DETERMINANTS OF BRAND PREFERENCE OF COMMERCIAL THREE WHEELER PASSENGER AUTO RICKSHAW DRIVERS IN ADAMA CITY, ETHIOPIA

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Abstract

Purpose of the study: The aim of this study is to find out the factors that influence drivers of three wheeler auto rickshaw in their brand preference towards different brands of commercial three wheeler passenger auto rickshaw in Adama City, Ethiopia.

Methodology: Primary data was collected from 500 auto drivers using a pilot tested questionnaire consisting of 40 questions. Cronbach’s alpha measure was used to test constructs reliability and in order to identify brand preference, exploratory factor analysis and parallel analysis was conducted.

Main Findings: PCA revealed that there are 11 factors whose Eigen values are above 1. A look at scree plot indicated that there is a need to reconsider the number of factors to be used for further analysis. This decision was supported by Parallel analysis and 8 relevant factors identified. This 8 component solution explained 64.25% of the variance.

Applications of this study: Identification of determinants of brand preference can be used by three wheeler passenger auto manufacturers and distributors in Ethiopia.

Novelty/Originality of this study: There is no study conducted on drivers brand preference of three wheeler passenger auto rickshaws in Ethiopia.

Keywords: Three wheeler, Brand preference, drivers’ preference, factor analysis, passenger auto, customer behavior

INTRODUCTION

For movement of the people in the city from one place to another a good transport system is necessary. A well developed internal transport system leads to economic activity to develop the cities or nation. It helps in increase of production thereby raising the standard of living of the people and removes the problem of distance, help the people of different regions to come in contact with each other, encourage exchange of ideas and culture and also promote cooperation, employment of the people of the country. The major factor of a good transport system is time management. The entire economy of the modern country depends on the effective system of transport.

Ethiopia is a landlocked country and mostly imports the goods from other countries. Ethiopia was ruled by Italian for five years approximately (1935-41) and this brief period resulted in laying down of the road and railway line. Subsequent to the Italian invasion of 1935-41, expansion of modern transportation began in the country and public transportation, like taxi and bus services, rail transportation. The transport sector is one of those economic sectors whose administration is shared between the federal government and the regional states (A.Temesgen 2007). The transport ministry of government of Ethiopia reports that alternative methods of transport such as buses, metro taxis, railways and other means are used as a popular means for satisfying demands of local public. Further it has revealed that massive infrastructural expansion in land, air and domestic travels is undertaken with the most common mode of public transportation being Minibuses and three wheeler taxis.

The three-wheeler taxis that were made in India, first came to Ethiopia in 2005. They have become very popular as a convenient method of transport in regional cities and certain parts of the capital city, Addis Ababa. The three-wheeled auto-Rickshaw, commonly called as Bajaj was first introduced in Dire Dawa city that is located about 500 kms from capital Addis. Since it was first introduced this vehicle has become very popular as an important transport option in most cities. This increase in demand is primarily responsible for the increase in price. It should be noted that the spare part costs are four times less for a Bajaj as compared to mini bus with significant fuel efficiency (Seyoum H, 2014).

Bajaj is an informal term used to refer to rickshaws although market competition has increased during past few years. The demand of three wheeler auto rickshaw is increasing for several reasons, one of the reasons being its affordability in terms of price in comparison to other means of transport as well as efficient fuel consumption. Market for three wheelers is very high in Adama, and adjacent woredas and zonal cities (E.Dawit 2014). Adama city is also known as Nazareth and the Addis Ababa-Djibouti railroad runs through Adama. This road is the main thoroughfare running through the centre of the city. Behavior of the customers are changing very fast due to availability of number of similar products and brands and at the same time a customer is confused. The experience of using the same brand and product has its advantages as well as disadvantage which influences the customers behavior. For the manufacture it is necessary to identify customers need and satisfy the same. The three wheeler auto rickshaw industry is very much competitive in Ethiopia with the presence of
different brands such as Baja, TVS, Atul, Force and Piaggio. Therefore, assessing various factors which influence the customer’s behavior and the service level to be delivered is essential. In this area it is observed that there is no study done before, and having identified the importance of studying customers behavior and brand preference, this study on Customer’s brand preference towards three wheeler auto rickshaw in Adama city has been conducted.

The primary objective of this study is to find out the factors that influence drivers of three wheeler auto rickshaw in their brand preference towards different brands of commercial three wheeler passenger autorickshaws in Adama City.

**LITERATURE REVIEW**

Consumers who are familiar with a brand usually possess basic information regarding that brand, especially about its characteristics which may be either material or non material and the inter relationship that exist between them (Sujan M & Bettman J R 1989). There is a significant impact of brand participation, sponsorship, involvement, price and quality on preference of brand by a consumer (Najam & Maryam 2016). In a study it was found that the consumer’s preference were identified in terms of four factors i.e., branding, packaging, taste and validation and price (Lazim & Haliza 2011).

In the study conducted by Banerjee, it was found that there is a significant impact of individual and brand personality on the preferred brand which implied that at the time of expressing their preference for brand, consumers found individual personality and personality of the considered brand of sports utility vehicle as vital. Brand personality that is strong and clear indicated a favorable opinion about the brand. The result of this study further showed that at the time of buying decision characteristics such as personalitie of both product and corporate brand are showing an influence over their preferences (Banerjee, S. 2016).

A change in the basic vehicle attributes may result in loss of market share as it was observed in a study conducted by Train and Winston. They found that most of the loss in the share for U.S. manufacturers in terms of market share can be better understood from the changes that are made in certain fundamental vehicle attributes as is understood from changes in transmission type, reliability, and body type, price, size, power, operating cost (Kenneth E. Train & Clifford Winston 2007/Kenneth and Clifford).

A study by Sriram (2006), revealed that the effect of the brand preference is greater than the effect that is created by the attractiveness of the brand’s product line. With the assumption of reasonable margin of profit, this study further evaluated the effect increased advertising expenditures for the largest and the smallest brands and concluded that it is possible for these brands to increase their profitability by increasing advertising capital (Sriram,S et.al., 2006).

Brand preference has a significant role in building brand. In order to understand and to value the true image of the company it is found that the brand equity’s elements should be logical. Similarly it is found that the customer preference does have a positive impact on the attributes that build confidence and assist in increasing sales (Mkhitaryan,D., 2014). It is also found that factors such as loading ability, Performance, Resale value, Serviceability, Warranty etc have an important role to play especially in consumer preference of Heavy Commercial Vehicles (Ruban Kumar, K. & Surulivel, 2016).

Further findings about functional image congruity, showed that it has a negative impact of symbolic image congruity on brand preference of Chinese consumers. When a brand’s perceived symbolic image is in upward incongruity it does not restrain brand familiarity (Hu,J.et.al.,2012).

Another study conducted in Ghanaian automobile industry identified that the features of a car, consciousness as well as accessibility of the product do have a strong impact on brand choice (Narteh,B.et.al, 2012).

Studies also revealed that factor analysis was used and results disclosed that consumers are more inclined by product strategies, technical know-how and satisfaction level (Giridhar,A.et.al., 2015). Therefore consumers are more influenced by the USP of a commodity. Furthermore, this study also conducted discriminant analysis which revealed that consumers are more influenced by product strategies, technology know how degree of satisfaction and service in the same order while are least influenced by the factory workshop features.

In another study it was found that pricing and fuel efficiency are the major factors while factors such as technology, pick-up, comfort are the least important of the factors that influence the sample car owners (Rajasekar,T. 2015). The accessibility, ambition, value, comfortability, efficiency, and need were found to be important factors affecting brand preference in case of small cars. (Anandh,K & Shyama Sundar,K, 2014). Results also showed that sex, age, income, family size, type of driving license, fuel type, a significant increase in the monthly income, and costs of having SRC-K licenses are determinants of consumers’ demand for light commercial vehicle (Ali Kemal, C.e.t.al.,2015).

Another study show that safety, interior, modernity, economy, and value for money are the five major factors which persuade consumers to purchase a particular automobile. Conclusion can be made that the brands of automobiles purchased and influencing factors has a relationship by the respondents ( Kojo Mensah Sedzro et.al, 2014).

A number of studies are conducted using factor analysis, the most general use of the factor analysis is to find out whether the responses to a set of items used to determine a exacting idea can be grouped together in order to form a similar index of the concept (Duncan,C., 2003). Psychologist have been traditionally using this technique to study the dimensions of an
individual’s intelligence (Thomson, G.H., 1951). Similarly economists have been using factor analysis to study behaviour of consumer by assessing consumer’s living standards and individual consumer charity behaviour (Schokkaert & Van Ootegem, 1990).

Though there are a number of studies conducted on brand preference, most of these studies are on consumer durables. There are a few studies on brand preference of automobiles but none on three wheeler autos especially in Ethiopian context. Having identified this major gap, this study is carried out to categorise factors that influence brand preference among three wheeler auto rickshaw drivers in Adama city.

**RESEARCH METHODOLOGY**

This is a quantitative research that is intended to identify factors affecting brand preference among three wheeler commercial passenger auto rickshaw drivers in Adama city.

**Population of the study**

The relevant population of this study is all auto rickshaw drivers (including owner drivers), As per Road Transport Authority Adama there are approximately 4,411 three wheeler passenger automobile in Adama city.

**Sample size and selection**

This study purposively selected 500 respondents for data collection. A sample size of 384 respondents is needed to draw valid conclusions (K & M table 1970). A total of 500 respondents is chosen for this study, which is much more than the required 384 respondents. Accordingly auto rickshaw drivers were purposively selected and a pilot tested questionnaire was administered.

**Data requirements, methods of collecting and analyzing data**

Primary data and secondary data are used in this study. Primary data is collected using a pilot tested questionnaire that consisted of 43 questions which were coded as Q1 upto Q40. The responses were collected using a Likert like scale of 1 to 5 corresponding from strongly disagree to strongly agree. A description of the questions is given in table 1. Further demographic profile of the respondents was also obtained to validate responses. Secondary data sources such as Road Transport Authority reports, three wheeler association reports, and published research were also used for collecting data.

**Table 1: Showing description of items and code**

| No. | Items | Code |
|-----|-------|------|
| 1   | Its Exterior styling is very good | Q1  |
| 2   | Seat designed is good | Q2  |
| 3   | It has driving comfort | Q3  |
| 4   | It has good leg room | Q4  |
| 5   | Dash board is stylish | Q5  |
| 6   | Interior design and colour is attractive | Q6  |
| 7   | Comfortable for passenger | Q7  |
| 8   | It has good mileage | Q8  |
| 9   | It has good pickup | Q9  |
| 10  | It has good visibility from driver seat | Q10 |
| 11  | It has good suspension | Q11 |
| 12  | It has good breaking system | Q12 |
| 13  | It assure safety while driving | Q13 |
| 14  | It can move congested traffic easily | Q14 |
| 15  | It has price of worth | Q15 |
| 16  | It has technology leadership of the brand | Q16 |
| 17  | No advance booking is necessary to purchase | Q17 |
| 18  | Spare part easily available | Q18 |
| 19  | Spare parts are not costly | Q19 |
| 20  | Servicing centres are available | Q20 |
| 21  | Bank providing loan easily | Q21 |
| 22  | Passengers can move easily | Q22 |
| 23  | I can earn good money for my livelihood | Q23 |
| 24  | No frequently services is required | Q24 |
| 25  | Cost of services is less | Q25 |
| 26  | Repair cost is less | Q26 |
| 27  | Quality is with respect to the price of this brand | Q27 |
Data collected using questionnaire is analyzed using IBM SPSS software. Data is analyzed to identify factors affecting brand preference of drivers of three wheelers in Adama city, accordingly descriptive statistics and exploratory factor analysis using Varimax rotation were employed to analyze data.

DISCUSSION / ANALYSIS

Data collected using a pilot tested questionnaire is analysed and presented in the following sections.

Reliability Statistics (Cronbach’s Alpha)

In order to test the reliability of scale Cronbach’s alpha is used which is a measure for assessing internal consistency of a series of test items. A commonly accepted rule for describing internal consistency is alpha measure of 0.7 and anything more than 0.7 is considered a good indication of reliability of constructs. The calculated Cronbach’s alpha was 0.876 which is a good indication of constructs reliability.

| Table 2: Showing Reliability Statistics |
|----------------------------------------|
| Alpha       | N of Items |
| 0.876       | 40         |

Factor Analysis

This study employs an Exploratory Factor Analysis. In factor analysis, variables are not categorized as independent/dependent, as an alternative the whole set of relationships that are interdependent are examined (Malhotra & Birks, 2007).

Assessment of the Suitability of the Data for Factor Analysis

There are a few methods of considering whether a given data set is suitable for conducting factor analysis the size of sample used, and the strength of the relationship among select items.

Justification of Sample Size

While conducting factor analysis where there is no hypothesis testing, sample size is still an important issue for evaluation. Although there is no method to determine statistical power, researchers have proposed a wide range of recommendations and guidelines regarding adequate sample sizes when conducting a factor analysis. Accordingly at least 10 subjects per variable are necessary to reduce sampling errors (Nunnally, 1978). Various sample sizes such as 100 is considered poor, 200 as fair, 300 as good, 500 as very good, and 1000 and above as excellent (Comrey & Lee, 1992). Therefore, based on the above a sample size of 500 responses is considered adequate for this study.

Correlation Matrix and KMO (Kaiser–Meyer–Olkin) and Bartlett’s test

The second issue to be addressed concerns the strength of the inter-correlations among the items. Tabachnick & Fidell (2001) recommend an inspection of the correlation matrix for evidence of coefficients greater than .3. Bartlett’s test of sphericity (Bartlett, 1954) should be significant, and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1970, 1974) considers 0.5 and above as the minimum value for a good factor analysis (Tabachnick & Fidell, 2001).

Correlation matrix

The correlation matrix of 40 items used in this study shows that in 38 out of 40 items correlated with at least one other item with a correlation of more than 0.3 suggesting reasonable factorability.

KMO (Kaiser-Meyer-Olkin) and Bartlett’s Test results

| Q28  | 28 It has good resale value |
| Q29  | 29 Brand is having goodwill in the market |
| Q30  | 30 This brand is my first choice |
| Q31  | 31 I recommend this brand to other |
| Q32  | 32 Passengers like this vehicle |
| Q33  | 33 Finance is available easily |
| Q34  | 34 Maintenance is very less |
| Q35  | 35 Easy to learn (driving) |
| Q36  | 36 It is comfortable on the road |
| Q37  | 37 It gives less pollution |
| Q38  | 38 It is a easy self employment source |
| Q39  | 39 This brand gives mental satisfaction |
| Q40  | 40 Possibility of accident is less |
Table 3: showing KMO and Bartlett's Test results

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .760 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 13153.497 |
| df | 780 |
| Sig. | .000 |

Source: Researcher’s own computation from primary data sources

Table 3 shows the KMO (Kaiser-Meyer-Olkin) and Bartlett test results. The KMO test tells us whether or not enough items are predicted by each factor. In this case it is .76 and is considered good. The Bartlett test is .000, which is significant (i.e., a significance value of less than .05); this means that the variables are highly correlated that is enough to provide a reasonable basis for conducting factor analysis.

Communalities

Table 4: showing Communalities

| Item code | Extraction | Item code | Extraction |
|-----------|------------|-----------|------------|
| Q1 | .776 | Q21 | .852 |
| Q2 | .690 | Q22 | .627 |
| Q3 | .654 | Q23 | .680 |
| Q4 | .709 | Q24 | .720 |
| Q5 | .680 | Q25 | .724 |
| Q6 | .722 | Q26 | .781 |
| Q7 | .702 | Q27 | .865 |
| Q8 | .776 | Q28 | .672 |
| Q9 | .715 | Q29 | .637 |
| Q10 | .765 | Q30 | .759 |
| Q11 | .791 | Q31 | .789 |
| Q12 | .651 | Q32 | .607 |
| Q13 | .742 | Q33 | .702 |
| Q14 | .679 | Q34 | .840 |
| Q15 | .761 | Q35 | .727 |
| Q16 | .715 | Q36 | .788 |
| Q17 | .631 | Q37 | .716 |
| Q18 | .764 | Q38 | .717 |
| Q19 | .747 | Q39 | .860 |
| Q20 | .800 | Q40 | .631 |

Source: SPSS output from primary data sources

Table 4 shows Extraction in communalities before rotation the amount of variance shares with all extraction values exceeding 0.6 which confirmed that each item shared some common variance with other items.

Total Variance Explained

Table 6: showing total variance explained

| Component | Ini. Eigen values | Rot. Sums of Sqrd Loadings |
|-----------|-------------------|-----------------------------|
|          | Total | % of Var | Cum % | Total | % of Var | Cum % |
| 1         | 9.198 | 22.995 | 22.995 | 3.515 | 8.789 | 8.789 |
| 2         | 3.923 | 9.808 | 32.803 | 3.491 | 8.729 | 17.517 |
| 3         | 3.325 | 8.312 | 41.115 | 3.326 | 8.316 | 25.833 |
| 4         | 2.370 | 5.926 | 47.041 | 3.242 | 8.104 | 33.938 |
| 5         | 1.972 | 4.930 | 51.971 | 2.838 | 7.096 | 41.033 |
| 6         | 1.782 | 4.454 | 56.425 | 2.520 | 6.300 | 47.333 |
| 7         | 1.629 | 4.071 | 60.496 | 2.341 | 5.853 | 53.186 |
| 8         | 1.503 | 3.757 | 64.253 | 2.059 | 5.148 | 58.333 |
| 9         | 1.191 | 2.977 | 67.230 | 2.046 | 5.116 | 63.450 |
| 10        | 1.149 | 2.872 | 70.102 | 2.022 | 5.055 | 68.504 |
| 11        | 1.123 | 2.808 | 72.910 | 1.762 | 4.406 | 72.910 |

Source: SPSS output from primary data sources
The total variance explained matrix is provided under table 6. The number of factors to be considered is dependent on Eigen values. Components with Eigen values greater than 1.0 are retained while others are not included in the model. Further identified component 1 explains 22.99% of variance, Component 2 explains 9.808% of variance, component 3 explains 8.31% of variance, Component 4 explains 5.93% of variance, Component 5 explains 4.9%, Component 6 explains 4.45% while Components 7 explains 4.07% while component 8 explains 3.75%. Component 9 explains 2.98% while components 10 and 11 explain about 2.87 and 2.80% respectively. Thus a total cumulative 72.9% of the variance is explained by these 11 components or factors.

![Scree Plot](image)

**Figure 1: Scree plot, SPSS output from primary data sources**

The above scree plot gives a clearer picture of identified factors and the respective eigen values. An inspection of the scree plot shows that there are a few components which are identical with respect to eigen value and may be dropped from further analysis. In order to confirm the same and to extract exact number of components parallel analysis is conducted. Parallel analysis results are shown below.

| Comp no. | Actl. Eigen value from PCA | Crit. value from Parallel analysis | Result |
|----------|----------------------------|-----------------------------------|--------|
| 1        | 9.198                      | 1.5831                            | Accepted |
| 2        | 3.923                      | 1.5164                            | Accepted |
| 3        | 3.325                      | 1.4638                            | Accepted |
| 4        | 2.370                      | 1.4215                            | Accepted |
| 5        | 1.972                      | 1.3822                            | Accepted |
| 6        | 1.782                      | 1.3490                            | Accepted |
| 7        | 1.629                      | 1.3172                            | Accepted |
| 8        | 1.503                      | 1.2868                            | Accepted |
| 9        | 1.191                      | 1.2587                            | Rejected |
| 10       | 1.149                      | 1.2299                            | Rejected |
| 11       | 1.123                      | 1.2017                            | Rejected |

Source: Researcher’s own computation from primary data sources

The results of parallel analysis confirm the decision to reduce the number of active components to 8 as actual PCA Eigen values exceed criterion value for 8 components. Therefore the number of components retained for further analysis is 8.

**Rotated component matrix using Varimax with Kaiser Normalization**

Rotated component matrix is presented in table no 8 for the components identified in the previous sections. Components/factors identified with latent factor description along with KMO and Bartlett values is presented in Table 9.

| Item | Component |
|------|-----------|
| Q30  | .802      |
| Q31  | .748      |
| Factor Identified | Item | KMO | BT | df | P-value |
|-------------------|------|-----|----|----|---------|
| 1                 | Q29  | .591| .318|    |         |
|                   | Q22  | .544| .328|    |         |
|                   | Q20  | .493| -.453| .305|         |
|                   | Q32  | .490| .338| .343|         |
|                   | Q40  | .380| .378|    |         |
|                   | Q39  | .837|     |    |         |
|                   | Q36  | .815|     |    |         |
|                   | Q34  | .808| .364|    |         |
|                   | Q13  | .659|     |    |         |
|                   | Q10  | .649| .319| .317|         |
|                   | Q6   | .768|     |    |         |
|                   | Q24  | .587| .457|    |         |
|                   | Q5   | .339| .580|    |         |
|                   | Q8   | .346| .555| -.328| -.304 |
|                   | Q7   | .551|     |    |         |
|                   | Q4   | .493|     |    | .344   |
|                   | Q25  | .479| .422| .315|         |
|                   | Q21  | .875|     |    |         |
|                   | Q15  | .756|     |    |         |
|                   | Q27  | .337| .755|    |         |
|                   | Q14  | -.684|     |    |         |
|                   | Q9   | .628|     |    |         |
|                   | Q33  | .725|     |    |         |
|                   | Q37  | .311| .632|    |         |
|                   | Q35  | .584|     |    |         |
|                   | Q38  | .532| .563|    |         |
|                   | Q26  | .460| -.427| .482|         |
|                   | Q18  | .791|     |    |         |
|                   | Q19  | .310| .767|    |         |
|                   | Q16  | -.422| .632|    |         |
|                   | Q17  | .452| .341|    |         |
|                   | Q2   | .808|     |    |         |
|                   | Q1   | .649|     |    |         |
|                   | Q28  | .533|     |    |         |
|                   | Q23  | .302| .382| -.562|         |
|                   | Q3   | .469| .498|     |         |
|                   | Q12  | .348| .388| .465|         |
|                   | Q11  | .409| .345| .460|         |

Source: Researcher’s own computation from primary data sources
| Q25 | Cost of services is less |
|-----|-------------------------|
| Q21 | Bank providing loan easily |
| Q15 | It has price of worth |
| Q27 | Quality is with respect to the price of this brand |
| Q14 | It can move congested traffic easily |
| Q9  | It has good pickup |
| 4   | .798                     |
|     | 1127.64                  |
|     | 10                      |
|     | .000                    |
| Q33 | Finance is available easily |
| Q37 | It gives less pollution |
| Q35 | Easy to learn (driving) |
| Q38 | It is a easy self employment source |
| Q26 | Repair cost is less |
| 5   | .770                     |
|     | 591.59                  |
|     | 10                      |
|     | .000                    |
| Q18 | Spare part easily available |
| Q19 | Spare parts are not costly |
| Q16 | It has technology leadership of the brand |
| Q17 | No advance booking is necessary to purchase |
| 6   | .639                     |
|     | 338.70                  |
|     | 6                       |
|     | .000                    |
| Q1  | Its Exterior styling is very good |
| Q2  | Seat designed is good |
| Q28 | It has good resale value |
| 7   | .626                     |
|     | 207.55                  |
|     | 3                       |
|     | .000                    |
| Q23 | I can earn good money for my livelihood |
| Q3  | It has driving comfort |
| Q12 | It has good breaking system |
| Q11 | It has good suspension |
| 8   | .614                     |
|     | 241.68                  |
|     | 6                       |
|     | .000                    |

Source: Researchers own computation from primary data sources

Description of questions in each of the identified factors is shown in Table 9. The 40 questions pertaining to brand preference among three wheeler drivers was used to conduct principal component analysis using SPSS version 23. Prior to conducting PCA, the suitability of data for conducting factor analysis was performed. Investigation of correlation matrix showed that many of the coefficients are 0.3 and above and while KMO stood at 0.76 and Bartlett’s test of Sphericity was significant. PCA revealed that there are 11 factors whose Eigen values are above. A look at scree plot revealed that there is a need to reconsider the number of factors to be used for further analysis. Thus decision was supported by Parallel analysis and 8 relevant factors identified. This 8 component solution explained 64.25% of the variance with component 1 contributing 22.99%, Component 2 contributing 9.8%, component 3 about 8.31, component 4 about 5.92, component 5 around 4.93, component 6 contributing 4.45, component 7 around 4.07 and component 8 contributing 3.76. In order to assist in the interpretation Varimax rotation was used.

CONCLUSIONS

This study has extracted 8 factors that are significant in explaining the brand preference of drivers of commercial three wheeler automobiles. An analysis of these factors will provide new insights to manufacturers, distributors and importers of Commercial three wheeler passenger auto rickshaws. A deeper analysis of these factors will also enrich government and policy makers and road transport authorities in policy decisions

These 8 factors can explain various aspects of brand preference of drivers in terms of (i) Passenger preference , (ii) satisfaction of drivers, ( iii) Features attracting customers, (iv) being price worthy, (v) source of employment (vi) technology leadership and easy maintenance (vii) Stylish features and resale value, (viii) safety features.

LIMITATIONS AND STUDY FORWARD

This study focussed on identifying factors that determine brand preference of commercial three wheeler ( 3+1),fuel based passenger auto rickshaw drivers.. Further research can be done in understanding how these identified factors can be related with brand preference and study the impact of one or more of the factors on brand preference by drivers of three wheeler auto rickshaws in general.

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