

#### INTERNATIONAL JOURNAL OF ADVANCE SCIENTIFIC RESEARCH

#### AND ENGINEERING TRENDS

# PROBLEM AND SOLUTION IN AUTOMOBILE INDUSTRY IN PANDEMIC COVID-19

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Abstract: Now a day the world automobile markets is in recession and huge loss due to covid-19 infection, this paper is trying to focus the solution of sale and service sector of automobile industry in the pandemic year 2020 due to covid-19 infection worldwide. the revenue loss of this industry during the march 2020 to upcoming December 2020 is forecasted almost Rs15, 000 crore per day due to halt in manufacturing as per report of economic times India and Auto sales drops 51% in June 2020 and Passenger vehicles once again moved to negative with 49.6 percent decline in domestic sales at 105,617 units in June 2020 as compared to 209,522 units sold in the same period last year as per economic times India. (1).so this research is trying to focus the key requirement and governing area on the basis of customized survey for a group of people in upcoming smart city Prayagraj utter Pradesh for exploring and key feature required for marketing and sales of various segments of car available in targeted survey area.

**Keywords:** Covid-19, Budget car (Below 6 Lakhs)

Abbreviations: W.S.N (Wide Service Network), A.O.P (Availability of Parts), V.O.M (Value of Money), COVID-19 Novel Coronavirus Disease.

#### **I INTRODUCTION**

The global economic in this situation of word pandemic Covid 19 is going down .every manufacturing and sales sector trying to come out in this situation . So this paper highlights the need of car segments and its feature required for car up to 6 lakes cost and consumer mindset during this situation of lockdown and restricted environments. For analyzing the result group of students and senior persons are targeted and through survey data is recorded.

# II RESEARCH METHODOLOGY

The selection of budget car is a complicated exercise for consumer in the larger domain consumer thinks about budget safety, efficiency, pollution etc. Improved energy efficiency can help reduce pollution, contribute to energy security, and help consumers save money. [4] This paper explores energy labelling schemes as a policy instrument for promoting energy-efficient cars in Spain. Specifically, it explores consumer responses to changes in vehicle prices. We derive the demand responses for two different efficiency labelling schemes: absolute and relative. To that end, we calculate own- and cross-price elasticities of demand for cars with efficiency labels on the Spanish car market. The results show that the elasticities for more efficient cars are in general higher. However, in the specific case of sedans, the elasticities depend on assumptions about how consumers decide

which car to purchase. If consumers are concerned about the absolute energy performance of cars independently of other attributes, and thus pay attention to absolute labelling, demand for more efficient cars is more elastic than demand for less efficient cars. If consumers choose the car segment first and then the energy performance, using the relative label, the opposite result is found. The results suggest that both relative and absolute labelling schemes can be useful, depending on how consumers make their decisions. It might also be possible to design a mixed system. So the proposed paper is explaining the governing factors & way of selection a budget car in utter Pradesh east region consumers, manufacturer and sealer, what is Budget Car? Which can target the business at Middle class family group in any smart city? For this a survey base research is conducted in one of the city Prayagraj. The methodology adopted for this is show through flow chart given below.

In other research paper has also discussed two objectives. First, the aims to advance knowledge on factors that lead to the choice of car sharing, by proposing, for the first time a different perspective based upon the attitude towards the use of private car. Second, the study helps to understand the connection between the rate of penetration of car sharing services and the attitude towards the use of the private car, analysing also the socio-demographic influences on car-sharing behaviour. The paper draws on the findings from a telephone-structured

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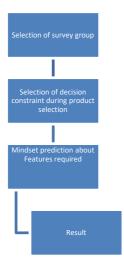
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questionnaire we carried out in this underexplored market area in four urban metropolitan cities in Italy (Rome, Milan, Turin and Genoa). For this purpose, we firstly made an exploratory factor analysis to determine the key dimensions of private car behaviour. We then performed a logistic regression model in order to analyse which factors may affect the dependent variable.[3] consumer behavior and its influences also the part of survey in this research paper.

Andersson et al (2020)[2] discussed the study explores marketing messages promoting sustainable transport and reported motivation to reduce private car use within different segments. A stated preference survey targeting a sample of 1300 residents in Sweden was conducted, and exploratory factor analysis was used to identify underlying dimensions of a set of 19 marketing messages. Self-efficacy and collective efficacy were defined as latent factors, and the latter was found to be a better motivator for all segments. For the most car-advocating segment, however, the factors (both self-and collective efficacy) was unsuccessful in inducing any reported motivation to reduce private car use. Assimilation bias seems to influence the respondent's interpretation of marketing messages.

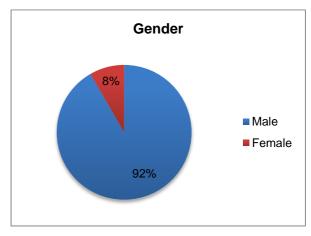
So the current paper followed the below steps for research purpose.



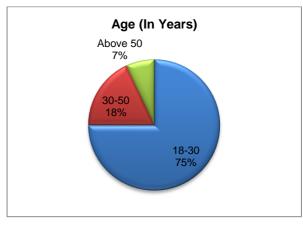
# 2.1 Study of targeted group

The outcome of the paper depends upon the response of targeted group of persons of Prayagraj city, utter Pradesh, India. A customize survey from is designed under the mindset of titled given to the research paper and the response recorded and concluded as mention below. The situation of selected group is analyzed by some of governing factor like age, gender, occupation and annual family income is targeted.

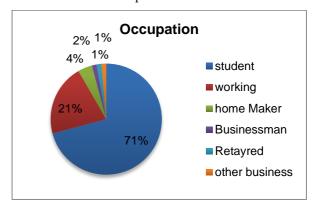
#### 2.11On the basis of customer gender



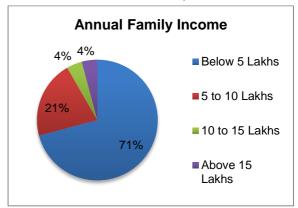
2.12 On the basis of age of consumer



2.12n the basis of occupation



2.14On the basis of annual family income



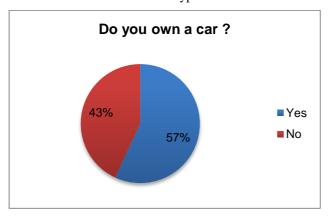
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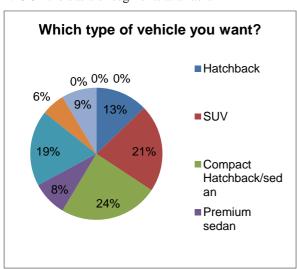
#### III DECISION CONSTRAINTS DURING PRODUCT SELECTION

The consumers are select the product under different circumstances which may be govern by self-budget, family requirement, self-liking etc.. In this paper some of the condition are recorded and mentioned below.

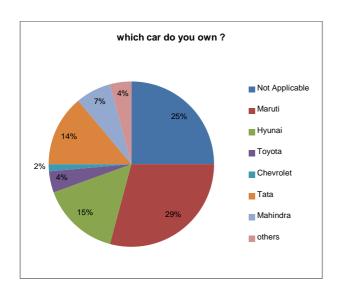
#### 3.1 On the basis of automobile type



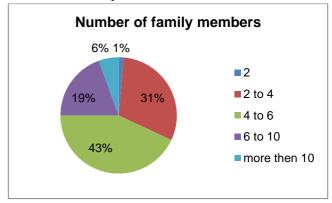
#### 2.15On the basis of segments available



#### 2.16On the basis of past experience



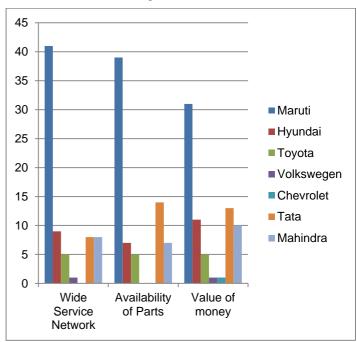
#### 2.17 On the basis of personal constraint



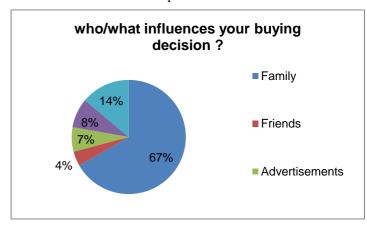
# IV CUSTOMER MINDSET ABOUT REQUIRED FEATURE

The mindset of consumer about different feature required in automobile is analyzed, some of the factors like W.S.N, A.O.P, V.O.M described below.

### 4.1 On the basis of Existing Market



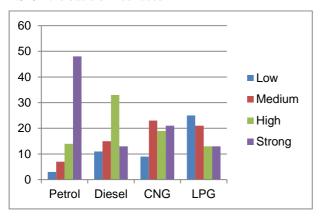
# 4.2 On the basis of influence parameter



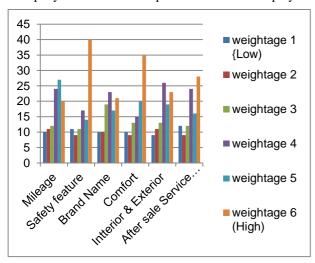
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#### 4.3 On the basis of Fuel used



**Result** The governing factor which influences the design and sales of budget car in upcoming smart city like Prayagraj in influenced by safety feature and comfort offered by Car Company is most. Other important factor also displayed below.



#### **V CONCLUSION**

The paper concluded the ergonomical design factors & checklist of automobile company & manufacture for designing the budget car segments lunching for middle class car segments for upcoming new car user in Prayagraj utter Pradesh.

#### VI FUTURE SCOPE

The data of paper gives the projection of designer to think about the feature required in family budget car and manufacture for incorporation of new technology in compact hatchback and sedan segments car in smart city for future users of this products.

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Conflict of Interest: No

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