# E-CAB HAILING SERVICES: PASSENGERS PREFERENCES AND SATISFACTION

Dr. B. Divya Priya, Associate Professor of Commerce, Kongunadu Arts and Science College (Autonomous), Coimbatore, India T. Nithya Devi, Research Scholar, Department of Commerce, Kongunadu Arts and Science College, Coimbatore, India.

#### Abstract:

India approximately spends 13 per cent of GDP on transportation sector. The plight of pandemic has opened new venues for low-touch economy. Services were extended to the remote area at an exceptional scale and speed. As people and goods move from one place to another, this prevailing situation tend to continue. The next crucial step is to drive value-creation within the sector; improving human's assets and productivity, reducing costs, and cutting waste are critical. Digitalization can help by: enabling effective route and capacity planning, linkages with allied sub-sectors, improving safety and customer experience, access to newer markets. Taxis, major component 'accessibility' for urban residents, i.e. mobility - a need for people to complete their tasks, entail with travel, time and distance. E-hailing services can connect passengers and cabdrivers directly using Information and Communication Technology (ICT) since cabdrivers know the passengers' origins and destinations beforehand and passengers as well. However there are other drawbacks to be considered: cancellation of booking, high charge, late arrival, safety, etc. In line with this, the study examined passengers' preferences, driving factors and satisfaction towards e-hailing of cab services.

The transportation sector in India is extensive and diverse. Transportation is a critical component of economic infrastructure. The transportation system is often considered to be the fundamental symbol of civilization. Changing lifestyle and increased has led an individual to prefer over luxurious living style. The modes' convenience, speed, and safety have matched their transit needs. People, businesses, the environment, and the economy all benefit from effective transportation links. Among the various modes of transportation, road transportation maintains a major role in today's world due to its unparalleled reach. It aids in the

#### **METHODOLOGY:**

#### Data Used:

Primary Data was collected using structured Interview Schedule; personal meet with the passengers who hire a taxi to move from one place to another place. Other data were collected from books, journals, periodicals and websites.

#### Sample Size:

The target respondents are consumers who were either occasional or regular cab users, aged 18 or older, with

expansion of business, industry, and trade. The transportation system reduces space and time constraints. Depending on the city/state, taxis can be summoned or hired at taxi stands. The community benefits from taxi services.

A taxi provides an end-to-end point service to the public and is an alternative to and a part of public transport. Taxis are a necessary component for making the supply of public transport function in accordance with the public demand. In some areas and contexts the taxi industry is the only public transport available. Taxis also constitute an accessibility component i.e. mobility - a need for people to complete their tasks, entail with travel, time and distance. Ehailing services can connect passengers and cabdrivers directly using Information and Communication Technology (ICT) since cabdrivers know the passengers' origins and destinations beforehand. However there are other drawbacks like cancellation of booking, high charge, late arrival, etc. Thus, taxi is a type of rental vehicle with a driver used by an individual or group to travel to and from specific areas. It alleviates commuting and transit worries for city people while also promoting accessibility. This study is an attempt to determine the factors influencing the customer to hire a taxi as a means of transport and measure the level of satisfaction.

#### **Objectives of the Study:**

The following were the objectives of the study:

- To assess the consumer preferences towards E-hailing of Cab services
- To understand the factors that influencing consumers choice towards E-hailing
- To find out the level of satisfaction towards E-hailing of cab services

basic education. As the number of cab users cannot be determined and by consideration to infinite population, the study will concentrate on the population in the vicinity of Coimbatore considering the importance of cab services in urban areas gained over the time, the sample size chosen were 200. Convenient sampling method was used to reach the targeted respondents.

# Tools and Techniques used for Analysis:

The collected data were coded in MS – Excel; percentages, Garrett Ranking method and Chi – square test of independence were used for analyzing the data using SPSS.

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# **RESULTS AND DISCUSSIONS:**

# (i) Consumer Preferences towards E-Cab hailing:

Particulars	Number of Respondents	Percent				
Preferred way of booking Cab:						
Over phone call	68	34.0				
Mobile-app	73	36.5				
Others	59	29.5				
Purpose for hiring a Taxi:						
Office purpose	70	35.0				
Personal use	52	26.0				
Both	78	39.0				
Cost incurred for Cab per ride:						
Below Rs. 100	46	23.0				
Rs. 101 to 250	57	28.5				
Rs. 251 to 500	42	21.0				
Above Rs. 500	55	27.5				
Cost Incurred on hiring a taxi p.m.:	· · ·					
Below Rs. 1,000	52	26.0				
Rs. 1,001 to 2,000	54	27.0				
Rs. 2,001 to Rs. 3,000	52	26.0				
Rs. 3,000 and above	42	21.0				
Distance covered per ride:	· · · · · ·					
Less than 15 km	54	27				
15 to 30 kms	83	41.5				
Above 30 kms	63	31.5				
Payment mode:						
Cash payment	54	27.0				
Credit/Debit cards	45	22.5				
e-wallets	48	24.0				
Internet Banking	53	26.5				

# Table 1 - Consumer Preferences towards E-Cab hailing

Source: Own Calculation – Primary Data

Table 1 revealed consumers preferences towards E-Cab hailing services.

- (i) Preferred way of booking a Cab: Out of 200 sample respondents, it was found that 34 percent of them made a phone call, 36.5 percent of them used m-app and 29.5 percent preferred other way for booking/hiring a cab.
- (ii) *Purpose for hiring a Cab:* Out of 200 sample population, 35 percent of them hire a taxi for official

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purpose; 26 percent of them for personal purpose and 39 percent of them hired taxi for both purpose.

- (iii) Cost Incurred for Cab per ride: Out of 200 respondents, 23 percent incurred below Rs.100; 28.5 percent of them incurred in the range between Rs.101 to 250; 21 percent of them incurred Rs.251 to 500 and remaining 27.5 per cent of them incurred above Rs.500 towards cost for hiring a cab per ride.
- (iv) Cost Incurred for hiring a Cab per month: Out of sample respondents, 26 percent of them incurred below Rs.1,000; 27 percent incurred in the range

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between Rs.1,001 to Rs.2,000; 26 percent of them incurred Rs.2,001 to Rs.3,000 and 21 percent of them incurred above Rs.3,000 for hiring a taxi per month.

(v) Distance Covered per ride: Out of sample population, 27 percent covered distance less than 15 km; 41.5 percent of them covered distance between 15 km to 30 kms and remaining 31.5 percent of

#### (ii) Reasons for E – Cab hailing Services:

them covered distance above 30 kms in hired taxi service.

(vi) Payment mode: Out of sample population, 27 percent of them made payment by cash; 45 percent of them preferred Debit cards/Credit cards; 24 percent of them used e-wallets and 26.5 percent of them used Internet banking for making payment for hiring a Cab.

<b>Reasons for E-Cab hailing</b>	Number of Respondents	Percent
Don't have to call or signal a taxi in the street road – Easy tracking of taxi drivers	32	16
Car type	37	18.5
Payment via App.	35	17.5
Travel cost Estimation	42	21
Taxi Driver Rating	31	15.5
Recorded transactions (Taxi Driver name, pick-up and drop location, cost)	23	11.5

# Table 2 – Reasons for E – Cab hailing Services

Source: Own Calculation – Primary Data

The above table showed the reasons for E-Cab hailing services. It was found that 'travel cost estimation' and 'car type' was the major reason among the respondents for e-hailing of cab service accounted to 21 percent and 18.5 percent respectively. 'Payment via app' and 'don't have to call or signal a taxi in the street road – Easy tracking of taxi drivers' were the secondary reason for e-hailing a taxi with percentage accounted to 17.5 percent and 16 percent

respectively. 'Taxi-driver rating on the app' and 'Recorded transaction' was the least reason for hiring a taxi cab over e-hailing services accounted to 15.5 percent and 11.5 percent respectively (Table 2).

It can be concluded that 'travel cost estimation' and 'car type' was the major reason among the respondents for ehailing cab service.

#### (iii) **Problems in E – Cab hailing services:**

<b>Problems in E – Cab hailing services</b>	Number of Respondents	Percent
Taxi Driver Lethargic Attitude – Attending phone calls while driving, no traffic rules follow-up	33	16.5
Applicability of Cancellation fees	36	18
Unknown journey duration	38	19
Discomfort	33	16.5
No adequate training on map	29	14.5
Attending phone calls while driving	31	15.5

Table 3 - Problems in E - Cab hailing services

Source: Own Calculation – Primary Data

The above table showed the problems in hailing cab services. It was found that 'unknown journey duration' and 'applicability of cancellation fees' were the major problem identified by the respondents of the study constituting to 19 and 18 percent respectively. 'Discomfort' and 'Taxi Driver's lethargic attitude' were the secondary problems identified by the respondents contributing equal percent upto 16.5. 'Attending phone calls while driving' and Copyrights @Kalahari Journals 'No adequate training on map' were the least problem faced by the respondents while hiring a cab services (Table 3).

It can be concluded that 'unknown time duration' and 'applicability of cancellation fees' were the prime problem identified by the respondents for hiring Cab service.

# (iv) Satisfaction towards Cab Services:

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In this section, an attempt has been made to study the socio – economic variables such as their gender, age family type, marital status, educational qualifications, employment status and annual income which influence consumers' choice and satisfaction in preferring E – hailing of cab services. Further an attempt has been made to examine the relationship between socio-economic variables and level of satisfaction.

Satisfaction towards Cab Services	Number of Respondents	Percent
Highly Satisfied	40	20
Satisfied	48	24
Neutral	35	17.5
Dissatisfied	38	19
Highly Dissatisfied	39	19.5

Source: Own Calculation – Primary Data

The above table showed the satisfaction level of the respondents towards hiring cab services. It was found that 44 per cent of the respondents were satisfied with highly satisfied comprising 20 percent. 38.5 percent of them were dissatisfied with hiring cab services (Table 4).

# (v) Association between Socio – Economic Variables and Satisfaction towards E-hailing of Cab Services:

In order to find out whether such relationship was statistically significant, the following null hypothesis were framed and tested with the Chi – square test and result were presented in Table 5.

Tuble Tibbeland bell bell bell bell bell bell bell bel	Table 5 - Association between Socio -	- Economic Variables and Satisfactior	n towards E-hailing of Cab Services
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Socio- economic Variable	Group	Satisfied	Neutral	Dissatisfied	N	Chi- square value	Sig. level
lder	Male	32 (34.32)	07 (13.66)	39 (30.03)	78	9.961	0.05
Gen	Female	56 (53.68)	28 (21.33)	38 (46.97)	122		
d	Below 25 years	12 (14.08)	16 (5.60)	04 (12.32)	32		
Grou	26 to 50 years	54 (43.12)	10 (17.15)	34 (37.73)	98	40.099	0.05
Age	Above 50 years	22 (30.8)	09 (12.25)	39 (26.95)	70		
tal s	Married	68 (45.32)	19 (18.02)	16 (39.66)	103	52 605	0.05
Mari Statu	Unmarried	20 (42.68)	16 (16.90)	61 (37.34)	97	52.005	0.05
	Up to school level	18 (16.28)	07 (6.48)	12 (14.24)	37		
al ions	UG degree	27 (26.4)	12 (10.5)	21 (23.10)	60	14 (02	0.05
ation	PG degree	30 (22.88)	08 (9.10)	14 (20.02)	52	14.693	0.05
Educ Qual	Professional	13 (22.44)	08 (8.93)	30 (19.64)	51		
6 1	Below Rs. 2,00,000	12 (28.16)	16 (11.20)	36 (24.66)	64		
Annua ncom	Rs. 2,00,001 - 5,00,000	40 (33.44)	10 (13.3)	26 (29.26)	76	25.583	0.05
A.I.	Above Rs. 5,00,000	36 (26.4)	09 (10.5)	15 (23.10)	60		

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uly pe	Joint family	16 (36.96)	32 (14.07)	36 (32.34)	84		
Fam Tyj	Nuclear	72 (51.04)	03 (20.03)	41 (44.66)	116	56.311	0.05
×	Private employee	22 (18.52)	12 (7.52)	9 (16.56)	43		
Statu	Government employee	13 (18.48)	05 (7.35)	24 (16.67)	42		
ation	Self-employed	23 (21.56)	01 (8.57)	25 (18.86)	49	29.963	0.05
)ccup	Professionals	12 (11.0)	09 (4.38)	04 (9.62)	25		
0	Others	18 (18.04)	08 (7.18)	15 (15.78)	41		

- (i) Gender and Satisfaction towards E – Cab hailing services: Chi - square test of independence showed there was significant association between the gender of the respondents and level of satisfaction towards hailing E-cab services (p-value=0.006) at 5 percent significance level. Female respondents were satisfied towards E-cab hailing services than male.
- Age and Satisfaction towards E Cab hailing (ii) services: Chi - square test of independence showed there was significant association between the age of the respondents and level of satisfaction towards hailing E-cab services (p-value=0.000) at 5 percent significance level. Respondents who were middle aged are satisfied and old- aged respondents are dissatisfied towards E-cab hailing services when compared to young age.
- Marital Status and Satisfaction towards E Cab (iii) hailing services: Chi – square test of independence showed there was significant association between the marital status of the respondents and level of satisfaction towards hailing E-cab services (pvalue=0.000) at 5 percent significance level. Respondents who were married were satisfied towards E- Cab hailing services when compared to the unmarried one.
- Family type and Satisfaction towards E Cab (iv) hailing services: Chi – square test of independence showed there was significant association between the family type of respondents and level of satisfaction towards hailing E-cab services (p-value = 0.000) at 5 percent significance level. Respondents who belong to nuclear type family

were satisfied towards E-cab hailing than joint family type.

- Educational level and Satisfaction towards E -(v) Cab hailing services: Chi - square test of independence showed there was significant association between the educational level of the respondents and level of satisfaction towards ehailing of cab services (p-value=0.0227) at 5 percent significance level. Respondents who were postgraduates (but less percentage) were satisfied towards E- Cab hailing services when compared to other educational group.
- Employment Status and Satisfaction towards E -(vi) Cab hailing services: Chi - square test of independence showed there was significant association between the employment status of the respondents and level of satisfaction towards hailing E-cab services (p-value = 0.0002) at 5 percent significance level. Respondents who were selfemployed and private employed were satisfied towards E-cab hailing services when compared to other employment group.
- Annual Income and Satisfaction towards E Cab (vii) hailing services: Chi – square test of independence showed there was significant association between the annual income of the respondents and level of satisfaction towards hailing E-cab services (p-value 0.0003) at 5 percent significance level. Respondents who were earning an annual income above Rs. 2,00,000 were satisfied towards E-cab hailing services.

#### **Recommendation to others to hire Cab Service:**

Table 7 - Recommendation to others to mile Cab Service	Table 7 -	<ul> <li>Recommendation</li> </ul>	ion to	others t	to hire	Cab	Service
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Recommendation to others to hire Cab Services	Number of Respondents	Percent
Yes, I will recommend to hire a Cab service	136	68
No, I will not recommend Cab service to others	64	32

Source: Own Calculation - Primary Data

The above table showed the recommendation to hire cab services based on their experience. It was found that 68 percent

of them will recommend other to hire a taxi while 32 per cent will not (Table 7).

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#### **CONCLUSION:**

The present study recorded the passengers preferences towards E-Cab hailing services; problems faced by them and level of satisfaction based on their socioeconomic characteristic of the respondents. According to the study, the major reason for choosing over the E-cab hailing among the respondents were estimation of cost and car type

'Travel cost estimation' and 'car type' was the major reason among the respondents for e-cab hailing service. Payment via App and easy track of drivers were the features that attract the respondents for choosing over E-cab hailing service. Among the gender, female respondents were more satisfied than male. Most of the men hire a cab on the job and female on a journey; this may be the reason that leads men for dissatisfaction towards E-cab service. Middle and old-aged people are less satisfied with cab services as the comfort enjoyed in other mode of transport is not available like toilet facility, catering in trains, sleeper coach in bus is not available but young-people give importance for luxury. Respondents who were married respondents who were graduates; either self-employed and private employed earning above Rs.2,00,000 and belonging to nuclear type family were highly satisfied towards E-cab hailing service. The purpose of journey matters to them all.

#### **Bibliography:**

Hanif, K., Sagar, N. (2016). An empirical research on the penetration levels for a call-a-cab service in Mumbai. *Reflections Journal of Management*, 5, 1-10.

Hemanth Kumar, V. and Sentamilselvan, K. (2018). Customer Satisfaction towards call taxi services with reference to Chennai. *International Journal of Pure and Allied Mathematics*, 119(12), 14919-14927.

Horsu, E. N., Yeboah, S. T. (2015). Influence of Service quality on customer satisfaction: A study on minicab taxi services in Cape Coast, Ghana. *International Journal of Economics, Commerce and Management*, 3(5), 1451 - 1464.

Jayanthi, M. and Gunasundari, K. (2019). A Study on User's Satisfaction of Call Taxi Services in Erode City. *Journal of Engineering Technologies and Innovative Research*, 6(2), 266-274.

Kishore Kumar and Ramesh Kumar Ramavaram. (2016). A Study on Factors Influencing the Consumers in Selection of Cab Services. *International Journal of and Social Sciences and Humanities Research*, 4(3), 557-561.

According to the study, certain problems were also identified among the respondents that lead them to dissatisfaction while hiring a cab. Those problems are 'unknown journey duration', 'applicability of cancellation fees', 'discomfort ride', 'lethargic attitude of taxi driver' and 'no adequate training over the use of Google map'. Therefore, it was suggested to give the journey time (hours of travel) to reach the place of destination from the place of start-up. Cancellation fees were another problem identified; it is advisable for companies to make revision in cancellation fee either to minimum or no cancellation fee applicable. Comfort ride can be provided by checking the type of passengers they carry in and give the smooth ride with adequate speed. It is also advisable for the companies to check the driving license and ensure whether the taxi-driver follow traffic-rules, avoid phone calls while on drive and avoid drinks while driving; for safety measures, the company can install CCTV inside the vehicle. Adequate training should be given to the drivers regarding the usage of Google map effectively. Improved service with additional features will add more value to the product and service that will help companies to generate more revenue.

Lifang Peng, Huan Wang, Xuanfang He, Danxia Guo, Yuchuan Lin, (2014). Exploring Factors Affecting the User Adoption of Call-taxi App. 25<sup>th</sup> Australian Conference on Information System.

Manivannan, P. Kesavan, D., Malarvizhi, K. (2020). A Study on Momentum and Prospects of Call Taxi Segment in Indian Economic Scenario. *Aegaeum Journal*. 8(3), 661-669.

Ramasamy, A. Muduli K, Mohamed A, Biswal J N. and Pumwa, J. (2021). Understanding Customer Priorities for Selection of Call Taxi Service Provider. *Journal of Operations and Strategic Planning*. 4(1), 52-72. Doi: 10.1177/2516600X21997201

Wong, R. C. P., Szeto, W. Y. (2018). An alternative methodology for evaluating the service quality of urban taxis. *Transport Policy*, 69, 132 – 140.

https://auto.economictimes.indiatimes.com/news/industry/op inion-reimagining-the-future-of-transportation-with-digitaltechnologies/79967182\_Accessed on 15.06.2021

https://en.wikipedia.org/wiki/Taxi