

# SERVICE QUALITY OF ON-LINE TAXI CABS SERVICE PROVIDERS IN TIRUCHIRAPPALLI DISTRICT

Mahesh D, Bharathidasan University

## ABSTRACT

*Transportation after the invention of wheel has revolutionized the world in communication of goods and services. The man has made use of this technology to his favour in all possible way. Vehicles are exclusively used for transportation of goods are the primary one and later during World War I and II, soldiers were also communicate from one place to the another to wage a war with their enemy. Later the bad lessons learnt from the world wars has made the man to realize that if there is any more world war broke out, the chance of human race will extinct from mother earth. Later, majority of the business men has decide to continue their traditional business through roads which were been performed through sea in large volume. Trade has made every enemy into a best friend. This trade extension and exploration has made the world a meaningful place to live and survive.*

**Keywords:** Service Quality, Taxi Cabs, Service Providers.

## INTRODUCTION

Being the promising business of today, taxi services in India and all over the world is booming. One up on the time, taxi is parked in front of Railway station or Central Bus stand or Airport or for that matter anywhere in a city for commuting passengers from one place to another. At those times, people to move physically to the taxi stand to hire a taxi for a ride. Chance of accepting your request lies with the driver mode and attitude. The fare charged by the taxi driver being monopoly is not at all economically at those times Adam & Al-Masrey (2019).

Uber and Lyft in the World and Ola and Fast Track in India are the prominent leaders in serving the market In the initial levels, owners of the taxi will rent taxi for ride, later the owner is interested to lend his taxi to an online taxi service provider in order to have a consistency of ride per day is guaranteed. A new term of business has evolved called taxi aggregators, they who provide service to the public and does not have any taxi vehicle of their own but provide ride sharing business through their business strategy using internet and Mobile Application technology. Before these companies evolved, travelers have to depend on unorganized taxi operators and various challenges and issues were faced both economically and psychologically. After the evolution of smart phones and mobile application (App) technology, the things of favoritism and flexibility have changed the side to customer. Using a Mobile App installation in a smart phone, a passenger can identify the branded taxi services availability using GPS facility, hire one of the closer proximity free Taxi available through computer algorithm and confirm a ride. Hence passengers have a freedom to stay from the boarding point for hiring a taxi with no hassle and a best transportation choice in India (Chaudhary et al., 2016).

## Service Quality Dimensions taken for Research

With respect to this research, the researcher has used the 10 Service Quality dimensions declared by Emel Kursunluoglu Yarimoglu. He believed that these ten Service Quality dimensions are the enhanced set of five dimensions of SERVQUAL model postulated by Parasuraman and Zeithaml; (Agyemang et al., 2014). The following are the ten dimensions that have been considered for appraising the leading online taxi service providers in Tiruchirappalli district. They are:

1. Reliability
2. Responsiveness
3. Competence
4. Access
5. Courtesy
6. Communication
7. Credibility
8. Security
9. Understanding / Knowing the customer

## Classification of Taxi Service Providers

The following are the classification that the taxi market evolved in India.

1. Model 1 – Fully Owned Fleets
2. Model 2 – Aggregation Fleet Model

## Classification of the Taxi Cab Service is further Classified as

### Organized

1. Aggregators – Ola cabs and Uber cabs, D drivers.
2. Owners –Meru Cabs, Easy Cabs, Aisswaryam Track Call Taxi Tack Call taxi.

### Unorganized

1. Agencies –Car agency, small travel agency
2. Individuals – car drivers and Car owners
3. Registered taxi aggregator's at regional transport office
4. The following are the data on the cumulative registered taxi cabs at RTO offices of Thuvakudi, Srirangam and Pirattiyur of Tiruchirappalli district Table 1.

Table 1 CUMULATIVE REGISTERED TAXI CABS AT RTO OFFICES OF THUVAKUDI, SRIRANGAM AND PIRATTIYUR OF TIRUCHIRAPPALLI DISTRICT				
Sl. No.	2015-16	2016-17	2017-18	2018-19
Taxi cabs Registered	67	185	326	418

**Source:** District regional transport office, Tiruchirappalli.

## Service Quality Reviews

Julie Paquette has found that studies on quality of service provided by the organizations responsible for the operation of dial-a-ride service for people with reduced mobility. The article incorporated various measurement scales and particular dimensions and service quality attributes are reviewed. Finally the impact on quality of various elements, like the size and type of organization and the operational rules used, are discussed (Minhans et al., 2014).

Parul Gupta & R.K. Srivastava through Kano two-dimension Quality Model has found 34 quality elements and two essential quality factors be classified as “*attractive quality elements*”; 28 quality items are “*must-be quality elements*”; and 4 quality items are “*indifferent quality elements*”. They have analyzed the Customer Satisfaction (CS) coefficient about the Satisfaction Increment Index (SII) and Dissatisfaction Decrement Index (DDI). The result showed that DDI higher than SSI in all service quality. It indicates that hotel industry should improve the service to decrease the dissatisfaction of customer. Especially in “*Clear and comfortable*”, “*Accuracy of settlement*”, “*Friendliness services*”, “*Disciplined attendants*”. “*Thorough fire protection equipment*”, and “*Exit direction smooth and clear*”.

Chenggang Wang found at initial level that taxi business intelligence service system of Singapore’s has inherent randomness with low efficiency, high fuel consumption and low customer satisfaction. He created and analyzed a large-scale transportation datasets with value-added information that were extracted from spatial-temporal data mining technologies. He also analyzed the population of travel behaviour characteristics and then put forward various taxi business models to describe both passengers and taxi drivers’ behaviour. As a result taxi business intelligence system can overcome many of the limitations for existing taxi business system and thus chance for improvement on quality of service is guaranteed (Canale et al., 2019).

Kundan Dutta Koirala & Sajeeb Kumar Shrestha has used SERVQUAL model to examine the relationship between customer satisfaction and service quality in commercial banking sectors undertakings in Nepal Khade & Patil (2018). This study has the potential to make theoretical, managerial, and methodological contributions to the analysis of service quality. They have attempted to investigate the casual relationship among service quality dimensions, service quality, and customer satisfaction. The level of service quality has positive impact on customer satisfaction. This study has generated an insight to understand on how to increase customer satisfaction level Awasthi (2020).

Corinne Mulley & Rhonda Daniels has said that public transport is important for social inclusion, for providing access to participation of life opportunities and to reach activities and services such as work, education, health, shopping, and social recreational activities. While planning public transport networks, tradeoffs must be made in network design between coverage and frequency when the budget is constrained (Panigrahi et al., 2018). A change in emphasis from coverage to frequency will inevitably lead to winners and losers in access to fixed route services. Thus, the provision of flexible transport service to access the higher frequency trunk schedules routes offers the ability to ensure existing passengers do not lose accessibility Ashish (2019). The proposed network design (new trunk scheduled fixed routes with a flexible transport service for access) provides much higher accessibility top public transport overall on the suburban fringe and offers the possibility to patronage growth through higher frequency services. Present scenario in the domestic consumer market segment is overflowing with lot of online opportunities and possibilities to develop Vilakazi & Govender (2014). Every market segment place has got a pivot location. The Domestic Taxi Cabs vehicle segment is one of the most sought by the consumers and has fast growing market spreading all over the Country.

The present day consumers are choosy and are seeking very good comfort, pride, reliability, tangible service and prompt service with safety associated with hygiene.

### Objectives of the Study

1. To Study the implications of Socio-Economic Factors on customer satisfaction.
2. To find out the customer satisfaction towards the on-line call-taxi services.
3. To suggest inputs to enhance the on-line taxi cabs services to delight the customers in the long run.

### Pilot Study

It was found that there was feasibility to conduct the present study among people of cabs consumers of in Tiruchirappalli District affiliated. A pilot study was conducted by circulating a sample Questionnaire among prospective respondents. A sample of 91 samples was collected from all the five zones in Tiruchirappalli district. Based on the pilot study results, the questions were modified and few questions were added for obtaining unbiased results. Reliability is the ratio of true variance to the total variance yielded by the measuring instrument. The Convergent Validity is achieved. We found the Cronbach's alpha value is 0.970.

### Sampling Design

Data collection was performed using simple random sampling method. The sample size is arrived as 785.

### Data Collection Instrument

Data was collected using a well-structured and non-disguised questionnaire from the public customers of on-line taxi cabs service users in Tiruchirappalli District. The questions in the questionnaire were designed pertaining to the problem and objective of the study.

### Limitations of the Study

1. This study covered only Taxi Cabs service users and public at large in Tiruchirappalli District.
2. The study covered Five different locations like Center, North, South, East and West zone of Tiruchirappalli District, comprising 752 Respondents (Omitted 33 from the planned sample size of 785 (4%)).
3. The Bias of the Respondents was prevalent in some answers.

### Data Analysis and Interpretation - Demographic Profile of the Respondents

Sl. No.	Respondent's Genderwise Classification	Number of Responses	Percentage
1	Male	398	52.9
2	Female	354	47.1
	Total	752	100.0

(Source: Primary Data).

**Inference:** It is inferred from the above Table 2 that majority of the respondents 52.9 % were by Male and Female responded 47.1 % from the Study the service quality of leading online Taxi Cabs service providers with a special reference to Tiruchirappalli at five different locations.

Sl. No.	Respondent's Age-wise Classification	Number of Responses	Percentage
1	18 – 23 years	37	4.9
2	23 – 29 years	111	14.8
3	30 – 35 years	152	20.2
4	36 – 40 years	282	37.5
5	Above 50 years	170	22.6
Total		752	100.00

(Source: Primary Data)

**Inference:** It is inferred from the above Table 3 that majority (37.1%) of the respondents were in the age group of 36 to 40 years and 23.8 % of the respondent were in the age group of above 40 years 17.2 & 17.4% in the age group of 24-29 years and 30-35 years respectively. Only 4.5% belongs to the age group of 18-23 years.

Sl. No.	Respondent's Travel Distance using Taxi Cabs in Kilometers	Number of Responses	Percentage
1	Less than 10	238	31.7
2	10 to 25	179	23.8
3	25 – 100	148	19.8
4	100 – 150	120	15.9
5	Greater than 150	72	8.9
Total		752	100.00

(Source: Primary Data)

**Inference:** It is inferred from the above Table 4 that majority of the customers were utilizing the service for less than 10 kilometers travel (31.7%), 23.8% travel between 10 kilometers and 25 kilometers, 19.8 % utilize the service 25 to 100 kilometers, 15.9% utilize for 100 to 150 kilometers and 8.9 % utilize the service for more than 150 kilometers travel distance.

Sl. No.	Respondent's Residential Location	Number of Responses	Percentage
1.	South	132	17.6
2.	East	153	20.3
3.	North	147	19.5
4.	West	147	19.5
5.	Center	173	23.0
Total		752	100.0

**Inference:** It is inferred from the above Table 5 that majority of the customers were utilizing the service at centre part of the city 23.0%, 20.3% from the East, 19.5% from North and west respectively and 17.6 % were utilizing the services from south part of the Tiruchirappalli.

Sl. No.	Number of Family Members	Number of Responses	Percentage
1	One	232	30.8
2	Two to Five	294	39.2

3	Five to Seven	149	19.8
4	Above Eight	77	10.2
Total		752	100

(Source: Primary Data)

**Inference:** It is inferred from the above Table 6 that majority of the customers are having two to five members (39.2%), 30.8% belongs to single member who are utilizing the services, 19.8% belongs to five to seven members family size and 10.2 have a family size of above eight members.

Sl. No.	Area Description	Number of Responses	Percent
1.	Urban	317	42.2
2.	Semi Urban	254	33.8
3.	Rural	181	24.1
Total		752	100.0

Source: Primary Data

**Inference:** It is inferred from the above Table 7 and PIE chart that majority of the respondent belongs to urban area (42.2%), 33.8% Belongs to Semi Urban and 24.1% are belongs to Rural area.

Sl. No.	Service Providers	Number of Responses	Percentage
1	Ola Cabs	128	17.0
2	Red Taxi	125	16.6
3	Fast Track	115	15.3
4	Friends Track	113	15.0
5	Best Track	109	14.5
6	Aisswaryam Track Call Taxi	82	10.9
7	Trichy Cabs	80	10.6
Total		752	100.0

Source: Primary Data

**Inference:** It is inferred from the above Table 8 and BAR chart that majority of the respondent response for the service providers are Ola (17.0%), Red (16.6%), Fast (15.3%), Friends (15.0%), Best (14.5%), Aisswariyam Track Call Taxi (10.9%) and Trichy Cabs (10.6%) respectively.

Sl. No.	Motivating Factors	Number of Responses	Percentage
1	Brand	141	18.8
2	Access	105	14

3	Previous Experience	214	28.5
4	Word of Mouth	174	23.1
5	Advertisement	118	15.7
	Total	752	100

**Inference:** It is inferred from the above Table 9 and PIE chart that majority of the respondents' response for the motivating criteria it was found that Previous Experience (28.5%), 23.1% responded as based on word of mouth, (18.8 %) response towards Brand, 15.7 % based on Advertisement, and 14% easy access respectively.

Sl. No.	Customer Expectation Factors	Number of Responses	Percentage
1.	Accessible	122	16.2
2.	Safety	157	20.9
3.	Easy and Pleasant	114	15.2
4.	Comfort	150	19.9
5.	Cheaper	209	27.8
	Total	752	100.0

**Inference:** It is inferred from the above Table 10 and PIE chart that majority of the respondents' response for the expectation criteria it was found that Cheaper (28.0%), 21.0 % response based on safety requirements, 20.0% Comforts, accessibility (16.0 %), and 15 % based Pleasant respectively.

Sl. No.	Respondent's Payment Mode preference	Number of Responses	Percentage
1.	Credit / Debit Card	283	37.6
2.	Cash	369	49.1
3.	Transfer	100	13.3
	Total	752	100.0

**Inference:** It is inferred from the above Table 11 and PIE chart that majority of the respondents' prefer to pay cash (49%), 38 % prefers Card and only 13 % prefers Transfer.

Sl. No		Coefficient	Statistic		P
01	Skewness	1374.755	183300.614	22100	1.000e
02	SKewness corrected for small sample	1374.755	184015.019	22100	1.0000
03	Kurtosis			82.918	0.0000**

**Inference:** The normality was ensured based on statistical inferences require that a distribution be normal or nearly normal, if a normal distribution has skewness and excess kurtosis of 0, The column skewness and excess kurtosis in the above Table 12 reveals that the Kurtosis and Skewness are within the range of +/- 2.0 (Schutz ve Gessaroli). Therefore the normality is ensured Table 12.

## SUMMARY OF FINDINGS

1. It is observed that majority of the response of around 52.9% from Male and 47.1% response from Female members from the Study.
2. It is inferred from age wise response that majority (37.1%) of the response were from 36 to 40 years and 23.8 % response were from above 40 years, 17.2 & 17.4% between the age group of 24 to 29 years and 30 to 35 years respectively. Only 4.5% belongs to the age group of 18 to 23 years.
3. It is observed from the analysis that majority (37.5%) of the customers were, passed 12<sup>th</sup> Standard, 22.6% were less than SSLC, 20.2% were from Under Graduate category and 14.8% and 4.9% were belongs higher qualification responded in the Study.
4. The study reveals that majority (29.4 %) of the response related to monthly income of between Rs. 25,000 and 30,000 Rupees, 23.1 % were in the income profile above Rs.35,000 Rupees, 20.2% were in the income category of Rs.20,000 and 25,000, around 17.4 % respondents were in the income profile of between RS. 15,000 and 20,000.
5. It is observed from the study that majority (31.7%) of the customers were utilizing the service for less than 10 kilometers travel, 23.8% travel between 10 kilometers and 25 kilometers, 19.8 % utilize the service 25 to 100 kilometers, 15.9% utilize for 100 to 150 kilometers and only 8.9 % utilize the service for more than 150 kilometers travel distance.
6. As utilizing location from the study reveals that majority (23.0%) of the customers were utilizing at centre part of the city, 20.3% from the East, 19.5% from North and West respectively and 17.6 % were utilizing the services from south part of the Tiruchirappalli.
7. The study reveals that majority (39.2%), of the customers are having two to five members, 30.8% belongs to single member who are utilizing the services, 19.8% belongs to five to seven members family size and 10.2% have a family size of above eight members.
8. It is inferred that majority of the respondent 42.2 % belongs to urban area, 33.8 % belongs to Semi-urban and 24.1% are belongs to Rural area.

## Suggestions

1. Taxi cab service must be made to all the possible location such that majority of the commuters can get benefit of the service.
2. Cancel of a trip ordered must be avoided by the concerned driver. The driver switch off their aggregator's app and driver on their own board with regular customers. Once the driver logged in, he / she has to undertake all the commuters irrespective of pickup location. The Call centre of the taxi cab aggregators will be identifying the close taxi available.
3. OTP (one Time password) has made a revolutionized on picking the right order customers. Some of the taxi aggregator's app have started including these good features.
4. If the driver rating by a user is very poor, call centre of the taxi aggregators has to talk to the concerned passenger and get the right information why he / she has rated that driver poor and cross verification has also to be made with concerned driver whose rating is found to be poor. On consistent poor service quality, measure is to be taken to remove that driver from the fleet system since, one bad driver will spoil the brand of the taxi.

## CONCLUSION

The research study has been undertaken on the service quality of leading on-line taxi service providers to study precisely with specific reference to Tiruchirappalli District. The Cabs



market is one of the growing service industries in the District getting faster momentum in this segment. The cab services has a tremendous potential for growth in Tiruchirappalli District as the transport needs of the present advanced technological world all segment customers are using the services in specific equally female consumers are using this services irrespective of middle-class or upper segment. It is growing day by day due to paradigm shift in the consumer market to enable quick and economically a faster transportation available at consumers door step through easy access.

## REFERENCES

- Adam, A.I.A., & Al-Masrey, A.H.S. (2019). The role of induction training on service quality a study with special reference to services providers' performance. *Innovation Arabia* 12, 18.
- Agyemang, W., Kolawole, O.T., & Amoako-Sakyi, R. (2014). Percieved quality of campus shuttle bus service in Ghana.
- Ashish, C.P. (2019). A Study on impact of transport network companies on buying behaviour of millenials towards automobile sector. *International Research Journal of Commerce and Law*, 6(11).
- Awasthi, M.A. (2020). Intangible dimension of service quality and its relationship with customer satisfaction: Ola cabs in Delhi NCR. 101.
- Canale, A., Tesoriere, G., & Campisi, T. (2019). The MAAS development as a mobility solution based on the individual needs of transport users. In AIP conference proceedings, 2186(1), 160005.
- Chaudhary, S., Tyagi, V., & Rao, P.H. (2016). Factors affecting customer satisfaction in the taxi service market in India. *Journal of Entrepreneurship & Management*, 5(3), 46-53.
- Khade, A., & Patil, V.A. (2018). Study of customer satisfaction level of Ola and Uber paid taxi services with special reference to Pune city. *International Journal of Management, Technology and Engineering*, 8, 1596-1603.
- Minhans, A., Shahid, S., & Ahmed, I. (2014). An investigation into qualitative differences between bus users and operators for intercity travel in Malaysia. *Journal Teknologi*, 70(4).
- Panigrahi, C.M.A., Shahi, S., & Rathore, A. (2018). Success story of a start-up—a case study of ola cabs. *Journal of Business and Management*, 20(2), 30-37.
- Vilakazi, A., & Govender, P. (2014). Commuters' perceptions of public transport service in South Africa. *Journal of Social Sciences*, 3(1), 258-270.

**Received:** 08-Apr-2022, Manuscript No. AMSJ-22-11307; **Editor assigned:** 09-Apr-2022, PreQC No. AMSJ-22-11307(PQ); **Reviewed:** 23-Apr-2022, QC No. AMSJ-22-11307; **Revised:** 25-Apr-2022, Manuscript No. AMSJ-22-11307(R); **Published:** 29-Apr-2022