

Affordability of Small Cars Buyers with Reference to Madurai Region

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Abstract

“Consumption plays a central role in economic theory. The most popular theories and models in economic consumer research portray consumers as somewhat passive and rational decision makers and assume that well-defined and insatiable desires for goods and services drive consumer behaviour in the market”. 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. 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. The hypothesis “There is no difference of perception between male and female customers in respect of variables under Affordability” was partially rejected with regard to the above two variables. But with regard to other ten variables, it is accepted. In spite of ambition and need for a car, the customer should have affordability to purchase a car. So, to suit their affordability, the price of the car and their initial costs should be within the limit of the customer’s income or savings. Also even after purchase a car, the customer has to bear expenditure on fuel, maintenance of engine and repairs. Therefore, according to the availability of funds with the customer, he has to restrict his expenditure in reasonable way and choose the car fit in to their economic condition.

Keywords: Behavior; Manufacturing; Production; Market and customer

Introduction

The effect of the Globalization has triggered the cultural transformation among people. It also has made the people to get utmost satisfaction by fulfilling their needs and aspirations whatever and whenever they required. Once there was manufacturers’ market. Whatever they produced, consumers had to buy irrespective of quality and durability, since the consumers were looking for the utility value only. But, the globalization has brought the competition among manufacturers which has in turn transformed the producer’s market as customer market. Unless, the consumers or the customers are convinced and satisfied, it is very hard for a manufacturer to withstand in the market. Hence the customer satisfaction is considered to be more important and vital for the survival of the product in the market. Having this important concept in mind, the researcher has tried to study the customer satisfaction on the small cars [1].

It forms a part of economic domain in the buying process under the major attribute buying or customer behaviour. “Consumption plays a central role in economic theory. The most popular theories and models in economic consumer research portray consumers as somewhat passive and rational decision makers and assume that well-defined and insatiable desires for goods and services drive consumer behaviour in the market”. Hence the consumers get satisfied in consuming or buying the goods affordable to their income or economic condition. Some of the attributes/factors represent the affordability to buy a small car, have been identified and incorporated the questionnaire under the dimension ‘Affordability’. 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 [2].

Period of the Study

The survey was conducted by the researcher during the period from August 2015 to March 2016 after having fully understood the concepts and systems in marketing the small cars. The referred period of the survey was to the calendar year [3-5].

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 [6,7].

Statistical tools used

The following statistical tools were employed. They are:

1. Frequency Analysis – Descriptive statistics
2. Percentage Analysis

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3. 't' test
4. One way ANOVA
5. Factor Analysis
6. Discriminant Analysis

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.

Frame Work of Analysis

The dimension Affordability is supported by twelve variables and the agreement level of the respondents in respect of the twelve variables have been presented in Table 1.

It is extracted from the Table 1, the mostly agreed variables are, the car with good fuel efficiency, Low price, less maintenance cost and the spare parts. Also be able to purchase on loan and any where service even on the road side. Since other variables, show only the minimum agreement level, these were not splay any significant role in customer satisfaction while purchasing small car [8,9].

The significant difference of perception between male and female customers in respect of variables under the dimension affordability was found out from the result of the 't' test and presented in Table 2.

It is understand from Table 2 it is found that there is difference of perception between male and female customers with regard to two variables under the dimension "Affordability". They are "I prefer gas car" (-2.81) and "Purchased the car on loan availed from financial institutions/Bank" (2.32). The highly perceived variable by both male and female is "about fuel efficiency (4.3035 and 4.0952).

The hypothesis "There is no difference of perception between male and female customers in respect of variables under Affordability" was partially rejected with regard to the above two variables. But with regard to other ten variables, it is accepted.

One should have affordability to buy a car. To reduce fuel expenses,

one may apt for a car gives good fuel level efficiency, some may go for low priced car to suit to their income or savings, like that, there are Twelve factors which supports the dimension affordability. The customers belong to various age groups were asked to rate the twelve variables on a five point scale strongly agreed to strongly disagree as the makes assigned from 5 to 1 respectively. The mean scores of each factor among the four groups computed separately. The onway ANOVA was been administered to examine the significant difference among the four groups. The result has been presented in Table 3.

The Group-I considered the factors fuel efficiency, low maintenance cost, the cost of the car suited to Income, since the means scores are 4.4000, 3.9000 and 4.2667 respectively. The factors identified by Group-II customers are, fuel-efficiency, cost of the car suited to income, since the mean scores are 4.3640 and 4.0960 respectively. Group-III customers also prefer the same factors considered by Group-II since the respective mean scores are 3.9612 and 3.9029. The Group-IV customers have considered the factors, the good fuel efficiency, low price, low maintenance cost, cost of the car suited to income and petrol car since the respective mean scores are 4.3509, 4.1404, 4.2281, 4.1930 and 4.1053. Regarding the perception on various factors of affordability, the significant difference among the four groups of customers have also been identified in case of fuel efficiency (8.2569), low price (3.7394), low maintenance cost (6.6445), the cost of car suited to income (3.6463), offer more rebate (7.6267), second hand car (3.5789), preference of petrol car (3.6391) and car fitted with gas (4.0026), since the 'F' statistics are significant at the five percent level.

Inspite of ambition and need for a car, the customer should have affordability to purchase a car. So, to suit their affordability, the price of the car and their initial costs should be within the limit of the customer's income or savings. Also even after purchase a car, the customer has to bear expenditure on fuel, maintenance of engine and repairs. Therefore, according to the availability of funds with the customer, he has to restrict his expenditure in reasonable way and choose the car fit in to their economic condition. The accompanying Twelve variables clarify in different mode, the moderateness of the clients. The mean scores of the variables saw by the distinctive instructive gatherings of clients may uncover on which element or components, the clients get fulfilled in purchasing a little auto. As needs be the clients were separated into three gatherings to be specific, Group-I Qualified up to +2, Group-II under Graduates and Group-III Post-Graduates. Their perception on the twelve factors were rated by five point scale, using

Sl. No.	Variables	Level of agreement			Total
		Agree	Undecided	Disagree	
1.	Which gives good fuel efficiency	430 (86.0)	61 (12.2)	9 (1.8)	500 (100.00)
2.	The price is low	305 (61.0)	163 (32.6)	32 (6.6)	500 (100.00)
3.	Maintenance cost is low	331 (66.2)	136 (27.3)	33 (6.6)	500 (100.00)
4.	The cost of the car suited to my income	401 (80.2)	80 (16.0)	19 (3.8)	500 (100.00)
5.	Cost of spares is low	266 (53.2)	165 (33.0)	69 (13.8)	500 (100.00)
6.	Since offered more rebate	195 (39.0)	191 (38.2)	114 (22.8)	500 (100.00)
7.	Whether your car already owned (second hand)	107 (21.4)	88 (17.6)	305 (61.0)	500 (100.00)
8.	I prefer diesel car	185 (37.0)	48 (9.6)	267 (53.4)	500 (100.00)
9.	I prefer petrol car	296 (59.2)	27 (5.4)	177 (35.4)	500 (100.00)
10.	I prefer gas car	102 (22.4)	126 (25.20)	262 (52.4)	500 (100.00)
11.	Purchased the car on loan availed from financial institutions/bank	257 (51.4)	113 (22.6)	130 (26.0)	500 (100.00)
12.	Anywhere service-even on the road-side	255 (51.0)	166 (33.2)	79 (15.8)	500 (100.00)

Source: Primary data.

Table 1: The Importance of Affordability. I. Purchased the car.

Sl. No.	Variables	Gender				t'	Sig. level
		Male N=458		Female N=42			
		Mean	SD	Mean	SD		
1.	Which gives good fuel efficiency	4.3035	0.758	4.0952	0.790	1.64	0.108
2.	The price is low	3.7882	0.917	3.7381	1.170	0.27	0.788
3.	Maintenance cost is low	3.8057	0.872	3.8571	0.899	0.36	0.723
4.	The cost of the car suited to my income	4.1004	0.790	4.0714	0.973	0.19	0.852
5.	Cost of spares is low	3.4782	0.880	3.7857	1.116	1.74	0.089
6.	Since offered more rebate	3.2644	1.064	3.4762	1.418	0.93	0.355
7.	Whether your car already owned (second hand)	2.3603	1.281	2.6667	1.223	1.55	0.128
8.	I prefer diesel car	2.7380	1.700	2.5238	1.550	0.85	0.399
9.	I prefer petrol car	3.5197	1.658	3.5476	1.699	0.10	0.919
10.	I prefer gas car	2.5568	1.242	3.2381	1.527	2.81'	0.007
11.	Purchased the car on loan availed from financial institutions/bank	3.4710	1.249	3.0000	1.104	2.32'	0.025
12.	Anywhere service-even on the road-side	3.4520	1.007	3.3810	0.962	0.46	0.650

*Significant at 5 percent level.

Table 2: Affordability – Male and female perceptions compared.

Sl. No.	Variables	Mean Square (Age in years)				F Statistics	F Probability
		Below 20 Gr. I	31-40 Gr. II	41-50 Gr. III	Above 50 Gr. IV		
1.	Which gives good fuel efficiency	4.4000	4.3640	3.9612	4.3509	8.2569*	0.000
2.	The price is low	3.6222	3.7760	3.7476	4.1404	3.7394*	0.0112
3.	Maintenance cost is low	3.9000	3.7560	3.6311	4.2281	6.6445*	0.0002
4.	The cost of the car suited to my income	4.2667	4.0960	3.9029	4.1930	3.6463*	0.0127
5.	Cost of spares is low	3.3333	3.5040	3.5437	3.7018	2.0515	0.1058
6.	Since offered more rebate	3.2222	3.1040	3.5146	3.7544	7.6267*	0.0001
7.	Whether your car already owned (second only)	2.5222	2.4400	2.4175	1.8772	3.5789*	0.0139
8.	I prefer diesel car	2.7222	2.6440	3.0777	2.4035	2.4001	0.0671
9.	I prefer petrol car	3.1889	3.5280	3.4757	4.1053	3.6391*	0.0128
10.	I prefer gas car	2.6222	2.4640	2.7087	3.0877	4.0026*	0.0078
11.	Purchased the car on loan availed from financial institutions/bank	3.1111	3.4400	3.4563	3.4211	1.7578	0.1543
12.	Anywhere service-even on the road-side	3.3222	3.5400	3.3689	3.3684	1.5112	0.2107

*Significant at 5 percent level.

Table 3: Affordability to buy a small car – perceived by different age group of customers.

are way ANOVA test, the mean scores and 'F' statistics were computed. The factor scoring high mean scores considered satisfying factor. The result of the one way ANOVA presented in Table 4.

The Group-I customers get satisfied with the factors, the car gives good fuel efficiency, the low price, the cost of the car suited to the income, since their mean scores are 4.3333, 4.0476 and 3.9762 respectively. The satisfying factors in respect of Group-II customers are, the car gives good fuel efficiency, and the cost of the car, suited to my income, since their mean scores are 4.2675 and 4.0395 respectively. The satisfying factors of Group-III customers are, the car gives good fuel efficiency and the cost of the car suited to my Income, since the mean scores of these factors are 4.2957 and 4.1783.

Nonetheless, the four gatherings of clients essentially varied in their recognition in regard of four elements to be specific, low upkeep cost (3.5760), I lean toward diesel auto (3.2390), I favor gas auto (5.5504) and anyplace benefit even out and about side (5.6616). The "F" measurements of the over four elements are noteworthy at five pre penny level. Additionally because of its huge arrangement under this basic variable, these four elements may considered playing lead come in the fulfillment of the client.

The profile variable occupation was grouped into six, namely, Business-Group-I, Company Executive-Group-II, Government Staff-

Group-III, Academicians-Group-IV, Professionals-Group-V and Ex-Service Staff- Group VI. The customers belong to the six different occupational groups were asked to rate the Twelve factors relating to the dimension the affordability. The perceived ratings in the five point scale was transformed into data and the same were fitted with the statistical tool one way ANOVA to calculate the mean scores and 'F' statistics. The computed mean scores and the 'F' statistics of the respective factors were displayed in Table 5.

Out of the twelve factors, the satisfactory factors of all the six group of customers' are the car gives good level efficiency (4.4433, 4.3448, 4.3548, 4.2688, 4.1932 and 4.2500) and the cost of the car suited to my income (4.2165, 3.8966, 4.2258, 4.1613, 4.0000 and 4.1667) the factor price is low was considered satisfactory by the company executives, Government Staff, Ex-Service Staff (3.9310, 3.9889 and 4.0833). The factor, maintenance cost is low was considered by Business Men, Company Executives, Government Staff, Ex-Service Staff (3.8041, 3.9655, 4.0161 and 4.0000). Preference to petrol car was given by Ex-service staff (4.1667).

The 'F' statistics of the factors, cost of spares is low (3.8226), since offered more rebate (4.4358), I prefer petrol car (2.4206), and purchased the car on loan available from Financial Institutions/Banks (3.8203) are found to be statistically significant at five percent level. Hence there are

Sl. No.	Variables	Mean Square (Education)			F Statistics	F Probability
		Up to +2	UG	PG		
1.	Which gives good fuel efficiency	4.3333	4.2675	4.2957	0.1656	0.8474
2.	The price is low	4.0476	3.7368	3.7826	1.9473	0.1438
3.	Maintenance cost is low	3.6190	3.7368	3.9174	3.5760*	0.0287
4.	The cost of the car suited to my income	3.9762	4.0395	4.1783	2.2318	0.1084
5.	Cost of spares is low	3.3333	3.4474	3.5913	2.2733	0.1040
6.	Since offered more rebate	3.3333	3.2456	3.3130	0.2614	0.7701
7.	Whether your car already owned (second only)	2.3333	2.3114	2.4696	0.9160	0.4008
8.	I prefer diesel car	2.8095	2.5132	2.9087	3.2390*	0.0400
9.	I prefer petrol car	3.5714	3.6491	3.3870	1.4512	0.2353
10.	I prefer gas car	3.1429	2.6711	2.4609	5.5504*	0.0041
11.	Purchased the car on loan availed from financial institutions/bank	3.1667	3.5088	3.2957	2.3871	0.0930
12.	Anywhere service-even on the road-side	2.9524	3.4912	3.4913	5.6616*	0.0037

*Significant at 5 percent level.

Table 4: Affordability – Perceptions of customers belong to different group of educational qualification.

Sl. No.	Variables	Mean Square (Occupation)						F Statistics	F Probability
		1	2	3	4	5	6		
1.	Which gives good fuel efficiency	4.4433	4.3448	4.3548	4.2688	4.1932	4.2500	1.5984	0.1589
2.	The price is low	3.7320	3.9310	3.9839	3.6129	3.7874	4.0833	1.6333	0.1495
3.	Maintenance cost is low	3.8041	3.9655	4.0161	3.6667	3.7826	4.0000	1.5377	0.1765
4.	The cost of the car suited to my income	4.2165	3.8966	4.2258	4.1613	4.0000	4.1667	1.8531	0.1011
5.	Cost of spares is low	3.2062	3.4483	3.4355	3.6989	3.5990	3.2500	3.8036*	0.0022
6.	Since offered more rebate	3.1959	2.9655	2.9194	3.1935	3.5314	3.0833	4.4358*	0.0006
7.	Whether your car already owned (second only)	2.3918	2.5862	2.2903	2.5161	2.3333	2.5000	0.5004	0.7760
8.	I prefer diesel car	2.6495	3.2759	2.2097	2.7742	2.8164	2.5000	2.0129	0.0754
9.	I prefer petrol car	3.2680	3.1034	3.3387	3.3978	3.7729	4.1667	2.4206*	0.0349
10.	I prefer gas car	2.7629	2.2069	2.6613	2.6129	2.5894	2.5833	0.8808	0.4937
11.	Purchased the car on loan availed from financial institutions/bank	3.2062	2.8276	3.2903	3.3011	3.6329	2.9167	3.8203*	0.0021
12.	Anywhere service-even on the road-side	3.2268	3.2414	3.4677	3.5054	3.5266	3.7500	1.7410	0.1236

*Significant at 5 per cent level.

Table 5: Affordability – Perceived by customers having different occupation.

Sl. No.	Variables	Nature of Family				t'	Sig. Level
		Joint N=123		Nuclear N=377			
		Mean	SD	Mean	SD		
1.	Which gives good fuel efficiency	4.2033	0.829	4.3130	0.739	-1.31	0.192
2.	The price is low	3.8049	1.121	3.7772	0.874	0.25	0.803
3.	Maintenance cost is low	3.6911	0.924	3.8488	0.854	-1.67	0.096
4.	The cost of the car suited to my income	4.0163	0.789	4.1247	0.811	-1.31	0.190
5.	Cost of spares is low	3.4472	0.977	3.5225	0.881	-0.76	0.448
6.	Since offered more rebate	3.4553	1.250	3.2281	1.040	1.82	0.070
7.	Whether your car already owned (second only)	2.1382	1.314	2.4668	1.257	-2.43*	0.016
8.	I prefer diesel car	2.4634	1.636	2.8037	1.698	-1.98*	0.048
9.	I prefer petrol car	3.8130	1.575	3.4271	1.678	2.32*	0.021
10.	I prefer gas car	2.9593	1.224	2.5013	1.280	3.56*	0.000
11.	Purchased the car on loan availed from financial institutions/bank	3.7154	1.149	3.2732	1.254	3.62*	0.000
12.	Anywhere service-even on the road-side	3.3089	1.033	3.4907	0.990	-1.71	0.089

*Significant at 5 percent level.

Table 6: Affordability – Perception of customers belong to joint and nuclear family.

significant difference of perception among the six groups of customers found in respect of the above four factors.

The perception of the customers belong to joint and nuclear family was compared to examine the difference if any, on the variables, by employing the statistical tool 't' test. The result is presented in Table 6.

It is ascertained from Table 6, that the 't' values of the variables whether your car already owned, I prefer diesel car, I prefer petrol car, I prefer gas car and purchased the car on loan availed from financial institutions/bank in Sl. Nos. 7, 8, 9, 10 and 11 are -2.43, -1.98, 2.32 and 3.62 respectively and these are significant at 5 per cent level. Hence

it shows the significant difference of perception among the above two categories of customers in respect of the above four variables.

Therefore, the hypothesis, “there is no difference of perception among the customers belong to Joint and Nuclear family with regard to the dimensions affordability” is partially rejected with regard to the above four variables and mostly accepted with regard to the other eight variables.

The perception of the customers belong to both the sizes of family namely below three members and above three members were compared through the significant ‘t’ and the ‘t’ values obtained for the Twelve variables were presented in Table 7.

Out of the twelve variables tested with ‘t’ test, seven variables namely, the car which shows good fuel efficiency, the price is low, maintenance cost is low, cost of spares is low, since offered more rebate, prefer diesel model and prefer gas model are found to the significant, since the ‘t’ values are 2.62, 1.90, -2.51, -3.29, -2.39, -3.36 and 2.67. Hence it is inferred that the two categories of customers differed in their perception with regard to the above seven variables.

Hence the hypothesis, “there is no difference of perception among the two categories of customers belong to the families of below three members and above three members with regard to the dimension affordability is mostly rejected”.

It is inferred that, different types of the customers have different values of affordability in buying a small car. The one way ANOVA was used to compute the mean scores and ‘F’ statistics. The result has been presented in Table 8 below.

The satisfying factors perceived by the Group-I customers are the car gives good fuel efficiency and the cost suited to income since their mean scores are 4.4280 and 4.0988 respectively. The Group II customers’ satisfying factors are the car gives good fuel efficiency, and cost of the can suited to income. The Group III and IV customers perceived the following satisfying factors. They are, good fuel efficiency (4.3393, 3.9412), the price is low (4.0000, 4.1118), Maintenance cost is low (4.1607, 4.1765), cost of the car is suited to income (4.2500, 4.1176). In addition, the Group III customers’ were satisfied with the factor, I prefer petrol car (3.9286).

Except the three factors namely, cost of the car suited to income, cost of the spares is low, purchased the car on loan form bank, all the other nine factors are found to be statistically significant at five percent level, according to their ‘F’ statistics. Hence all the nine factors have the significant differences in perception by the four groups of customers. Hence the nine factors seems to be significant in nature.

SI. No.	Variables	Family Size				‘t’	Sig. Level
		Below 3 N=118		Above 3 N=382			
		Mean	SD	Mean	SD		
1.	Which gives good fuel efficiency	4.4407	0.723	4.2382	0.769	2.62*	0.009
2.	The price is low	3.6525	0.820	3.8246	0.971	1.90*	0.058
3.	Maintenance cost is low	3.6441	0.801	3.8613	0.890	-2.51*	0.031
4.	The cost of the car suited to my income	4.1186	0.808	4.0916	0.806	0.32	0.751
5.	Cost of spares is low	3.2627	0.919	3.5785	0.889	-3.29*	0.001
6.	Since offered more rebate	3.0763	1.071	3.3482	1.100	-2.39*	0.018
7.	Whether your car already owned (second only)	2.3729	1.211	2.3901	1.299	-0.13	0.895
8.	I prefer diesel model	2.2712	1.657	2.8586	1.675	-3.36*	0.001
9.	I prefer petrol model	3.6271	1.642	3.4895	1.666	0.79	0.429
10.	I prefer gas car	2.9068	1.402	2.5236	1.229	2.67*	0.008
11.	Purchased the car on loan availed from financial institutions/bank	3.4068	1.269	3.3743	1.235	0.24	0.807
12.	Anywhere service-even on the road-side	3.3305	0.943	3.4817	1.019	-1.49	0.137

*Significant 5 percent level.

Table 7: Affordability – Perception by the customers belong to different sizes of the family.

SI. No.	Variables	Mean Square (Income)				F Statistics	F Probability
		15000 to 30000	31000 to 50000	51000 to 70000	70000 and Above		
1.	Which gives good fuel efficiency	4.4280	4.1141	4.3393	3.9412	7.4536*	0.0001
2.	The price is low	3.7860	3.6576	4.0000	4.4118	4.7284*	0.0029
3.	Maintenance cost is low	3.7449	3.7554	4.1607	4.1765	4.8011*	0.0026
4.	The cost of the car suited to my income	4.0988	4.0489	4.2500	4.1176	0.8941	0.4440
5.	Cost of spares is low	3.4815	3.5054	3.7143	3.1176	2.1032	0.0989
6.	Since offered more rebate	3.1029	3.4293	3.7321	2.8235	7.6805*	0.0001
7.	Whether your car already owned (second only)	2.5185	2.3424	1.8214	2.8235	5.3913*	0.0012
8.	I prefer diesel model	2.3128	3.3152	2.5000	2.8235	13.6535*	0.0000
9.	I prefer petrol model	3.6337	3.2717	3.9286	3.2941	3.0246*	0.0293
10.	I prefer gas car	2.6667	2.3370	3.2321	2.8235	7.8145*	0.0000
11.	Purchased the car on loan availed from financial institutions/bank	3.4321	3.3804	3.2143	3.2353	0.5496	0.6486
12.	Anywhere service-even on the road-side	3.5638	3.3696	3.2143	3.3529	2.5440*	0.0555

*Significant 5 percent level.

Table 8: Affordability – Perceived by different income groups of customers.

Factor analysis was done to find out the groupings of factors under the dimension affordability (Table 9).

The above factor analysis exhibits the rotated factor loadings for the twelve factors given as statements of Affordability of the customer to buy a car. The table evidently shows all the twelve statements have been extracted into four factors namely, F1, F2, F3 and F4. The four factors identified with new names according to its groupings under a category, influence the customer satisfaction in owning a car, are discussed hereunder.

Factor I (F1)

Among the twelve factors of the dimension Affordability, the factors namely, I prefer petrol car (.85488), I prefer gas car (.81763), I prefer diesel car (.84532) have higher loadings on Factor I. These three factors represent the preference of the car on fuel efficiency. Usually the customers look for a car to which expenditure on fuel to be less and expect the consumption also less. So it is natural, they may prefer diesel car, since the cost of diesel is less and consumption also less and the mileage is more. The same yardstick is also followed in the case of Gas fitted car. Hence the factor can be called fuel efficiency.

Factor II (F2)

Out of the twelve statements or factors under the dimension Affordability, the price is less (.68588), purchased the car on loan availed from financial Institution Bank (.60439) and Maintenance cost

is low (.57294) have high loadings on Factor II. The cost of the car has been seen as main element in buying process. Within their income, and in affordable cost, most of the customers, seek to own a car. In order to meet the cost of the car they approach the financial Institution for loan. Hence the Factor II can be referred as “cost conscious”.

Factor III (F3)

The factors having high loadings in this group are, since offered more rebate (.60428), cost of the car is low (.8245) and cost of the car suited to my income (.53335). The customers expect the price of the car should be less and suited to his income and also expects more rebates. These satisfactory factors may be grouped under Factor III in the name Rebate.

Factor IV (F4)

The fourth factor consists of, whether your car already owned (.75018), Anywhere service even in the road side (.63553) and when gives good level efficiency (.51679) have higher loadings on factor IV. The Factor IV can be referred as Preference of owned cars.

Discriminant analysis

Fisher’s linear discriminant function analysis adopted to find out discriminants of the three brands of cars namely Maruti, Hyundai and Tata (Table 10).

The variable in Sl.Nos. 1, 2, 4, 8, 9, 11 and 12 are the main

Sl. No.	Factors in statement	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1.	I prefer petrol car	.85488	-.18877	.12590	.11256	-.10726
2.	I prefer Diesel car	.84532	-.15913	.17094	-.07062	-.21092
3.	I prefer Gas car	.81863	.13788	.11014	-.01212	.08535
4.	The price is low	.14802	.68588	.06254	-.07324	.05710
5.	Purchased the car on load availed from Financial Institution/Banks	.24381	.60439	.02077	.10223	-.21908
6.	Maintenance cost is low	.16181	.57294	.47564	.07914	-.08666
7.	Since offered more rebate	.12462	-.12261	.82485	.05321	.08581
8.	Cost of spare is low	.01744	.11878	.60428	-.26372	.42165
9.	Cost of the car suited to my income	-.23883	.34452	.53335	-.4937	-.09182
10.	Whether your car already owned	-.19828	0.3536	-.09599	.75018	.21654
11.	Any where service in the road side	-.15585	-.30247	-.09282	.63553	.38723
12.	Which shows good fuel efficiency	.14970	.47520	-.09282	.51679	.01141
	Eugene Value	2.25081	1.7390	1.28957	1.21493	1.04688
	Percentage of Varibale	18.8	14.0	10.7	10.1	3.7
	Cumulative Percent	18.8	33.7	44.5	54.6	63.3

Table 9: Factor analysis for affordability.

Sl. No.	Variables	Co-efficient		
		Maruti	Hyundai	Tata
1.	Which gives good fuel efficiency	3.1142	2.8741	4.6349
2.	The price is low	4.7976	4.7280	5.1121
3.	Maintenance cost is low	2.7211	2.8085	2.2571
4.	The cost of the car suited to my income	6.3460	6.1505	6.6280
5.	Cost of spares is low	2.2707	2.2557	2.0261
6.	Since offered more rebate	-1.3593	-0.5322	-1.1554
7.	Whether your car already owned (second hand)	2.2039	2.2181	2.0975
8.	I prefer diesel car	3.3525	2.9786	4.0206
9.	I prefer petrol car	4.1220	4.1311	4.0495
10.	I prefer gas car	2.2274	2.1299	2.2054
11.	Purchased the car on loan availed from financial institutions/bank	3.8014	4.0504	3.7744
12.	Anywhere service-even on the road-side	4.3094	4.4255	4.0169

Table 10: Brand Discriminants – Affordability.

determinants of the brand. The price and it suited income discriminate Tata Models from others. Diesel cars of Tata and petrol cars of Maruti and Hyundai discriminate the other brands. Availing loan facilities and anywhere service discriminate Hyundai and Maruti from Tata.

Conclusion

It is found that there is significant difference of perception between male and female customers with regard to two variables under the dimension "Affordability". They are "I prefer gas car" and "Purchased the car on loan availed from financial institutions/Bank". The highly perceived variable by both the male and female is "fuel efficiency.

The customers of age below 30 years, 31-40 years and 41-50 years considered the factors fuel efficiency, low maintenance cost and the cost of the car suited to Income. The customers belong to above 50 years of age have considered the factors, the good fuel efficiency, low price, low maintenance cost, cost of the car suited to income and petrol car. Significant difference among the above four groups of customers have been identified with regard to the following factors that are fuel efficiency, low price, low maintenance cost, the cost of car suited to income, offer more rebate, second hand car, preference of petrol car and car fitted with gas.

The customers upto +2 qualified get satisfied with the factors, the car gives good fuel efficiency, the low price, the cost of the car suited to the income. The satisfying factors in respect of graduates and post-graduates customers are, the car gives good fuel efficiency, and the cost of the car, suited to my income. However, the four groups of customers significantly differed in their perception in respect of four factors namely, low maintenance cost, I prefer diesel car, I prefer gas car and anywhere service even on the road side.

Out of the twelve factors, which form the affordability the satisfactory factors of all the six group of customers' having different kinds of occupation are, the car gives good level efficiency and the cost of the car suited to their income the factor price is low was considered as an influencing satisfactory factor by the company executives, Government Staff, Ex-Service Staff. The factor, maintenance cost is low was considered by Business Men, Company Executives, Government Staff, Ex-Service Staff. Preference to petrol car was given by Ex-service staff. The following factors cost of spares is low, since offered more rebate, I prefer petrol car and purchased the car on loan available from Financial Institutions/Banks are found to be statistically significant.

The following factors whether your car already owned, I prefer diesel car, I prefer petrol car, I prefer gas car and purchased the car on loan availed from financial institutions/bank have significant difference of perception among the above two categories of customers of joint and nuclear families.

Seven factors namely, the car which shows good fuel efficiency, the price is low, maintenance cost is low, cost of spares is low, since offered more rebate, prefer diesel model and prefer gas model are found to be significant, since the two categories of customers belong to below three and above three members in a family differed in their perception with regard to the above seven variables. Therefore, they have different values of affordability in buying a small car.

The satisfying factors perceived by the customers belong to the income group of Rs.15000-30000 and 31000 – 50000 are the car gives good fuel efficiency and the cost suited to income. The customers having the income of Rs.51000-70000 and Rs.70000 and above perceived the following satisfying factors, they are, good fuel efficiency, the price is low, maintenance cost is low, cost of the car is suited to income. Except the three factors namely, cost of the car suited to income, cost of the spares is low, purchased the car on loan form bank, all the other nine factors are found to be statistically significant.

The car, which gives good fuel efficiency, low maintenance cost, low cost of spares, low price has been preferred by the customers. The important factor is the price of the car should be suited to their income.

Suggestions

In this competitive environment, all the car manufacturers are finding out suitable strategies to improve their sales. In this juncture, the concepts of total quality management and business process reengineering process will be of more helpful in their venture.

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