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**OBJECTIVES**

**HYPOTHESES**

**RESEARCH METHODOLOGY**

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- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19-22 June.

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**A STUDY ON EXISTING CAR CUSTOMERS (ALL BRANDS) ON THEIR REPLACEMENT PLANS****S. SHRILATHA****RESEARCH SCHOLAR, THIRUVALLUVAR UNIVERSITY, VELLORE; &  
ASST. PROFESSOR  
AUXILIUM COLLEGE  
VELLORE****DR. A. ARULAPPAN****PRINCIPAL  
VOORHEES COLLEGE  
VELLORE****ABSTRACT**

*In today's competitive world, Marketing does not stop with selling a product. It has become a continuous process where the companies are trying to retain their customers for years together. The above statement is highly suitable for a car industry. The manufacturers believe in customer delight as well as customer retention. In order to retain customers and increase their customer base, they regularly study the customer's perceptions and behaviours in various areas. One such area what they have selected falls under "Existing car customers (all brands) and their Replacement plans". This study is to postulate and analyze when and why consumers try to replace their cars and to understand the key factors that affect their replacement decisions. To focus on the existing owners and their trends followed while switching to new cars, to focus on utility factor w.r.t cars, to focus on upgradation as an issue for replacement of cars w.r.t customers, to determine the preference for fuel while replacement, to study the financial preference of the customers for purchase of cars, to bring out the various needs of future cars and car industry, and to measure the worth of brands w.r.t to certain criteria's for different car manufacturers.*

**KEYWORDS**

Customer's perception and behaviours, existing owners, replacement, financial preference.

**INTRODUCTION**

The first motor cars on the streets of India were in the year 1898. Mumbai had its first taxicabs in the early 1900. Then for the next fifty years, cars were imported to satisfy domestic demand. Between 1910 and 20's the automobile industry made a humble beginning by setting up assembly plants in Mumbai, Kolkata and Chennai. The import/ assembly of vehicles grew consistently after the 1920's, crossing the 30,000 mark in 1930. Despite this, head start, the industry has never quite matched up to the performance of its counterparts in other parts of the world. Moreover, the industries considered low priority as cars and an "Unaffordable Luxury".

With the liberalization of the Indian economy, the passenger car industry was finally deregulated in 1993 and many companies, both Indian and foreign, announced their plans to enter the market. The last four years have seen companies like Hyundai, Ford, GM, Honda, Mercedes-Benz, Volkswagen, Skoda, Audi and BMW launch their cars in India. Nonetheless, times have changed significantly the days of the customer chasing the dealer to purchase poor quality cars backed my inefficient service are history. Today, the customer dictates the terms.

**OBJECTIVES OF THE STUDY**

- To postulate and analyze when and why consumers try to replace their cars.
- To understand the key factors that affects their replacement decisions.

**PRESENT SCENARIO OF CAR INDUSTRY**

From a very modest beginning, the Indian passenger car industry has come a long way. The industry has the presence of global players like General Motors, Ford, Suzuki, Toyota, Mitsubishi, Honda, Fiat, Hyundai, Daimler Chrysler, Skoda, Nissan, BMW and Renault. MNCs are widening their product portfolio, which will further intensify competition. This also marks the next phase of the Indian auto industry after the sectors were opened up. At present one of the key drivers for the growth of Indian car industry were exchanges of cars.

**Phase I** (upto 1984) Regulated and restrained market

**Phase II** (1985 to 1992) Exploring new technology

**Phase III** (1995 to 2000) Hurried entry of world players

**Phase IV** (2001-04) Market maturing with intense competition

**Phase V** (2005 and after) Globalisation

A new trend in the passenger car market is the exchange schemes launched by car manufacturers. Besides there arise the need for the pre-owned car markets. In 2006-07, an estimated 12.5% of all car sales achieved through exchange of old models on the back of brand loyalty. Maruti has been a major beneficiary selling reportedly 76,500 cars under the scheme. Others benefiting include Hyundai (16%), GM (8 to 10%) and Honda (6%). Maruti's pre-owned car dealings were having their own brand in the name of "True Value". Hyundai's pre-owned car showrooms were known as "Advantage" which has been recently started. Volkswagen were also likely to start their pre-owned car markets with various schemes like insurance and the finances.

The sale of pre-owned (or second hand) cars has caught on. Not only Maruti which sold 84,500 cars through its 'True Value' chain of marketing outlets, even global majors like Porsche (40 cars) and Bentley have also joined the bandwagon. Nearly 20% of the pre-owned market is organized. Nearly 60% of the vehicles sold by individuals through word of mouth, while 20% of the market were controlled by brokers.

**Market Segmentation in mid 2008-09 as against 2006-07 as follows**

Segments	2006-07	Mid-2008-09
Premium and luxury	0.40%	0.80%
Executive segment	3.20%	2.60%
Mid-size	17.20%	20.30%
Small and compact	79.20%	76.30%

Source: SIAM

Market Growth Rates	
1990-91-1996-97	16.20%
1996-97-2001-02	4.50%
2001-02-2006-07	17.70%
2006-07-2011-12	9.80%
2011-12 - 2019-20	8.50%

Source: SIAM

Sensitivity Coefficient 9.3%

**HYPOTHESIS**

1. There is no relationship between income and time period for replacement of cars.
2. There is no relationship between age of respondents and time for replacement of cars.
3. There is no relationship between Age of the customer and engine power for cars.
4. There is no relationship between Income and preference for cars while replacement.
5. There is no relationship between Income and preference for upgradation of cars while replacement.
6. There is no relationship between Age of customer and preferences for upgradation of cars.
7. There is no relationship between Income of the customer and the preference for fuel Options w.r.t cars while replacement.
8. There is no relationship between income and seasonal offers while purchasing a car.
9. There is no relationship between age and seasonal offers while purchasing a car.

**METHODOLOGY**

The study is intended to analyze the customer's perceptions while replacement of their cars. The researcher conducted survey to bring out the various aspects on which customers to validate their process of replacement w.r.t cars by questionnaire. An attempt is also made to assess the brand worth for various cars. The sample size of the study was 400. The data collected at Vellore city by distributing questionnaires. The researcher used primary and secondary data for this study. Chi Square, Rank Correlation and percentage analysis had used for this study.

**CHI SQUARE TESTS****HYPOTHESIS NO. 1**

Ho: There is no relationship between income and time period for replacement of cars.

Income/Replacement	<1yr	1-2yrs	2-3yrs	3-4yrs	>4yrs	Total
5-15k		4	13	13	25	55
15-25k	14	8	31	40	54	147
>25k	15	26	75	25	57	198
Total	29	38	119	78	136	400

Chi-Square Tests		
	Value	df
Pearson Chi-Square	33.23406	8

Table value:  $X_{0.05}$  @ 8 d.f. = 15.5

At 5% level of significance the calculated value is greater than table value. Hence, the Ho is rejected. Therefore, there is a relationship between income and replacement of cars.

**HYPOTHESIS NO. 2**

Ho: There is no relationship between age of respondents and time for replacement of cars.

Age/Replacement	<1yr	1-2yrs	2-3yrs	3-4yrs	>4yrs	Total
20-30	5	13	23	23	40	104
30-40	2	10	36	18	38	104
40-50	13	13	38	19	25	108
50-60	6	2	16	12	26	62
60-70	3		6	6	7	22
Total	29	38	119	78	136	400

Chi-Square Tests		
	Value	df
Pearson Chi-Square	27.99665	16

Table value:  $X_{0.05}$  @ 16 d.f. = 23.6

At 5% level of significance the calculated value is greater than table value. Ho is rejected. Hence, there is a relationship between age of respondents and replacement of cars.

**HYPOTHESIS NO.3**

Ho: There is no relationship between Age of the customer and engine power for cars.

Age/ CC	1000	1000-1500	1500-2000	>2000	Total
20-30	17	76	7	4	104
30-40	13	78	10	3	104
40-50	17	75	15	1	108
50-60	10	39	9	4	62
60-70	3	15	4		22
Total	60	283	45	12	400



Chi-Square Tests		
	Value	df
Pearson Chi-Square	10.86437	12

Table value:  $\chi_{0.05} @ 12 \text{ d.f.} = 21.0$

At 5% level of significance the Calculated value is less than table value. Hence, the  $H_0$  is accepted. There is no relationship between Age and engine power for cars.

#### HYPOTHESIS NO.4

$H_0$ : There is no relationship between Income and preference for cars while replacement.

Income/Preference	Indigenous	Imported	Assembled	Total
5-15k	32	18	5	55
15-25k	89	20	38	147
>25k	99	65	34	198
Total	220	103	77	400

Chi-Square Tests		
	Value	df
Pearson Chi-Square	21.85474	4

Table value:  $\chi_{0.05} @ 4 \text{ d.f.} = 9.49$

At 5% level of significance the calculated value is greater than table value. Hence, the  $H_0$  is rejected. Therefore, there is a relationship between Age and Preference for cars while replacement of the cars.

#### HYPOTHESIS NO. 5

$H_0$ : There is no relationship between Income and preference for Upgradation of cars while replacement.

Income/Preference	High Maintenance	Increase in income	Advance in tech	Need	Total
5-15k	8	16	20	11	55
15-25k	42	35	38	32	147
>25k	51	24	77	46	198
Total	101	75	135	89	400

Chi-Square Tests		
	Value	df
Pearson Chi-Square	17.54724	6

Table value:  $\chi_{0.05} @ 6 \text{ d.f.} = 12.6$

At 5% level of significance the calculated value is greater than table value. Hence, the  $H_0$  is rejected. Therefore, there is a relationship between Income and Preference for Upgradation while replacement of the cars.

#### HYPOTHESIS NO. 6

$H_0$ : There is no relationship between age of customer and preferences for upgradation of cars.

Age/Upgradation	High maintenance	Increase in income	Advance in tech	Need	Total
20-30	22	32	36	14	104
30-40	41	22	25	16	104
40-50	23	11	48	26	108
50-60	9	10	21	22	62
60-70	6		5	11	22
Total	101	75	135	89	400

Chi-Square Tests		
	Value	df
Pearson Chi-Square	55.25944	12

Table value:  $\chi_{0.05} @ 12 \text{ d.f.} = 21.0$

At 5% level of significance the calculated value is greater than table value. Therefore,  $H_0$  is rejected. Hence, there exists a relationship between age of the customer and his preferences for upgradation w.r.t cars.

#### HYPOTHESIS NO. 7

$H_0$ : There is no relationship between Income of the customer and the preference for Fuel Options w.r.t cars while replacement.

Income/Fuel Options	Diesel	Petrol	LPG	Electric	Total
5-15k	13	28	10	4	55
15-25k	32	97	11	7	147
>25k	66	99	23	10	198
Total	111	224	44	21	400

Chi-Square Tests		
	Value	df
Pearson Chi-Square	13.41069	6

Table value:  $\chi_{0.05} @ 6 \text{ d.f.} = 12.6$

At 5% level of significance, the calculated value greater than table value.

Hence, the  $H_0$  is rejected. Therefore, there is a relationship between Income and fuel options while replacement of the cars.

#### HYPOTHESIS NO. 8

$H_0$ : There is no relationship between Income and seasonal offers while purchasing a car.

Income/seasonal offers	Seasonal Offers		Total
	No	Yes	
5-15k	35	20	55
15-25k	92	55	147
>25k	97	101	198
	224	176	400

Chi-Square Tests		
	Value	df
Pearson Chi-Square	7.837502	2

Table value:  $\chi_{0.05} @ 2 \text{ d.f.} = 5.99$

At 5% level of significance the calculated value is greater than table value.

Hence, the  $H_0$  is rejected. Therefore, there is a relationship between Income and seasonal offers while purchasing a car.

#### HYPOTHESIS NO. 9

$H_0$ : There is no relationship between Age and seasonal offers while purchasing a car.

Age/Seasonal Offers	Yes	No	Total
20-30	46	58	104
30-40	41	63	104
40-50	47	61	108
50-60	30	32	62
60-70	12	10	22
Total	176	224	400

Chi-Square Tests		
	Value	Df
Pearson Chi-Square	2.373793	4

Table value:  $\chi_{0.05} @ 4 \text{ d.f.} = 9.49$

At 5% level of significance the calculated value is less than table value. Hence, the  $H_0$  is Accepted. Therefore, there is no relationship between Age and seasonal offers while purchasing a car.

#### RANK CORRELATION

1. To find the correlation between professionals, employees and self-employees in terms of utility.

Criteria's/Occupation	Professional	Employed	Self employed
Safety	1	1	1
Convenience	2	2	2
Luggage Space	5	5	5
Faster pick up	3	4	3
Seating Capacity	4	3	4
Parking Space	6	6	6

$$r_s = 1 - 6(d^2) / N^2(N-1)$$

a. Professionals and Employees:  $r_s = 0.93$

b. Employees and Self-employees:  $r_s = 0.9$

c. Professional and Self-employees:  $r_s = 1$

Result: There is a degree of correlation between respondents of different occupations w.r.t to utility for cars.

#### MAJOR FINDINGS

- 34% of the respondents will go for replacement above 4 years.
- 37.87% of the respondents in the income group above twenty-five thousands per month, 35.19% of the respondents in the age group 40 to 50 and 37.90% self-employed think of replacing their cars within 2 to 3 years.
- 54% of the respondents do not prefer replacement while transfers.
- 33.75% of the respondents will go for replacement when advanced technology.
- 55% of the respondents will go for cars manufactures in India:
  - Technology
  - Availability of spares
  - Low cost
  - Maintenance
  - Suitability to Indian conditions.
- The purchasing behaviour 70.5% of the respondents is influenced by their family.
- 56% of the respondents prefer petrol as the fuel option for low maintenance costs and faster pickup etc.
- 62.25% of the respondents prefer for loans while purchase of cars to get relief on taxes and initial investments. 57.5% of the respondents prefer loans with low interest rates.
- 56% of the respondents in Vellore show no preference for seasonal offers while purchase of cars.

#### RECOMMENDATIONS

##### REPLACEMENT

- Studies shows certain people like to replace their cars between 2 to 3 yrs, thus the company has to develop a database of car users above 2 yrs and try establishing contacts and keep mailing them about the new releases.
- Study shows professionals prefer to replace their cars while transfers.
- Study shows people prefer to replace their cars for high maintenance cost.
- Study shows people prefer to replace while change of needs, thus can create a database from its customers (coming for service or any other source) about their extra needs and present trends w.r.t to models, features etc and try to bring in changes frequently in the cars.

**PROMOTION**

- Since study shows cars to be a high value product and the purchase decisions to be affected by the whole family.
- Study shows banners to be not effective as a media for promotion of cars.

**UPGRADATION**

- Study shows people prefer for technology as a means to replace their cars with vivid features and availability of spares.
- Study shows people look for safety and convenience as the most important factor for purchase of cars.

**CONCLUSION**

This study has helped in understanding the perceptions of car users in Vellore. This study clearly suggests that cars are no more perceived as a luxury product and buyers are willing to replace as and when there is a technological advancements.

This project gave an insight into the utility aspect of cars in City life. This study has also given an insight into understanding the car users' perception about various brands.

Based on the findings few suggestions have been given for promoting the car among those who are planning to upgrade their cars. If the company can look into these suggestions, it may prove them helpful in improving their sales and brand image.

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