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A Progressive Study on Users Perception and Satisfaction towards Online Cab Service with Reference to Coimbatore

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Abstract: ***The taxi market has evolved over time and how it has now become an expeditiously growing business in the country. The evolution of on-demand taxis in India happened in early 2014 and 2015. Fundamentally, the growth happened at the cost of radio taxis like Ola cabs, Uber cabs, Meru cabs etc. The popularity of on-demand taxis grew very rapidly because they were able to plug gaps in the intra-city transportation, something the municipal public transport couldn`t do that. The ease of availing a door-door ride through smartphone at a reasonable cost fueled the on-demand taxi market in India. The cab aggregators call themselves a tech company as they don't own any of the vehicles and charge a commission only for their "match-making" services. The research paper aims to study how Taxi Aggregators have impacted the society through various methods like offering coupons, quality service, mobile applications, air conditioning, educated and skilled drivers, multiple payment options, 24×7 user support, electronic fare meters, GPS enabled vehicles, etc. and what has resulted in its growth which leads it to be called as a disruptor.***

Keywords: Online Cabs, Users, Perception, Satisfaction, Mobile Applications.

I. INTRODUCTION

The evolution of on-demand taxis or demand for radio cabs in India happened in early 2015. The growth in taxi industry happened because of radio taxis like Ola cabs, Uber cabs, Meru cabs etc. The easy booking of door-step ride through smartphone cab app at a reasonable cost increased the growth of radio cabs business market in India. The cab aggregators company don't own any of the vehicles or cars but they tied up with local drivers who would register with such organization, and the agency simply acted as an intermediary between the drivers and customers by charge a commission only for their "match-making" services as they developed the cab application.

A. Objectives of The Study

1) To know the user's perception on availability of various cab service providers.
2) To analyse the various factors which are influencing users while selecting a cab service.
3) To identify the unique features offered by the cab operators to the users.
4) To analyse the user satisfaction level towards cab service providers.
5) To identify the problems faced by users while using cab services.

B. Research Methodology

The current study is based on primary data collected from 200 respondents from the different parts of Coimbatore. A well-structured questionnaire was designed to collect the information from the respondents the questionnaire was designed to study perception of user and satisfaction towards online cab services.

C. Statistical Tools Of The Study

The following statistical tools were used in the study for the purpose of analysis.

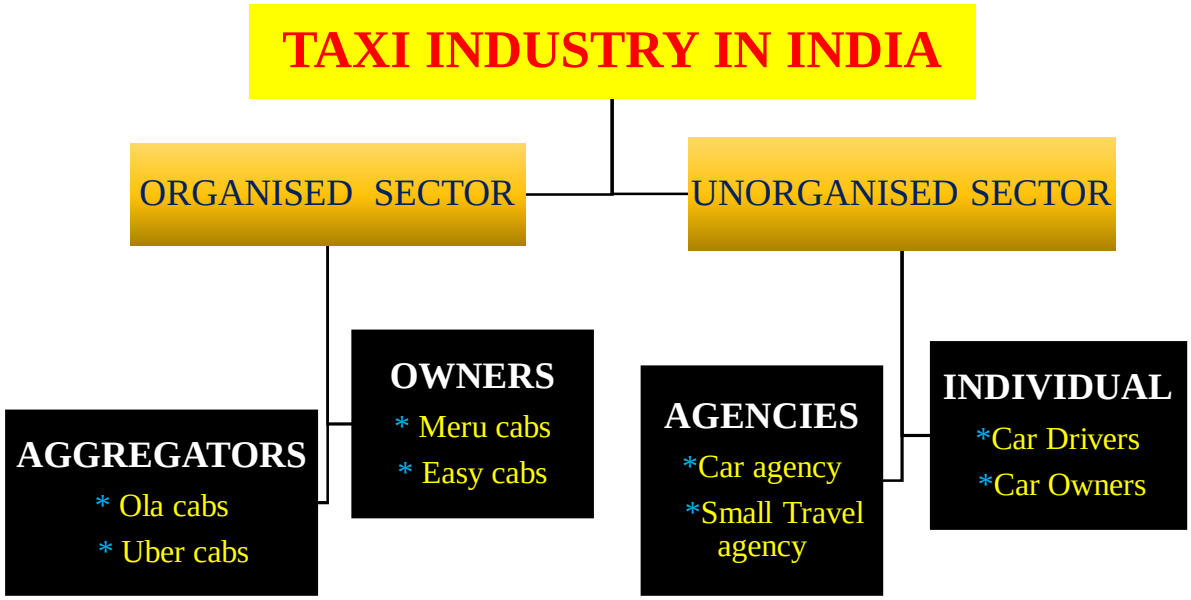
1) Simple Percentage Analysis
2) Chi-Square Analysis
3) Weighted Average Score Analysis
4) Kendall's Coefficient of Concordance

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D. Market Dynamics

The evolution of on-demand taxis in India happened in early 2014 and 2015. Fundamentally, the growth happened at the cost of radio taxis like Ola cabs, Uber cabs, Meru cabs etc. The popularity of on-demand taxis grew very rapidly because they were able to plug gaps in the intra-city transportation, something the municipal public transport couldn`t do that. The ease of availing a door-door ride through smartphone at a reasonable cost fueled the on-demand taxi market in India. The cab aggregators call themselves a tech company as they don't own any of the vehicles and charge a commission only for their "match-making" services.

The biggest risk to on-demand taxi market in India is the scrutiny it gets from local state governments. The Gujarat government is the latest addition to the list. The Gujarat government is considering a proposal to limit the number of cabs run by cab aggregators at 20,000 each. The Karnataka government has already pushed the cab aggregators to limit the fare charged as per the cost of the vehicle. There are safety risks too and the on-demand taxi operators are using tech to solve that. For example, Ola has rolled out a real-time ride monitoring system to keep tab of any deviation in routes. Many cities don't have legislation regarding app-based taxis. Due to this, new entrants like Namma TYGR in Bengaluru had to stop operations.

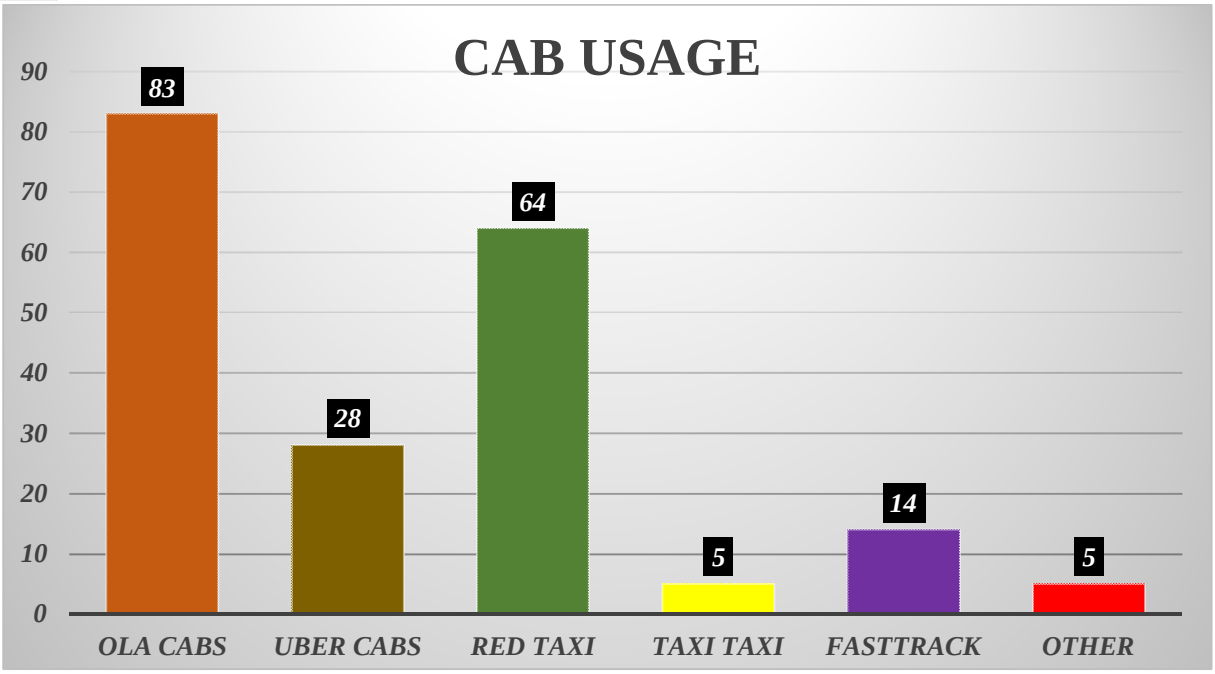


II. DATA ANALYSIS AND INTERPRETATION

Table no - 1
Cab usage by the respondents

S. No	Cab Providers	No of Respondents	Percentage
1	Ola Cabs	83	41.5
2	Uber Cabs	28	14
3	Red Taxi	64	32.5
4	Taxi Taxi	5	2.5
5	Fasttrack	14	7
6	Other	5	2.5
	TOTAL	200	100

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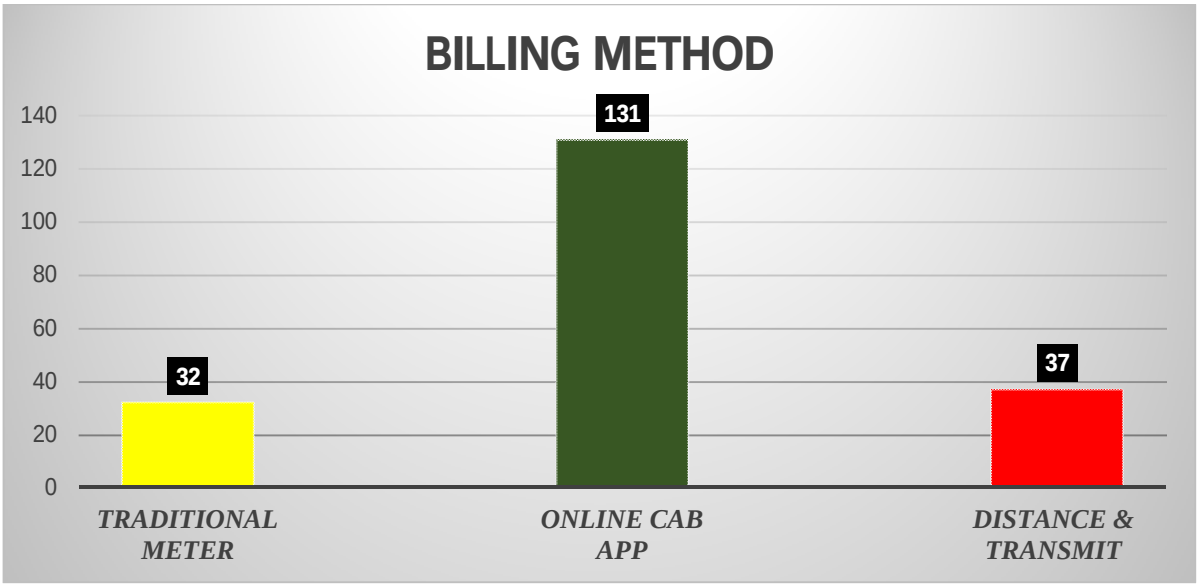
1) *Interpretation:* This Bar diagram revealed that, out of 200 respondents 41.5% of respondents are using Ola Cabs, 14% of respondents are using Uber Cabs, 32.5% of respondents are using Red Taxi, 2.5% of respondents are using Taxi Taxi service, 7% of respondents are using Fasttrack, and 2.5% of respondents are using their Own vehicles.

Most (41.5%) of the respondents are using Ola Cabs.

Table no - 2

Billing method preffered by users

S. No	Method of Billing	No of Respondents	Percentage
1	Traditional Meter	32	16
2	Online Cab App	131	65.5
3	Distance & Transmit billing	37	18.5
	Total	200	100



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2) *Interpretation:* Table no-3 indicates that, out of 200 respondents 16% of respondents are preferring Traditional method of billing, 65.5% of respondents are preferring Online Cab Application billing method and 18.5% of respondents are preferring Distance & Transmit billing method.

Majority (65.5%) of the respondents are preferring Online Cab Application billing method.

Table no - 3
Benefits Enjoyed Through Online cab app

S. No	Benefits	No of Respondents	Percentage
1	Tracking GPS location	55	27.5
2	Various Payment option	32	16
3	Providing Driver's Profile	18	9
4	Estimating Accurate Waiting Time & Price	20	10
5	Displaying Destination location Map	15	7.5
6	Insurance Claim Benefit	11	5.5
7	Providing 24/7 service	49	24.5
	Total	200	100



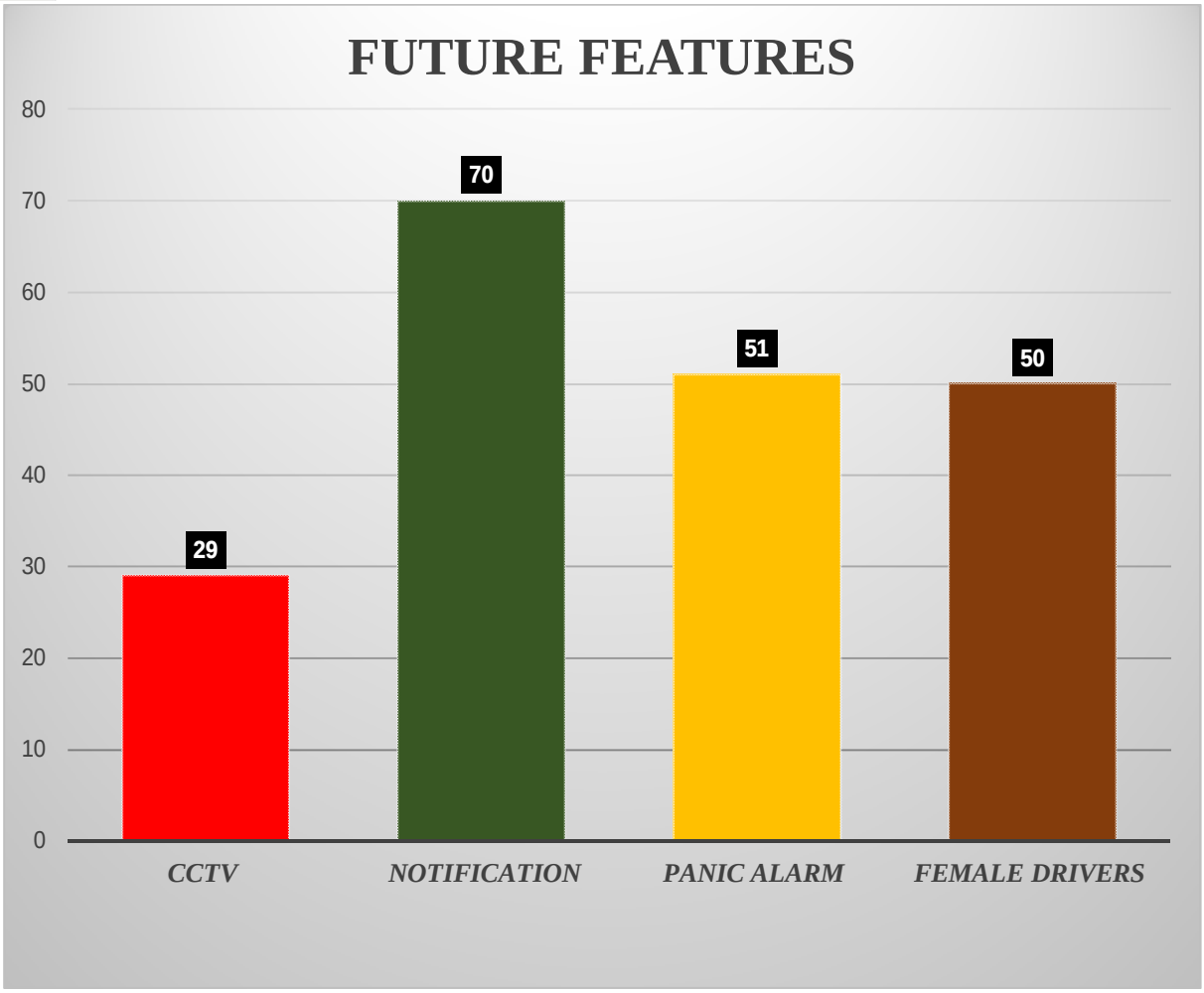
3) *Interpretation:* This figure has inferred the following data, out of 200 respondents 27.5% of respondents are preferring Tracking GPS Location facility, 16% of respondents are preferring Various Payment Mode facility, 9% of respondents are preferring Maintenance of Driver's Profile facility, 10% of respondents are preferring Estimation of Accurate Waiting Time & Price facility, 7.5% are preferring Destination Location Map facility, 5.5% of respondents are preferring Insurance Benefit and 24.5 of respondents are preferring 24/7 Service facility.

Most (27.5%) of the respondents are preferring Tracking GPS Location facility.

Table no - 4
Future features expected by the respondents

S. No	Unique Features	No of Respondents	Percentage
1	CCTV to monitor driver	29	14.5
2	Track and Send Notification	70	35
3	Panic alarm option	51	25.5
4	Female drivers for females	50	25
	Total	200	100

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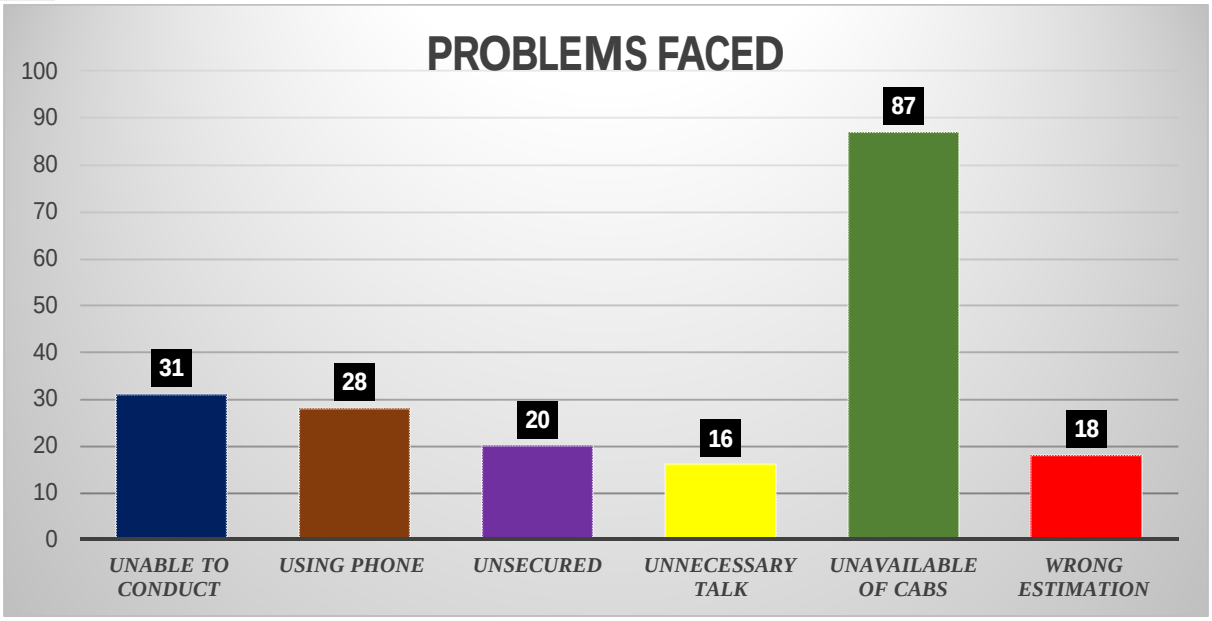
4) Interpretation: This data has resulted from above table that, out of 200 respondents **14.5%** of respondents are expecting CCTV camera to monitor driver, **35%** of respondents are expecting to Track and Send Notification to Control room if there are any changes from destinating location, **25.5%** of respondents are expecting Panic Alarm facility at the time of emergency and **25%** of respondents are expecting Female Drivers facility for female passengers.

Most (35%) of the respondents are expecting to Track and Send Notification to Control room if there are any changes from destinating location.

Table no - 5
Problems faced by users of cabs

S. No	Problems Faced	No of Respondents	Percentage
1	Unable to conduct drivers	31	15.5
2	Attending personal phone calls while driving	28	14
3	Feeling unsecured during night rides	20	10
4	Drivers Unnecessarily engaging in conversation with passengers	16	8
5	Unavailable of cabs at sometimes	87	43.5
6	Wrong estimation of waiting time	18	9
	Total	200	100

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5) Interpretation: This Bar diagram revealed that, out of 200 respondents 15.5% of respondents are Unable to Conduct drivers, 14% of respondents have noticed drivers Attending Personal Phone calls while driving, 10% of respondents are feeling Unsecured during night time, 8% of respondents have noticed that drivers are engaging with Unnecessary Conversation with passengers, 43.5% have faced issue of Unavailability of cabs at sometimes and 9% of respondents have felt bad for Wrongly estimating Waiting Time to customers.

Most (43.5%) of the respondents have faced issue of Unavailability of cabs at sometimes particularly during Rainy seasons.

Table no - 6
Personal factors vs Behaviour of Drivers

PERSONAL FACTOR	CHI-X^2 VALUE	DF	P.VA	SIGN	ACCEPTED/NOT ACCEPTED
Gender	0.515	3	0.916	NS	Accepted
Area	9.625	6	0.141	NS	Accepted
Age	8.773	9	0.458	NS	Accepted
Educational Qualification	15.720	15	0.401	NS	Accepted
Occupational Status	10.897	12	0.538	NS	Accepted
Type of Family	2.339	3	0.505	NS	Accepted
Income Level	12.786	9	0.173	NS	Accepted

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6) *Interpretation:* From the above table it is clear that the personal factors like gender, area, age, educational qualification, occupational status and monthly income level do not have any significant influence on behaviour of cab drivers. The null hypothesis is accepted.

And it is also inferred that one of the personal factor, type of family has significant influence on behaviour of cab drivers. The null hypothesis is not accepted.

Note – If Sign Value = >0.05 means NOT SIGNIFICANT [NS]

If Sign Value = <0.05 means SIGNIFICANT [S]

Table no - 7

Personal factors vs payment mode of users

PERSONAL FACTOR	CHI-X^2 VALUE	DF	P.VA	SIGN	ACCEPTED/NOT ACCEPTED
Gender	3.046	4	0.550	NS	Accepted
Area	11.920	8	0.155	NS	Accepted
Age	5.102	12	0.954	NS	Accepted
Educational Qualification	12.323	20	0.905	NS	Accepted
Occupational Status	16.693	16	0.406	NS	Accepted
Type of Family	20.485	4	0.000	S	Not Accepted
Income Level	12.987	12	0.370	NS	Accepted

7) *Interpretation:* From the above table it is clear that the personal factors like gender, area, age, educational qualification, occupational status, type of family and monthly income level do not have any significant influence on paying methods preferred by users. The null hypothesis is accepted.

Note – If Sign Value = >0.05 means NOT SIGNIFICANT [NS]

If Sign Value = <0.05 means SIGNIFICANT [S]

Table no - 8

Customer satisfaction towars factors

W S.NO	FACTORS		HS	S	MS	DS	HDS	TOTAL	AVG SCORE
1	Pricing Structure	No	39	114	42	4	1	200	3.93
		Score	195	456	126	8	1	786	
2	Safety & Comfortable	No	61	99	30	0	0	200	3.65
		Score	305	396	90	0	0	731	
3	Quality Assurance	No	47	114	35	1	0	200	3.99
		Score	235	456	105	2	0	798	
4	On Time Performance	No	45	116	35	4	0	200	4.01
		Score	225	464	105	8	0	802	
5	Ease of Work	No	43	67	44	5	1	200	3.13
		Score	215	268	132	10	1	626	
6	Area Coverage	No	40	95	56	9	0	200	3.83
		Score	200	380	168	18	0	766	
7	Availability of Cabs	No	45	98	48	6	3	200	3.88
		Score	225	392	144	12	3	776	

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8) Interpretation: The above table shows that, out of 200 respondents irrespective of the classification have high level agreeability towards "On Time Performance" followed by "Quality Assurance" then followed by their "Pricing Structure", when compared to the other factors relating to satisfaction of Cab services.

The majority of respondents irrespective of the classification have high level agreeability towards "On Time Performance" of Cab services.

Table No – 9 Ranking The Cab Providers

CAB PROVIDERS	MEAN RANK	FINAL RANK
Ola Cabs	2.43	I
Uber Cabs	2.93	III
Red Taxi	2.73	II
Taxi Taxi	3.66	V
Fasttrack	3.26	IV

9) Interpretation: Most of the respondents who are using cab services have Ranked those providers based on their Quality of Service offered by Cab services. As per respondent's perception it's found that "Ola Cabs" was Ranked FIRST with least mean rank of 2.43, then "Red Taxi" was Ranked as SECOND, followed by "Uber Cabs" was Ranked as THIRD, next is "Fasttrack" in FOURTH place and the last one was "Taxi Taxi" cab service was in the FIFTH place of ranking order.

As per Respondents choice "OLA CABS" stood 'FIRST PLACE' among others.

A. Kendall's Coefficient Of Concordance

Kendall's coefficient of concordance (W) has been applied to find the extent of similarity among the respondents in assigning the ranks to the various Cab service providers. 'W' ranges between 0 and 1. Higher the value of W, more will be the similarity among the respondents.

Test statistics- Kendall's coefficient of concordance (W)

Kendall's W	0.149

With the value (W) 0.149 it is inferred that there is less similarity among the Quality of Service provided by various Cab operators.

III. FINDINGS, SUGGESTIONS AND CONCLUSIONS

A. Findings Of The Study

1) During the course of analysis, it is realized that 36% of the respondents are aware about and 41.5% of respondents are using Ola cabs in which 36.5% of respondents are aware through Family, Friends and Relatives.

2) The study found that, 50% of the respondents are using for Personal use and 72.5% of the respondents are mostly preferring Hatchback (4 seats) type cars for travel.

3) The analysis of the study discloses the fact that, 65.5% of the respondents are preferring online cab app Billing method in which 48.5% of the respondents are booking through Online Cab App but 72.5% of the respondents are preferring Cash Payment method.

4) During the course of analysis, it is realized that 35.5% of the respondents are considering Safety & Comfortable in cabs, so 27.5% of the respondents are enjoying Tracking GPS location facility and 35% of the respondents are expecting the feature to Track & Send Notification to Control room at the time of emergency.

5) In this study, user's satisfaction are analysed that 37% of the respondents are feeling Comfortable with drivers while using cabs and 40% of the respondents are saying that drivers are Moderately Knowledgeable about the city but 43.5% of the respondents have faced Unavailability of Cabs at sometimes mainly during rainy seasons.

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IV. RESULTS OF HYPOTHESES

A. Weighted Average Score Analysis resulted that the majority of respondents irrespective of the classification have high level agreeability towards "ON TIME PERFORMANCE" of cab services and the majority of respondents irrespective of the classification have high level agreeability of Risk Factor towards "TAXI TAXI" while comparing with other cab service providers.

B. Chi-Square analysis derived that the awareness of various cabs, cab booking method, payment mode along with behaviour of cab drivers and their socio-economic factors like gender, area, age, educational qualification, occupational status, type of family and monthly income level of the family don't have the Significance among the respondents.

C. Kendall's Coefficient of Concordance results stated that, based on the quality of service provided by various cab service which correlates with each respondent. It may be inferred that Ist place in the Ranking order was given to "OLA CAB & AUTO".

V. SUGGESTIONS

Respondents have suggested their valuable comments in questionnaire. The following are the some of the concrete recommendations that are grouped in the Sub-section.

A. To Aggregators

1) Users are expecting many new innovative features in the cab services like,
a) Track and Send Notification to Control room to ensure safety.
b) Motion Sensor or Heart Beat Rate monitors this isn't breach Consumer's privacy but provides security in extreme conditions.
c) Option to cease Engine Remotely in case of Emergency while travelling.
d) Accident and Obstacle Detection Sensor.
e) Panic Alarm facility at the time of emergency.

B. To Cab Owners

1) May cabs can avoid high prices for short rides and extra charges during peak times.
2) Need to improve availability of cabs for the users in rural areas.
3) Improve customer services and consider their valuable feedbacks.
4) May adopt Flexible fare system and Transparent fare system by making it as common pricing structure of all cab providers.
5) Maximize your service by providing 24/7 availability.
6) Maintain consistency by providing cabs even during Rainy times with the same available pricing structure.
7) May adopt for Female Drivers facility for female passengers.

C. To Drivers

1) Every driver should respect women and also need special care for women and kids mainly during night travels.
2) Driver's should Strictly obey traffic rules every time.
3) Driver's should have control over the speed level.
4) They can control their emotions in any sort of situation and be calm by avoiding rudeness behaviour.

VI. CONCLUSION

On the whole Cab providers are excellently providing quality service to travelers. This study highlights that the Taxi market in India is primarily an unorganized sector; however, over the years the private sector has identified opportunity in this sector which has given rise to the organized taxi market in India.

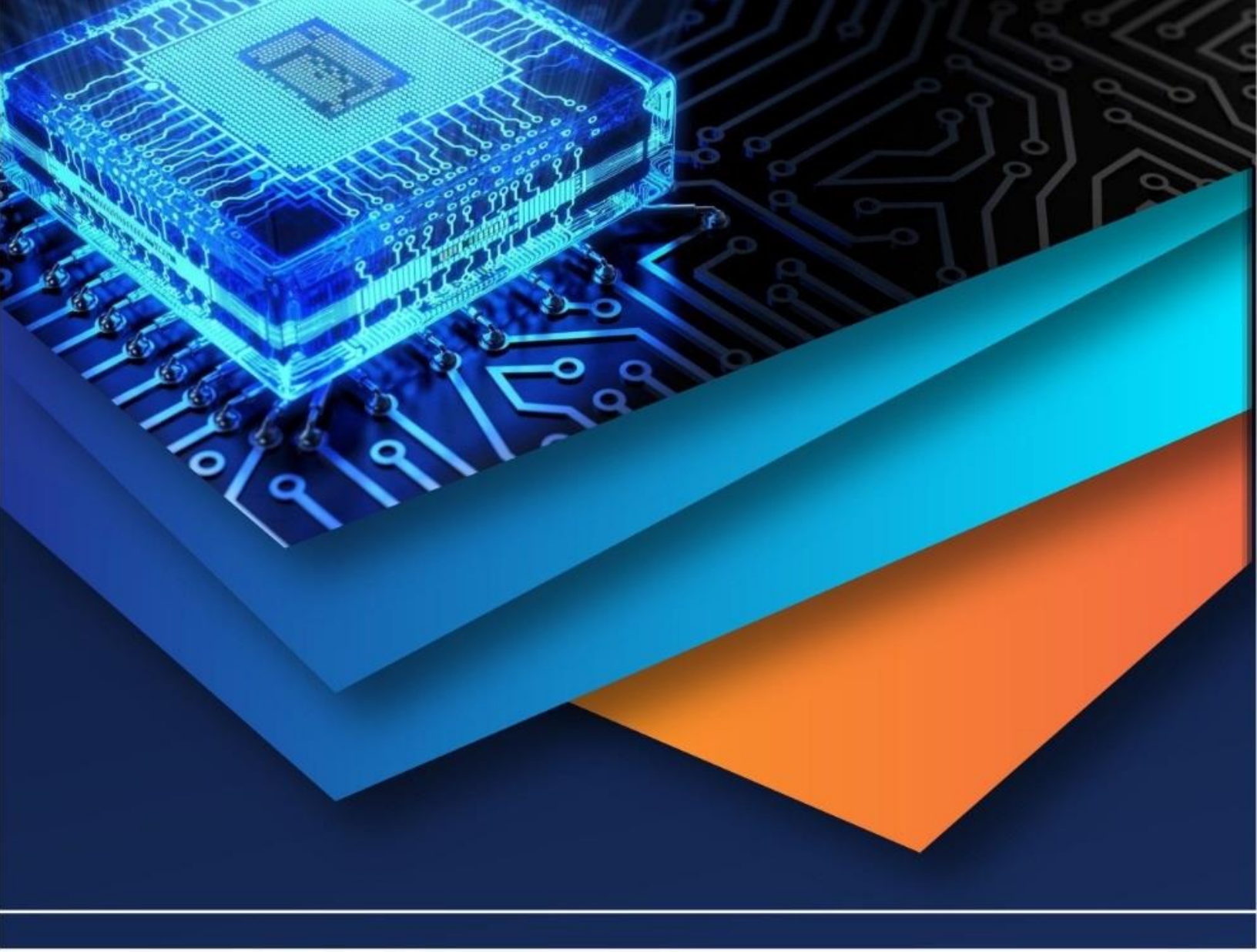
Additionally, the growth of taxi aggregators in the organized transport sector has been a significant one. The share of unorganized sector is reducing year by year since the inception of taxi aggregators in 2010. As per survey on Taxi industry revenues are gradually declining in Indian Society. Cab Service user's attitude are changing consistently and expecting many more add on benefits in future. In Coimbatore half of the passengers are ready to use cabs than to use public transport mode and they are not much conscious on the cost charged by cab services. Customers are always kings in every business. So, cab providers have to run in the race and adopt to offer many innovative features and facilities for customers to increase revenue in this taxi industry in order to increase market capitalization.

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REFERENCES

[1] Chenggang Wang, Huaixin Chen, and Wee Keong Ng, "A TAXI BUSINESS INTELLIGENCE SYSTEM" -Communication of the ACM, Vol. 46, pp.: 81-83, 2011.
[2] Peng Zhou, Tamer Nadeem, Porlin Kang, Cristian Borcea, and Liviu Iftode, "EZCAB: A CAB BOOKING APPLICATION USING SHORT-RANGE WIRELESS COMMUNICATION" -IEEE International Conference on Pervasive Computing and Communications, Dallas-Fort Worth, TX, pp.: 87-96, 2012.
[3] G. Venkatesh and George Easaw, "MEASURING THE PERFORMANCE OF TAXI SERVICE SUPPLY CHAIN" – SIBM Pune Research Journal, Vol X, ISSN (print): 2249-1880 & ISSN (online): 2348-5329, pp.: 26-36, 2015.
[4] Aditya Sisode, Pallavi Palande, Vinay Puranik, Kunal Purandare, Rahul Akhouri, "CAB TRACKING AND PERSONAL SECURITY SYSTEM" – International Journal of Engineering and Computer science, Vol 4, Issue 1, ISSN: 2319-7242, pp.: 10158-10160, 2015.
[5] Ruchi Shukla, Ashish Chandra & Himanshi Jain, "OLA VS UBER: THE BATTLE OF DOMINANCE," –IOSR Journal of Business and Management, e-ISSN: 2278-487X, p-ISSN: 2319-7668, pp.: 73-78, 2017.

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