al. (2019), paying close attention to the facilities and high-quality services offered to clients is crucial for the strategic management of customer satisfaction.

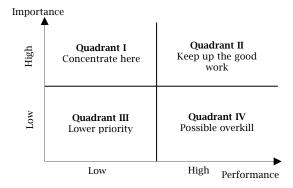
The evaluation of a service after its use is the customer's satisfaction (Hunt, 1977; Mostafa, 2005). It is a subjective judgement that is based on customers' knowledge about the service or product. Customer satisfaction is a psychological feeling after the organisation has met the needs of the customer to their liking. It is directly linked to the long-term progress of an organisation (Ribbink et al., 2004). The highest customer satisfaction scores, in Kotler's (1991) opinion, are the best indicator of a company's potential future profitability.

Customer satisfaction takes a central role in a company's well-being and survival. A number of benefits can be procured from it. Lots of researchers have agreed that a satisfied customer is loyal to the company. It can encourage positive word of mouth, and customers may consider buying other products or services from the company (Anderson et al., 1994). For any company that wants to have a competitive advantage, customer satisfaction has fundamental its concern. Different be organisations have used customer satisfaction as to measure their performance a benchmark (Manhasa et al., 2015). According to Kotler and Armstrong (2014), customer satisfaction an important part of marketing.

Parasuraman et al. (1985) stated that customer satisfaction can increase if the perceived service quality is high. According to Parasuraman et al. (1988), service quality is the discrepancy between what customers believe they are getting and what they expect from the service. A good customer experience that is above their expectations can lead to an enhanced image, increased business performance, reduced costs, and customer loyalty (Choi & Chu, 2001, as cited in Boon-Itt & Rompho, 2012).

Importance-performance analysis (IPA) has been carried out as a powerful approach to finding improvement opportunities for a firm, guiding strategic planning, and figuring out the competitive position of a firm in the market (Hawes & Rao, 1985; Martilla & James, 1977; Myers, 1999). This analysis was first presented by Martilla and James (1977) and it helped in recognising the attributes on which a firm should focus on to improve customer satisfaction (Matzler et al., 2004). The mean scores of importance and performance usually divide the matrix into four quadrants, as can be seen in Figure 1.

Figure 1. Importance-performance quadrants



Source: IPA framework adopted from Martilla and James (1977).

- *Quadrant I.* Attributes appeared to be very essential to respondents, but overall performance levels are pretty low. This sends an instant message that improvement efforts must be focused here.
- *Quadrant II.* Attributes seem vital to the respondents, and at the same time, the business is having very good levels of performance in these areas. Keep up good quality work is the message here.
- *Quadrant III.* Attributes have a low value for both importance and performance. Although performance levels in this cell may be poor, managers should not be too bothered because this cell's attribute is not regarded as particularly significant. On this low-priority cell, only a small amount of resources should be spent.
- *Quadrant IV.* This quadrant has attributes with low importance but high performance. Respondents are pleased with the organisations' results, but managers must consider current efforts on this cell's attributes to be overused.

Specific improvement opportunities can be identified based on this analysis. For example, researchers often recommend that major flaws (Quadrant I) be prioritised and targeted for immediate improvement (Martilla & James, 1977). Significant strengths (Quadrant II) can, on the other hand, be maintained, leveraged, and strongly promoted (Lambert & Sharma, 1990).

The IPA serves as a guide for addressing many of the SERVQUAL and SERVPERF scale's defined challenges. IPA, similarly to SERVQUAL, maintains that quality is an element of customer perceptions of the importance and performance of the attribute.

A fundamental dimension of IPA is the value a consumer holds in any given service attribute. As a result. the SERVPERF scale's important service attributes can be paired with the performance attributes to form an IPA. For several years, the IPA framework has been used in hospitality and tourism research (Qu & Sit, 2007). Many researchers have shown that it is an important quantitative research tool. According to Sethna (2015), the IPA offered a clear path for implementation by defining areas where limited resources should be focused. Lewis and Chambers (1989) published on Sheraton Hotel Corporation's efficient use of the importance performance tool in customer satisfaction monitoring. Although Evans and Chon (1989) used the IPA to develop tourism policy, Almanza et al. (1994) and Justitia et al. (2019) utilised it to figure out how to improve customer satisfaction.

Some more international tourism studies that have used the IPA technique for measuring customer satisfaction are from Tonge and Moore (2007), Smolčić Jurdana and Soldić Frleta (2012a), Sörensson and von Friedrichs (2013), and Newsome et al. (2019). As its name implies, IPA evaluates how well a good or service fulfils travellers' expectations for a pleasurable trip by comparing travellers' perceptions of the attributes' performance with their importance (Oh, 2001; Taplin, 2012; Moore & Taplin, 2014).

The simplicity of use and attractive method of displaying both data and strategic recommendations appear to be among the factors that led to the IPA technique's widespread adoption (Martilla & James 1977). With the help of this method, managers can easily see which aspects of their operation require more, less, or the same amount of attention overall, as well as which should continue to function at the current level (Oh, 2001; Smolčić Jurdana & Soldić Frleta, 2012b; Tonge et al., 2011; Taplin, 2012; Moore & Taplin, 2014).

3. RESEARCH METHODOLOGY

Recognising what passengers want will not only assist current and future mobile application-based taxi services in growing their businesses in a sustainable manner, but it will also ensure that this does not result in cutthroat competition, which can result in a variety of negative effects widely associated with transportation. As a result, it was agreed to approach the passengers who have used the services of a mobile application-based taxi service in Dehradun. Only the responses of the passengers who have used the services at least three times were used in this study because they will have a holistic view as they have enough experience with the mobile application-based taxi services, which mitigates the effect of having a bad experience as a matter of chance.

Ola and Uber, the mobile application-based taxi services in Dehradun, were chosen for this study because they have served a significant number of passengers, and therefore, firstly, the researcher can easily get experienced respondents for the study, and secondly, the passengers' experiences with these companies can also be a lesson for the smaller or upcoming companies in this business.

Participants provided primary data for the analysis by filling out a closed-ended structured questionnaire with items assessed on a five-point Likert scale. The questionnaire was shared with the sample population, and the data was collected from February 10 to March 31, 2023.

The study used Cronbach's alpha coefficients to assess questionnaire reliability, specifically focusing on the internal stability and consistency of variables. Cronbach's alpha values for all attributes were greater than 0.7, indicating that respondents understood and answered each questionnaire item correctly. This confirms that the desired constructs were successfully measured.

As this study involved not only the experience of the passengers with the taxis but also the mobile app provided by the taxi operators, it was thought to have a target population that had at least a Bachelor's degree. All respondents for this study were either men or women aged 21 years and older. It is believed that people who are educated and mature can use the app and all its functionalities in a better way.

The research was descriptive since it discussed how passengers felt about the features of taxi services that are based on mobile applications. Survey designs are appropriate for descriptive studies, according to Kothari (2004). The one-shot or cross-sectional survey design is best suited for research that aims to ascertain the presence of a phenomenon, circumstance, problem, attitude, or issue by polling a cross-section of the population all at once. The study adopted a cross-sectional survey methodology taking this into consideration.

The population of the research was taken to be infinite because it was impossible to determine the number of customers. The target population was chosen as the sample using non-probability sampling. In order to create a sample that accurately reflects the complete universe, this sampling technique calls for the intentional or purposeful collection of particular universe units (Kothari, 2004). Purposive sampling is a type of non-

probability sampling where the researchers make a conscious decision on what the sample needs to include and choose participants accordingly. Purposive sampling was used in this study, with population elements chosen in the survey based on whether they had used mobile application-based taxi services at least three times. The overall sample size for this study was 384 respondents, with a 95% confidence level and a 5% margin of error. Using the following sampling formula for an infinite population, the sample size was determined:

$$N_0 = \frac{Z^2 pq}{e^2} = \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2} = 384.16 = 384$$
 (1)

A total of 28 attributes were chosen based on their frequency of appearance in taxi-related research over the last five years. Industry professionals were asked for their opinions on the questionnaire's drafting. A pilot survey was conducted on ten clients who utilised the mobile application-based taxi services of either of the two businesses in Dehradun in order to evaluate the validity of each item of the instrument. The instrument was prepared in English since respondents with a bachelor's degree made up the target population.

The answers to the surveys were provided voluntarily. To encourage participants to complete the questionnaire thoroughly and honestly, the questionnaire included a cover page that described the aim and relevance of the study. Once the sample population had grown to 384, the data collection was halted. To analyse the data, Statistical Package for Social Sciences (SPSS) 19.0 was used.

Two pivotal metrics utilised in the evaluation of service quality are SERVQUAL and SERVPERF. Both IPA and SERVQUAL assert that a company's performance and the significance of a specific attribute are shaped by customer perceptions. SERVPERF, to the importanceperformance technique allows for the simultaneous comparison of a direct performance measure of service quality with the importance rating assigned by customers to various quality attributes under consideration. Incorporating customer preference ratings into IPA offers a more precise understanding of how customers assess the quality of services they receive. This comparative analysis, in line with Barsky's (1995) perspective, distinctly highlights the product or service quality elements crucial to customer satisfaction. Consequently, insights derived from IPA can contribute to the development of more targeted marketing strategies (Ford et al., 1999).

The respondents' mean scores for twenty-eight different variables were used to perform the IPA. The attributes were segmented using cross-hairs (vertical and horizontal lines) into four distinct quadrants. Martilla and James (1977) suggested that the mean be used as the separating point to prevent throwing away important information. In accordance with the assessed relevance and degree of performance of each attribute, the data was then displayed on a grid. The two-dimensional grid displayed attribute performance on the horizontal axis and attribute importance on the vertical axis, from high (right) to low (bottom) (left).

4. ANALYSIS AND DISCUSSION

A questionnaire was created for this research to investigate the factors that impact mobile application-based taxi services in Dehradun, India. The questionnaire asked questions on demographic data such as gender, age, employment status, education, and previous use of mobile application-based taxi services and was intended to be self-administered. Additionally, it contained 28 variables to explore specific aspects of mobile application-based taxi services.

4.1. Demographic profile of respondents

Based on the study, 384 respondents participated in the research, and the majority of them were male, comprising 68% (n = 261) of the sample size. It is important to note that all respondents had previously used mobile application-based taxi services at least three times, which allowed them to

provide relevant data on the variables being studied. Furthermore, all the participants held a Bachelor's degree and were employed. Additionally, a significant number of respondents fell within the age range of 25 to 35 years old, accounting for 62% of the sample size (n = 238).

4.2. Importance-performance matrix data

All of the study's variables were measured using a five-point Likert scale. Using the mean values, it was possible to quantify how important and effective each of the twenty-eight factors was to consumers. The importance–performance matrix that was created using these values as input is shown in Table A.1 (in Appendix).

The grid in the importance-performance matrix, shown in Figure 2, was constructed using the mean scores for performance rating (x = 4.4) and importance (y = 4.3), and the axes were placed accordingly.

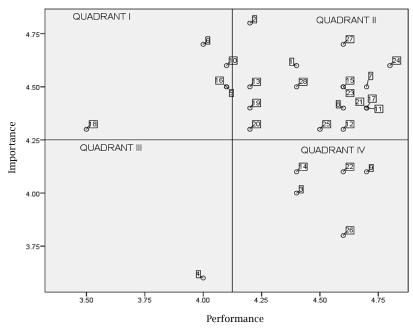


Figure 2. Importance-performance matrix

Source: Author's elaboration.

4.2.1. Quadrant I (Concentrate here)

Mobile application-based taxi services should prioritise and pay immediate attention to certain attributes. These include, the vehicles are available whenever you want them (5), waiting time for the cab to arrive after you have booked it through the app (6), driver cancels the trip (10), taxi charges are clearly mentioned in INR (16), discounts/promotional offers on cab booking (18).

Although research conducted in Los Angeles by Smart et al. (2015) and Las Vegas, Nevada, by Contreras and Paz (2018) has also shown that car availability and wait times are often not an issue during regular business hours, they can pose a problem during peak rush hours or in places with high demand. This can also be the case during night-time hours or when there is heavy traffic congestion or bad weather. Although it is uncommon for taxi

drivers to cancel rides, there have been instances where this has occurred due to dissatisfaction with the fare displayed on the app or other personal reasons. In some cases, the fare charged may differ slightly from what was initially displayed on the app due to inaccuracies in the distance measurement from origin to destination on the app when the ride was booked, although this is not common. While there are discounts available on the app, they are infrequent.

4.2.2. Quadrant II (Keep up the good work)

The attributes that are strength of the mobile application-based taxi services are software never freezes/hangs (1), taxi service app is easy to use (2), different types of vehicles are available on the app (7), taxis provided through the app covers the entire city of Dehradun (8), cab picks you up from your

exact location (11), cab drops you precisely at your destination (12), app gives fast results (13), interior of the vehicle (15), multiple forms of payments are accepted (17), refunds offered by the company in case of any problems because of the mobile app/taxi (19), penalty charges if you cancel the trip after you have made the booking due to your personal issues (20), you can make a phone call to the driver through the app (21), communication skills of the driver (23), driver is comfortable in using online maps (24), smooth driving experience (25), security/safety felt by the passenger during the trip (27), customer complaints are attended quickly by the mobile application based taxi services company (28).

The respondents have expressed satisfaction with the mobile application-based taxi services, praising them for their performance in several areas. The apps are user-friendly and offer a range of vehicle types, from small cabs to larger sport utility vehicles (SUVs), covering all areas of the city. Thanks to technological advancements, it is easy to locate pick-up and drop-off points, and the app results are also delivered quickly with fast internet speeds. This result is also in line with the study by Rayle et al. (2016), who discovered that drivers could quickly find their customers by entering their location or by utilising a GPS. The cleanliness of the vehicles is considered a minimum standard by customers, and the company accepts various payment methods, including cash, cards, and e-wallets, with refunds offered in case of any issues. While refunding to a debit/credit card may take longer, penalty charges generally not imposed for immediate cancellations, and communication with the driver is easy via phone if required. Drivers are skilled, polite, and knowledgeable about using the app. While some mishaps have occurred in the past, customers generally feel safe, and panic options are available on the app to enhance safety. This result is similarly in line with that of Edelman and Geradin (2016), who found that allowing passengers to monitor a car's real-time position lowers anxiety and increases Additionally, companies offer customer care support in case of any problems.

4.2.3. Quadrant III (Lower priority)

The attributes in this quadrant are not regarded as significant by the customers, and the company is also not performing well in these areas. Businesses should focus on allocating resources based on the needs and preferences of their customers. This will ensure that resources are used efficiently and effectively.

List of frequently asked questions (FAQ) is available on the app (4). Based on the responses, it appears that the respondents are not particularly concerned about the FAQ list on the app. When they encounter issues or problems, they prefer to contact a customer care representative instead of searching for answers to their queries on the app.

4.2.4. Quadrant IV (Possible overkill)

The analysis suggests that the attributes in this quadrant are not particularly important to customers, even though the company is performing well in these areas. As a result, these attributes may not require a significant amount of resources since

they are already meeting or exceeding customer expectations.

App is having a pleasing display (3), scheduling of taxi to a future date/time is possible through the app (9), exterior of the vehicle (14), you can send a chat message to the driver through the app (22), music/entertainment facilities in the car (26).

It appears that the participants are not overly concerned with the aesthetics of the app, as it does not significantly affect their ability to book a cab. They do not attach much importance to scheduling taxis for a future date or time, as they are usually able to book cabs quickly, with the vehicles arriving within a few minutes. The respondents do not prioritise the exterior of the vehicle, as they already expect it to be in good condition. It appears that they also do not pay much attention to this aspect. Chat messaging does not appear to be a significant feature, as participants can directly call the driver from the app if needed. Additionally, with the availability of personalised playlists on various smartphones, the apps music on entertainment/music facility may not make much difference to the respondents.

The research underscores several practical and social implications for the enhancement and sustainable growth of app-based taxi services in Dehradun, India. From a practical standpoint, key strategies involve enhancing vehicle availability and reducing wait times, ensuring clear pricing, and providing strategic discounts. On the societal front, these services have the potential to mitigate traffic congestion and pollution by minimising needless vehicle emissions. Furthermore, they can improve accessibility for individuals without cars, contribute to local economic empowerment by providing income opportunities for local drivers, and promote smart mobility practices in alignment with urban planning objectives.

5. CONCLUSION

This study aimed to investigate the factors that impact the customer experience in relation to mobile application-based taxi services in Dehradun, India. The study identified 28 attributes and used the IPA to evaluate their importance and performance level. A total of 384 respondents who have used the services at least three times participated in the study. The study used non-probability purposive sampling, and the sample size was calculated using a sampling formula for an infinite population. The study found that recognising passengers' needs is crucial to growing the mobile application-based taxi service industry in a sustainable manner. For elderly individuals who are not adept at using smartphones, the researcher believed that including voice commands for taxi searches could be beneficial. Improvements can also be made in the area of expediting refunds for cancelled trips by customers. Mobile taxi companies may want to offer better fares and faster payouts to drivers to reduce trip cancellations. Improving the accuracy of distance measurements in applications could help mitigate occasional pricing discrepancies when customers reach their destination. One potential solution, especially in the Indian context, is the use of the Navigation with Indian Constellation (NavIC) satellite-based navigation system, which is supposed to have superior accuracy in India compared to

the GPS. Additionally, more discounts could potentially be offered to customers. The strategic recommendations derived from the study's outcomes provide a roadmap for enhancing service offerings, addressing customer concerns, and navigating the competitive landscape in the evolving domain of urban transportation. As the industry continues to evolve, adapting to customer needs and preferences remains pivotal for sustained success

and growth in the app-based taxi services sector. However, the limitations of sampling, methods, and contextual focus may make the study less generalisable. Significant additional research across cities and the use of more robust statistical tools would be valuable in future studies. Nonetheless, this study offers a useful foundation to build upon using enhanced research designs and methodologies.

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APPENDIX

 Table A.1. Importance performance (mean values)

S. No.	Attributes	Mean importance (Y)	Mean performance (X)	I-P Gap
App re	liability/aesthetics	T		
1	Mobile application-based taxi services software never freezes/hangs.	4.6	4.4	-0.2
2	Taxi app is easy to use.	4.8	4.2	-0.6
3	App is having a pleasing (attractive) display.	4.0	4.4	0.4
4	List of frequently asked questions (FAQ) is available on the app.	3.6	4.0	0.4
Availal	bility of vehicles			
5	Vehicles are available whenever (24*7 availability) you want them.	4.5	4.1	-0.4
6	Waiting time for the cab to arrive after you have booked it through the app.	4.7	4.0	-0.7
7	Different types of vehicles (hatchback, sedan, SUV etc.) are available on the app.	4.5	4.7	0.2
8	Taxis provided through the app covers the entire city of Dehradun (availability of the cabs wherever you want them in the city).	4.4	4.6	0.2
9	Scheduling of taxi to a future date/time is possible through the app.	4.1	4.7	0.6
10	Driver cancels the trip.	4.6	4.1	-0.5
	on/route recognition	110		0.0
11	Cab picks you up from your exact location (point of departure).	4.4	4.7	0.3
12	Cab drops you precisely at your destination.	4.3	4.6	0.3
13	App gives fast results (finding and booking the cab on the app doesn't take a lot of time).	4.5	4.2	-0.3
Condit	ion of the vehicle			
14	Exterior of the vehicle (paint, dents on the body of the car, cleanliness).	4.1	4.4	0.3
15	Interior of the vehicle (hygiene, well maintained seat covers, smell, noise).	4.5	4.6	0.1
Payme		I .		
16	Taxi charges are clearly mentioned in INR.	4.5	4.1	-0.4
	Multiple forms of payments are accepted (Gpay, Phonepay, online			-
17	money transfer, credit card, debit card, cash etc.).	4.4	4.7	0.3
18	Discounts/promotional offers on cab booking	4.3	3.5	-0.8
19	Refunds offered by the company in case of any problems because of the online app/taxi (for example: breakdown of vehicle, delays due to driver negligence, cancellation of the trip by the taxi app company/driver).	4.4	4.2	-0.2
20	Penalty charges if you cancel the trip after you have made the booking due to your personal issues (change in plan, better offer from another taxi operator etc.).	4.3	4.2	-0.1
	unication			
21	You can make a phone call to the driver through the app.	4.4	4.7	0.3
22	You can send a chat message to the driver through the app.	4.1	4.6	0.5
23	Communication skills of the driver.	4.5	4.6	0.1
Drive q	quality			
24	Driver is comfortable in using online maps (navigate the route from point of departure to destination).	4.6	4.8	0.2
25	Smooth driving experience (without sudden braking, jerks, etc.).	4.3	4.5	0.2
26	Music/Entertainment facilities in the car (audio system, tablets attached to the back of the driver and front passenger seats for entertainment of the passengers seated on the back seats).	3.8	4.6	0.8
27	Security/Safety felt by the passenger during the trip.	4.7	4.6	-0.1
28	Customer complaints are attended quickly by mobile application-based taxi services company.	4.5	4.4	-0.1
Grand mean				

Source: Author's elaboration.