On What Basis People Select Vehicles in Metropolitan Cities

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Abstract—

*T*he purpose of this proposed survey based research study is to explore the travel attitude, personality, lifestyle, and mobility factors that affect individuals vehicle type choices, and to develop a choice model of vehicle type based on these factors as well as typical demographic variables. This paper presents the result of a survey on vehicles from the perspective of people. This survey has looked into the familiarity of people towards vehicle and most importantly the used of it that influence their choice towards selecting correct vehicles.*

Keywords— Vehicles, transportation, automobile etc.

I. INTRODUCTION

In the past time the people used to select or choose the vehicle only for the transportation and there was nothing as such mileage, speed, model, lifespan and types of the body parts about the vehicle but now in the present time due to number of branded automobile companies and their different models and feature peoples are very much crazy about the different types of vehicle and their varieties in terms of different parameter. The people have been using vehicles in order to travel from place to another since ancient times. At that time simple transportation forms existed. But nowadays people have their transportation to travel from one place to another. Each year nearly 200 new vehicle models are produced by domestic and foreign vehicle manufacturers, and millions of new vehicles are sold. There is wide range of makes and models, and people make choices based on their own preferences and needs when choosing which vehicles to buy.

Traditionally, economists and market researchers have been interested in identifying the factors that affect consumers' car buying behaviours to estimate market share, and have developed various models of vehicle type choice. However, they do not usually consider consumers' travel attitudes, personality, lifestyle, and mobility as factors that may affect the vehicle type choice. Of course, there are stereotypes for what kind of person drives a certain vehicle make and model, assuming that attitudes influence the vehicle type choice. However, a better understanding of the relationships between travel attitude, personality, or lifestyle factors and vehicle type choices will improve vehicle type choice models. Furthermore, a better understanding of these relationships will be useful background for decision makers and transportation planners developing transportation policies related to vehicle ownership.

II. RESEARCH METHODOLOGY

This is research work is use to evaluate and understand the mentality and psychology of the people about choosing or selecting the vehicles in the metropolitan cities. The survey based methodology is adopted for collect the opinion and comments regarding the smartphones. So, here based on current trends in transportation, automobile companies and the psychology of the people and number are questionaries are available on the past research on the transportation on internet are used to prepare the compiled questionaries for this research work

A. Overview of methods

In order to collect a generalized data that represents the whole population from the samples. Questionnaire survey was adopted as a data collection method. The questions are prepared in such a way that it targets audience of young, middle aged and old age group, so it covers broader section of the society.

B. Subjects and Procedures

The data plays very important role to understand and conclude the results and the finding about the particular research and it is also used to prove the hypothesis. The data used in this study was collected via online self-administrated survey. The data were collected from public of young, middle aged and older age group as well. The questionnaires are designed in such a way that it is easily understood by everyone. The options or the answers of the questionnaires can be easily understood by all responders. At the end of the data collection process total number of 109 responses has been collected successfully.

III. SIGNIFICANCE OF STUDY

The market of automobile and transportation companies are growing rapidly so, an understanding of the people or consumer behaviour regarding the characteristics of consumers in influencing their selection and buying behaviour is plays very important role. By understanding the consumer or people's behaviour, psychology of vehicles selection, this study is very significant to a wide spectrum of many industries related to the automobile and transportation to bring a real

life changes in the marketing mix and marketing strategy as per the characteristics of consumers to enhance their sales. Besides, this research will be useful for students and future researchers intending to make further study in the same field of consumer behaviour towards selection for the vehicles in the metropolitan cities.

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IV. RESULT
</div>

The data which are collected using the online and offline survey based methodology are feed into the excel sheet and used to analyse the different results related to the survey conducted for that questions. So, the calculated results are as follows:

A. Age group

The first parameter considers as the age of the person those who are frequently using the vehicles. The data collected according to the survey shows that the people those who are teenagers and adult people in the age between 18 to 30 years frequently use vehicles. Recommended result is shown in and Table I and Fig.1.

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TABLE I
STATICS OF THE AGE GROUP OF PEOPLE
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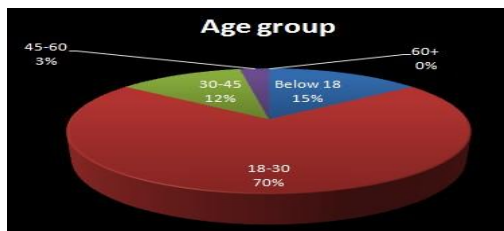| Age group	Precent	No. of people
Below 18	14.81%	16
18-30	70.37%	76
30-45	12.04%	13
45-60	2.78%	3
60+	0.00%	0
Total		108

Fig.1: Age group

B. People choices of cars/bikes brands

The next parameter selected that is the companies which are providing the different brand of the vehicles and according to the survey conducted and studies, it is found that there are 27 consumers (16.07%) use Hyundai and 47 consumers (27.98%) use Yamaha.

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TABLE II
TYPES OF CARS/BIKES
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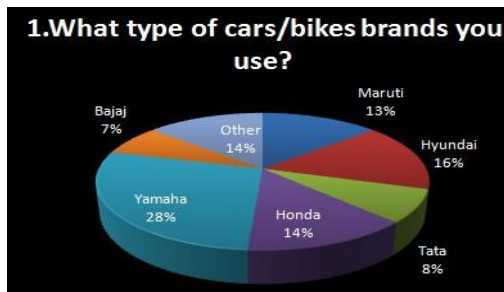| Cars/bikes	Precent	No. of people
Maruti	13.69%	23
Hyundai	16.07%	27
Tata	7.74%	13
Honda	13.69%	23
Yamaha	27.98%	47
Bajaj	7.14%	12
Other	13.69%	23
Total		168

Fig.2: Type of Cars/bikes

C. Features and Quality

Good Features is a must while selecting vehicles, whenever people go to select the vehicles then they specifically see the different features so that our studies also shows that around 63 users (42.86%) want good features in their vehicles. It is often seen that people first see Quality of a vehicles before buying it; around 77 users (40.96%) first see quality of the vehicles.

1) What is the main reason, which initiated you to buy cars/bikes?

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TABLE III
REASON TO BUY CARS/BIKES
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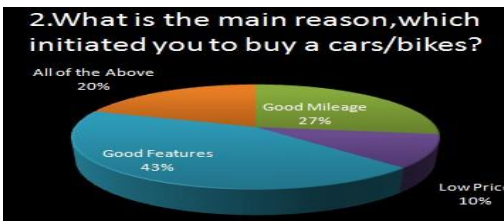| Answer	Precent	No. of people
Good Mileage	27.21%	40
Low price	10.20%	15
Good Features	42.86%	63
All of the above	19.73%	29
Total		147

Fig.3: Reason to buy cars/bikes

2)   Why do you think a cars/bikes is the best choice for you after using it?

TABLE IV
BEST CHOICE VEHICLES

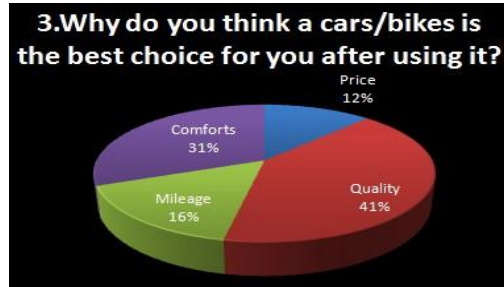| Answer	Percent	No.of people
Price	12.23%	23
Quality	40.96%	77
Mileage	15.96%	30
Comforts	30.85%	58
Total		

Fig.4: Best choice vehicles

D. What type of problems you have faced driving cars/bikes?

While driving vehicles we face number of the problems such as technical, engine, seating problems etc.So, in the analysis of this data shows that 49 users (32.67%) have selected all the problems after the selection of the vehicles (technical, engine, seating problems).

TABLE V
PROBLEMS

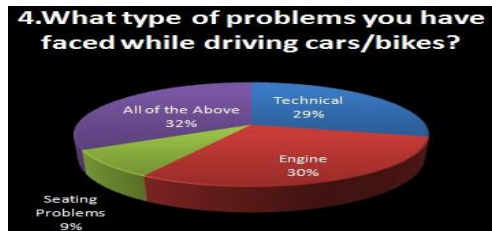| Answer	Percent	No.of People
Technical	28.67%	43
Engine	30.00%	45
Seating Problems	8.67%	13
All of the Above	32.67%	49
Total		150

Fig.5: Type of Problems

E. Cost, Needs and Fuel consumption

Cost and Fuel Consumption is very important in every vehicles, so considering that while taking the survey suitable results were posted.65 users (59.09%) prefer bikea over cars because of low cost and fuel consumption. Whereas 43 users (29.05%) selected Maruti as most successful in fulfilling the needs of customers.

1)   Do people prefer bike over car because of low cost?

TABLE VI
LOW COST AND FUEL CONSUMPTION

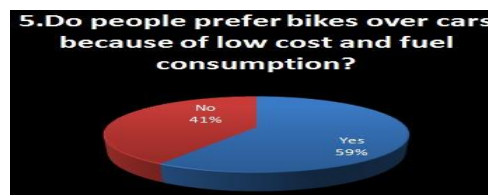| Answer	Percent	No.of people
Yes	59.09%	65
No	40.91%	45
Total		110

Fig.6: low cost and fuel consumption

2)   Which company is most successful in fulfilling the needs of customers?

TABLE VII
SUCCESSFUL COMPANY

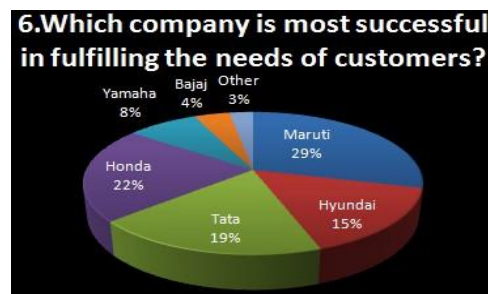| Cars/Bikes	Precent	No. of people
Maruti	29.05%	43
Hyundai	15.54%	23
Tata	18.92%	28
Honda	21.62%	32
Yamaha	8.11%	12
Bajaj	4.05%	6
Other	2.70%	4
Total		148

Fig.7: Successful Company

F. Impact on Youth

Nowadays youth ride cars and bikes for their own purpose. Here the purpose is some real work where as many are using the vehicles just for the enjoyment purpose. So, in the survey conducted and studied applied shows that there are 88 users (58.28%) use their vehicles only for just enjoyment purpose.

TABLE VIII
IMPACT ON YOUTH

Answer	Precent	No. of people
Education Purpose	5.96%	9
Travelling	35.76%	54
Enjoyment	58.28%	88
Total		151
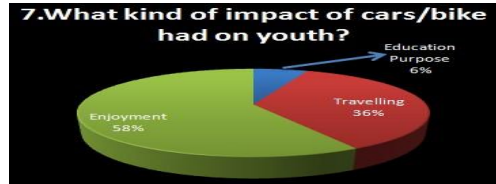
Fig.8: Impact on Youth

G. Trends in vehicles

Some user's likes cars while some likes bikes, so considering that we took survey on what type of vehicles users prefer so based on study it is got that around 54 users (35.76%) prefer sedan car, whereas 51 users (36.43%) prefer sports bike.

1) *Which type of cars do you prefer?*

TABLE IX
TYPE OF CARS

Answer	Precent	No of people
Sedan	35.76%	54
Hatchback	11.26%	17
SUV	30.46%	46
MUV	1.99%	3
Roadster	20.53%	31
Total		151
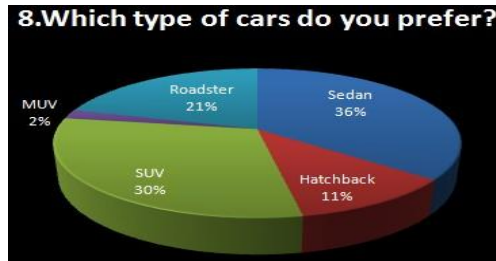
Fig.9: Types of cars

2) *Which type of bikes do you prefer?*

TABLE X
TYPES OF BIKES

Answer	Precent	No of people
Cruiser	23.57%	33
Naked	9.29%	13
Scooter	17.86%	25
Commuter	5.00%	7
Sports	36.43%	51
Off road	7.86%	11
Total		140

Fig.10: Types of bikes

H. Marketing Source

Nowadays while selecting a vehicle users use some source, which help users for easier selection. In the survey conducted 55 users (35.48%) selected the entire above (Advertisement, Marketing staff) source to buy cars/bikes.

1) *What marketing source initiated you to buy cars/bike?*

TABLE XI
MARKETING SOURCE

Answer	Precent	No of people
Advertisements	21.29%	33
Marketing Staff	17.42%	27
All of the above	35.48%	55
Total		155
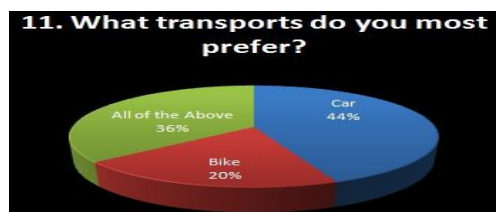
Fig.11: Marketing Source

2) What transport do you prefer?

TABLE XII
TRANSPORTS

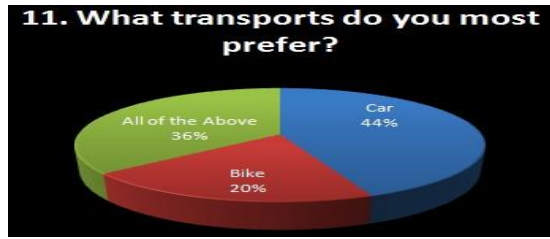| Answer	Precent	No of people
Car	43.86%	50
Bike	20.18%	23
All of the Above	35.96%	41
Total		114

Fig.12: Transports

V.   CONCLUSION

This study on vehicles had proved to be more meaningful in the field of trends, quality, cost and usage. The research methodologies can be used in future considering some specific technology in mind. This paper has also provided tidings about the different aspect in vehicles such as quality, features, cost, and influences from marketing staff and advertisements. This evidence can be used in future works to analyse vehicles factors and maintain knowledge with the upcoming technology. From the collected data analysis we can conclude that on the basis of quality, cost, features and fuel consumption, company should fulfil customer's requirements and make better products.

ACKNOWLEDGMENT

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