CUSTOMER SATISFACTION TOWARDS THE PERCEPTION IN AMBIENCE OF SMALL CAR WITH REFERENCE TO MADURAI REGION

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Abstract

Some of the consumers who get satisfied in the ambience of the product, not bothering about the quality, utility, price and technology even never bother about their affordability. It is the colour or the shape that may attract the consumer and not the brand or anything else. The dimension Ambience is also an important one to give satisfaction to the customer while buying a car. The customers were used to be attracted by some factors of the product. Some may look for the longevity of the product. The hypothesis, "there is no difference of perception among the customers belong to the family size of below three and above three with regard to the dimension ambience" is rejected, partially with regard to the one variable and accepted mostly on other four variables. To identify the satisfying factors under the dimension ambience, among the four groups of customers belong to different income, they were asked to rate the five factors given in five point scale. The factors were identified by the higher intensity of perception which could be decided from the mean scores of the factors. The mean scores and the 'F' statistics have been derived from the test of one way ANOVA. The next one is the bench marking, which involves looking outward to examine how others achieve their performance and to change the present process to suit to the requirements or to improve it further. Taguchi's quality loss function will also help to modify the product into quality one with minimum efforts and maximum skills.

Keywords:

Ambience, Customers, Factors, Purchasing and Perception

1. INTRODUCTION

One segment that has caught everybody's attention is the scope of battery-operated cars [1]. It was precisely for this reason that some major carmakers like General Motors, Renault, Hyundai, Tata Motors and Maruti Suzuki announced their plans to bring "green cars" in the near future. India is also being seen as a major source of e-cars for global markets [2]. On the other hand, the commercial vehicle segment saw, global players like Volvo, Navistar, Tata Motors, Ashok Leyland and Mercedes-Benz renewing their focus on the Indian market, thanks to the boom in the infrastructure sector and consistent economic growth [3]. Some of the consumers who get satisfied in the ambience of the product, not bothering about the quality, utility, price and technology even never bother about their affordability [4]. It is the colour or the shape that may attract the consumer and not the brand or anything else [5] – [7].

1.1 SIGNIFICANCE OF THE STUDY

A review of literature reveals that there are more studies on customer satisfaction besides certain factors influencing consumer's buying behaviour. But it may change due to the influence of various economic, cultural and environmental factors. It is vital to find out the determinants of the behaviour and intention of the customer in purchasing a small car. Also their expectations and delivery of services in the areas of tangibles, individualized attention, performance, assurance and empathy or courtesy. As these dimension are prime importance for any car manufacturing company, they generate interest in knowing the factors which give rise to customer satisfaction. This study may help the car manufacturers to understand their position in service quality, manufacturing and marketing systems. So the manufacturers can boldly enter into the venture of small car production by involving suitable strategies commensurate with the expectations of customers and give them satisfaction.

1.2 PERIOD OF THE STUDY

The survey was conducted by the researcher during the period from August 2018 to March 2019 after having fully understood the concepts and systems in marketing the small cars. The referred period of the survey was to the calendar year.

2. METHODOLOGY

The methodology followed in this study has been detailed below: Since the study is based heavily on primary data, the customer of small cars are identified by contacting respective Regional Transport offices, the petrol bunks, friends, relatives and service stations. The total customers are the global population and from them, sample customers were identified.

2.1 STATISTICAL TOOLS USED

The following statistical tools were employed. They are:

- Frequency Analysis – Descriptive statistics
- Percentage Analysis
- *t* test
- One way ANOVA
- Factor Analysis
- Discriminant Analysis

2.2 DESCRIPTIVE STATISTICS

The descriptive statistics include the measures of central tendency and dispersion. The mean and standard deviation for all the factor under the ten dimensions were calculated and studied. The nature of distribution of the factors, which give satisfaction to customer taken in the study, could be assessed from the mean and standard deviation of the different groups among the profile variable. The variables include:

1. Liking the colour
2. Liking the shape
3. Liking the shape of the front side
4. Liking the shape of the rear side
5. The interior is more attractive

The dimension Ambience is also an important one to give satisfaction to the customer while buying a car. The consideration of customers with regard to the five supporting factors have been presented in Table.1. The Table.1 clearly gives the opinion that, most of the customers satisfied in buying a car, since the user like the color of the car, the shape of the car, the shape of the front side and also the rear side and attractive interiors.

Table.1. Level of Agreement on Ambience of Car

Variables	Level of agreement			Total
	Agree	Undecided	Disagree	
1	393 (78.6)	96 (19.2)	11 (2.2)	500 (100)
2	394 (78.8)	86 (17.2)	20 (4.0)	500 (100)
3	374 (74.8)	110 (22.0)	16 (3.2)	500 (100)
4	302 (60.4)	164 (32.8)	34 (6.8)	500 (100)
5	319 (66.8)	168 (33.6)	13 (2.6)	500 (100)

Source: Primary Data

The significant difference of perception with regard to the satisfactional critical Factor/Dimension "Ambience" among male and female customers was calculated by fitting t test (2 tail) with the obtained data. The result is shown in Table.2.

Table.2. Ambience – perception of male and female compared

Variables	Gender				't'	Sig. level
	Male N=458		Female N=42			
	Mean	SD	Mean	SD		
1	4.1223	0.773	3.5476	0.861	4.17*	0.000
2	4.0611	0.780	3.5952	1.127	2.62*	0.012
3	3.9760	0.723	3.5714	1.129	2.28*	0.028
4	3.7773	0.894	3.8810	1.017	-0.64	0.526
5	3.9258	0.904	4.1429	0.814	-1.64	0.107

* Significant at 5% level

While comparing the perception of males and females in respect of the variables under the dimension 'Ambience', significant difference in perception among them were noticed with regard to the variables, "Liking the colour" (4.17), "Liking the shape "(2.62) and "Liking the shape of the front side" (2.28). The variables liking the colour (4.1223) and liking the shape (4.0611) were highly perceived by males and the variable "interior is more attractive" (4.1429) was perceived highly by the females. Generally females are more particular about the attractive interiors.

The hypothesis "there is no significant different in perception among male and female customer regarding the variables under 'ambience'" is mostly rejected. Since the t values of the above three variables are significant at 5% level.

The perception of the four groups of customers, belong to different years of age as rated by them on the five factors in respect of the dimension on ambience was fitted with one way ANOVA and the result has been presented in Table.3.

Table.3. Ambience – perceived by different age group of customers

Variables	Mean Square (Age in years)				F Ratio	F Probability
	<30	31-40	41-50	>50		
1	4.0333	4.6640	3.9126	4.0351	2.6249*	0.0499
2	3.6556	4.1360	4.0680	4.0175	7.9561*	0.0000
3	3.7778	3.9880	4.0291	3.8421	2.4302	0.0645
4	3.5444	3.8600	3.8350	3.7544	2.8536*	0.0368
5	4.1667	3.8720	3.8932	4.0000	2.5882*	0.0523

* Significant at 5% level

It is ascertained from the result in Table.3, all the four age groups of customers, have highly perceived all the factors. Hence it is inferred that all the age group of customers are considering the ambience of the car while the user go for purchase a small car. However, significant difference of perception among the four age group of customers with regard to the factors, liking the colour (2.6249), liking the shape (7.9561), liking the shape of the rear side (2.8536) and interior is more attractive (2.5882).

It is inferred that all the age group of customers get satisfied in the factors contributing to ambience of the car.

The customers were used to be attracted by some factors of the product. Some may look for the longevity of the product. But some may concern only with the beauty, colour, shape and the better finish of the product. With regard to the car, the following five factors may act upon a customer to choose and satisfy. The mean scores of the factors perceived by the customers and the 'F' statistics obtained through the test of one way ANOVA is shown in Table.4.

Table.4. Ambience – the satisfying factors of ambience perceived by customers having different educational qualifications

Variables	Mean Square (Education)			F Statistics	F Probability
	Upto +2	UG	PG		
1	3.6190	4.0965	4.1348	7.8280*	0.0004
2	3.8333	4.1184	3.9609	3.3260*	0.0367
3	4.1429	3.9956	3.8522	3.5655*	0.0290
4	3.9286	3.7588	3.7870	0.6245	0.5360
5	4.1905	3.9649	3.8783	2.2715	0.1042

* Significant at 5% level

The Group-I customers who qualified up to +2, have satisfied with the factors, liking the shape of the car the front side, the rear side and the attractive interiors, since the mean scores of the respective factors are 3.8333, 4.1429, 3.9286 and 4.1905. The factors, liking the colour, liking the shape of the car, front side and attractive interiors are more satisfied for the Group II customers, who are under graduates and the mean scores of the above are 4.0965, 4.1184, 3.9956 and 3.9649 respectively. The

Group III customers the post graduates, satisfied with the factors, liking the colour, liking the shape, shape of the front side and attractive interiors since the mean scores are 4.1348, 3.9609, 3.8522 and 3.8783 respectively. Interestingly all the customers were satisfied with the factors, liking the shape, attractive interiors and shape of the front side.

However, significant difference in their perception with regard to the factors, liking the colour (7.8280), liking the shape (3.3260) and liking the shape of the front side (3.5655) was found, since the 'F' statistics of respective factors , were found to be significant at 5% level. Hence these three factors may be considered as important.

Table.5. Ambience – perceived by the customers belong to different occupation

Variables	Mean Square (occupation)						F Stati-stics	F Prob-ability
	1	2	3	4	5	6		
1	3.979	4.069	4.048	4.194	4.068	4.167	0.740	0.594
2	3.794	3.828	4.065	4.151	4.063	4.417	3.008*	0.011
3	3.897	4.000	3.936	3.925	3.986	3.583	0.757	0.581
4	3.536	3.828	3.694	3.979	3.86	3.417	3.213*	0.007
5	4.093	4.172	3.790	3.860	3.961	3.333	2.599*	0.025

* Significant at 5% level

The highly perceived mean scores by the respondents – customers show the high satisfaction of the customers towards that respective factors. The mean scores and 'F' statistics with regard to the five factors supporting the dimension ambience as perceived by customers belong to various occupations have been presented in Table.5.

On inspection of the Table.5, the two factors relating to the dimension ambience of the car, namely, liking the colour (3.9794, 4.0690, 4.0484, 4.1935, 4.0676 and 4.1667) and liking the shape of the car (3.7938, 3.8276, 4.0645, 4.1505, 4.0628 and 4.4167) were considered as satisfactory factors by the six groups of customers, belong to business, the company executives, Government Staff, Academicians Professionals and Ex-service staff. Barring the ex-service staff, other five categories of customers, satisfied from the factor liking the shape of the front side of the car (3.8969, 4.0000, 3.9355, 3.9247 and 3.9855). The company executives, Academicians Professionals got satisfied with the factor liking the shape of the rear side of the car (3.8276, 3.9785 and 3.8599). Barring the ex-service staff, other five categories of customers satisfied with THE factor, the interior is more attractive (4.0928, 4.1724, 3.7903, 3.8602 and 3.9614).

The significant difference of perception among the six categories of customers were found in respect of the factors, liking the shape of the car (3.0081), liking the shape of the rear side (3.2126) and interior is more attractive (2.5989) since their 'F' statistics are statistically significant at five percent level.

The data on Ambience were tested by applying t test to find out whether any significant difference of perception exists among the customers belong to Joint and Nuclear Family. The result has been tabled in the Table.6.

Table.6. Ambience – perception of customers belong to joint and nuclear families - compared

Variables	Nature of Family				t	Sig. level
	Joint N=123		Nuclear N=377			
	Mean	SD	Mean	SD		
1	4.0569	0.803	4.0796	0.795	0.27	0.785
2	4.0163	0.810	4.0239	0.830	0.09	0.928
3	4.0407	0.751	3.9098	0.777	1.66	0.098
4	3.8537	0.920	3.7639	0.899	0.94	0.346
5	3.8130	0.872	3.9867	0.904	1.90*	0.059

* Significant at 5% level

It is ascertained from the Table.6, significant difference of perception between the customers belong to Joint and Nuclear Family in respect of only one variable that is 'the interior is more attractive'. The t value of this variable is -1.90, which IS nearly higher than or equal to the tabulated t value.

Hence the hypothesis, "there is no difference of perception between the two types of customers that are from joint and nuclear families" was partially rejected in respect of the one variable. The other four variables, have no significant difference in their t values, hence it is presume the user all think alike about these variables. It is concluded that, the ambience also play a role in purchasing a car. With regard to the dimension 'ambience', the perception of the customers belong to different family size were compared to find out whether there are any difference in the perception between the two groups, the result of the 2 tail t test is furnished in Table.7.

Table.7. Ambience – perception of customers belong to the family size having the members of below 3 and above 3 members

Variables	Family Size				t	Sig. level
	Below 3 N=118		Above 3 N=382			
	Mean	SD	Mean	SD		
1	3.9153	0.769	4.1230	0.799	-2.54*	0.012
2	3.8983	0.841	4.0602	0.816	-1.84	0.067
3	3.9746	0.685	3.9319	0.797	0.57	0.571
4	3.7373	0.871	3.8010	0.915	-0.69	0.493
5	3.9576	0.871	3.9398	0.907	0.19	0.848

* Significant at 5% level

It is ascertained from the Table.7 significant difference in perception between the customers belong to the family size of Three or below three and above three members in respect of the variable liking the colour. t value is -2.54, which is significant at 5% level. For the other four variables the customers think alike. Hence, the colour of the car plays a significant role in choosing the car.

The hypothesis, "there is no difference of perception among the customers belong to the family size of below three and above three with regard to the dimension 'ambience'" is rejected, partially with regard to the one variable and accepted mostly on other four variables.

It is inferred that the customers are in the same opinion about, the shape of the car, front side, rear side and interiors. But the colour seems to be significant among them.

Table.8. Ambience – Perceived by Different Income Group of Customers

Variables	Mean Square (Income)				F Stati-stics	F Proba-bility
	15000 to 30000	31000 to 50000	51000 to 70000	> 71000		
1	4.0453	4.0598	4.2857	3.9412	1.6088	0.1864
2	4.0905	3.9076	4.0714	4.1176	1.8963	0.1292
3	4.0453	3.8424	3.7857	4.0588	3.4150*	0.0173
4	3.8313	3.7174	3.7321	4.0588	1.1389	0.3328
5	4.0000	3.8533	3.9286	4.1765	1.3290	0.2642

* Significant at 5% level

To identify the satisfying factors under the dimension ambience, among the four groups of customers belong to different income, the user were asked to rate the five factors given in five point scale. The factors were identified by the higher intensity of perception which could be decided from the mean scores of the factors. The mean scores and the 'F' statistics have been derived from the test of one way ANOVA and the result has been provided in Table.8.

On examination of the Table.8, all the four groups of customers perceived highly about all the five factors. Hence all the five factors are considered to be the satisfying factors of Ambience.

Significant difference in perception among the four groups in respect of the critical factor ambience was found in one factor liking the shape of the front side since the 'F' Statistics (3.4150) of the factor is statistically significant at five percent level. Hence this factor has significant in nature.

3. CONCLUSION

Apart from utility value most of the customers purchased the car, considering the ambience of the car. The colour, the shape (model), the shape of the front and rear sides and the interior were considered by the customers.

3.1 SUGGESTIONS

The next one is the benchmarking, which involves looking outward to examine how others achieve their performance and to change the present process to suit to the requirements or to improve it further. Taguchi's quality loss function will also help to modify the product into quality one with minimum efforts and maximum skills.

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