# A STUDY OF CONSUMER BUYING BEHAVIOUR IN THE SELECTED AUTO BRANDS RELATING TO 4 WHEELERS IN PUNE REGION 

A Thesis

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BY

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UNDER THE GUIDANCE OF

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## Annexure III

## Tilak Maharashtra Vidyapeeth, Pune

## Undertaking

I Simon Thomas is the Ph.D. Scholar of Tilak Maharashtra Vidyapeeth in Management subject. Thesis entitled - A Study of Consumer Buying Behaviour in the selected Auto Brands relating to 4 Wheelers in Pune Region under the supervision of Prof. (Dr.) Asha Nagendra, solemnly affirm that the thesis submitted by me is my own work. I have not copied it from any source. I have gone through extensive review of literature of the related published / unpublished research works and the use of such references made has been acknowledged in my thesis. The title and the content of research is original. I understand that, in case of any complaint especially plagiarism, regarding my Ph.D. research from any party, I have to go through the enquiry procedure as decided by the Vidyapeeth at any point of time. I understand that, if my Ph.D. thesis (or part of it) is found duplicate at any point of time, my research degree will be withdrawn and, in such circumstances, I will be solely responsible and liable for any consequences arises thereby. I will not hold TMV, Pune responsible and liable in any case.

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## Annexure IV

## CERTIFICATE OF THE SUPERVISOR

It is certified that the work entitled - A Study of Consumer Buying Behaviour in the selected Auto Brands relating to 4 Wheelers in Pune Region is an original research work done by Simon Thomas under my supervision for the degree of Doctor of Philosophy in Management to be awarded by Tilak Maharashtra Vidyapeeth, Pune.

To the best of my knowledge this thesis embodies the work of candidate himself and has duly been completed and fulfils the requirement of the ordinance related to $\mathrm{Ph} . \mathrm{D}$. degree of TMV up to the standard in respect of both content and language for being referred to the examiner.

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## Chapter 1 - Introduction

This chapter consists of the following headings:
1.1 Background of the Research
1.2 Consumer Buying Behaviour
1.3 Statement of the Problem
1.4 Need and Significance of the Study
1.5 Objectives of the Study
1.6 Scope of the Study

### 1.1 Background of the study

The auto industry started in 1940 in India. The first automobile car industry was launched by Hindustan Motors in 1942, Premier a long-time competitor came behind them in 1944, manufacturing products for G. M. Motors and Fiat Motors. Later two brothers in the year 1945 established Mahindra and Mahindra and started assembling Jeep a utility vehicle in the country. In 1947 after independence, the private sectors and government of India took pains to start an auto component producing business to source the auto industry. The import of complete assembled cars was controlled in 1953 due to import substitution programmes an initiative taken by Government of India to protect the Indian Automotive Manufacturers. The auto industry of India is one among the key players of the world, hence this industry represents $7.1 \%$ of the nation's gross domestic product. A middle class with a young growing population has contributed to the advancement of the two-wheeler section taking the market share to $80 \%$ and is now a leader of the Indian Auto Industry. This sector is also exploring the villages of India to increase the existing growth. The passenger car industry has now $14 \%$ market share of the overall auto industry. India is among the key players internationally in the export market and hopes to grow further in the future. The total auto industry's growth was about $13.01 \%$ between April and December 2017.

Between April and December 2017 this industry produced consolidated 2,14,15,719 numbers of passenger cars, commercial vehicles, 2 and 3-wheeled vehicles and grew annually by $11.27 \%$. Passenger cars and 2-wheelers exhibited a growth of $5.22 \%$ and 40.31 \% respectively annually in December 2017. The government together with the auto industries is working towards making India a front-runner in the two and four-wheeler marketplace in the world by 2020.

The auto industries are working on electric vehicles to reach the new emission and safety standards. The government is considering of giving special rights to the users of such vehicles by allowing them to use green number plates, free toll and free parking for three years. The electric vehicles sales have increased by 37.5 \% between 2015 and 2016 and
supposed to grow further to meet the Indian governments vision of 2010 by manufacturing six million electric and hybrid vehicles.

To achieve this demand many automobile manufacturers are capitalizing seriously in different segments of this industry in the past years. This industry has also generated around 19.29 billion US \$ between the period of April 2000 and June 2018 as per department of industries. To encourage business in this sector the Ministry of Industries of government of India has permitted $100 \%$ foreign direct investment by the automatic route.

The auto industries revenue is likely to reach by 2021 to 16.5 billion US $\$$. This industry is also likely to manufacture US \$ 300 billion by 2026 in yearly revenue and generate 65 million more jobs and support the Indian GDP by $12 \%$.

The high levels of disposable income are a sure reason for a fast rise in consumer spending which helps in quantitative spurt. A significant qualitative change in the people's perceptions of what they want and how they would go about the job of fulfilling their wants is determined by their income. Hence, the growing number of companies are gradually looking towards positioning their business to go past customers' wants and needs to satisfy them.

India will be the most gifted of the world economies and will become a universal economic powerhouse in the future. It is the fastest and most exciting automobile marketplace in the world, due to various changes in the Indian economic scenario. Hence, today every global automobile manufacturer is keen on entering the Indian marketplace because they see a great opportunity ahead in investing in India.

Financial establishments and banks are providing some wider financial schemes to buyers which will drive car sales. Hence, many old models are getting exchanged by fresher ones at some quicker pace.

### 1.2 Consumer Buying Behaviour

Kotler (1997) states that behaviour of consumers is a study of many actions of the consumer in the purchasing process such as why, how, when and what people buy. It contains elements from sociology, psychology, anthropology, sociopsychology, and economics. It tries to comprehend both independently and in groups the buying decision process. Individual consumers characteristics such as psychographics, behavioural variables and demographics helps to understand peoples wants. Reference groups, friends, family and generally the society influences the consumer to decide in purchasing a product.

In general, it is said that humans are multifaceted persons who frequently do not appear even to distinguish their personal thoughts. Hence it is not easy to predict human conduct, as everyone is an exclusive creation of inheritance, situation and knowledge. It is a tough and a complex job, complete with doubts, risks, and amazements to predict such an odd behaviour of people. Precise forecasts can produce vast riches and imprecise forecast results can forfeit millions of rupees.

Schutteand et al., (1998) expresses that apart from the implication of actual manufacturing, the car is important for its influence on lifestyle and consumption as the car gratifies both elementary consumer requirements for conveyance, as well as an assortment of requirements, luxury cars incline to be informally consumed.

Each person is an exceptional product of inheritance, situation and knowledge. Forecasting such an odd behaviour of persons is a tough and complex task, full of reservations, risks and astonishment. Precise forecasts can produce vast prosperities and imprecise forecasts can have an outcome of loss of millions of rupees. Once marketers are intelligent to comprehend consumers' wants and please them, then only can they justify their existence. As per modern marketing perception a successfully managed firm needs sellers to study the buyers as the central theme of their professional act. Hence, it is said that to be an effective retailer the purchasers mind should be opened as it is labelled as a dark box.

### 1.3 Statement of the Problem

After the liberalization and globalization era there has been a race among varied car manufacturers who are concentrating their attention on acquiring the market in India. For a considerable time, a car was considered to be a luxury item but now occupies an important part of one's life and has now become a necessity in Pune and hence is selected for the study as the city is developing very fast. Hence, Pune has become a potential market for the existing and new entrants in the automobile sector for this ever-growing market. The attitude of people has changed as those who were not ready to employ their money on extras have now started spending. It is said that yesteryear's luxuries have become today's requirements. One has to understand the insights of the potential buyers of cars to be an effective marketer. It was thought that the ever-increasing support and encouragement from the government for the development of the passenger car business was indirectly helping in employment generation and adding revenue in terms of taxes and forex for the country.

### 1.4 Need and Significance of the Study

Understanding the consumer's needs and desires and satisfying them can only justify marketer's existence. Marketers are obliged to ponder on their consumers, as the core of their business action lies around the consumer for effective marketing.

The right orientation for the product development is provided by the marketing managers based on the behaviour of the consumers. Optimum profitability is based on the consumers satisfaction level and the scope for repeat buying pattern and brand loyalty. Hence it is considered as important as the product itself. Thus, we can presume that, "specific satisfaction from the product of today will create a favourable confidence in the future."

Today, as car has turned out to be a need than a luxury it has become a part and parcel of one's life. So, there is a considerable possibility to scrutinize the observation and purchasing conduct of the patrons of cars.

### 1.5 Objectives of the Study

The core objective of this study is to understand the consumer buying behaviour of fourwheeler passenger cars in Pune region.

1. To study the consumer buying behavior with reference to four-wheeler auto brands.
2. To understand the attitudes, feelings, beliefs towards selecting an auto brand.
3. To find and examine the causes prompting the buying of cars.
4. To identify the difficulties faced by consumers in selecting a brand.
5. To investigate the level of satisfaction amongst the respondents and to find the alternative brand choice, if any.
6. To submit recommendations on the buying behavior of consumers.
7. To study the impact of government policies on buying motive of consumers.

### 1.6 Scope of the Study

1. The study has been limited to Pune region only as it is economically rich and famous due to the existence of engineering, automobile, construction, services, and IT and ITES companies.
2. The study has been restricted to the consumer buying behaviour of passenger cars manufactured by Indian automobile industries only.
3. Only the selected list of brands as mentioned in Table - 6 of Chapter 3 of Research Methodology has been considered for the research.
4. A1 (Mini) to A2 (Compact) segments are only considered for the study.
5. A price range between 2 to 7 lakhs was considered as the ownership value of the vehicle for the interview of the consumers and dealers' representatives.
6. Premium and luxury vehicles are not considered for the study.

## Chapter 2-Review of Literature

This chapter consists of research studies reviewed under the following headings:

### 2.1 Introduction

2.2 Consumer Behaviour
2.3 Communication
2.4 Influence of Family Members /Friends / Social Status in the Buyers Behaviours
2.5 Customer Loyalty
2.6 Purchasing Behaviour
2.7 Rural and Urban Consumer Behaviours
2.8 Sales \& Service / Customer Relations / Quality / Spare Parts Availability
2.9 Features and Brand Loyalty
2.10 Pricing / Value / Fuel Efficiency
2.11 Safety / Value for Money / Performance
2.12 Secondary Data regarding Sales of Automobiles in India
2.13 Research Gaps

### 2.1 Introduction

This section provides an analysis of the literatures relating to consumers buying behaviour, brand, customer service and their purchase preferences. It also aims to bring out numerous studies in behaviour of today's contemporary consumers especially in making purchasing decisions concerning automobiles. It tries to explain the process how people buy and use goods and services and their response to prices, advertising and store interiors. It also tries to explain the fundamental mechanisms which function to produce these responses. Hence, if marketing managers of these markets have responses to such questions they can take improved management decisions. And if government has answers they can improve strategies and policies. We can say responses to all these questions on the role of consumer buying behaviour can be provided by researchers.

The two, marketing and consumer buying behaviour does have a close affinity. Hence, this suggests that marketing is a customer of consumer research. Consumer researchers can only deliver responses to a number of problems raised by the numerous practices of marketers.

The marketing practices are mentioned below:

- Using price as an incentive.
- Using specific colors', music and aromas in the retail environment.
- Presenting new products using present brand names which can be labelled as brand extension.

In the past decade consumer buying behaviour has changed intensely. Today's consumers have the facility to order online many tailored products ranging from jackets to lap top computers due to mass digitization. In todays digitized age people are familiarized with digitized newspapers, magazines, online editions of numerous other media which are receiving data from online sources.

### 2.2 Consumer Behaviour



Figure 1: An Early Model of Consumer Behaviour
Source: https://www.slideserve.com/ally/an-early-model-of-consumer-behavior
Naik et al., (1999) has expressed that the financial, emotional and sociological features of the customers and their drives, viewpoints, perceptions, traits etc. can aid to realize new marketplace openings, to deliver a sharper division of the marketplace and a significant product diversification and to frame selling policies based on consumer response as a major variable. A customer gives much significance to the contributions offered by the company to the product than what the product contributed him / her. Therefore, the knowledge of consumer behaviour makes it simple to analyse the marketplace with suitable policies.

Pasricha (2007) states that customers no longer reply to mass marketplace requests; they have more specific tastes and they are looking for a more specific style. When faced with similar products they may select the brand towards which they have an emotional bonding and which accomplishes their emotional needs.

Krishna (2013) has defined sensual selling as a selling that involves the customers' senses and touches their behaviours.

As per Gupta and Pal (2010) customers are extremely involved in buying when it is luxurious, bought rarely, risky and extremely expensive. Typically, the consumer does not know much about the product group and has much to learn.

As per Blackwell and Miniard (2006) the high involvement means individual significance or status of the product. It is an inner state of flexibility and specifies the amount of stimulation, attention and determination induced by a specific stimulation or situation.

Bhatt (2010) has said that viewpoints can express steady individual assessments. It is recognized that persons overall are not predominantly steady or constant in their behaviour across circumstances.

As per East et al., (2008) viewpoints are what we sense about a thought, which can be a category, brand, person, theory about which we can reason and so which we can assign sensitivity. A vital class of ideas is activities mostly commercially pertinent behaviour such as purchasing, hiring, using, robbery and betting.

Hoyer et al., (2008) has said that one can identify two key methods to the study of customer behaviour: a "micro" positioning which concentrates on the specific psychological methods that customers use to make a purchase, character decisions and a "macro" positioning which concentrates on cluster behaviours and the representative nature of customer behaviour. This orientation draws heavily from such fields as sociology and anthropology.

Evans and Berman (1987) has expressed that sellers need to understand the fact that persons and civilization can alter over time. In the early1980s buyer consumption was noticeable to some extent. Many companies overlooked buyer's contribution or openly challenged customer clusters. Customers weren't well-informed about the quantity of goods, specifically engineering goods like autos which had numerous makes and yet did not develop a leading marquee. Hence, they weren't sure of what they expected from the
products. Number of motorized cars were recalled in the auto business under the authority of the National Highway Traffic Safety Administration of the US.


Figure 2: Buyer Decision Process
Source: https://www.ukessays.com/essays/marketing/environmental-factors-which-influence-marketing-decisions-marketing-essay.php (Dekel et al, 2007: 251)

Cuza (2011) in her research article on issues prompting passenger car customer behaviour and their usage in the ecological community policy concluded that the car is a vital symbol of status to the customer and does not stand for a solitary norm of fulfilment for conveyance need. The auto fits into the character of the purchaser and hence portrays the purchaser and also fits into a particular group of users who buy that product. In most of the cases the purchaser has to fit into the trend of the product rather than tailoring the product for their need. In the present case the product has to cater to the environmental needs of the era, in addition to resolving the problem of CO 2 discharges to meet the current requirements. Other than the organizational difficulties where the key part remains with the civic establishments, the automotive manufacturers will have to distinguish the environmental car through design, so that it could be recognized easily on the streets, but also build a
novel image for the owner of the environmental car, diverse from the present distinctive car possessor, so that it makes a desire amidst the consumers. In this mode, it would be thinkable for the modification of the powerful, big and stylishly decorated car categorized with the new environmental car which should not be modest nor should it be a compromise to the consumer. In devising the selling policy, it is vital to properly segment the marketplace in order to find the initial adopters, but there is a necessity for additional research concerning the consumer in order to learn the behavioural model and ethics which need to be encouraged in selling the message to the initial adopters. In the Romanian consumer studies, it was decided to find his / her level of apprehension to the environment, which could measure the acceptance level for the environment in the automobile field on distinct consumer sections and to find the affective and representative issues significant to the Romanian customer when it comes to his / her car.

A research was conducted on customer life style effect of customer behaviour with respect to auto industry in Chennai by Vidyavathi (2012). A questionnaire was distributed to 350 respondents randomly and only 327 actual interviews were possible in Chennai town of Tamil Nadu. Interviews were held to ascertain insight of the respondents on the use of automobiles. The purpose of the research was to evaluate the automobile owner's insight and behaviour relating to the acquisition of automobiles and to identify and analyse the issues inducing the buying of the automobiles. Most of the respondents in the investigation faced technical problems with their present cars and some were going to change over to a new brand as they wanted to buy a car with the modern knowhow. The researcher feels that the government should promote research and development to make world class quality car in India. He has concluded saying that the rising middle-class populace of India has fascinated the automobile industry. Hence, sellers who learn the behaviour of customers and provide to their desires will be victorious in the future in the coming LPG era.

Vyas (2013) researched on the effect of profession over buying behaviour towards cars. The need of the study was to determine the consequence of the profession on purchasing behaviour of make and model towards cars, to analyse the effect of country of origin on buying behaviour towards cars within different professions. A questionnaire was made to
collect the data from 100 respondents who were employed in academics, law, chartered accountancy firms, hospitals and clinics as doctors and media fraternity from the area of Jamnagar and Rajkot. It was resolved that in the booming automobile industry in India, consumers had the luxury to choose the best. Many MNC's and domestic players in the automobile field were competing fiercely with each other to acquire a larger market share. Hence in this situation research might give an idea to the companies to establish a particular niche for particular consumers and cater to their individual and professional needs which will help the consumers in getting exactly what they want and also the organization to gain a larger market share. India is known for its diversity and tapping this market is a challenge for every company. We cannot comprehend the mentality of the Indian consumers that easily, hence in such circumstances research plays a big role.

A research analysis in consumer behaviour of auto passenger car customers presented by Shende (2014) attempted to study and classify car market based on sections like hatch back, small car, premium sedan, sedan, MUV, SUV and luxury cars. Their purchase decisions have an effect on the classification of the behaviour of consumers of the above segments. The researcher used the methodology of studying the research papers presented by others in the passenger car segment to come to conclusions. He studied the buying choice process and its interface with behaviour limits across all the sections of cars. It was found that the behaviour was different in each segment and the reason for the purchase was disposable income. The worth of the money, safety and driving luxuries were at the top of their demands, whereas quality was perceived based on brand image.

Menon and Raj (2012) studied the main limited smallest square factors of customer behaviour of passenger cars with an objective to develop a model with key variables, which impacts the customer buying behaviour of passenger car possessors in Kerala state. 750 respondents answered questionnaires to get data from 5 districts of Kerala. The findings of the study contributed to the real-world facts based on the automobile business, particularly to the passenger car industry. It also contributed a good amount of worth to the manufacturers and dealers for modifying their selling campaigns in the state. Moreover, the study will not only help the stake holders of this industry but also the dealers, financing
agencies to validate and strategize their plans to focus on effective selling strategies. The acceptability was established through eight parameters established by a prototype which was hypothesized and was verified through wide research and measurable analysis.

## Influence on Buyer Behaviour



Figure 3: Influence on Buyer Behaviour
Source: https://slideplayer.com/slide/1435122/
Sheetal (2014) conducted a research study on user behaviour for top passenger car section in the state of Uttar Pradesh after the liberalization period. The need of the study was to analyse the individual pre-purchase search strategies, factors that motivated the owners to buy a premium car, source of information to influence the buyer to buy the car, role of reference clusters in influencing the buyer to purchase a car and to study the post purchase satisfaction level of the customer. The study was done in 5 economically vital districts namely Allahabad, Kanpur, Varanasi and Lucknow of U.P. The study was done using a questionnaire from 250 respondents basically owners of the vehicles and 25 dealers. The study was done to get the customers perceptions towards premium passenger cars. The author has concluded saying that worldwide auto manufacturing is a vital segment of the financial system of every nation in the world. The future for the premium car industry is bright as the disposable income has increased, extensive choice of models, easy
convenience of finance and technological advancement. Marketers must come out with state-of-the-art promotional plans to entice consumers. The profitability can be increased by marketers by pre-purchase strategies of consumers. Finally, based on the issues related with buyer behaviour, strategies can be planned on the chosen ways and can be employed to get maximum sale.

A review on features inducing customer preference for procuring a car with respect to Maruti Suzuki in Bhilai-Durg, India was brought out by Sahu (2017) to analyse the main issues which are accountable for inducing the preference of customers to acquire the car. Primary data was collected through a questionnaire from 90 respondents in Bhilai Durg district. He found that most of the customers were servicemen, non-service class and students. Most of them $55 \%$ looked for comfort and mileage in a car of their preference. The researcher suggests that self-esteem and social status are the major factors for the customers, the company should work on the external and internal looks of the cars in various models. They should also work on the fuel consumption of their cars, as the fuel prices are increasing and they should also increase free servicing for their customers and come up with new models. The author concludes saying that market is very competitive and hence the complex understanding of the consumer behaviour is very vital for marketing success and taking the right decisions. The customers are satisfied by the performance and promotions of Maruti Suzuki cars and feel they can increase the market share if they act on the other factors discussed above.

Schiffman and Kanuk (2004) has used intellectual managers to find the top values for the goods or services offer on numerous marketing gifts, avoid delivery channels and distributors and shop for things everywhere in the world and round the clock from the ease of their homes. To understand about the knowledge of the customers and their behaviours, in depth study has been done on the numerous literatures existing in the area of green marketing. From an experimental viewpoint, a considerable theoretical and specialized literature discovers the areas like maintainable marketing, customer behaviour, green car etc. The procedures of these studies vary extensively, but the main results have been observed to describe the research objective. The above literature evaluation gives a detailed
knowledge on the subject and it is also observed that not much work has been done in India on the buyer's behaviour with reference to the environment friendly cars.

A study on consumer purchasing behaviour for second-hand cars in Pune city was conducted by Shimpi (2014). The objective of the research was to explore the association among variables which touch consumer purchasing behaviour for second-hand cars and to understand the car market in India. A questionnaire received from 84 respondents were used to conduct this study for Pimpri Chinchwad Municipal Corporation and Pune Municipal Corporation areas. As the disposable income is growing in middle class society, India has become a potential market for used cars. There are many world class manufacturers who have set up shops in India and this has resulted in people wanting to replace their cars with brands with latest and advanced technology. This has created a space for used cars and thus a used car market came into existence. It was also noticed that the used car owners also had the same emotions, purchase intentions, mileage, colour of the car etc. as a consumer behaviour. It was also noticed that numerous manufacturers have also set up a separate unit to deal with sale of used cars.

### 2.3 Communication

As per Raju et al., (2004) communication with existing and potential consumers, is a necessity for any company for molding consumer behaviour. Persuasion is the subtle part of communication and that will inspire continued favourable behaviour of existing consumers into customers.

Engel et al., (1990) has expressed that the wide literature on character / mindset and other behavioural sciences has convinced marketing investigators to imagine the character of the personality. Features should foresee brand or liking of store and other kinds of consumer action. They said that Evans was initially an investigator who tried to foresee auto brand rights. He commenced this education using 12 fact-based variables, such as age of the car, revenue and other demographics, to assess the supposition that automobile purchasers vary in their character structure. Though Evans was talented to forecast properly a Ford or

Chevrolet possessor, in 70 percent of the cases he resolved that character is of comparatively little worth in forecasting automobile brand possession.

As per Schiffman and Kanuk (2007) character mirrors individual changes. Character is a valuable idea since it allows us to classify customers into diverse clusters on the basis of one or even numerous behaviours. If each individual were diverse in terms of all character behaviours, it would be very difficult to cluster customers into sections and there would be minor motives for marketers to develop products and publicity crusades targeted to specific sections.

Assael (2001) has said that one of the most significant behaviour is the uncompromising group. A discussion on the impact of clusters is based on the reference cluster, that is a cluster that aids as a reference point for the individual in forming his or her principles, attitudes and behaviour. Marketers also use celebrities as speakers to try to mirror group impact. The customers try to imitate the celebrity and hence a group of people tries to characterize the celebrity. The supposition is that customers are expected to be inspired by these individuals since they want to be recognized with the celebrity.

Peter and Olson (2002) refers persuasion to a change in principles, attitudes and behavioural intents instigated by a rise in communication. Marketing scholars have reviewed the convincing effects of advertising statements, but sales promotions, personal selling and publicity can also convince consumers.

Familmaleki et al., (2015) analyzed the impact of sales promotion on buyer procurement behaviour. The purpose of the research was to learn the outcome of diverse tools used for sales on the purchasing behaviour of the consumers. The study was done based on literature review findings from various journals. The analyst has inferred that understanding the factors that influence customer conduct and the policymaking procedure isn't only crafted by huge partnerships, yet in addition experts look to locate the key zones. Deal advancement has an influence on the customers procurement behaviour which is an accomplishment achieved at that juncture. Consumers procurement behaviour and sales
can be driven by numerous types of essentials, such as free trials, price reductions, social surroundings and physical surroundings. It has been affirmed by different scientist's investigations that the relationship between deal advancements, consumer loyalty, client esteem and social expectations, legitimize the development of offers. The factors that influence the customer's buying choice is the value that the purchaser sees in the product. It is actually seen by the buyer the advantages of the manufactured goods. $75 \%$ of the businesses use free trials to advance their goods, but $52 \%$ of the businesses don't promote their new goods. This method is a powerful promotion tool but requires high costs for the organization. The principle results of this examination are that organizations can surge deals by displaying the correct exposure instruments to allure pilot clients. Associations ought to deliberately design their special strategies and work on the limited time spending plan over the differing reputation, offering inclination to more powerful devices.


Figure 4: Marketing Communication Mix
Source: https://businessjargons.com/marketing-communication.html

Veerakumar (2017) studied on consumer behaviour and issues influencing purchase decision of durable goods. The objective was to study the socio-economic report and the factors influencing purchase decision of the consumers. A questionnaire was used to gather facts from 150 respondents from Pollachi city. Simple statistical tools were used to analyse
the study. The results of the study were that respondents under the age of 20 years were 50 $\%$. All the respondents were females. $60 \%$ of the respondents were singles and under graduates. $40 \%$ were employed in both public and private sectors. $80 \%$ were from joint families. 50 \% had 3 to 6 members in the family and had an income of Rs 15001 to Rs 20000. 18 \% felt that brand is vital to make a purchasing decision. The researcher has concluded saying that consumer durables market has become very competitive. Hence the interest of the consumer has a bigger role in the success and higher sales of the product. Marketers should communicate with their customers through every available media to educate and convince them. Hence, a seller who comprehends the behaviour of the consumers plans to his selling policies to suit the requirements and aspirations of the target market will definitely have a lead over his competitors.

### 2.4 Influence of Family Members /Friends / Social Status on the Buyers

## Behaviour

Blackwell et al., (2002) have communicated that families or family units are purchaser units of basic investigation of shopper conduct for two reasons. In the first-place families or relations are the units for utilization and buyers for some items. Second, the family is a key influencer of dispositions and conduct of people. As buyers, we are the making of our families.

Schiffman and Kanuk (2000) has stated that in the background of customer behaviour, values are defined as the total of academic views, morals and customs that serve to control the customer behaviour; customs are usual and identified ways of behaving. The influence of ethos on civilization is so normal and so deep-seated that its effect on behaviour is seldom noted. Yet, culture offers order, direction and direction to associates of the society in all stages of human problem solving. Ethos is active and slowly repeatedly advances to meet the wants of civilization.
"Consumer behaviour towards Passenger Cars- A Study in Delhi-NCR" was studied by Indu (2016). The objective of the study was to recognize diverse wellsprings of data utilized by the purchasers and their part while settling on a buying choice. Random sample
method was adopted for collecting the data. Questionnaires were distributed to 100 people but only 80 questionnaires came back duly filled. Out of the 80 after scrutiny only 50 valid questionnaires were used for the study from Delhi - NCR region. Findings from the study displays that the customers are impacted by various variables like culture, household, orientation, age besides mode of life. The most basic component that effects the purchaser to use passenger auto is the moderateness of the cost of the automobiles, societal position and quality. The researcher presumes that there are four critical classes of client behaviour determinants and they are specifically societal, monetary, singular and mind. The affordability of consumers has gone up due to rising salaries and disposable income. Each company in Delhi NCR region would like to have its presence felt in the society, as individuals are prepared to bear the price of an auto, as it is a symbol of social status to travel in an auto.

## Influence in Purchase Decision



Figure 5: Influence in Purchase Decision
Source: https://www.slideshare.net/PranavKumarOjha/buying-roles-family-influences

Consumer behaviour pertaining to passengers' cars - a study in Delhi NCR was examined by Srivastava and Matta (2014). The objective of the study was to identify the diverse sources of data used by the consumers and their role while deciding to buy. The authors finally collected 50 questionnaires from Delhi NCR region which were duly filled and were
used for the research. The findings in this study brings out that customers in this area are influenced by numerous issues for instance principles, household, position, age and life style. The utmost vital aspect that effects the buyer to utilize passenger car is the worth of the cars, societal position and sturdiness. The author has concluded saying that customer behaviour comprises of all human conduct that drives in building a buying choice. Being acquainted with the shopper's conduct enables a vendor to settle on promoting decisions which are well coordinated with the buyer's desires. There are four primary classes of buyer conduct deciding variables specifically social, financial, mental and individual. Increasing salary has enhanced the acquiring strength and more individuals can bear the cost of an auto. Clients requests are dynamic, yet it's thoughts are fundamental for each organization to make presence into the market. In places like Delhi NCR auto has turned into an image of societal position. Clients are using the autos as a transport and also as a prized ownership.

Shukla and Barada (2015) made an investigation of client dedication and happiness towards deals in Ahmedabad city, India. The target of the examination was to recognize the space among desire and discernment, to distinguish the level of fulfillment among different measurement, to know the client steadfastness towards deals in India and to comprehend if noteworthy distinction exists amongst observation and desire or not. Exploratory examination was used to study through the survey and accumulated data from different respondents of Ahmedabad through shopping center block technique. The examination was done by means of SPSS programming and $t$ - test was utilized to get the noteworthy distinctions among the observations and desires of the clients towards deals in India. The researcher established that there is lowest space between recognition, desire towards physical measurement and clients are relatively fulfilled in this measurement. The stores execute according to the desires of the clients. The clients are happy with the store, as it satisfies according to their desires. The sightings are that happiness level of clients in different classes such as age groups, sex, pay levels are the components affecting them to buy a Yamaha. The customers were not satisfied by the mileage but service was not good for half the respondents. The performance was good for all but servicing was good only for half of them. The buyers were influenced by their friends.

Mubarak (2007) tried to learn the impact of household units in the buying choice of durable goods. The aim of the study was to discover the role played by the husband and the wife in the process of need identification and fulfilment with respect to the purchase of consumer durables. The respondents selected for the study were in the age group of 21 to 51 years and above, their household monthly revenue extended from 20,000 to 70,000 and above. The study exposed that all the relations possessed variety of durables like motor car, twowheeler, television, vacuum cleaner, washing machine etc. The study stated that majority of the respondents gave status to their friend's opinion and propositions based on their previous buying behaviour. The study resolved that to bring about long-term pleasure in one-time purchase the choice should be a combined verdict.

Indushri (2011) researched on purchasing roles in the buying choice of consumer durables. Primary data was collected from Chennai city, Tamil Nadu from 210 respondents out of 300 respondents to whom questionnaires were given. The questionnaires were given to women only since they were the primary users of the consumer durables. Microwave oven, washing machine, television, refrigerator and air conditioners were included in the study. Later major roles on the purchase decision was decided such as originator, influencer, decider and purchaser. The role of each of them was measured statistically. The findings were that family consisted of individuals of varied mental, sensitive behavioural characteristics and abilities that can greatly affect family decision making process. There is more than one-persons involvement in the choice making process. The temperament of each individual is different and hence influences the discussion in a dynamic manner especially when parents and siblings are involved in the process. Most of the respondents have said the males in the family are the deciders and purchasers. The women in the house are only initiators for kitchen items, as their role is weak, the male is the decider and purchaser. It was observed that less women were working and hence their role was less of a decider and purchaser. It was revealed that fathers make decision before marriage and husbands after marriage. There are also social and cultural issues that doesn't allow women to be deciders and purchasers. In the study it was found that except for washing machine the remaining four consumer durable initiator and influencer were the same family
representatives of the household. The initiator feels strongly about it and this influences the final decision and purchase. This shows that if the need is felt then the purchaser persuades the other household members in the purchase decision.

## Consumer Buying Influences



Figure 6: Consumer Buying Influences
Source: https://slideplayer.com/slide/10772526/

A study of influencers purchasing choice for passenger car section in New Delhi was suggested by Gupta (2013). The purpose of the study was to inspect the influence of issues affecting today's buyers buying insights and behaviour on passenger cars. Information was collected using a questionnaire from car users from New Delhi and a 5-point Likert's scale was used to get their feedback. Out of the 230 questionnaires distributed 191 proper filled survey forms were used for the study. The research has revealed that reference groups has a major role in the decision-making process followed by friends, family and relatives. Respondents preference was for the best pricing and fuel-efficient cars. They have also said all the other attributes also plays a role in the choice making process of buying a car.

A study on pre and post customer buying behaviour for different car brands in Punjab was conducted by Gurleen and Sukhmani (2011). A questionnaire was distributed to 200 respondents for this study and 195 correctly completed the questionnaires which were used
for this study. SPSS 14 was used to statistically analyse the data and come to a conclusion. The study was done for mid segment car brands with a price range of Rupees 5 to 8 Lakhs. The objective of the study was to study the pre and post purchase behaviour of customers of passenger cars and find the issues that impact the purchase choices of customers while buying a car. The authors concluded that there was a stiff competition in this segment and Maruti Swift was the most preferred brand followed by Maruti Swift Desire, Tata Indica Vista, Ford Ikon and Volkswagen Polo. The least preferred were Nissan Micra and Fiat Punto among the respondents. Sources of information for buying the brand of car was from friends and advertisements. The study revealed that dealers and media were not much useful, but in contrast family members and friends helped in the choice making method of buying a car. Bulk of the respondents were pleased with their vehicle, most of them with the after sales service and were ready to hold on to their existing brand. Owners of Nissan Micra, Ford Ikon and Chevrolet Spark were ready to change their vehicles for a different brand. Brand name, fuel efficacy and value were the main factors that influenced a buyer, whereas after sales service and outlook were secondary and dealer network and warranty were the least.

### 2.5 Customer Loyalty

Andersen and Ritter (2008) expresses that the concept of the buyer's world is vital as it embraces the secret to knowing in what way the customer is true and loyal. Space is left open to the competitors if the company has no representation and is not reasonable in the areas of its expertise and hence can't build relationships with its customers. But in the opposite if the company is present in all the areas of its expertise and is reasonable and adjusts to the customers thinking process, then there will be a true footing for consumer faithfulness and fulfillment.

Jahanshahi et al., (2011) considered the results of client administration and item quality on consumer loyalty and reliability. The target of the current investigation was to elucidate the connection between four factors of administration quality, item quality, consumer loyalty and client faithfulness. The examination was done in view of 53 addresses primarily made on various estimation scales before examination. 24 questions were utilized to assess
client benefit quality and item quality. 13 questions were used to survey client steadfastness and 11 inquiries were intended to evaluate consumer loyalty. Fulfillment was estimated by a seven-point Likert scale. Different SPSS measurable apparatuses were utilized to analyze the data. It has been seen from the exploration that consumer loyalty expands their devotion, however there are likewise numerous fulfilled clients who are not faithful to that specific brand. Hence, the critical and challenging task for the company is to maintain the satisfaction and loyalty of the customers. The discoveries from the examination features the consumer loyalty and furthermore there is a positive relationship among client satisfaction and client faithfulness from the point of view of the Indian car industry.


Figure 7: Loyalty Loop
Source: https://generalassemb.ly/blog/loyalty-loop-replacing-marketing-funnel/
Outcome of customer rapport management on customer contentment and loyalty was studied by Khedkar (2015). The motivation behind the examination was to break down the effect of client relationship administration on consumer loyalty and to dissect the impact of client compatibility administration on client reliability. Information was gathered using a questionnaire with 20 questions, out of which 12 questions evaluated the client faithfulness and 11 queries were related to client fulfillment. The replies were given on a five-point Likert's scale. Statistical techniques using SPSS was used to analyse the data. The sample size for the study was 104. The findings of the study reveal that customer relationship management is needed in an organization and the implementation of the same
will determine in enhancing the worth, revenue and going through the wants of clients. The most vital part of CRM is that if the customer satisfaction level goes up, we get a satisfied customer. A satisfied customer talks positively about the product and the dealer and becomes loyal to the brand. The impact of this helps in increasing the revenue and profitability of the business. Hence, the research has brought out that customer contentment and customer faithfulness are two vital components of CRM. Client Relationship Management (CRM) is a technique that incorporates administration of client gatherings, administration leaders of an association and overseeing business in a compelling way. CRM is used as an instrument to encourage the business and enhancing client association. In the long-term in the wake of leading this exploration and approving it through different information and quantitative investigation, it can be adequately expressed that CRM is required in an association and will bring about advancing gainfulness, salary and meeting the needs of customers. The most extreme thing that CRM gives is consumer loyalty. A powerful CRM will prompt consumer loyalty and if the client is fulfilled it drives towards hopeful verbal exchange and dependability. This certainly helps in utilizing the business and producing more income and benefits. Hence, this exploration is an endeavor by the analyst to recognize factors that impact CRM i.e. Consumer loyalty etc.

An investigation on the effect of client administration and merchandise quality on client satisfaction and confidence was done by Senthilkumar (2012) to discover the connection between four factors of client benefit quality, item quality, client happiness and client dedication. The essential information was collected using a survey form which had 53 questions. 24 questions were relating to client benefit quality and item quality, 13 were for client's confidence and the rest 11 were for consumer loyalty. Fulfilment was estimated utilizing a five-point Likert's scale, exceedingly fulfilled, fulfilled, impartially fulfilled, disappointed and profoundly disappointed. The researcher has endeavoured to demonstrate that consumer loyalty builds their reliability, yet there are additionally numerous fulfilled clients who are not faithful to that specific brand. Thus, fulfilment and reliability at the comparable period is basic and furthermore a testing errand for an organization. The discoveries show that there is an idealistic and expressive relationship between consumer loyalty and clients' reliability. The examination demonstrates that the prevalence of client
benefit and the nature of items advances consumer loyalty and furthermore there is a positive connection between consumer loyalty and client dependability in setting up of the Indian car industry.

## Loyalty/Satisfaction matrix

| Sigh | Secure <br> Focus on issues with <br> current products and <br> orders | Danger of becoming <br> complacent? |
| :---: | :---: | :---: |
| Low | New business or <br> transactional supplier | Need to build <br> relationships to <br> understand customer's <br> future needs |
| Low Satisfaction |  |  |

Figure 8: Loyalty / Satisfaction matrix
Source: info.bsquared-consulting.com/blog-and-news/customer-loyalty-is-a-better-measure-of-future-behaviour-than-customer-satisfaction

Function of facility excellence and consumer fulfillment in 4-wheeler auto facility business: an assessment was examined by Javed et al., (2015). The objective of the research was to ascertain the significance of customer contentment in the 4 -wheeler industry, the review of consumer fulfillment and facility excellence issues that touch consumer fulfillment. The researcher has resolved that customer contentment is crucial for the victory of every business. This means improving the product quality and improving the service quality on a constant basis to help the company to be the best in the industry. After giving such service, they will automatically be number one in the industry. The researcher feels that once the company can achieve that level, then the company need not put any money further on promotions, as the satisfied customers themselves will promote the product and the brand by word of mouth. So, the conclusion is that victory of every business purely depends on the fulfillment than on the perception of the consumers.

### 2.6 Purchasing Behaviour

Louden and Delta (2001) viewed that the study of consumer's purchasing behaviour usually should contain the less noticeable choice processes that go with consumption, with where, how often and under what conditions consumers make their purchases of desired goods and services. Most of the marketers have accepted the fact that the understanding of consumer buying behaviour is essential for their long-run success. So, their main actions and plans such as marketplace opportunities, investigation, target marketplace choice and marketing combination decision, are customer focused.

## The Consumer Buying Process



Figure 9: The Consumer Buying Process
Source: https://cdn.business2community.com/wp-content/uploads/2014/03/The-Consumer-BuyingProcess.jpg

Renganathan (2005) analyzed the customer marketplaces and purchaser conduct of autos in Chennai zone. The sample size consisted of 135 persons who owned a car and individuals ready to change from 2 wheelers to 4 wheelers. The findings indicate that 39 \% feel that their car should be mid-size with luxury. Appearance and style of a car influences a consumer to purchase the car. In the urban areas Hyundai has got a considerable marketplace in the city zones. They can conduct in the rural areas campaigns
and road shows to capture those markets. The researcher suggests that to have an active advertising to convince the customers the company should first look for the right superstar to back the campaign and advertising. While selecting the celebrity the brand managers should recognize the long-term impact as the celebrity has an effect on the advertisements and this may help to increase the sales as well as bring down the sales.

Bakshi (2012) suggested in her research influence of gender on customer buying behaviour through literature survey that gender is not only a biological concept as being a masculine or feminine, but beyond. Gender with diverse extents is not only a marketplace division adjustable, but it is a variable that has a robust influence on the choices. To satisfy the customers, sellers need to comprehend gender-based tendencies. It has been noted that there is a big difference between both the genders, due to physiological differences. The purchasing behaviour of the genders are different, the women seem to be assertive and talks to more people internally to inform, connect and network with others, whereas the men are outwardly engrossed and tend to talk more often and still doesn't pass on information. Men try to gather more information, whereas women go into the depth of the information. Women are extra personal and spontaneous in nature, but men are more systematic and rational and opines based on others purchases, than by themselves. Men value for quality and efficiency and immediate needs, whereas women are emotional and look for long term needs.

Determining and planning the varying Indian customer behaviour - drivers of variation for the sellers, a research was conducted by Kumar (2014). The study is based on consumer purchasing behaviour with the customer having the three distinct roles of user, financier and purchaser. Consumer behaviour is tough to forecast, even for specialists in the field. Retaining consumer, customer association with management and personalization are vital factors for the Indian consumers.


Figure 10: Model of Consumer Buying Behaviour
Source: https://slideplayer.com/slide/8531411/
Joshi (2013) steered a study on customer behaviour aimed at small cars: an experimental study. The objectives of the study were to identify factors influencing the selection and purchase behaviour, attitude of consumers towards various brands of small cars and to find the brand preferences of the consumers. Duly filled questionnaires were collected randomly from 100 respondents from Jaipur and Jodhpur. A 5-point Likert's scale was used for the response. The findings of the study were that Maruti Suzuki's Alto was the utmost favoured car trailed by Santro, Tata Indica, Maruti Zen, Spark, whereas Palio was the least chosen car among the consumers. The study bought out that advertisements played a key role followed by family and friend's recommendations in making the buying decision. The study exposed that $50 \%$ of the consumers who responded were fully satisfied from their brand, whereas only $16 \%$ are not satisfied with their cars. Price was the most important criteria in selecting a car, whereas safety was the least.

### 2.7 Rural and Urban Consumer Behaviour

Trehan and Singh (2003) made a relative study on municipal and countryside consumer behaviour. Their study exposed noteworthy changes in seeing brand image, assurance,
warranty, credit accessibility, overseas partnership, modern knowhow, after sales facility and irrelevant variance among the two populations in seeing sturdiness and price while making a buying choice. The initial three most extreme imperative issues in the country were value, credit accessibility and strength, whereas in the urban market the initial three elements were value, most recent innovation and toughness.


Figure 11: Rural Marketing Model
Source: https://www.slideshare.net/raghavenugopal/rm-1-15436247

### 2.8 Sales \& Service /Customer Relations/Quality /Spare Parts Availability

Najeemudeen and Panchanatham (2014) discussed customer behaviour towards the dealer choice for passenger car buying in Malappuram district. The intention of the study was to ascertain the socio-economic profile, rating the dealer and reasons for choosing a particular dealer for the purchase of cars in Tirur district of Malappuram from Kerala. A questionnaire was used to gather data from the respondents. 250 questionnaires were circulated and 201 effective filled questionnaires were received from the respondents. The findings of the study were that respondents went to a particular dealer because of good earlier experience, decent after sales service and easy availability of spares, ready availability of desired colour
and model of car and high resale value for exchange of cars. Very few respondents went to a particular dealer due to discounts and offers. Informal oral communication with friends and dealers also played a key role in deciding a particular dealer. The author has concluded that the dealer is the link between manufacturers and customers. Hence good sales / service and customers relations matters in getting future business from the same customers or their friends and relatives.

## Customer Service and After Sales Benefits



Figure 12: Customer Service and After Sales Benefits
Source: https://www.langhammer.de/en/services.html
Manikandan and Asokan (2016) worked on consumer behaviour with reference to small cars in Tiruvarur district. The purpose of the study was to understand the consumer behaviour theoretically, know source of knowledge of various small car brands, know consumer feedback on after sales service and study problems faced by small car consumers. Data was collected using a questionnaire from 60 respondents for the research from Tiruvarur district. It was found that $70 \%$ of the owners of small cars were doctors, engineers and college teachers. Many international companies have come in the Indian marketplace and are making space for them in the intense competition. These manufacturers have improved on the fuel efficiency, better safety and entertainments have been introduced in most of the cars. The motivating factor for certain brands of cars is fuel efficiency, easy maintenance and high resale value. In the study 37 of the respondents from a total of 60 respondents have said that it is no more a luxury item but is a convenience and
hence feel as the major reason for owning a car. 21 respondents felt it was a necessity. Moreover $92 \%$ of the car owners are satisfied with their present car. The researcher feels that for success in this competitive marketplace knowing the consumer behaviour is vital. The study has brought out that high maintenance cost, spare parts cost and quality of the dealers does have an effect on the sales of the cars and hence if the manufacturer wants to have growth they need to improve these factors.

A study of customers likings and approach to passenger cars of Maruti Suzuki \& Hyundai motors in Marathwada region of Maharashtra was conducted by Rana and Lokhande (2015). The objectives of the study were to get an opinion from the customers of Maruti and Hyundai makes in Marathwada area regarding their after sales service, resale worth, fuel efficiency, vehicle contentment, view about value and source of information. The data was collected using a questionnaire from 500 respondents in the Marathwada region. The respondents were servicemen, entrepreneurs, self-employed persons, pupils, agriculturalists and superannuated people. Yearly earnings of $50.6 \%$ respondents were in the range of 2-5 lakhs per annum, whereas $45.4 \%$ respondent were above 5 lakhs. Maruti Suzuki were owned by 66.6 \% respondents, whereas 33.4 \% owned Hyundai Motors. Most of the respondents $98 \%$ agreed that their automobiles were given with all promised features during the sales and delivery. Maruti cars were fuel efficient and had better after sales service, spare parts availability and better pricing, wherein we can say it was value for money / resale value. Whereas Hyundai cars were preferred for all the above factors and better interiors / exteriors and comforts. $40 \%$ of the respondents alleged that the pricing was competitive, whereas $39 \%$ said the pricing was affordable. Moreover, the automobile companies should have periodic meetings with marketing and sales managers, production managers and customer care officers to frame innovative strategies. $92 \%$ of the respondents said that they didn't have any problem with after sales service, whereas $8 \%$ had some problems. Moreover $73 \%$ said that the demand of vehicles doesn't depend on resale value, but only $27 \%$ felt it depends on resale value. The researcher's findings were that customer satisfaction was crucial for business performance, loyalty and retention. It was found that getting a new client was costlier than retaining them. Satisfied customers, employees and stockholders all have one common characteristic, they are optimistic and
excited about the firm they are dealing with. For retaining a customer for an extended term, the automobile companies should have a proper marketing mix. Further the companies should have an efficient complain registering process and the same should be resolved efficiently to gain confidence of the customer. For this to happen the dealers should be in constant touch to get the feedback of their customers.

Development of a model and validating the study for consumer likings of car owners was studied by Menon and Raj (2012). The study was done in 5 districts of Kerala. 150 respondents answered the questions from each district. The total sample size finally was 750 from the country side and city areas of Kerala. The purpose of the investigation was to discover and hypothesize numerous factors which impact the buying methods of passenger cars in Kerala State and to develop behavioural methods and validate the acceptability of the research which may finally inspire the customers buying of the passenger cars in the State. The investigation brought out that because of its narrow streets and less parking area the small cars were in demand. Sale of sedan and advanced sedan executive models are rising in the state. Customers' demand for personalized care for the sales and service from dealers. Peer group is the highest inducing aspect for the car purchasing decision for the youth. We can see numerous ladies driving the auto in the city and towns imitated from other states. Car companies in the previous years have started using internet for brand building.

Bhatia (2013) discusses about plans for selling cars by producers in India in her research. The purpose of the study was to understand the post liberalization period in the automobile industry, strategies being followed in the industry after liberalization and its effectiveness by analyzing the consumers for brand choice and intentions for loyalty. Exploring and suggesting marketing strategies in the current situation. A questionnaire was made to collect data from 138 respondents from NCR - Delhi area. Various statistical analysis was done using SPSS for testing the hypothesis of the research. The findings of the research are that post liberalization the Indian car industry has taken up the challenge and hence the leadership taken by them is commendable for maintaining high quality standards and business excellence. The empirical findings exhibit that the industry has to have an
integrated holistic approach towards marketing and customer service to capitalize on customer value. Car buyer's preference cannot be forecasted but can arrive very near to that by research. Advertisements should be designed in such a manner that the role of the family member in making a decision is evident. Hatch back and compact cars are used mostly by women. Growing disposable income, increasing family and their needs coupled with improved infrastructure has been the drivers for the progress of the car industry. The positivity of a brand can only prevail if the customer service is good and there are satisfied customers. The Indian consumer is now looking for safety measures like ABS, EBD, safety belts, airbags, reverse camera etc. The customer these days are looking for exterior / internal design, advanced technology, engine capacity, safety, performance, value for money, comfortable ride etc. Easy after sales service, spare parts availability and good pricing plays a great role in deciding a brand. Rapport management has a good role in retaining the present customers and getting new customers. As most of the purchasing takes place through financing the dealers should work as an intermediary between the consumer and the financing company. Car companies should have a good network of sales and service centers to give $24 \times 7$ service for the customers. Finally, one can say that the right positioning of the brand along with right strategy will help the car industry to have a consistent growth.

### 2.9 Features and Brand Loyalty

Monga et al., (2012) studied on car marketplace and purchasing behaviour - a study of customer insight. The objectives were to ascertain the demographic variables of consumers of diverse makes of autos, understanding product and dealer related perception from different customers on satisfaction etc. It was concluded from the findings that the manufacturers are operating in a very competitive market and hence quality has a main role for the success of this business. It was revealed that TQM plays a major role in this industry and hence co-ordination and integration along with nonstop enhancement of entire events is vital. Total Relationship Management is the latest selling policy and way of life. Here internal, besides external activities are integrated by the manufacturer to make a quality product and making decent association with sellers to enhance the service levels. There isn't any key change between the car makes in a section as far as operation is involved.

The make awareness depends on the marginal signals which depends on the kind and class of the package offered together with the set price, upkeep, handiness of spare parts and linked matters. It has been understood now that even if the manufacturers feel that they have a good product it may not be the perception of the customer and hence a newly launched product can fail in the market. The study brings out that make awareness to some degree starts developing much earlier than a car is bought, moves on with its usage and is reproduced in the endorsements, the purchaser recommends his friends for the similar car. Brand celebrity of an automobile is prescribed through the suppliers in the minds of the consumers. The consumers make their own insights regarding the car and these echoes on the make of the car. So, make image and celebrity match each other and the brand insight aids in the making of the brand image. Sellers have a facilitating role between manufacturers and customers and hence help in building the brand. After sales service has a large role in the success of the brand and their proximity to the customers helps in building the image of the company. The researcher feels that even if the automobile marketplace is rising they have to tread a long way ahead, as they must convince the customers about the brand celebrity of the car and how it fits in their way of life. It has been noticed that even if customer feels that the brand personality and the brand perception of the car is good it may not convert into a sale. Cars have become a commodity and hence the success in the sale can happen only if the salesman understands the perception of the customer about the car and if he can convert his perception positively to make the sale happen.

Bhatt and Bhatt (2015) depicts the issues prompting the procurement of hatchback cars an experimental study in Ahmedabad observes the association between these issues and demographics. The data was collected using a questionnaire from 300 respondents. There were six factors like brand assurance, characteristics, reach, marketing, professed excellence and cost which prompted the consumers to buy a product. There is an association amongst brand assurance and age, periodic revenue and educational qualification. There is also an association among reach and regular income, attributes, age, value / brand and matrimonial position. Various statistical tests determine that consumers between the age range of 25 to 35 years are aware of make as well as attributes of the cars.

It was revealed that persons in the pay bracket of Rs. 35000 to Rs. 45000 were further involved regarding make and reach as equated to higher pay brackets. Customers with advanced education give extra significance to brand assurance and wedded customers were extra aware of the cost. The results are suggestive which requires to be spoken when we are considering customers fitting to discrete demographics


Figure 13: Loyalty
Source: https://blog.inkjetwholesale.com.au/marketing-advertising/build-awesome-brand-loyalty-6-tricks/

Venkateswaran (2012) studied brand loyalty behaviour among consumers in FMCG market in Madurai district and had selected 100 masculine and feminine customers from each taluka for his study. His total sample size was 1400 which was done using a questionnaire. He found in his study that the most important age group among the rural, semi-city and city customers were among 30 to 40 years. He found male customers dominated in all the three areas. The most dominant income level of the people was in the range of Rs. 15001 to 20000. The family size among the country side and semi-city customers were 5 to 6 members, whereas among the urban customers, it was 3 to 4 members. The family size of urban customers was lesser than the family size of the semicity and country side customers. The urban people were more experienced than the rural regarding FMCG. It was found that the brand loyalty towards the FMCG's were higher among the semi-urban and rural customers. The reason for the brand loyalty was level of make awareness, make association, professed quality, brand trust, brand quality and
distribution intensity. The vital factors for brand loyalty are produce excellence, elegance, make tag, facility excellence and campaign of the make. The study portrays that the required marketing strategy to generate brand loyalty among the rural customers is different from other two group of customers. The study has found that in order to succeed in the FMCG's market the marketers should study the brand loyalty behaviour among the customers segment wise and then formulate appropriate brand loyalty strategies.

A study on brand relationships and switching over behaviour for highly used products in young consumers was conducted by Sahay and Sharma (2010). The study focused on the make relationship among youthful customers in the age group of 13 years to 25 years in a developing economy and data was gathered using questionnaires from two city groups from western India. The outcomes infer that young consumers do have a relationship with brands, their affection and desire for the make is robust among the teenagers than the young adults. Societal clusters like household, peers and friends influence on the swapping behaviour of a brand. It is established that household has a comparatively strong impact than friends. Price also has a greater role in deciding a brand and hence customers do equate value regardless of the strength of the make. This too suggests that the Indian consumer is price conscious across income groups. The study also shows that once the young Indian leaves the family home, then peer influence becomes vital. Hence, we can say that if the seller requires the focused consumer to develop association through the make, then they should concentrate on his/her friends to improve the method.

A study of brand loyalty for cosmetic goods between youth researched by Parmar (2014) brings out extra perceptions on brand faithfulness for cosmetics. An organized questionnaire was used to get data from Indian youth whose age was between 18 to 40 years. 120 questionnaires were distributed between youth of Vadodara and Kheda districts. Though, only 113 questionnaires were finally used for the study. Data analysis discloses that young consumers are well conscious about different cosmetic brands and product categories existing in the market. The purchasing behaviour of the consumers were influenced by friends and followed by parents. The findings also bring out that outstanding quality has a crucial role in developing brand loyalty and on the opposing, quality, allergic
reaction makes a switch over to other brands. Surprisingly it was found that, imaginative advertisement and superstar marketing do not significantly affect purchasing behaviour of youth. Hence, the marketer and the producer should place more stress on quality factor rather than using media creatively for advertisements and using celebrity for endorsements as excellent quality only will help to build a brand loyalty and have loyal customers. The research brings out that marketers should emphasize more on innovative brand loyalty programs to have a stable sale of the product and to create a strong connection with consumers to have a lasting association. This can be only achieved through excellent quality. Moreover, cosmetic manufacturers should understand the buying behaviour of consumers before executing any marketing strategy.

A study on customers favourite brand in SUV's and MUV's on marketing mix variables was conducted by Raj et al., (2013). The objectives of the study were to recognize the issues inducing brand selection of budget segment SUV's and MUV's and inspect the reliability of several data sources and emotions associated with the brand. 143 questionnaires were distributed in Cochin a city of Kerala and finally 98 questionnaires were used for the research with their criteria. Various statistical tests like Chi-Square test, Kaiser-Meyer-Olkin Measure of Sampling Adequacy test, Friedman's test, Bartlett's Test of Sphericity, ranks and variances were used to support their findings. The findings of the researchers bring out that the affection of a specified make can be clarified in relation to six issues that produce dependability, financial issue, demand for fashion, occurrence of non-price campaigns presented, dependability and consumer sense or alliance to the make.

Factors influencing consumer's liking towards a brand of small cars was examined by Anandh and Shyama (2014). The purpose of this study was to understand the socioeconomic status of consumers and brand preference of small cars in Chennai city of Tamilnadu. Questionnaire was used to gather information from 500 respondents from Chennai city for the study. It has been concluded by the researcher that the small cars are mostly owned by males in the age group of 31 to 40 years and graduates are employed in a private organization. The majority of the consumers in this small car segment are those who have a monthly income between Rupees $25,000 /-$ to $50,000 /-$ and have a nuclear
family. The bulk of the consumers owned Maruti Suzuki as the brand of their small car. Pricing, comfortability, efficacy, availability, desire and want are the issues touching consumer's liking a brand of small cars as per the author.

Liking of a particular brand of passenger cars in the district of Aurangabad was described by Sardar (2012). The purpose of the study was to understand the preferential brand, profile and analyse the satisfaction level of the consumers. A questionnaire was used to get the data from 150 respondents from the district of Aurangabad of Maharashtra state. It was found that $60 \%$ of the consumers are using a Maruti Suzuki brand of car. Brand was the utmost significant issue while choosing a car followed by price. $60 \%$ of the respondents do not want to alter their brand, whereas $40 \%$ want to change the brand of the car used by them. Respondents in the age group of 25 years to 45 years are the leading customers of cars and there is a substantial correlation among age and make preference. Nearly $70 \%$ of the respondents are pleased with their present car. The researchers concluded that individual issues like age, education qualification, sex, job and pay position has an important impact on the issues prompting make affection. There is a firm competition in the market on the valuation front and hence there is a need to work on excellent quality with lowest cost. In this business the marketing department has a key role and hence they decide on the type of product and the target groups for the product in comparison to any other business.

Factors of brand equity in Indian car businesses were discussed by Thiripurasundari and Natarajan (2011). The purpose of the study was to identify the factors for the car industry. 200 structured questionnaires were used to gather facts from the respondents in Puducherry city. This research observes how brand preferences, brand loyalty, brand knowledge, brand relationships and brand applications impact in the process of building up of brand equity. The authors have concluded that brand preference and brand loyalty have a vital part in making a brand equity. Reliable image of the firm can be understood and appreciated by customers if the mechanisms of brand equity is clear. This study enhances the increasing form of literature works on brand equity by investigating in what way brand relationships, brand knowledge, brand applications, brand loyalty and brand preferences influence on creating a brand equity. In striving to make a robust brand equity, businesses must be
involved in evaluating the need of a grade for customer brand. The make power is determined by the insight of consumers content and faithful consumers shows optimistic insights of the make. Over a time when competition goes up it is imperative that the company should work seriously to evaluate on issues that are important in making a strong brand equity but should also work on getting customer endorsements and faithfulness towards the brand. The outcome of the study implies that make affection and make faithfulness have a vital part in making a brand equity. These mechanisms of brand equity should be clear in their activities, so that proper picture of the firm is understood and appreciated by consumers. It is found that $60 \%$ of the consumers are using Maruti-Suzuki brands in the car industry and this is the key factor while selecting a car, even though price is the next utmost significant issue. It is also found that $60 \%$ of the consumers haven't to differ from their existing makes while $40 \%$ of the consumers have to differ from their make of cars. It can be seen that between the age of 25 years to 45 years maximum consumers have a car and this has a vital relationship between make preference and age. It is observed that $70 \%$ of the consumers are content with their present car. It is also observed that individual aspects like sex, job, pay status, age and education have a vital effect over other factors like make etc.

The effects of getting one's favoured service brand on consumer fulfilment and brand faithfulness was researched by Paswan et al., (2007) focuses on the feeling of being excluded by the favoured service brand and its consequence on consumer valuation for an alternate brand. Data was collected using a questionnaire in the background of advanced education services targeted at the global marketplace. The study concludes that consumers who do accomplish to get their favoured service brand are more satisfied with the characteristics of the brand which they received and they display advanced levels of brand faithfulness towards that brand. In contrast, clients who end up with a service brand which isn't their primary alternative have lesser levels of contentment and faithfulness towards the received brand. The research also brings out that in case of services the consumer satisfaction depends on the internal factors on which the firm does have a control, but there are many external factors on which the firm doesn't have any control. This can bring down
the satisfaction level of the consumer. The research also highlights that managers have to go one step ahead to make a customer fully satisfied and delighted.

A study of consumer insight and behaviour towards passenger cars in Tirur was discussed by Najeemudeen and Panchanatham (2014). The purpose of the study was to know the proportion of car owners, market share of different brands of cars and the factors that influence in the purchase of cars in Tirur. An organized questionnaire was received from 201 respondents from Tirur in the district of Malappuram of Kerala. The findings of the study show that $68 \%$ of the population of Tirur possesses a car. Maruti Suzuki has the highest marketplace share in Tirur which is eight times ahead of Hyundai, which is second as far as market share is concerned. People here prefer petrol and diesel cars and are not favouring LPG as a fuel. The main factors for selecting a brand of car is driving and travel comfort followed by mileage, interiors and resale value. Good public opinion, price, brand, style and design and availability of replacement parts followed by salesman's personality and communication does influence the customer. But the researcher feels the key is good public review about a brand of car. The researchers have resolved that all consumer behaviour attributes do play a major role in making a buying decision.

Srivastava and Tiwari (2011) studied Maruti SX4 and Honda City purchasers in Jaipur. The objectives were to learn the behaviour a buyer portrays when going to buy a A3 segment car particularly SX4 and Honda City and to understand the characteristics of the vehicle that are significant to A3 segment buyers. Duly filled 50 questionnaires were collected from each brand totaling to 100 numbers in total. Descriptive statistical tools such as mean and percentage along with ANOVA, t - tests and chi-square test were used to analyse the data. The authors concluded that the increasing buying power of the Indian consumers has made it a favourite market for all car manufacturers. Success can come in this competitive market only if one understands the complex behaviour of the consumers. The consumers behaviour is affected by financial, technical, partisan, social, demographic and normal issues surrounding them as well as their own features. The analysis has shown that choice of brand depends on the salary or the job of the buyer and also depends on the gender. Honda city clients are extremely pleased by the car in comparison to Maruti SX4
clients. Safety, driving, brand name and seating comfort are important for consumers. The investigation has shown that Honda City is ahead of Maruti SX4 on various fronts such as value for money, best features, customer friendliness of the vehicle and the sales and service of the brand. Magazine advertisement and word of mouth are the best medium for promoting A3 segment cars.

### 2.10 Pricing / Value / Fuel Efficiency

Issues inducing procurement of 'NANO' the advanced car from India an experimental study by Bikash et al., (2010) shows the aspects, which are vital for selecting the innovative car 'Nano' launched by one of the foremost Indian automobile industries called 'Tata Motors'. The researcher collected samples from 108 respondents for the study from two major cities of Orrisa a fast-growing state in the eastern part of India. The findings of the research shows that value of the car was the maximum vital reason for influencing the consumer towards NANO followed by the tag TATA which was a strong brand. The other important factors were availability of colour variants, style, fuel efficiency and the financing options which were available for this car as it was considered to be a people's car. Power, safety, prestige, resale value etc. ranked low as per the respondents.

Sathish and Pughazhendi (2011) attempted to learn on consumer behaviour of auto goods with singular reference to 2 -wheelers in the city of Tirunelveli in the state of Tamil Nadu, India. The objectives were to look for the consumer behaviour in the buying process in the 2-wheeler segment, understand the most preferred brand in terms of price and mileage. The facts were collected through a survey form from Tirunelveli city of Coimbatore district. 150 survey forms were circulated to various respondents but ultimately, they received only 125 completed questionnaires for the study. The findings of the study brought out that the 2-wheeler marketplace was in the entire country and hence it was necessary to get data from every geography. It was noticed that there were numerous manufacturers and hence the product features were copied from each other and hence it is difficult for the consumers to differentiate the quality and price associated with the product and hence they feel more study is required in this area. It has been found that the female segment has become important in the society and hence more study is required to determine their choices and
preferences. The urban area has more sales outlet than the rural area and hence has neglected the rural area. The researchers feel that more study is required in the rural areas to ascertain the consumer behaviour in that area to frame the marketing strategy. They feel that the manufacturers have to study the marketing channels and the distribution of the product for their growth. The study resolves that the range of products available in the 2wheeler segment are satisfactory. The consumer evaluates the need, purchasing power and price before making a purchasing decision. It is seen that the consumer likes expensive bikes as there are many features even thou they can't afford it. Value addition and aesthetics attract more consumers towards that segment. Hence the researcher feels that the manufacturers should work more on the research of their products. The study has exposed that Hero Honda, Bajaj and TVS 2-wheelers were the most preferred brands and other new entrants are also coming with new range of products.

## Value-Based Pricing

Effective pricing strategies should be based on three factors:


Objective: Maximize the difference between the value created for the customer and the company's costs to provide that value.
The Value-based Pricing Process
CUSTOMER $\longrightarrow$ VALUE $\longrightarrow$ PRICE $\longrightarrow$ COST $\longrightarrow$ Product
SMU © $\operatorname{cox}$
Figure 14: Value - Based Pricing
Source: https://slideplayer.com/slide/6259001/
A study of small car consumers first choice in Pune city by John and Pragadeeswaran (2013) had objectives to find out the liking of small car by masculine and feminine consumers in Pune city, analyse consumer profile and key factors that influence one to buy a small car. A questionnaire was used to gather facts from 100 respondents. The respondents contained 70 males and 30 females. The issues deliberated were cost
awareness, value awareness, cost - excellence belief, group influence were the factors studied for the research. One trial t - test was done to analyse the significant issue when one buys a small car. The test helped to comprehend from the $t$ values that value realization was well-thought-out, the most vital issue was cost, excellence and other implications. The t - test indicated that value awareness is the top inducing issue when one purchases a small car. The result states that a fast-developing nation is undergoing bigger intake of small cars. Features like age, sex, education qualification, position and salary effect customers incidentally in their purchasing inclination for small cars. The predominant age group were between 31 to 40 years. Female consumers felt they were more comfortable using a small car in comparison to various other types of conveyance. In Pune city most of the consumers used compact cars. Value, price, quality consciousness are the issues which effect small car buyers.

Factors of preference towards passenger cars in the case of Madurai City in Tamilnadu was examined by Rajasekar and Rameshkumar (2015). The objective of the research was to evaluate the issues inducing the brand preference by the possessors of passenger cars in Madurai City. Data was collected using a questionnaire from 150 respondents residing in Madurai city. Simple statistical calculations were done to rank the factors influencing the brand preference using percentage. The researchers have summarized that intense competition in the market has allowed many brands to enter in the country with latest advanced technology and features. This has given the customers a chance to prefer from many available brands and models. Manufacturers are coming everyday with many innovative designs and features to win the confidence of the consumers. Although there are many brands in the market, consumers look for a certain brand where they had a good customer sales and service. The study has highlighted that price and mileage are the utmost vital factors while deciding a brand of car, whereas pick up and comfort are secondary.

The effect of mileage on car value in low sector car was examined by Singh and Mani (2016). The objective of the research was to find small car preference by masculine and feminine customers in a particular marketplace and the effect of mileage on car value. Questionnaires were circulated to 120 respondents in the city of Allahabad out of which

100 proper filled questionnaires were used for the study. The findings from the study shows that consumer preference cannot be predicted but research is required for the same. Globalization has brought with it lot of competition and hence every manufacturer is trying to satisfy the consumer to their needs. Small cars have grown in India due to rising income and increasing price of fuel. The utmost significant issues highlighted by the study is that manufacturers should concentrate on product improvement to increase the fuel efficiency, and mileage of the car. The researcher feels that if the same strategy of small cars is adopted in the large and premium cars their sales can be improved.

### 2.11 Safety / Value for Money / Performance



Figure 15: Value Proposition Builder
Source: https://slideplayer.com/slide/6259001/

Dongyan and Bai (2008) found that the Chinese customers safety was prime, followed by value for money and driving comfort were the vital features considered by them when they buy a car. When we compare with western consumers of car they aren't different, as for
the Chinese value for money and safety is highest in their list of preferences. Normally a Chinese family owns only one car and hence they look for driving comfort, as they use the vehicle to pick the members in the family, whereas in developed nations the family owns two or three cars. Hence for them riding comfort is not vital in comparison to China. Chinese customers give importance to after sales service and external design when they buy a car. They have a desire to go for a larger car which have good looks by which they can express their societal status and get respect from their society. The second-hand car market has not progressed in Chinese market and hence resale of cars doesn't give them good price. For the Chinese consumers externals of the car is more important than the technicalities of the car and its interiors which clearly implies that for them the outside of the car plays a key role than the interiors and that is performance for them.

Victor et al., (2016) conducted a study on consumer expectancy in C - sector cars in Chennai city. The purpose of the study was to comprehend the expectation of C - segment vehicle possessors in Chennai city and their demographics. The researcher interviewed 680 respondents using a structured questionnaire. It was found that the respondents differed significantly in the five age clusters in relation to expectations towards the exteriors of the car, convenience, performance, economics, sales and service but there isn't any difference in opinion towards factors like safety of the car. The other findings were that consumer expectations can only be realised through research only. There has been an upsurge in C segment cars demand due to increase in income of the masses and the rising fuel costs. Globalization has brought in competition and so retaining the customers has turned out to be a challenge. The demand of this segment is more in the age cluster between 50 and 60 years and above in comparison with other age groups.

### 2.12 Secondary Data regarding Sales of Automobiles in India

From the websites of Society of Indian Automobile Manufacturers of India (SIAM), autopunditz.com, financialexpress.com and of Team-BHP.com, the researcher was able to gather vital information on various parameters showing the following:
a. Evolution of the Indian Automotive Sector
b. India's Major Auto Hubs
c. Domestic Market Share for 2017 - 18
d. Carmakers' market share in India (FY 2017-18)
e. Zone-wise sales of cars in India between April 2015 and March 2016
f. Top 10 States contributing to car sales in India between April 2015 and March 2016
g. Top 10 cities in India: Total Industry Volumes between April 2015 and March 2016
h. Segment wise contribution in Top 10 cities in India between April 2015 and March 2016
i. Gross Turnover of the Automobile Manufacturers in India (In USD Million)
j. Automobile Production Trends
k. Automobile Domestic Sales Trends

1. Automobile Exports Trends

## Evolution of the Indian Automotive Sector



Figure 16: Evolution of the Indian Automotive Sector
Source: http://www.team-bhp.com/forum/attachments/indian-car scene/1626960d1491418210-ibef-report-indian-automotive-industry-fy-2015-16-4.jpg

## India's Major Auto Hubs



Figure 17: India's Major Auto Hubs
Source: Business Today: http://www.autopunditz.com/uncategorized/list-of-automotive-plants-in-india

Table 1: Domestic Market Share for 2017-18

| Domestic Market Share for 2017-18 |  |
| :--- | ---: |
| Passenger Vehicles | 13 |
| Commercial Vehicles | 3 |
| Three Wheelers | 3 |
| Two Wheelers | 81 |
| Grand Total | $\mathbf{1 0 0}$ |

Domestic Market Share for 2017-18

```
|Passenger Vehicles | Commercial Vehicles |Three Wheelers |Two Wheelers
```



Figure 18: Domestic Market Share for 2017-18
Source: http://www.siamindia.com/statistics.aspx?mpgid=8\&pgidtrail=1

## Carmakers' market share in India (FY 2017-18)



Figure 19: Carmakers' market share in India (FY 2017-18)
Source: https://www.google.co.in/imgres?imgurl=https://images.financialexpress.com

Zone-wise sales of cars in India between April 2015 and March 2016


Figure 20: Zone-wise sales of cars in India between April 2015 and March 2016 Source: https://www.team-bhp.com/forum/indian-car-scene/178868-city-wise-car-sales-india-april-2015-march-2016-a.html

Top 10 States contributing to car sales in India between April 2015 and March 2016


Figure 21: Top 10 States contributing to car sales in India between April 2015 and March 2016
Source: https://www.team-bhp.com/forum/indian-car-scene/178868-city-wise-car-sales-india-april-2015-march-2016-a.html

Top 10 cities in India: Total Industry Volumes between April 2015 and March 2016


Figure 22: Top 10 cities in India: Total Industry Volumes between April 2015 and March 2016
Source: https://www.team-bhp.com/forum/indian-car-scene/178868-city-wise-car-sales-india-april-
2015-march-2016-a.html

Segment wise contribution in Top 10 cities in India between April 2015 and March 2016


Figure 23: Segment wise contribution in Top 10 cities in India between April 2015 and March 2016
Source: https://www.team-bhp.com/forum/indian-car-scene/178868-city-wise-car-sales-india-april-2015-march-2016-a.html

Table 2: Gross Turnover of the Automobile Manufacturers in India (In USD Million)

|  | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 66,264 | 67,607 | 55,212 | 58,909 | 63,866 | 67,724 |
| (USD Conversion Rate) | 47 | 50 | 60 | 61 | 66 | 67 |

GROSS TURNOVER OF AUTOMOBILE MANUFACTURERS IN INDIA 2011.12 TO 2016.17


Figure 24: Gross Turnover of Automobile Manufacturers in India
Source: http://www.siamindia.com/statistics.aspx?mpgid=8\&pgidtrail=10

Table 3: Automobile Production Trends

| Category | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Passenger <br> Vehicles | $32,31,058$ | $30,87,973$ | $32,21,419$ | $34,65,045$ | $37,91,540$ | $40,10,373$ |
| Commercial <br> Vehicles | $8,32,649$ | $6,99,035$ | $6,98,298$ | $7,86,692$ | $8,10,286$ | $8,94,551$ |
| Three <br> Wheelers | $8,39,748$ | $8,30,108$ | $9,49,019$ | $9,34,104$ | $7,83,721$ | $10,21,911$ |
| Two <br> Wheelers | $1,57,44,156$ | $1,68,83,049$ | $1,84,89,311$ | $1,88,30,227$ | $1,99,33,739$ | $2,31,47,057$ |
| Grand |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |

Source: http://www.siamindia.com/statistics.aspx?mpgid=8\&pgidtrail=10

Table 4: Automobile Domestic Sales Trends

| Category | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Passenger <br> Vehicles | $26,65,015$ | $25,03,509$ | $26,01,236$ | $27,89,208$ | $30,47,582$ | $32,87,965$ |
| Commercial <br> Vehicles | $7,93,211$ | $6,32,851$ | $6,14,948$ | $6,85,704$ | $7,14,082$ | $8,56,453$ |
| Three <br> Wheelers | $5,38,290$ | $4,80,085$ | $5,32,626$ | $5,38,208$ | $5,11,879$ | $6,35,698$ |
| Two <br> Wheelers | $1,37,97,185$ | $1,48,06,778$ | $1,59,75,561$ | $1,64,55,851$ | $1,75,89,738$ | $2,01,92,672$ |
| Grand <br> Total | $\mathbf{1 , 7 7 , 9 3 , 7 0 1}$ | $\mathbf{1 , 8 4 , 2 3 , 2 2 3}$ | $\mathbf{1 , 9 7 , 2 4 , 3 7 1}$ | $\mathbf{2 , 0 4 , 6 8 , 9 7 1}$ | $\mathbf{2 , 1 8 , 6 2 , 1 2 8}$ | $\mathbf{2 , 4 9 , 7 2 , 7 8 8}$ |

Source: http://www.siamindia.com/statistics.aspx?mpgid=8\&pgidtrail=10

Table 5: Automobile Exports Trends

| Category | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Passenger <br> Vehicles | $5,59,414$ | $5,96,142$ | $6,21,341$ | $6,53,053$ | $7,58,727$ | $7,47,287$ |
| Commercial <br> Vehicles | 80,027 | 77,050 | 86,939 | $1,03,124$ | $1,08,271$ | 96,867 |
| Three <br> Wheelers | $3,03,088$ | $3,53,392$ | $4,07,600$ | $4,04,441$ | $2,71,894$ | $3,81,002$ |
| Two <br> Wheelers | $19,56,378$ | $20,84,000$ | $24,57,466$ | $24,82,876$ | $23,40,277$ | $28,15,016$ |
| Grand <br> Total | $\mathbf{2 8 , 9 8 , 9 0 7}$ | $\mathbf{3 1 , 1 0 , 5 8 4}$ | $\mathbf{3 5 , 7 3 , 3 4 6}$ | $\mathbf{3 6 , 4 3 , 4 9 4}$ | $\mathbf{3 4 , 7 9 , 1 6 9}$ | $40,40,172$ |

Source: http://www.siamindia.com/statistics.aspx?mpgid=8\&pgidtrail=10

### 2.13 Research Gaps

The researcher has gone through close to 250 research papers on this subject and allied subject and after these had been reviewed the research gap was identified. It was found that no research was published on this particular topic for Pune region. Only a few brief studies have been conducted on isolated aspects of consumer buying behaviour. Hence the researcher felt there was a need to do a research on this topic, as he himself is an automobile enthusiast and updates with all the latest developments in the automobile industry.

The literature reviewed considered various aspects in relation to consumer buying behaviour for 4 -wheeler passenger cars. These studies looked at the impact of consumer perception, brand trust, brand commitment, consumers behaviour, customer service and their purchase preferences. The process of how people buy and use goods and services and their response to prices, advertising and store interiors which help in making a purchasing decision concerning automobiles was also reviewed.


Figure 25: Literature Review Structure
Source: https://www.slideshare.net/StudyToolboxAuthors/literature-review-27039179

After reviewing the research papers, no or limited research was found on the following topics and these were identified as gaps.

- Source of information, motivating factors and people who help in the buying process were limited.
- Problems / satisfaction level of consumers in terms of service pre and post sales, and if there were any reason for change in existing brand for repeat purchase was limited in the literatures reviewed.
- Pre-purchasing strategies and what consumers look for in a car were vague in most of the literatures surveyed.
- Type of families, their occupations, gender-based motivation, age etc., were not covered in the literatures reviewed.
- No study was found on provision of loans and mode of payment.
- The walk-ins and their conversion rate in terms of potential customers were not covered in any studies reviewed.
- The effect of government policies on the sale of cars were not covered in the literatures reviewed.

This led the researcher to investigate on the consumer buying behaviour in the selected auto brands relating to 4 -wheelers in Pune region.

## Chapter 3-Research Methodology

This chapter consists of the following headings:

### 3.1 Introduction

### 3.2 Research Design

### 3.2.1 Design of Questionnaire

1. Determining data necessary to understand the consumer buying behaviour
2. Defining the target respondents
3. Selecting the process for acquiring the focused respondents
4. Determining the subject matter for query on consumer buying behaviour
5. Evolving the query phrases
6. Placing the queries in a significant order to capture car owner's and dealer's response
7. Inspecting the size of the questionnaire
8. Preliminary test of the questionnaire
9. Evolving the final investigation form
3.3 Pilot Study
3.4 Research Questions and Hypothesis
3.5 Design of the Final Questionnaire
3.6 Data Collection
a. Primary Data
b. Secondary Data
3.7 Reliability and Validity of the Questionnaire
3.8 Sample Selection
3.9 Grouping of Respondents for Gathering Information
3.10 Data Analysis
3.11 Tools Used for Statistical Data Analysis
a. Cochran's Test
b. Friedman Test
c. Chi-Square Test
d. Sign (Binomial) Test
e. MANOVA
f. Bartlett's Test of Sphericity
g. Multivariate Tests
h. Test-Retest Method
i. Spearman's Rank Order Correlation
j. Cramer's V

### 3.1 Introduction

The main objective of this study was to understand and assess the information on the purchasing behaviour of consumers who buy cars. It benefits the manufacturers and dealers to choose their segment and develop selling policies to raise the sales. Publicists and sellers are attempting to learn why customers purchase and what they purchase. Government can get inputs before they frame and implement policies of the auto industry.

The moment sellers are able to comprehend the customer's needs, desires and gratify them, then only will they be able to justify their presence in an organization. In this modern era if a company is able to bring their customers to the central part of their business where all the action is happening, then we can say their sales team is successful and are on the right path to success. Hence, it is very important to understand how customers behave, while making decisions to buy the product as this benefits the sales managers and their assistants in numerous ways. A person's needs are limitless and regularly assume to get extra. Cars are no exemption to this conduct. This makes a way for continuous alterations of cars and its features and now we see a novel model approaching the marketplace almost each quarter. The marketplace is a central place to learn the conduct of buyers and also deliver valuable visions what a buyer needs in a product.

This investigation has brought in a decent opportunity for the manufacturers, distributors and dealers to determine what the consumers perception is in the process of buying a four-wheeler automobile and this will help them to package the product to meet the consumer's expectations.

### 3.2 Research Design

An investigation plan is a methodical strategy to learn any research question. The present investigation is intended to find the Consumer Buying Behaviour in the selected auto brands relating to 4 -wheelers in Pune region. To comprehend the matter, the investigator conducted wide assessment of writings on the subject. Later two sets of questionnaires were prepared, one for the consumers who own the car and the other for the dealers who sell the car. The following 4-wheeler auto brands were selected for the research.

Table 6: Selected 4-wheeler auto brands

| SNo | Selected 4-wheeler auto brands |
| :--- | :--- |
| 1 | Maruti Suzuki |
| 2 | Mahindra and Mahindra |
| 3 | Volkswagen India |
| 4 | Fiat India Automobiles |
| 5 | General Motors India Pvt. Ltd |
| 6 | Hyundai Motor India Ltd |
| 7 | Tata Motors |
| 8 | Toyota Kirloskar Motor Pvt. Ltd |
| 9 | Ford India Private Limited |
| 10 | Honda Cars India |
| 11 | Nissan Motor India Private Limited |
| 12 | Renault India Private Limited |

### 3.2.1 Design of Questionnaire

Accepting that no investigation can be a success story devoid of a well-designed questionnaire, the subsequent facts were well thought-out whilst outlining the questionnaire. Particulars on the plan of the questionnaire are mentioned below.

## 1. Determining data necessary to understand the consumer buying behaviour

The information required was to focus on consumer buying behaviour in the selected auto brands relating to 4 -wheelers in Pune region.

## 2. Defining the target respondents

The respondents defined as:

- Owners (consumers) of the cars (4-wheelers).
- Dealers who sell the car to their customers (dealers sales representative).


## 3. Selecting the process for acquiring the focused respondents

To get the focused respondents, the process selected was the questionnaire method.
But, it was tough to obtain $100 \%$ confirmed reply since the respondents were very busy with their schedules. Thus, the investigator had to contact them over telephonic talks, individual meetings and electronic mail.
4. Determining the subject matter for query on consumer buying behaviour

The subject matter of the queries was determined to capture the first-hand information directly from the owners of the cars and the dealers who are directly in contact with the customers.

## 5. Evolving the query phrases

The phrasing of the queries was kept minimal, so that respondents can simply comprehend and reply.
6. Placing the queries in a significant order to capture car owner's and dealer's response
An appropriate order was kept through the orderliness of the queries, so that it advanced slowly from simple to more tough.

## 7. Inspecting the size of the questionnaire

It was seen that the questionnaire wasn't lengthy. Firstly, demographic details of the respondents along with specific details were asked. Later close ended questions were asked with multiple choice to save time and to align the respondents in a set pattern, as there would be similarity and the contents would be in order. Open ended questions were also asked to get the personal response in terms of recommendations or any reactions. This permitted respondents to swiftly finish the questionnaire with the right replies.

## 8. Preliminary test of the questionnaire

Pilot survey was done to pretest the questionnaire and this has been described in the subsequent sheets.

## 9. Evolving the final investigation form

Built on the outcome of the pilot study, final questionnaire was evolved. Previously the questionnaire had all dichotomous queries like "Yes" or "No". The pilot studies indicated that rigidity cannot be given to the respondent's replies, but needs to be flexible. So, 5-point Likert's scale was exercised for questions wherever it was necessary, which ranged from Agree, Strongly Agree, Neutral, Disagree and Strongly Disagree or Most important, Important, Neutral, Least important and Not important.

### 3.3 Pilot Study

15 car owners and car dealers respectively were given the questionnaire requesting and justifying the need for the pilot study by the investigator. The researcher also extensively went through the questionnaires during the literature review of past researches which had allied topics as inputs for making the questionnaire. It was designed covering various dimensions of demography, specific questions on the owners and car dealers and some questions on existing cars, payment terms, information collection on the specific brands, motivational factors to own a car, pre-purchase strategies, decision makers, satisfaction level of existing cars if any, characteristics of car buyers, what the consumer looks for in a car, key selling points of a car, the financing options from the dealers, average footfalls and conversion of the same into customers etc. were asked. Having gained knowledge, valued views / propositions acknowledged through the pilot study, the pilot questionnaire were studied and amended and practical faults / discrepancies were eliminated preparing it more inclusive, condensed, significant and focused. A copy of the final questionnaire is enclosed in Appendix ' A ' and ' B '.

### 3.4 Research Questions and Hypotheses

Research questions that led the study in the formulation of the hypotheses are as follows:

## Research Question - 1

Will car buyers prefer dealers, family / relatives / neighbours / colleagues / friends and newspaper / magazines over other sources of information before buying the car?
$\mathbf{H}_{1}$ : Source of information significantly vary in frequency of preference.

## Research Question - 2

Are family requirement and economy (budgets) the major motivating factors while buying a new car?

H1: Factors motivating purchase of a new car significantly vary in size of importance. (Means ranks are different.)

## Research Question - 3

Are car buyers influenced by good after sales service, reputation or image of the brand and offers / discounts given by dealers and manufacturers, while buying a new car?
$\mathbf{H}_{1}$ : Variables that affects an individual while choosing a brand of car significantly differ in frequency of preference.

## Research Question - 4

Do parents affect the most in buying a car, followed by friends and well-wishers and your spouse?
$\mathbf{H}_{1}$ : People who affect the most in making a car purchase decision significantly differ in frequency of preference.

## Research Question - 5

Are major problems faced by car buyer's communication and servicing, followed by maintenance issues and availability of spares?
$\mathbf{H}_{1}$ : Problems faced in their present car significantly differ in frequency of preference.

## Research Question - 6

Are customers who are content with the level of servicing provided by the dealers, more likely to buy the same car of the same brand / model?
$\mathbf{H}_{1}$ : Repeat buying of same car and same brand depends upon the type of service provided by the dealers.

## Research Question - 7

Do majority of the customers who are not satisfied with their present car, buy a Maruti Suzuki brand?
$\mathbf{H}_{1}$ : Customers who are not satisfied with their present car majority of them buy a Maruti Suzuki brand.

## Research Question - 8

Are customers satisfied with their present car?
$\mathbf{H}_{1}$ : Customers are satisfied with their present car.

## Research Question - 9

Are majority of the customers mode of payment by loan?
$\mathbf{H}_{1}$ : Majority of the customers mode of payment is by loan.

## Research Question - 10

Do joint families own more cars than nuclear families?
$\mathbf{H}_{1}$ : Number of cars owned depends on type of family.

## Research Question - 11

Do families with more members tend to own more cars?
$\mathbf{H}_{1}$ : Number of cars owned depends on the number of members in the families.

## Research Question - 12

Are cars owned mostly by people in the age group of 26 to 35 years?
$\mathbf{H}_{1}$ : Number of cars owned depends on the age group.

## Research Question - 13

Do professionals own more cars than any other category?
$\mathbf{H}_{1}$ : Number of cars owned depends on professionals.

## Research Question - 14

Do factors motivating purchase of a new car differ across gender?
$\mathbf{H}_{1}$ : Factors motivating purchase of a new car differ across gender.

## Research Question - 15

Do factors motivating purchase of a new car differ across occupation?
$\mathbf{H}_{1}$ : Factors motivating purchase of a new car differ across occupation.

## Research Question - 16

Is visiting dealer's showrooms, taking opinions from experts and communication with sales people the pre-purchasing approaches accepted by the respondents?
$\mathbf{H}_{\mathbf{1}}$ : Pre-purchasing strategies adopted by respondents differ in preference. (Means ranks are different)

## Research Question - 17

Are car buyers influenced by their family, promotions and conscious of their esteem in the society? (As per dealers.)
$\mathbf{H}_{1}$ : Factors influencing car buyers significantly vary in size of influence. (Means ranks are different.)

## Research Question - 18

Do car buyers give more importance to price compared to other parameters? (As per dealers.)
$\mathbf{H}_{1}$ : Car buyers give more importance to price compared to other parameters.

## Research Question - 19

Are the key selling features for cars excellent customer sales plus after sales service, influenced by promotions and influenced by marketing strategies? (As per dealers.)
$\mathbf{H}_{\mathbf{1}}$ : Key selling features of car buyers significantly differ in magnitude. (Means ranks are different.)

## Research Question - 20

Is the occupation of maximum car owners service? (As per dealers.)
$\mathbf{H}_{1}$ : Occupation of car buyers differ in frequency.

## Research Question - 21

Do majority of the dealers offer more than 10 lakhs as loan for the car buyers. (As per dealers.)
$\mathbf{H}_{1}$ : Loan of car buyers differ in frequency.

## Research Question - 22

Will the number of walk-ins increase by more than $25 \%$ during festive seasons? (As per dealers.)
$\mathbf{H}_{1}$ : Proportions in no of walk-ins differ in frequency.

## Research Question - 23

Are more than $15 \%$ walk-ins converted into a customer? (As per dealers.)
$\mathbf{H}_{1}$ : Proportion of customers differ in frequency.

## Research Question - 24

Will increase in taxation by the government have an effect on sales of cars? (As per dealers.)
$\mathbf{H}_{1}$ : Increase in taxation by the government has an effect on sales of cars.

## Research Question - 25

Will incentives offered by the government benefit in the increase of sales of cars? (As per dealers.)
$\mathbf{H}_{1}$ : Incentives offered by the government benefits in the increase of sales of cars.

### 3.5 Design of the Final Questionnaire

On the basis of the pilot survey and hypotheses formulated, final questionnaire was planned after making suitable alterations. Later the investigator chooses the ensuing two groups of respondents for the investigation and completed a distinct questionnaire for each group, as specified under:

- Questionnaire for Consumers. (Car owners)
- Questionnaire for Dealers. (Dealers' respondents)

The questionnaire focused on questions which can capture the first-hand information from the consumers and the dealers'. So, the investigator made use of closed / open ended, numerous select, nominal and ordinal queries. Attention was given to confirm that they were simple, straight, and clear-cut and kept in suitable order. Likert's scale has been used for gathering the grade of reply by the respondents.

## Techniques for Evolving a Questionnaire

Stage -1 Stipulate whatever data is required
Stage -2 Define kind of questionnaire and process of management
Stage -3 Define matter for specific queries
Stage -4 Define type of reply for individual query
Stage -5 Define phrasing for individual query
Stage -6 Define order for queries
Stage -7 Define real features for queries
Stage -8 Inspect Stages 1 to 7 and modify if required
Stage -9 Preliminary pilot survey questionnaire and modify if required

### 3.6 Data Collection

## a. Primary Data

This information is gathered fresh and for the first time, and therefore is unique in nature. Primary information is first-hand data gathered over numerous procedures such as watching, questioning, emailing etc. For this study primary data was gathered by the questionnaire cum interview method from consumers and dealers of Pune region. Details of the sample is given later under Sample Selection.

## b. Secondary Data

These are resources comprising information which have been gathered and composed for an alternative reason. It is information that was previously present and need not be gathered through the investigation. In the current study secondary information was gathered from the following resources:

1. Numerous reports, manuscripts, thesis (published and unpublished), periodicals, blogs, publications, research papers and other journals.
2. From the websites of Society of Indian Automobile Manufacturers of India (SIAM), autopunditz.com, financialexpress.com and of Team-BHP.com, the researcher was able to gather vital information on various parameters showing the following:

- Evolution of the Indian Automotive Sector
- India's Major Auto Hubs
- Domestic Market Share for 2017-18
- Carmakers' market share in India (FY 2017-18)
- Zone-wise sales of cars in India
- Top 10 States contributing to car sales in India
- Segment wise contribution in Top 10 cities in India
- Gross Turnover of the Automobile Manufacturers in India (In USD Million)
- Automobile Production Trends
- Automobile Domestic Sales Trends
- Automobile Exports Trends


### 3.7 Reliability and Validity of the Questionnaire

Reliability and Validity are important aspects of scale measurement. Reliability and validity are statistical techniques performed to assess quality of the instrument used by the researcher for measuring the variable under the study. For single-item scales, reliability is the ability of the instrument to produce consistent results. In the current study, the researcher aims at finding out the consumer buying behaviour in the selected auto brands related to 4 -wheelers in Pune region. A list of variables under the study are given below:

One time / cash down, loan, it is a symbol of social status, it is a time saving device, it is a source of entertainment, warranty / guarantee, it is an item of necessity, influenced by marketing, it is considered as luxurious item, requirement of the family, it is economical, communication with sales, advertisement of cars, collect information, visiting dealers, automobile magazines, internet websites, opinion from experts, taking test drive of the car, buy same brand and model of car, purchase of future brand of car, high income, social status in the society, esteem conscious, influenced by promotions, influenced by family, comfortable driving, safety and security, availability of credit, availability of discount, influenced by marketing, brand / model reputation, advanced technology, good after sales service, workshop location etc.

## Test-Retest Method

Test-Retest is the simple and up-front method for assessing reliability. In this process reliability is verified running the same tool on the similar set of respondents on two dissimilar instances. The two sets of responses are then linked, a correlation coefficient higher than 0.9 specifies reliability. In the current study correlation was established using Spearman's Rank Order Correlation for interval-scaled variables and Cramer's V for categorical variables. Results of data analysis are presented in the table below for Consumers.

Table 7: Results of Data Analysis by Test-Retest Method Derived from SPSS

| Pair | Test |  | $P$ value | Result |
| :---: | :---: | :---: | :---: | :---: |
| Social status (Test) $\leftrightarrow$ <br> Social status (Retest) | Correlation | coefficient $=0.991$ | < 0.01 | Reliability supported |
| Time saving (Test) $\leftrightarrow$ Time saving (Retest) | Correlation | coefficient $=0.948$ | < 0.01 | Reliability supported |
| Entertainment (Test) $\leftrightarrow$ <br> Entertainment (Retest) | Correlation | coefficient $=0.992$ | < 0.01 | Reliability supported |
| Warranty/guarantee (Test) <br> Warranty/guarantee (Retest) | Correlation | coefficient $=0.964$ | < 0.01 | Reliability supported |
| Necessity (Test) Necessity (Retest) | Correlation | coefficient $=0.979$ | < 0.01 | Reliability supported |
| Influenced  by <br> marketing <br> Influenced <br> marketing (Retest) (Test) by | Correlation | coefficient $=0.990$ | < 0.01 | Reliability supported |
| $\begin{array}{lr} \hline \text { Luxury (Test) } \\ \text { Luxury (Retest) } & \leftrightarrow \\ \hline \end{array}$ | Correlation | coefficient $=0.989$ | < 0.01 | Reliability supported |
| Requirement of family (Test) $\leftrightarrow$ Requirement of family (Retest) | Correlation | coefficient $=0.906$ | < 0.01 | Reliability supported |
| Economical (Test) $\leftrightarrow$ Economical (Retest) | Correlation | coefficient $=0.952$ | < 0.01 | Reliability supported |
| Communication <br> sales (Test) with <br> Communication <br> sales (Retest)  <br> with  | Correlation | coefficient $=0.944$ | < 0.01 | Reliability supported |
| Glance advertisement (Test) $\leftrightarrow \quad$ Glance advertisement (Retest) | Correlation | coefficient $=0.929$ | < 0.01 | Reliability supported |
| Information from public (Test) $\leftrightarrow$ Information from public (Retest) | Correlation | coefficient $=0.934$ | < 0.01 | Reliability supported |
| Visit dealers (Test) $\leftrightarrow$ <br> Visit dealers (Retest) | Correlation | coefficient $=0.995$ | < 0.01 | Reliability supported |
| Read auto magazines (Test) $\leftrightarrow$ Read auto magazines (Retest) | Correlation | coefficient $=0.997$ | < 0.01 | Reliability supported |
| Internet/website (Test) $\leftrightarrow \quad$ Internet/website (Retest) | Correlation | coefficient $=0.963$ | < 0.01 | Reliability supported |
| Experts opinion (Test) $\leftrightarrow \quad$ Experts opinion (Retest) | Correlation | coefficient $=0.978$ | < 0.01 | Reliability supported |
| Test drive (Test) $\leftrightarrow$ Test drive (Retest) | Correlation | coefficient $=0.914$ | < 0.01 | Reliability supported |


| Pair | Test | P value | Result |
| :--- | :--- | :--- | :--- |
| Buy same car (Test) $\leftrightarrow$ <br> Buy same car (Retest) | Cramer's V $=0.710$ | $<0.01$ | Reliability <br> supported |
| Future car brands (Test) <br> ↔ Future car brands <br> (Retest) | Cramer's V $=0.814$ | $<0.01$ | Reliability <br> supported |

Reliability is maintained as the above table shows that all variables have above the threshold P value.

## Validity

The ability of the scale to produce accurate results is known as Validity. In the current study, face validity method was used to confirm validity of the tool. It is a subjective method of ascertaining validity. It involves qualitative research. It is a systematic examination by experts to ensure that the contents of the variable, corresponds well with the definition of the variable.

In the current study, qualitative research was undertaken with 5 experts. These experts were requested to thoroughly examine the contents of the questions and rate the ability of scale to measure the underline variable using a 5 -point scale ( $5=$ completely explain the underline variable, $1=$ cannot explain the underline variable). Data was analyzed for descriptive statistics using IBM SPSS 21. Results of the data analysis are presented in the table below:

## Descriptive Statistics for Consumers

Table 8: Shows Validity Test Results Derived from SPSS for Consumers

|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Social status | 6 | 4 | 5 | 4.83 | .408 |
| Social status | 6 | 5 | 5 | 5.00 | .000 |
| Time saving | 6 | 4 | 5 | 4.83 | .408 |
| Time saving | 6 | 5 | 5 | 5.00 | .000 |
| Entertainment | 6 | 5 | 5 | 5.00 | .000 |
| Entertainment | 6 | 4 | 5 | 4.83 | .408 |
| Warranty/guarantee | 6 | 5 | 5 | 5.00 | .000 |
| Warranty/guarantee | 6 | 4 | 5 | 4.83 | .408 |
| Necessity | 6 | 4 | 5 | 4.83 | .408 |
| Necessity | 6 | 5 | 5 | 5.00 | .000 |
| Influenced by marketing | 6 | 5 | 5 | 5.00 | .000 |
| Influenced by marketing | 6 | 5 | 5 | 5.00 | .000 |


|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Luxury | 6 | 4 | 5 | 4.83 | .408 |
| Luxury | 6 | 5 | 5 | 5.00 | .000 |
| Requirement of family | 6 | 4 | 5 | 4.83 | .408 |
| Requirement of family | 6 | 5 | 5 | 5.00 | .000 |
| Economical | 6 | 5 | 5 | 5.00 | .000 |
| Economical | 6 | 4 | 5 | 4.83 | .408 |
| Communicate with sales | 6 | 4 | 5 | 4.83 | .408 |
| Communicate with sales | 6 | 5 | 5 | 5.00 | .000 |
| Glance advertisement | 6 | 5 | 5 | 5.00 | .000 |
| Glance advertisement | 6 | 4 | 5 | 4.83 | .408 |
| Information from public | 6 | 5 | 5 | 5.00 | .000 |
| Information from public | 6 | 5 | 5 | 5.00 | .000 |
| Visit dealers | 6 | 5 | 5 | 5.00 | .000 |
| Visit dealers | 6 | 5 | 5 | 5.00 | .000 |
| Read auto magazines | 6 | 5 | 5 | 5.00 | .000 |
| Read auto magazines | 6 | 5 | 5 | 5.00 | .000 |
| Internet / websites | 6 | 5 | 5 | 5.00 | .000 |
| Internet / websites | 6 | 5 | 5 | 5.00 | .000 |
| Experts opinion | 6 | 5 | 5 | 5.00 | .000 |
| Experts opinion | 6 | 5 | 5 | 5.00 | .000 |
| Test drive | 6 | 5 | 5 | 5.00 | .000 |
| Test drive | 6 | 5 | 5 | 5.00 | .000 |
| Buy same car | 6 | 5 | 5 | 5.00 | .000 |
| Buy same car | 6 | 5 | 5 | 5.00 | .000 |
| Future car brand | 6 | 5 | 5 | 5.00 | .000 |
| Future car brand | 6 | 5 | 5 | 5.00 | .000 |
| Valid N (list wise) | 6 |  |  |  |  |
|  |  | 5 |  |  |  |

## Descriptive Statistics for Dealers

Table 9: Shows Validity Test Results Derived from SPSS for Dealers

|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Higher income | 5 | 4 | 5 | 4.80 | .447 |
| Higher income | 5 | 5 | 5 | 5.00 | .000 |
| Social status | 5 | 4 | 5 | 4.80 | .447 |
| Social status | 5 | 5 | 5 | 5.00 | .000 |
| Esteem in society | 5 | 5 | 5 | 5.00 | .000 |
| Esteem in society | 5 | 4 | 5 | 4.80 | .447 |
| Promotions | 5 | 5 | 5 | 5.00 | .000 |
| Promotions | 5 | 5 | 5 | 5.00 | .000 |
| Influenced by family | 5 | 4 | 5 | 4.80 | .447 |
| Influenced by family | 5 | 4 | 5 | 4.80 | .447 |
| Social status | 5 | 5 | 5 | 5.00 | .000 |
| Social status | 5 | 5 | 5 | 5.00 | .000 |
| Luxury | 5 | 4 | 5 | 4.80 | .447 |


|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Luxury | 5 | 5 | 5 | 5.00 | . 000 |
| Driving comfort | 5 | 4 | 5 | 4.80 | . 447 |
| Driving comfort | 5 | 5 | 5 | 5.00 | . 000 |
| Safety and security | 5 | 5 | 5 | 5.00 | . 000 |
| Safety and security | 5 | 4 | 5 | 4.80 | . 447 |
| Necessity of family | 5 | 4 | 5 | 4.80 | . 447 |
| Necessity of family | 5 | 5 | 5 | 5.00 | . 000 |
| Easy payments options | 5 | 5 | 5 | 5.00 | . 000 |
| Easy payments options | 5 | 5 | 5 | 5.00 | . 000 |
| Discounts from manufacturer / dealers | 5 | 5 | 5 | 5.00 | . 000 |
| Discounts from manufacturer / dealers | 5 | 5 | 5 | 5.00 | . 000 |
| Influenced by marketing | 5 | 5 | 5 | 5.00 | . 000 |
| Influenced by marketing | 5 | 5 | 5 | 5.00 | . 000 |
| Reputation of brand/model | 5 | 4 | 5 | 4.80 | . 447 |
| Reputation of brand/model | 5 | 5 | 5 | 5.00 | . 000 |
| Advanced technology | 5 | 5 | 5 | 5.00 | . 000 |
| Advanced technology | 5 | 5 | 5 | 5.00 | . 000 |
| Influenced by promotions | 5 | 5 | 5 | 5.00 | . 000 |
| Influenced by promotions | 5 | 5 | 5 | 5.00 | . 000 |
| Excellent sales and service | 5 | 4 | 5 | 4.80 | . 447 |
| Excellent sales and service | 5 | 5 | 5 | 5.00 | . 000 |
| Proximity of workshop to residence | 5 | 5 | 5 | 5.00 | . 000 |
| Proximity of workshop to residence | 5 | 4 | 5 | 4.80 | . 447 |
| Availability of loan | 5 | 5 | 5 | 5.00 | . 000 |
| Availability of loan | 5 | 5 | 5 | 5.00 | . 000 |
| Increase in tax effects sales | 5 | 4 | 5 | 4.80 | . 447 |
| Increase in tax effects sales | 5 | 4 | 5 | 4.80 | . 447 |
| government incentives increase sales | 5 | 5 | 5 | 5.00 | . 000 |
| government incentives increase sales | 5 | 5 | 5 | 5.00 | . 000 |
| government incentives don't increase sales | 5 | 5 | 5 | 5.00 | . 000 |
| government incentives don't increase sales | 5 | 4 | 5 | 4.80 | . 447 |
| Valid N (list wise) | 5 |  |  |  |  |

The above table shows that every variable takes a mean score above 4.5, so all specialists agree and approve the scales and ability of the scales to evaluate the underline variable. So, validity is maintained.

### 3.8 Sample Selection

The researcher himself is an admirer of the auto industry and has a liking to update continuously about the various products which are launched and to be launched in the market. He has a thorough knowledge on various brands, technicalities of the product, market share, pricing and marketing techniques used by this industry. Hence it was easy for the researcher to talk to the consumers and the dealers to fill the questionnaires after clearing all their doubts. Thus, he had a good scope to evaluate most of the Pune region respondents. A list of brands were prepared after going through past research work, current market conditions etc. A1 to A2 segments as mentioned below were considered for the study.

SIAM, the Society of Indian Automobile Manufacturers of India, has categorized the Car industry into six segments from A1 to A6, depending on the length of the vehicle. The classification criterion (in meters) for the various segments is as given below:

Table 10: Classification criterion (in meters) for the various segments of Cars

| 1 | A1 (Mini) | $<3.4$ meters |
| :--- | :--- | :--- |
| 2 | A2 (Compact) | 3.4 to 4.0 meters |
| 3 | A3 (Mid-size) | 4.0 to 4.5 meters |
| 4 | A4 (Executive) | 4.5 to 4.7 meters |
| 5 | A5 (Premium) | 4.7 to 5 meters |
| 6 | A6 (Luxury) | 5.0 meters |

(Source: SIAM)

## Dealers of 4-wheelers in Pune

From the website of various brands, it was revealed that there were certain number of dealers and service centers of every car brand in Pune. A final list of dealers was prepared which would represent all the parts of Pune region to get a balanced view point without any bias for the research. This can be seen as given below.

Table 11: Shows final list of 4-wheeler dealers selected for the study

| SNo | Selected 4-wheeler auto brands | Number of Dealers |
| :--- | :--- | :--- |
| 1 | Maruti Suzuki | 14 |
| 2 | Mahindra and Mahindra | 4 |
| 3 | Volkswagen India | 2 |
| 4 | Fiat India Automobiles | 4 |
| 5 | General Motors India Pvt. Ltd | 4 |
| 6 | Hyundai Motor India Ltd | 9 |
| 7 | Tata Motors | 6 |
| 8 | Toyota Kirloskar Motor Pvt. Ltd | 4 |
| 9 | Ford India Private Limited | 4 |
| 10 | Honda Cars India | 6 |
| 11 | Nissan Motor India Private Limited | 2 |
| 12 | Renault India Private Limited | 3 |

Hence a total of 62 dealers were identified for the research. The questionnaire was administered to all 62 dealers. During the analysis it was found that some information was missing and some were invalid information. Hence finally 54 dealers were selected for the study of this research. Dealers interviewed varied from small dealers to large dealers.

## Consumer Buyers of 4 -wheelers in Pune

The population of the car buyers in Pune was unknown. A visit to the Regional transport office did not help in revealing the above information. A total of 53,195 numbers of A1 to A2 segment cars were sold in Pune during the period of April 2015 to March 2016 as per Team-BHP.com. Lower Hatch, Upper Hatch and Sub 4-meter Sedan originate under this category of cars. Hence, $0.5 \%$ ( 250 no's) of the total population has been considered for the study.

Car buyers who bought cars between the price range of Rs 2 Lakhs to 7 Lakhs were considered as the target respondents. This is the price range normally considered by families belonging to the middle-income segment in Pune.

The consumers (car owners) were interviewed from sales and service groups located at various dealer's offices. It was an inordinate task to convey the need of the present investigation, wherever consumers / dealers' representative's data / their candid response / feelings was crucial, there being natural fear and reluctance on the part of the persons involved to share the data, particularly in regard to revealing the data as it is private. The investigator was frequently expected to see the respondents in person and promise that all the data required would be kept stringently private and would be used wholly for the theoretical investigation study.

During the pilot study the researcher experienced that customers were reluctant to reveal information regarding the car that they wanted to buy. The researcher had to establish a rapport with each buyer to get the desired information. Hence a sample of 250 was considered for this study. A major part of the questionnaire was filled by the consumers themselves and the rest was filled by the researcher in the presence of the consumer. During the data validation process, it was found that 25 questionnaires were invalid due to lack of information or invalid information. Finally, 225 questionnaires were used for the data analysis of this study. The consumers (car owners) / dealers (representatives) were from both the sexes.

### 3.9 Data Analysis

To analyse the data which has been collected for this research from the consumers and the dealers the researcher has used various statistical tools as follows.

1. Descriptive Statistics: Descriptive statistical analysis is done to describe the data that we have for this present study. The information collected has been charted and offered as tables, charts and graphs.
2. Statistical tools like Cochran's Test, Friedman Test, Chi-Square Test, Sign (Binomial) Test, MANOVA, Bartlett's Test of Sphericity, Multivariate Tests, TestRetest Method, Spearman's Rank Order Correlation and Cramer's V were used to analyze the data obtained through SPSS.

### 3.10 Tools Used for Statistical Data Analysis

## a. Cochran's Q Test

In statistics, in the examination of two-way randomized unit plans wherever the reply variable can have just two likely results (coded as 0 and 1) Cochran's test is used. Cochran's Q test is a non-parametric statistical test to validate whether $k$ remedies hold the same outcomes. It is called after William Gemmell Cochran. In easy scientific terms, Cochran's Q test needs that there just be a binary reply (e.g. success/failure or $1 / 0$ ) and that there be additional 2 sets of similar size. The trial measures whether the share of achievements is similar among sets. Regularly it is used to measure if diverse viewers of the similar event have constant solutions.

## b. Friedman Test

The Friedman test is a non-parametric statistical test established by Milton Friedman. Related to the parametric repetitive methods ANOVA, it is used to find alterations in conducts amidst numerous trial efforts. The process includes grading individual row collectively, then taking into account the values of ranks by columns. Relevant to comprehensive unit plans, it is therefore a distinct case of the Durbin test.

## c. Chi-Square Test

A chi-squared test, also inscribed as $\chi^{2}$ test, is any statistical hypothesis test wherever the specimen spreading the test statistic is a chi-squared spreading when the null hypothesis is right. Minus other qualification, 'chi-squared test' often is exercised as
short for Pearson's chi-squared test. The chi-squared test is used to reveal whether there is a noteworthy variance among the probable occurrences and the detected occurrences in one or more groups.

## d. Sign (Binomial) Test

The sign test is a statistical method to test for reliable variances among sets of comments, such as the weightiness of topics beforehand and subsequent action. Assumed sets of comments for individual topic, the sign test governs if one participant of the duo inclines to be larger than the other participant of the duo.

## e. MANOVA

Multivariate Analysis of Variance (MANOVA) is a process for evaluating multivariate trial means. As a multivariate process, it is used when there are two or more needy variables, and is normally ensued by important tests comprising of specific reliant variables independently. It aids to reply:
Do alterations in the neutral variable(s) have important properties on the related variables?

What are the correlations amidst the related variables?
What are the correlations amidst the neutral variables?

## f. Bartlett's Test of Sphericity

Bartlett's test is used to test if $k$ trials are from populates using equivalent variations. Equivalent variation amidst peoples is called homoscedasticity or homogeneity of variations. Some statistical tests, for instance the examination of variation, assume that variances are equivalent through sets or tests. The Bartlett test can be used to verify that hypothesis.

## g. Multivariate Tests

Multivariate analysis is a method for checking a hypothesis in which numerous variables are amended. The objective of multivariate analysis is to establish which grouping of disparities top out of all of the possible combinations.

## h. Test-Retest Method

Test-retest is a statistical technique used to inspect how dependable a test is: A test is done twice, e.g., the similar test is assigned to a cluster of subjects at two diverse times.

## i. Spearman's Rank Order Correlation

The Spearman rank-order correlation coefficient is a nonparametric evaluation of the intensity and route of connection that is present amidst two variables calculated minimum on an ordinal scale.

## j. Cramér's $\mathbf{V}$

Cramér's V is a computation of relationship amidst two nominal variables, presenting a value flanked by 0 and +1 (inclusive). It is founded on Pearson's chi-squared statistic and was brought out by Harald Cramér in 1946.

## Chapter 4 - Analysis and Interpretation

This chapter consists of the following headings:
4.1 Section - I Response from Consumers
4.2 Section - II Response from Dealers
4.3 Testing of Hypotheses

### 4.1 Section - I Response from Consumers

250 questionnaires were circulated to car owners, but the investigator was able to obtain the reply from just 230 car owners. Of these, only 225 responses were valid and hence were taken for the final analysis.

Table 12: Age of Respondents

| SNo | Age of respondents | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1$)$ | Less than 25 years | 9 | 4 |
| 2$)$ | 26 to 35 years | 105 | 46.66 |
| 3$)$ | 36 to 50 years | 58 | 25.78 |
| 4$)$ | More than 50 years | 53 | 23.56 |

Majority ( $47 \%$ ) of the respondents were in the age group of 26 to 35 years. A large section ( $26 \%$ ) were in the age group of 36 to 50 years. Only $4 \%$ were below 25 years.

Table 13: Gender of Respondents

| SNo | Gender of respondents | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :---: | :--- |
| 1$)$ | Male | 189 | 84.00 |
| 2$)$ | Female | 36 | 16.00 |

Most of the respondents' ( $84 \%$ ) were males, whereas only $16 \%$ were females.
Table 14: Marital Status of Respondents

| SNo | Marital status of respondents | $\mathbf{N = 2 2 5}$ | Percentage |
| :--- | :--- | :---: | :--- |
| 1$)$ | Married | 156 | 69.33 |
| 2$)$ | Unmarried | 69 | 30.67 |

Majority ( $69 \%$ ) were married, whereas only $31 \%$ were unmarried.
Table 15: Respondents' Family Size

| SNo | Respondents' family size | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1) | Up to 3 members | 66 | 29.33 |
| 2) | 3 to 6 members | 151 | 67.11 |
| 3) | Above 6 members | 8 | 3.56 |

Most of the respondents' ( $67 \%$ ) had 3 to 6 members in their family. A large section ( $29 \%$ ) had up to 3 members in their family. Only $4 \%$ had more than 6 members in their family.

Table 16: Respondents' Type of Family

| SNo | Respondents' type of family | N = 225 | Percentage |
| :--- | :--- | :--- | :--- |
| 1) | Nuclear family | 120 | 53.33 |
| 2) | Joint family | 105 | 46.67 |

Most of the respondents' (53 \%) had a nuclear family, whereas only 47 \% had a joint family.

Table 17: Respondents' Occupation

| SNo | Respondents' occupation | $\mathbf{N = 2 2 5}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1) | Service | 80 | 35.56 |
| 2$)$ | Professional | 102 | 45.33 |
| 3$)$ | Business | 30 | 13.33 |
| 4$)$ | Agriculturist | 13 | 5.78 |

Majority ( $45 \%$ ) of the respondents' occupations were professionals, whereas $36 \%$ were from service and only $6 \%$ were agriculturists.

Table 18: Respondents' Educational Qualification

| SNo | Respondents' educational qualification | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :--- | :---: |
| 1) | Non-Graduate | 12 | 5.33 |
| 2) | Graduate | 75 | 33.34 |
| 3) | Post Graduate | 41 | 18.22 |
| 4$)$ | Professional | 97 | 43.11 |

Most of the respondents' ( $43 \%$ ) had their educational qualification as professionals, whereas $33 \%$ were graduates and only $5 \%$ were non-graduates.

Table 19: Respondents' Family Income in Rupees / Month

| SNo | Respondents' family income in Rupees / Month | N = 225 | Percentage |
| :--- | :--- | :---: | :--- |
| 1) | Less than 50,000 | 46 | 20.44 |
| 2$)$ | 50,000 to $2,00,000$ | 179 | 79.56 |

Most of the respondents' ( $80 \%$ ) had a family income between 50,000 and $2,00,000$
Rupees / Month, whereas only 20 \% had a family income less than 50,000 Rupees / Month.

Table 20: Number of Cars Owned by the Respondents in the Family

| SNo | Number of cars owned by the respondents in the family | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1$)$ | 1 | 210 | 93.33 |
| 2$)$ | 2 | 9 | 4.00 |
| 3$)$ | 3 | 5 | 2.22 |
| 4$)$ | More than 3 | 1 | 0.45 |

Majority ( $93 \%$ ) of the respondents' owned one car in the family, whereas $4 \%$ had 2 cars. Only $0.44 \%$ persons had more than 3 cars in the family.

Table 21: Price of the Cars Owned by the Respondents in Rupees

| SNo | Price of the cars owned by the respondents in Rupees | N =225 | Percentage |
| :--- | :--- | :---: | :---: |
| 1) | Less than $2,00,000$ | 12 | 5.33 |
| 2) | $2,00,000$ to $5,00,000$ | 49 | 21.78 |
| 3) | $5,00,000$ to $7,00,000$ | 115 | 51.11 |
| 4$)$ | $7,00,000$ to $10,00,000$ | 49 | 21.78 |

Majority ( $51 \%$ ) of the respondents' owned a car with a price range between Rupees $5,00,000$ and $7,00,000$. A large section $(22 \%)$ had a car with a price range between Rupees $2,00,000$ and $5,00,000$ and another $22 \%$ also had a car with a price range between Rupees $7,00,000$ and $10,00,000$. Only $5 \%$ had a car with a price below Rupees 2,00,000.

Table 22: Brand of Cars Owned by the Respondents

| SNo | Brand of cars owned by the respondents | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1$)$ | Maruti Suzuki | 123 | 54.67 |
| 2$)$ | Hyundai | 31 | 13.77 |
| 3$)$ | Fiat | 5 | 2.22 |
| 4$)$ | Nissan | 1 | 0.44 |
| 5$)$ | Ford | 9 | 4.00 |
| 6$)$ | G.M. Motors | 6 | 2.67 |
| 7$)$ | Tata Motors | 11 | 4.89 |
| 8$)$ | Toyota Motors | 9 | 4.00 |
| 9$)$ | Renault | 9 | 4.00 |
| 10$)$ | Mahindra | 9 | 4.00 |
| 11$)$ | Volkswagen | 6 | 2.67 |
| 12$)$ | Honda Motors | 6 | 2.67 |

Most of the respondents' ( $55 \%$ ) owned a car of Maruti Suzuki brand. A large section (14 \%) owned a car of Hyundai brand. Only $0.44 \%$ owned a car of Nissan brand.

Table 23: Brand and Model of Cars Owned by the Respondents

| SNo | Brand and model of cars owned by the respondents | N = 225 | Percentage |
| :---: | :---: | :---: | :---: |
| 1) | Maruti Suzuki Swift | 26 | 11.60 |
| 2) | Maruti Suzuki Alto | 20 | 8.89 |
| 3) | Maruti Suzuki Wagon R | 18 | 8.00 |
| 4) | Maruti Suzuki Ertiga | 13 | 5.78 |
| 5) | Maruti Suzuki Ciaz | 12 | 5.33 |
| 6) | Maruti Suzuki 800 | 8 | 3.56 |
| 7) | Maruti Suzuki Omni | 5 | 2.22 |
| 8) | Maruti Suzuki Zen | 5 | 2.22 |
| 9) | Maruti Suzuki Baleno | 4 | 1.78 |
| 10) | Maruti Suzuki Swift Dezire | 4 | 1.78 |
| 11) | Maruti Suzuki Ritz | 2 | 0.89 |
| 12) | Maruti Suzuki Celerio | 2 | 0.89 |
| 13) | Maruti Suzuki Dezire | 2 | 0.89 |
| 14) | Maruti Suzuki Versa | 1 | 0.44 |
| 15) | Maruti Suzuki Esteem | 1 | 0.44 |
| 16) | Hyundai i10 | 12 | 5.33 |
| 17) | Hyundai i20 | 11 | 4.89 |
| 18) | Hyundai Eon | 5 | 2.22 |
| 19) | Hyundai Grand i10 | 3 | 1.33 |
| 20) | Fiat Punto | 3 | 1.33 |
| 21) | Fiat Palio | 2 | 0.89 |
| 22) | Ford Figo | 4 | 1.78 |
| 23) | Ford Fiesta | 3 | 1.33 |
| 24) | Ford Eco sport | 2 | 0.89 |
| 25) | G M Motors Beat | 3 | 1.33 |
| 26) | G M Motors Aveo | 2 | 0.89 |
| 27) | G M Motors Tavera | 1 | 0.44 |
| 28) | Tata Motors Indica | 5 | 2.22 |
| 29) | Tata Motors Bolt | 4 | 1.78 |
| 30) | Tata Motors Manza | 2 | 0.89 |
| 31) | Toyota Motors Etios | 4 | 1.78 |
| 32) | Toyota motors Innova | 3 | 1.33 |
| 33) | Toyota Motors Liva | 2 | 0.89 |
| 34) | Renault Duster | 5 | 2.22 |
| 35) | Renault Kiwd | 2 | 0.89 |
| 36) | Renault Lodgy |  | 0.89 |
| 37) | Mahindra KUV 100 | 4 | 1.78 |
| 38) | Mahindra Bolero | 2 | 0.89 |
| 39) | Mahindra Thar | 1 | 0.44 |
| 40) | Mahindra Zylo | 1 | 0.44 |
| 41) | Mahindra Verito | 1 | 0.44 |
| 42) | Volkswagen Polo | 3 | 1.33 |
| 43) | Volkswagen Vento | 2 | 0.89 |
| 44) | Volkswagen Ameo | 1 | 0.44 |
| 45) | Honda Motors City | 4 | 1.78 |
| 46) | Honda Motors Jazz | 1 | 0.44 |
| 47) | Honda Motors Brio | 1 | 0.44 |
| 48) | Nissan Micra | 1 | 0.44 |



Figure 26: Brand and Model of Cars Owned by the Respondents

Majority ( $12 \%$ ) of the respondents had a car of brand and model of Maruti Suzuki Swift. A large section ( $9 \%$ ) had a car of brand and model of Maruti Suzuki Alto. Only 0.44 \% each had a car of brand and model of Maruti Suzuki Versa and Maruti Suzuki Esteem.

The next majority of the respondents' $(5.33 \%)$ had a car of brand and model of Hyundai i10, whereas 4.89 \% had Hyundai i20. Only 1.33 \% were Hyundai Grand 110 owners.
1.33 \% respondents had a car of brand and model of Fiat Punto, whereas 0.89 \% (the least) were Fiat Palio owners.
1.78 \% respondents had a car of brand and model of Ford Figo, whereas 1.33 \% owned Ford Fiesta. Only 0.89 \% owned a Ford Eco Sport.
1.33 \% respondents had a car of brand and model of GM Motors Beat, whereas 0.89 \% owned GM Motors Aveo. Only 0.44 \% had a GM Motors Tavera.
2.22 \% respondents had a car of brand and model of Tata Motors Indica, whereas ( 1.78 \%) were Tata Motors Bolt owners. Only ( 0.89 \%) were Tata Motors Manza owners.
1.78 \% respondents had a car of brand and model of Toyota Motors Etios, whereas 1.33 \% were Toyota motors Innova owners. Only 0.89 \% were Toyota Motors Liva owners.
2.22 \% respondents had a car of brand and model of Renault Duster, whereas 0.89 \% were Renault Kwid owners. Only 0.89 \% had a Renault Lodgy.
1.78 \% respondents had a car of brand and model of Mahindra KUV 100, whereas 0.89 \% were Mahindra Bolero owners. Only 0.44 \% each were of Mahindra Thar, Mahindra Zylo and Mahindra Verito.
1.33 \% respondents had a car of brand and model of Volkswagen Polo, whereas 0.89 \% had Volkswagen Vento. Only 0.44 \% had Volkswagen Ameo.
1.78 \% respondents had a car of brand and model of Honda Motors City, whereas 0.44 \% each had Honda Motors Jazz and Honda Motors Brio.

The least $0.44 \%$ had Nissan Micra.

Table 24: Respondents’ Brand and Model of Previous Cars

| SNo | Respondents' brand and model of previous cars | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1$)$ | Maruti Suzuki Omni | 5 | 2.22 |
| 2$)$ | Maruti Suzuki Wagon R | 4 | 1.78 |
| 3$)$ | Maruti Suzuki Zen | 6 | 2.67 |
| 4$)$ | Maruti Suzuki Ritz | 2 | 0.89 |
| 5$)$ | Maruti Suzuki 800 | 40 | 17.78 |
| 6$)$ | Maruti Suzuki Esteem | 23 | 10.22 |
| 7$)$ | Tata Motors Indica | 12 | 5.33 |
| 8$)$ | Tata Motors Manza | 5 | 2.22 |
| 9$)$ | Fiat Punto | 3 | 1.33 |
| 10$)$ | Fiat Palio | 2 | 0.89 |
| 11$)$ | Ford Fiesta | 1 | 0.44 |
| 12$)$ | Ford Figo | 4 | 1.78 |
| 13$)$ | Hyundai i10 | 7 | 3.11 |
| 14$)$ | Hyundai Santro | 20 | 8.89 |
| 15$)$ | No Response | 91 | 40.45 |

Most of the respondents' (18\%) had a previous car of brand and model Maruti Suzuki
800. A large section ( $10 \%$ ) had Maruti Suzuki Esteem. Only $0.44 \%$ had a previous car of brand and model of Ford Fiesta. Around 40.45 \% didn't respond.

Table 25: Respondents' Payment Terms for Buying the Car

| SNo | Respondents' payment terms for buying the car | $\mathbf{N = 2 2 5}$ | Percentage |
| :--- | :--- | :---: | :--- |
| 1$)$ | Full cash payment | 30 | 13.33 |
| 2$)$ | Loan | 195 | 86.67 |



Figure 27: Respondents' Payment Terms for Buying the Car
Most of the respondents' (87 \%) had opted for a loan for payments, whereas only (13 \%) opted for full cash payment.

Table 26: Respondents' Source of Information about the Car Before Purchase
(More than one options considered)

| SNo | Respondents' source of information | Number | Percentage |
| :--- | :--- | :--- | :--- |
| 1) | Advertisements on T.V. | 111 | 49.33 |
| 2) | Magazines / newspapers etc. | 138 | 61.33 |
| 3) | Family / relatives / neighbours / colleagues / friends | 159 | 70.67 |
| 4$)$ | Emails / internet / SMS | 70 | 31.11 |
| 5) | FM / Radio /public address system etc. | 12 | 5.33 |
| 6$)$ | Printed displays / brochures / pamphlets etc. | 40 | 17.78 |
| 7$)$ | Wall posters / wall writing / bill board /banners etc. | 10 | 4.44 |
| 8) | From dealers | 172 | 76.44 |
| 9) | Your own-decision | 52 | 23.11 |

Source of Information about the Car Before Purchase


Figure 28: Respondents' Source of Information about the Car Before Purchase
Majority (76 \%) of the respondents' source of information about the car before purchase was from dealers'. A large section (71 \%) depended on family / relatives /neighbours / colleagues / friends for information. Only (4 \%) depended on wall posters / wall writing / bill board / banners for information.

Table 27: Variables that Motivate Respondents in the Purchase of a new Car (MI -Most Important, I- Important, N- Neutral, L -Least Important, N - Not Important, \%-Percentage)
(More than one options considered)

| SNo | Variables | $\mathbf{M I}$ <br> $\mathbf{\%}$ | $\mathbf{I}$ <br> $\mathbf{\%}$ | $\mathbf{N}$ <br> $\mathbf{\%}$ | $\mathbf{L I}$ <br> $\mathbf{\%}$ | $\mathbf{N} \mathbf{\%}$ <br> $\mathbf{\%}$ | Mean | Standard <br> Deviation |
| :--- | :--- | :--- | ---: | ---: | ---: | :--- | :--- | :--- |
| 1) | It is a symbol of social status | 64 | 12 | 8 | 9 | 7 | 4.17 | 1.303 |
| 2) | It is a time saving device | 53 | 32 | 3 | 8 | 4 | 4.23 | 1.084 |
| 3) | It is a source of entertainment | 25 | 10 | 49 | 10 | 5 | 3.4 | 1.13 |
| 4$)$ | Warranty/ guarantee | 95 | 5 | 0 | 0 | 0 | 4.95 | 0.225 |
| 5$)$ | It is an item of necessity | 44 | 32 | 15 | 4 | 5 | 4.04 | 1.115 |
| 6$)$ | Influenced by marketing | 55 | 34 | 9 | 1 | 1 | 4.41 | 0.769 |
| 7$)$ | It is considered as a luxurious item | 43 | 24 | 29 | 2 | 1 | 4.06 | 0.964 |
| 8$)$ | Requirement of the family | 98 | 1 | 1 | 0 | 0 | 4.97 | 0.21 |
| 9$)$ | It is economical | 96 | 3 | 1 | 0 | 0 | 4.95 | 0.278 |

## Variables that Motivate the Respondents' in the Purchase of a new Car




Figure 29: Variables that Motivate the Respondents in the Purchase of a new Car
Under most important option since the mean is 4.97 and standard deviation is 0.210 it can be concluded that most of the respondents' ( $98 \%$ ) were motivated to purchase a car because it was a requirement of the family, whereas since mean is 4.95 and standard deviation is 0.278 it can be concluded that $96 \%$ were motivated because it was economical. As mean was 3.40 and standard deviation is 1.130 it can be concluded that only $25 \%$ were motivated in purchasing a car as a source of entertainment.

Under important option since the mean is 4.41 and standard deviation is 0.769 it can be concluded that most of the respondents' ( $34 \%$ ) were motivated to purchase a car because they were influenced by marketing, whereas since the mean is 4.04 and 4.23 respectively and standard deviation is 1.115 and 1.084 respectively it can be concluded that $32 \%$ each were motivated because they felt it was an item of necessity and a time saving device. As mean is 4.97 and standard deviation is 0.21 it can be concluded that only $1 \%$ were motivated in purchasing the car because it was a requirement of the family.

Under neutral option since mean is 3.40 and standard deviation is 1.130 it can be concluded that most of the respondents' ( $49 \%$ ) were motivated to buy a car as an entertainment source, whereas since mean is 4.06 and standard deviation is 0.964 it can be concluded that $29 \%$ were motivated because they considered it as a luxurious item. As mean is 4.95 and 4.97 respectively and standard deviation is 0.278 and 0.210 respectively it can be concluded that only $1 \%$ each were motivated in purchasing a car because it was economical and requirement of the family.

Under least important option since mean is 3.40 and standard deviation is 1.130 it can be concluded that most of the respondents' $(10 \%)$ were motivated to purchase a car because it was a source of entertainment, whereas since mean is 4.17 and standard deviation is 1.303 it can be concluded that $9 \%$ were motivated in purchasing a car because it was a symbol of social status. As mean is 4.41 and standard deviation is 0.769 it can be concluded that only $1 \%$ were motivated in purchasing a car because they were influenced by marketing.

Under not important option since mean is 4.17 and standard deviation is 1.303 it can be concluded that most of the respondents' ( $7 \%$ ) were motivated to purchase a car because it was a symbol of social status, whereas since mean is 3.40 and 4.04 respectively and standard deviation is 1.130 and 1.115 respectively it can be concluded that $5 \%$ each were motivated because it was a source of entertainment and an item of necessity. As mean is 4.41 and 4.06 respectively and standard deviation is 0.769 and 0.964 respectively it can be concluded that only $1 \%$ each were motivated in purchasing a car because they were influenced by marketing and also considered it as luxurious item.

Table 28: Variables that Affect the Respondents in the Process of Selecting a Car
(More than one options considered)

| SNo | Variables | Number | Percentage |
| :--- | :--- | :--- | :--- |
| 1) | Influenced by marketing | 166 | 73.78 |
| 2) | Reputation or image of the brand | 208 | 92.44 |
| 3) | Influenced by imported technology | 192 | 85.33 |
| 4$)$ | Influenced by good after sales service | 214 | 95.11 |
| 5) | Warranty / guarantee | 193 | 85.78 |
| 6 ( | Influenced by advanced technology | 181 | 80.44 |
| 7 7) | Promotion by dealers \& manufacturers | 147 | 65.33 |
| 8) | Relative / friend's suggestions | 102 | 45.33 |
| 9) | Satisfaction of earlier brand of car | 101 | 44.89 |
| 10) | Known dealer | 38 | 16.89 |
| 11) | Offers / discounts given by dealers \& manufacturers | 200 | 88.89 |
| 12) | Buy back scheme / resale value of car in the market | 107 | 47.56 |
| 13) | Pick up and drop facility/exclusive service for ladies | 76 | 33.78 |
| 14) | Easy and quick availability of spare parts | 93 | 41.33 |
| 15) | Best competitive pricing by dealer | 186 | 82.67 |

Variables that Affect the Respondents in Selecting a Car


Figure 30: Variables that Affect an Individual in the Process of Selecting a Car
Majority ( $95 \%$ ) of the respondents' process of selecting a car was affected by good after sales service. A large section ( $92 \%$ ) process of selecting a car was affected by reputation or image of the brand. Only $17 \%$ process of selecting a car was affected by a known dealer.

Table 29: Pre-Buying Strategies Chosen by the Respondents Prior to Buying the
Car (SA - Strongly Agree, A - Agree, N - Neutral, DA - Disagree, SDA - Strongly
Disagree, \% tage - Percentage) (More than one options considered)

| SNo | Pre-buying strategies | SA <br> $\mathbf{\%}$ | $\mathbf{A}$ <br> $\mathbf{\%}$ | $\mathbf{N}$ <br> $\mathbf{\%}$ | DA <br> $\mathbf{\%}$ | SDA <br> $\mathbf{\%}$ | Mean | Standard <br> Deviation |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| 1) | Communication with sales persons | 60 | 29 | 8 | 2 | 1 | 4.44 | 0.823 |
| 2) | Glancing through advertisement of <br> cars | 40 | 18 | 31 | 4 | 7 | 3.81 | 1.208 |
| 3) | Collect information from public | 40 | 24 | 25 | 9 | 1 | 3.92 | 1.068 |
| 4$)$ | Visit dealers' showrooms | 84 | 8 | 6 | 1 | 0 | 4.76 | 0.639 |
| 5) | Reading automobile magazines | 10 | 15 | 19 | 31 | 24 | 2.56 | 1.288 |
| 6) | Internet websites | 15 | 10 | 19 | 30 | 26 | 2.59 | 1.37 |
| 7$)$ | Opinion from experts | 64 | 20 | 15 | 1 | 0 | 4.45 | 0.823 |
| 8) | Taking test drive of the car | 71 | 17 | 10 | 1 | 0 | 4.58 | 0.747 |

## Pre-Buying Strategies Chosen by the Respondents Prior to Buying the Car



Figure 31: Pre-Buying Strategies Chosen by the Respondents Prior to Buying the Car
Under strongly agree option since mean is 4.76 and standard deviation is 0.639 it can be concluded that majority ( $84 \%$ ) of the respondents' pre-purchasing strategies were visiting dealers showroom. Since mean is 4.58 and standard deviation is 0.747 it can be concluded that a large section ( $71 \%$ ) pre-purchasing strategies were taking a test drive. As mean is 2.56 and standard deviation is 1.288 it can be concluded that only $10 \%$ were reading auto magazines as a pre-purchasing strategy.

Under agree option since mean is 4.44 and standard deviation is 0.823 it can be concluded that majority ( $29 \%$ ) of the respondents' pre-purchasing strategies were communicating with sales persons. Since mean is 3.92 and standard deviation is 1.068 it can be concluded that a large section (24 \%) pre-purchasing strategies were collecting information from public. As mean is 4.76 and standard deviation is 0.639 it can be concluded that only $8 \%$ were visiting dealers showroom as a pre-purchasing strategy.

Under neutral option since mean is 3.81 and standard deviation is 1.208 it can be concluded that majority ( $31 \%$ ) of the respondents' pre-purchasing strategies were glancing through advertisement of cars. Since mean is 3.92 and standard deviation is 1.068 it can be concluded that a large section ( $25 \%$ ) pre-purchasing strategies were collecting information from public. As mean is 4.76 and standard deviation is 0.639 it can be concluded that only $6 \%$ were visiting dealers showroom as a pre-purchasing strategy.

Under disagree option since 2.56 is mean and 1.288 is standard deviation it can be inferred that bulk ( $31 \%$ ) of the owners pre-purchasing strategies were reading auto magazines. Since 2.59 is mean and 1.370 is standard deviation it can be concluded that a large section ( $30 \%$ ) pre-purchasing strategies were going through internet/ websites. As mean is $4.76,4.45$ and 4.58 respectively and standard deviation is 0.639 , 0.823 and 0.747 respectively it can be concluded that only $1 \%$ each were visiting dealers showroom, getting opinion from experts and test driving as a pre-purchasing strategy.

Under strongly disagree option since mean is 2.59 and mean is 1.370 it can be concluded that majority ( $26 \%$ ) of the respondents' pre-purchasing strategies were going through internet / websites. As mean is 2.56 and standard deviation is 1.288 it can be concluded that a large section ( $24 \%$ ) pre-purchasing strategies were reading automobile magazines. As mean is 4.44 and 3.92 respectively and standard deviation is 0.823 and 1.068 respectively it can be concluded that only $1 \%$ each were communicating with sales persons and collecting information from public as a prepurchasing strategy.

Table 30: Factors Affecting Car Purchasing Decision
(More than one options considered)

| SNo | Factors affecting car purchasing decision | Number | Percentage |
| :--- | :--- | :--- | :--- |
| 1) | Your spouse | 140 | 62.22 |
| 2) | Your children | 103 | 45.78 |
| 3) | Your parents | 183 | 81.33 |
| 4$)$ | Your brother /sister | 131 | 58.22 |
| 5) | Any opinion leaders | 73 | 32.44 |
| 6$)$ | Your friends and well wishers | 145 | 64.44 |
| 7) | Your own decision | 24 | 10.67 |
| 8$)$ | Dealers | 26 | 11.56 |
| 9$)$ | Any other (specify) internet / websites | 1 | 0.44 |

Factors Affecting Car Purchasing Descision


Figure 32: Factors Affecting Car Purchasing Decision
Most of the respondents' ( $81 \%$ ) car purchasing decisions were influenced by parents, whereas $64 \%$ were influenced by friends and well-wishers. Only $0.44 \%$ were influenced by internet / websites.

Table 31: Respondents' Satisfaction Level of Sales/Servicing Provided by Dealers

| SNo | Respondents' satisfaction level for sales / servicing | $\mathbf{N = 2 2 5}$ | Percentage |
| :--- | :--- | :---: | :--- |
| 1$)$ | Excellent | 165 | 73.33 |
| 2) | Good | 52 | 23.11 |
| 3$)$ | Satisfactory | 4 | 1.78 |
| 4$)$ | Poor | 4 | 1.78 |

Majority ( $73 \%$ ) of the respondents' approval level for sales / servicing offered by the dealers were excellent. A large section ( $23 \%$ ) approval level for sales / servicing offered by the dealers were good. Only $2 \%$ each approval level for sales / servicing offered by the dealers were satisfactory and poor.

Table 32: Respondents' Satisfaction Level of the Present Car

| SNo | Respondents' satisfaction level of the present car | $\mathbf{N = 2 2 5}$ | Percentage |
| :--- | :--- | :---: | :--- |
| 1$)$ | Very satisfied | 177 | 78.67 |
| 2$)$ | Satisfied | 45 | 20.00 |
| 3$)$ | Dissatisfied | 2 | 0.89 |
| 4$)$ | Very dissatisfied | 1 | 0.44 |

Most of the respondents' ( $79 \%$ ) satisfaction level of the present car was very satisfied, whereas $20 \%$ were satisfied. Only $0.44 \%$ satisfaction level of the present car was very dissatisfied.
Table 33: Respondents who will Buy the Same Brand and Model in the Future

| SNo | Respondents who will buy the same brand/model of car | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :--- | :--- |
| 1) | Yes | 200 | 88.89 |
| 2$)$ | No | 25 | 11.11 |

Most of the respondents ( $89 \%$ ) said 'Yes' for buying the same brand of car in the future, whereas only $11 \%$ said 'No'.

Table 34: Brand of Car the Respondents would like to Purchase in Future

| SNo | Brand of car the respondents would purchase | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :---: | :--- |
| 1) | Maruti Suzuki | 138 | 61.33 |
| 2) | Hyundai | 38 | 16.89 |
| 3$)$ | No response | 49 | 21.78 |

Most of the respondents ( $61 \%$ ) would like to purchase Maruti Suzuki brand of cars in
the future, whereas only $17 \%$ would like to purchase Hyundai brand of cars in the future.

Table 35: Respondents' Reasons for not Buying the Same Brand of Car in Future

| SNo | Reasons for not buying the same brand of car | $\mathbf{N = 2 2 5}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1) | Maintenance issues | 15 | 6.67 |
| 2) | Availability of spare parts | 10 | 4.44 |
| 3) | Higher fuel consumption | 12 | 5.33 |
| 4) | Often breakdowns | 8 | 3.56 |
| 5) | Old styling | 20 | 8.89 |
| 6) | Lacks in safety | 25 | 11.11 |
| 7) | No response | 135 | 60 |

Majority ( $11 \%$ ) of the respondents were not going to buy the same brand of car in the future because it lacks in safety. A large section ( $9 \%$ ) were not going to buy the same brand of car in the future because it had got an old styling. Only $4 \%$ were not going to buy the same brand of car in the future because there are often breakdowns.

Table 36: Problems Faced by the Respondents in the Present Car

| SNo | Problems faced by the respondents in the present car | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :--- | :---: |
| 1$)$ | Communication and servicing | 37 | 16.44 |
| 2$)$ | Maintenance issues | 36 | 16.00 |
| 3$)$ | Availability of spare parts | 22 | 9.78 |
| 4$)$ | Higher fuel consumption | 13 | 5.78 |
| 5$)$ | Often breaks down | 8 | 3.56 |
| 6$)$ | Old styling | 9 | 4.00 |
| 7 7) | Lacks in safety | 11 | 4.89 |
| 8$)$ | Not easy to drive | 5 | 2.22 |
| 9$)$ | No response | 84 | 37.33 |

Problems Faced by Respondents in the Present Car


Figure 33: Respondents' Problems in the Present Car
Most of the respondents ( $16.44 \%$ ) problems in the present car were communication and servicing, whereas $16 \%$ had maintenance issues. Only $2 \%$ problems in the present car were 'not easy to drive'.

Table 37: Respondents' Comments on their Present Car

| SNo | Respondents' comments on their present car | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :--- | :--- |
| 1) | Very happy and delighted | 23 | 10.22 |
| 2) | Highly satisfied | 34 | 15.11 |
| 3) | Satisfied | 56 | 24.89 |
| 4$)$ | Value for money | 35 | 15.56 |
| 5) | No problem | 43 | 19.11 |
| 6$)$ | No response | 34 | 15.11 |

Majority ( $25 \%$ ) of the respondents were satisfied with their present car, whereas (19
$\%$ ) had no problem. Only $10 \%$ were very happy and delighted with their present car.

### 4.2 Section - II Response from Dealers' Representatives

The questionnaire prepared for dealers were distributed to 62 car dealers in Pune region. The dealers' representatives were asked to fill them. Out of the 62,8 questionnaires were not complete and hence were rejected from the analysis. Finally, only 54 responses were considered for the research.

Table 38: Age of Dealers' Representatives

| SNo | Age of dealers' representatives | $\mathbf{N}=\mathbf{5 4}$ | Percentage |
| :--- | :--- | :---: | :--- |
| 1$)$ | Below 25 years | 8 | 14.81 |
| 2$)$ | 26 to 35 years | 34 | 62.97 |
| 3$)$ | 36 to 50 years | 12 | 22.22 |

Majority ( $63 \%$ ) of representatives were in the age group of 26 to 35 years. Many (22
$\%)$ were in the age group of 36 to 50 years. Only $15 \%$ were below 25 years.
Table 39: Gender of Dealers' Representatives

| SNo | Gender of dealers' representatives | N=54 | Percentage |
| :--- | :--- | :---: | :---: |
| 1$)$ | Male | 53 | 98.15 |
| 2$)$ | Female | 1 | 1.85 |

Most of the representatives' ( $98 \%$ ) were males, whereas only $2 \%$ were females.
Table 40: Experience of Dealers' Representatives

| SNo | Experience of dealers' representatives | $\mathbf{N}=\mathbf{5 4}$ | Percentage |
| :--- | :--- | :--- | :---: |
| 1$)$ | $0-5$ years | 16 | 29.63 |
| 2$)$ | $5-10$ years | 24 | 44.45 |
| 3$)$ | $10-15$ years | 12 | 22.22 |
| 4$)$ | More than 15 years | 2 | 3.70 |

Majority ( $44 \%$ ) of representatives had an experience of 5 to 10 yrs. A large section ( $30 \%$ ) had experience of 0 to 5 years. Only $4 \%$ had an experience of 10 to 15 years.

Table 41: Characteristics of a Car Buyer as Perceived by Dealers'
Representatives (More than one options considered)

| SNo | Characteristics | SA <br> $\mathbf{\%}$ | $\mathbf{A}$ <br> $\mathbf{\%}$ | $\mathbf{N}$ <br> $\mathbf{\%}$ | DA <br> $\mathbf{\%}$ | SDA <br> $\mathbf{\%}$ | Mean | Standard <br> Deviation |
| :--- | :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- |
| 1) | Higher income | 63 | 22 | 15 | 0 | 0 | 4.48 | 0.746 |
| 2) | Social status in the society | 54 | 33 | 7 | 2 | 4 | 4.31 | 0.968 |
| 3) | Conscious of their esteem <br> in the society | 61 | 28 | 7 | 2 | 2 | 4.44 | 0.861 |
| 4$)$ | Influenced by promotions | 67 | 22 | 4 | 4 | 4 | 4.44 | 1.003 |
| 5) | Influenced by family | 70 | 24 | 0 | 2 | 4 | 4.56 | 0.904 |



Figure 34: Characteristics of a Car Buyer as Perceived by Dealers' Representatives
As per dealers' representatives, majority ( $70 \%$ ) of the car buyers were strongly influenced by their family. A large section ( $67 \%$ ) of the car buyers were lured by the promotional strategies. Only $54 \%$ of the car buyers considered a car as a symbol of social status in the society.

Under agree option majority ( $33 \%$ ) of the car buyers considered a car as a symbol of social status in the society. A large section ( $28 \%$ ) were conscious of their esteem in the society. Only 22 \% each were from higher income groups and were lured by the promotional strategies.

Under neutral option majority ( $15 \%$ ) of the buyers were from higher income groups. A large section ( $7 \%$ ) each were conscious of their esteem in the society and considered a car as social status in the society. Only $4 \%$ were lured by the promotional strategies.

Under disagree option majority ( $4 \%$ ) of the car buyers were lured by the promotional strategies, whereas only $2 \%$ each were conscious of their esteem in the society, social status in the society and were influenced by their family.

Under strongly disagree option majority (4 \%) each of the car buyers considered a car as a social status in the society, they were lured by the promotional strategies and were influenced by their family, whereas only $2 \%$ were conscious of their esteem in the society.

Table 42: Characteristics that Customers Look for in a Car as Perceived by Dealers' Representatives (More than one options considered)

| SNo | Characteristics that customers look for in a car | Number | Percentage |
| :--- | :--- | :--- | :--- |
| 1$)$ | Passenger carrying capacity | 45 | 83.33 |
| 2$)$ | Price range | 43 | 79.63 |
| 3$)$ | Technologically advanced car | 45 | 83.33 |
| 4$)$ | Brand of the car | 45 | 83.33 |



Figure 35: Characteristics that Customers Look for in a Car as Perceived by Dealers' Representatives

Most of the customers ( $83 \%$ ) each were looking for passenger carrying capacity, technological advanced car and the strength of the brand of the car, whereas $80 \%$ were looking for price range of the car.

Table 43: Key Selling Features for Cars as Perceived by Dealers'
Representatives (SA - Strongly Agree, A - Agree, N - Neutral, DA - Disagree, SDA Strongly Disagree, \% - Percentage) (More than one options considered)

| SNo | Key selling features | SA <br> $\mathbf{\%}$ | $\mathbf{A}$ <br> $\mathbf{\%}$ | $\mathbf{N}$ <br> $\mathbf{\%}$ | DA <br> $\mathbf{\%}$ | SDA <br> $\mathbf{\%}$ | Mean | Standard <br> Deviation |
| :--- | :--- | :--- | ---: | ---: | :--- | :--- | :--- | :--- |
| 1) | Social status in the society | 56 | 33 | 2 | 4 | 6 | 4.3 | 1.0754 |
| 2) | Luxurious interiors of the car | 44 | 24 | 19 | 6 | 7 | 3.93 | 1.242 |
| 3) | Good vision, driving comfort <br> with air-conditioning | 70 | 4 | 13 | 4 | 9 | 4.22 | 1.341 |
| 4) |  <br> security features | 74 | 7 | 19 | 0 | 0 | 4.56 | 0.793 |
| 5) | Necessity of family | 76 | 9 | 9 | 4 | 2 | 4.54 | 0.946 |
| 6) | Easy payment options with credit | 65 | 20 | 9 | 2 | 4 | 4.41 | 1 |
| 7) | Manufacturers and dealer's <br> discounts | 69 | 19 | 4 | 4 | 6 | 4.41 | 1.108 |
| 8) | Influenced by marketing <br> strategies | 74 | 22 | 2 | 0 | 2 | 4.67 | 0.7 |
| 9) | Reputation of brand / model | 67 | 11 | 15 | 4 | 4 | 4.33 | 1.099 |
| 10) | Advanced technology | 70 | 9 | 17 | 0 | 4 | 4.43 | 1.021 |
| 11) | Influenced by promotions | 74 | 20 | 4 | 2 | 0 | 4.67 | 0.644 |
| 12) | Excellent customer sales after <br> sales service | 74 | 26 | 0 | 0 | 0 | 4.74 | 0.442 |
| 13) | Proximity of the workshop to the <br> residence | 70 | 24 | 2 | 2 | 2 | 4.59 | 0.79 |

Key Selling Features for Cars as Perceived by Dealers'
Representatives


Figure 36: Key Selling Features for Cars as Perceived by Dealers' Representatives
Under strongly agree option since mean is 4.54 and standard deviation is 0.946 , it can be concluded that majority ( $76 \%$ ) of the cars were sold because of necessity of the family. Since mean is $4.56,4.67,4.67$ and 4.74 respectively and standard deviation is $0.793,0.700,0.644$ and 0.442 respectively it can be concluded that a large section (74 \%) each of the cars were sold for latest advanced safety and security features,
influenced by marketing strategies, influenced by promotions, and excellent customer sales and after sales service. As mean is 3.93 and standard deviation is 1.242 , it can be concluded that only $44 \%$ of the cars were sold for luxurious interiors of the cars.

Under agree option since mean is 4.30 and standard deviation is 1.075 it can be concluded that majority ( $33 \%$ ) of the cars were sold as a social status in the society. Since mean is 4.74 and standard deviation is 0.442 , it can be concluded that a large section ( $26 \%$ ) were sold for excellent customer sales and after sales services. As mean is 4.22 and standard deviation is 1.341 it can be concluded that only $4 \%$ were sold for good vision, driving comfort with air-conditioning.

Under neutral option mean is 3.93 and 4.56 respectively and standard deviation is 1.242 and 0.793 respectively it can be concluded that majority ( $19 \%$ ) of the cars were sold for its luxurious interiors, latest advanced safety and security features. Since mean is 4.43 and standard deviation is 1.021 , it can be concluded that a large section ( $17 \%$ ) of the cars were sold for advanced technology. As mean is $4.30,4.67$ and 4.59 respectively and standard deviation is $1.075,0.700$ and 0.790 respectively, it can be concluded that only $2 \%$ of cars were sold as a social status in the society, influenced by marketing strategies and because of proximity of the workshop to the residence.

Under disagree option, majority ( $6 \%$ ) of the cars were sold because of the luxurious interiors of the car, whereas only $4 \%$ each were sold as a social status in the society, good vision, driving comfort with air-conditioning, necessity of the family, manufacturers and dealer's discounts and for the reputation of the brand / model. Only $2 \%$ each were sold due to easy payment options with credit, influenced by promotions and proximity of the workshop to the residence.

Under strongly disagree option since mean is 4.22 and standard deviation is 1.341 , it can be concluded that majority ( $9 \%$ ) of the cars were sold for good vision, driving comfort with air-conditioning. Since mean is 3.93 and standard deviation is 1.242 , it can be concluded that a large section ( $7 \%$ ) were sold for luxurious interiors of the cars. As mean is $4.54,4.67$ and 4.59 respectively and standard deviation is 0.946 , 0.700 and 0.790 respectively, it can be concluded that only $2 \%$ cars were sold because of necessity of the family, influenced by marketing strategies and proximity of the workshop to the residence.

Table 44: Occupation of Maximum Car Owners as Perceived by Dealers' Representatives (More than one options considered)

| SNo | Occupation of maximum car owners | Number | Percentage |
| :--- | :--- | :--- | :--- |
| 1$)$ | Business | 38 | 70.37 |
| 2$)$ | Service | 45 | 83.33 |
| 3$)$ | Professional | 33 | 61.11 |
| 4$)$ | Others | 12 | 22.22 |

Majority ( $83 \%$ ) of the car owner's occupation were service. A large section (70 \%) of the owners were business people. Only $22 \%$ were from other occupations.

Table 45: Availability of Loan from Dealers'

| SNo | Availability of loan from dealers' | $\mathbf{N}=\mathbf{5 4}$ | Percentage |
| :--- | :--- | :--- | :--- |
| 1$)$ | Yes | 54 | 100.00 |

All the dealers' representatives ( $100 \%$ ) said loan is available.
Table 46: Extent of Loan Provided in Rupees

| SNo | Extent of loan provided in Rupees | $\mathbf{N}=\mathbf{5 4}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1) | < 2 Lakhs | 0 | 0.00 |
| 2) | 2-5 Lakhs | 2 | 3.70 |
| 3) | 5-10 Lakhs | 20 | 37.04 |
| 4) | More than 10 Lakhs | 32 | 59.26 |

Mostly (59 \%) dealers' provided loan above Rupees 10 lakhs. A large section (37\%) provided loan between Rupees 5 to 10 Lakhs. Only 3.7 \% provided loan between Rupees 2 to 5 lakhs.

Table 47: Average Number of Walk-ins in a Week as Perceived by Dealers’ Representatives

| SNo | Average no of walk-ins in a week | $\mathbf{N}=\mathbf{5 4}$ | Percentage |
| :--- | :--- | :--- | :---: |
| 1$)$ | $<25$ | 4 | 7.41 |
| 2$)$ | $<50$ | 7 | 12.96 |
| 3$)$ | 51 to 100 | 21 | 38.89 |
| 4$)$ | 101 to 150 | 13 | 24.07 |
| 5$)$ | $>150$ | 9 | 16.67 |

Majority ( $39 \%$ ) of the dealers had an average no of walk-ins in a week between 51 to 100 numbers. A large section ( $24 \%$ ) had an average no of walk-ins in a week between 101 to 150 numbers. Only $7 \%$ had an average no of walk-ins in a week less than 25 numbers.

Table 48: Walk-ins in Percentage in the following Segment of Cars as Perceived by Dealers' Representatives (Specified as $25 \%$ or $50 \%$ or $75 \%$ or $100 \%$ )

| SNo | Walk-ins in the following segments of cars. | $\begin{aligned} & \text { Dealers’ } \\ & <25 \% \end{aligned}$ | $\begin{aligned} & \text { Dealers' } \\ & <\mathbf{5 0 \% \%} \end{aligned}$ | $\begin{aligned} & \text { Dealers’ } \\ & <75 \% \end{aligned}$ | $\begin{aligned} & \hline \text { Dealers’ } \\ & \text { < } 100 \% \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1) | Micro length < 3.2 M | 6 | 7 | 0 | 0 |
| 2) | Mini 3.2 to 3.6 M | 20 | 11 | 2 | 2 |
| 3) | Compact 3.6 to 4 M | 24 | 33 | 11 | 6 |
| 4) | Super compact 4.0 to 4.25 M | 35 | 30 | 4 | 2 |
| 5) | Mid-Size 4.25 to 4.5 M | 30 | 41 | 2 | 4 |
| 6) | Others | 13 | 7 | 2 | 0 |

Majority $7 \%$ of the dealers get < $50 \%$ of the walk-ins for Micro length cars, whereas $6 \%$ of the dealers' get < $25 \%$ of the walk-ins for Micro length cars.

Majority $20 \%$ of the dealers get < $25 \%$ of the walk-ins for Mini cars, whereas $11 \%$ of the dealers' get < $50 \%$ of the walk-ins for Mini cars. Only $2 \%$ of the dealers' get $<75 \%$ and < $100 \%$ of the walk-ins for Mini cars.

Majority $33 \%$ of the dealers get < $50 \%$ of the walk-ins for compact cars, whereas 24 $\%$ of the dealers' get < $25 \%$ of the walk-ins for compact cars. A large section $11 \%$ of the dealers' get $<75 \%$ of the walk-ins for compact cars and only $6 \%$ of the dealers' get < $100 \%$ of the walk-ins for compact cars.

Mostly $35 \%$ of the dealers get < $25 \%$ of the walk-ins for super compact cars, whereas $30 \%$ of the dealers get $<50 \%$ of the walk-ins for super compact cars. A large section $4 \%$ of the dealers get $<75 \%$ of the walk-ins for super compact cars and only $2 \%$ of the dealers get < $100 \%$ of the walk-ins for super compact cars.

Majority $41 \%$ of the dealers get < $50 \%$ of the walk-ins for mid-size cars, whereas 30 $\%$ of the dealers get < $25 \%$ of the walk-ins for mid-size cars. A large section $4 \%$ of the dealers get < $100 \%$ of the walk-ins for mid-size cars and only $2 \%$ of the dealers get $<75 \%$ of the walk-ins for mid-size cars.

Mostly $13 \%$ of the dealers get < $25 \%$ of the walk-ins for other cars, whereas $7 \%$ of the dealers get < $50 \%$ of the walk-ins for other cars. Only $2 \%$ of the dealers get < 75 $\%$ of the walk-ins for other cars.

Table 49: Percentage Increase of Walk-ins during Festive Season as Perceived by Dealers' Representatives

| SNo | Walk-ins during festive season | $\mathbf{N}=\mathbf{5 4}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1$)$ | < $5 \%$ | 0 | 0.00 |
| 2$)$ | 5 to $15 \%$ | 4 | 7.41 |
| 3$)$ | 15 to $25 \%$ | 17 | 31.48 |
| 4$)$ | More than $25 \%$ | 33 | 61.11 |

Most of the dealers (61 \%) had more than $25 \%$ increase in walk-ins during festive seasons. A large section ( $31 \%$ ) had between 15 to $25 \%$ increase in walk-ins during festive seasons. Only $7.41 \%$ had between 5 to $15 \%$ increase in walk-ins during festive seasons.

Table 50: Customers Conversion Rate as Perceived by Dealers' Representatives

| SNo | Customers conversion rate | $\mathbf{N}=\mathbf{5 4}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1$)$ | $<5 \%$ | 3 | 5.56 |
| 2$)$ | 5 to $10 \%$ | 9 | 16.66 |
| 3$)$ | 10 to $15 \%$ | 12 | 22.22 |
| 4$)$ | More than $15 \%$ | 30 | 55.56 |

Majority ( $56 \%$ ) of the dealers had a customer conversion more than $15 \%$. A large section (22 \%) had a customer conversion between 10 to $15 \%$. Only $6 \%$ had a customer conversion of less than $5 \%$.

Table 51: Effect on Sales of Cars due to Increase in Taxes as Perceived by
Dealers' Representatives

| SNo | Effect on sales of cars due to increase in taxes | $\mathbf{N}=\mathbf{5 4}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1$)$ | Yes | 54 | 100 |
| 2$)$ | No | 0 | 0 |

All the dealers' representatives ( $100 \%$ ) said there will be an effect on sales of cars if there is an increase in taxes.

Table 52: Effect on Sales of Cars Due to Incentives Provided by the Government

| SNo | Effect on sales of cars due to incentives provided <br> by the government | $\mathbf{N}=\mathbf{5 4}$ | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Yes | 49 | 90.74 |
| 2 | No | 5 | 9.26 |

Most of the dealers ( $91 \%$ ) said 'yes' there would be an effect on sales of cars if the government provided incentives, whereas only $9 \%$ said 'No' there won't be any effect.

### 4.3 Testing of Hypothesis

## Research Question - 1

Will car buyers prefer dealers, family / relatives / neighbours / colleagues and newspaper / magazines over other sources of information before buying the car?

Statistical Tests: Cochran's Test

## Variables and Measurement:

Respondents were offered the following common sources of information preferred before purchase of a car.
Table 53: Sources of Information Preferred before Purchase of a Car

| 1) | T.V. Advertisements |
| :--- | :--- |
| 2) | Newspapers /Magazines |
| 3) | Family / Relatives / Neighbours / Colleagues / Friends |
| 4) | Internet / Emails / SMS |
| 5) | Radio / FM / Public address system etc. |
| 6) | Printed displays / Brochures / Pamphlets etc. |
| 7) | Wall writing / Bill board / Wall posters / Banners |
| 8) | Dealers |
| 9) | Self-decision |

Further they were asked to choose the sources of information as applicable.

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Source of info do not vary in frequency of preference.
$\mathbf{H}_{1}$ : Source of info significantly vary in frequency of preference.
Level of significance $\alpha=0.05$
Table 54: Shows Frequencies, Value and Test Statistics Derived from SPSS

| Frequencies | Value |  | Test Statistics |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 |  |  |
| Advertisement on TV | 114 | 111 | N | 225 |
| Magazines news papers | 87 | 138 | Cochran's Q | 825.613 |
| Family, relatives, neighbour's colleagues, friends | 66 | 159 | df | 8 |
| Emails, internet, SMS | 155 | 70 | Asymp. Sig. | .000* |
| FM, radio, public address system | 213 | 12 |  |  |
| Printed displays, brochures, pamphlets | 185 | 40 |  |  |
| Wall posters, wall writing, bill board, banners | 215 | 10 |  |  |
| Dealers | 53 | 172 |  |  |
| Own decision | 173 | 52 |  |  |

$\mathrm{Q}(8)=825.613, \mathrm{P}<0.05$

## Conclusion:

As the P value is lower than the level of significance the null hypothesis is rejected hence it is concluded that sources of information significantly vary in frequency of preference. To know where the difference lies, the frequency statement table is referred. The table for frequency shows that dealers have a frequency count of 172 , families / relatives / neighbours / colleagues / friends have a frequency count of 159, magazines / newspapers etc. have a frequency count of 138, Advertisements on T.V. have a frequency count of 111 , internet / emails / SMS have a frequency count of 70, own-decision have a frequency count of 52, printed displays / brochures / pamphlets etc. have a frequency count of 40 , radio / FM / public address system etc. have a frequency count of 12 and wall posters / wall writing / bill board /banners etc. have a frequency count of 10 . Hence there are top three preferred sources of information during purchase of a car. (Dealers, families / relatives / neighbours / colleagues /friends and newspaper / magazines) Hence the alternative hypothesis is proved / accepted.

## Research Question - 2

Are family requirement and economy (budgets) the major motivating factors while buying a new car?
Statistical Tests: Friedman Test
Variables and Measurement:
Respondents were offered the following motivating factors while buying a new car.
Table 55: Motivating Factors while Buying a New Car

| 1) | It is a symbol of social status |
| :--- | :--- |
| 2$)$ | It is a time saving device |
| 3$)$ | It is a source of entertainment |
| 4$)$ | Warranty / guarantee |
| 5) | It is an item of necessity |
| 6$)$ | Influenced by marketing |
| 7$)$ | It is considered as a luxurious item |
| 8$)$ | Requirement of the family |
| 9) | It is economical |

Further they were asked to choose the variables that motivated them while buying a new car as applicable.

Each factor was measured using a 5 -point scale.

## Hypothesis:

$\mathbf{H}_{0}$ : Factors motivating purchase of a new car do not vary in size of importance.
(Means ranks are equal.)
$\mathbf{H}_{1}$ : Factors motivating purchase of a new car significantly vary in size of importance. (Means ranks are different.)

Level of significance $\alpha=0.05$
Table 56: Shows Variables, Mean Rank and Test Statistics Derived from SPSS

| Variables | Mean Rank | Test Statistics |  |
| :--- | :--- | :--- | :---: |
| It is a symbol of social status | 4.76 | N | 225 |
| It is a time saving device | 4.74 | Chi-Square | 911.923 |
| It is a source of entertainment | 2.38 | df | 8 |
| Warranty / guarantee | 6.56 | Asymp. Sig. | $.000^{*}$ |
| It is an item of necessity | 4.1 |  |  |
| Influenced by marketing | 5.19 |  |  |
| It is considered as a luxurious item | 4.09 |  |  |
| Requirement of the family | 6.6 |  |  |
| It is economical | 6.56 |  |  |

$'^{\prime} '=3$ decimal places are reported since significance value is $<0.1 \%$
$\chi^{2}(8)=911.923, \mathrm{P}<0.05$

## Conclusion:

As value of P is lower than the point of significance the null hypothesis is rejected as it is concluded that factors motivating the purchase of new cars significantly vary in
size of importance. To locate where the difference is, the rank table is referred. On the ranks table it is observed that requirement of the family has 6.6 as mean rank. It is economical (budget) has a mean rank of 6.56 , and warranty and guarantee also has a mean rank of 6.56. The top three motivating factors for purchase of a new car are, 1) Requirement of the family. 2) It is economical (budget) and warranty and guarantee. Hence the alternative hypothesis is proved / accepted.

## Research Question - 3

Are car buyers influenced by good after sales service, reputation or image of the brand and offers / discounts given by dealers and manufacturers while buying a new car?

Statistical Tests: Cochran's Test

## Variables and Measurement:

Respondents were offered the following variables that affects an individual while choosing a brand of car.

Table 57: Variables that Affects an Individual while Choosing a Brand of Car

| 1) | Influenced by marketing |
| :--- | :--- |
| 2) | Reputation or image of the brand |
| 3) | Influenced by imported technology |
| 4$)$ | Influenced by good after sales service |
| 5) | Warranty / guarantee |
| 6$)$ | Influenced by advanced technology |
| 7$)$ | Promotion by dealers \& manufacturers |
| 8$)$ | Relative / friend's suggestions |
| 9) | Satisfaction of earlier brand of car |
| 10) | Known dealer |
| 11) | Offers / discounts given by dealers \& manufacturers |
| 12) | Buy back scheme / resale value of car in the market |
| 13) | Pick up and drop facility/exclusive service for ladies |
| 14$)$ | Easy and quick availability of spare parts |
| 15$)$ | Best competitive pricing by dealers |

Further they were asked to choose the variables that affects an individual while choosing a brand of car as applicable.

## Hypothesis:

$\mathbf{H}_{0}$ : Variables that affects an individual while choosing a brand of car do not differ in frequency of preference.
$\mathbf{H}_{1}$ : Variables that affects an individual while choosing a brand of car significantly differ in frequency of preference.

Level of significance $\alpha=0.05$

Table 58: Shows Frequencies, Value and Test Statistics Derived from SPSS

| Frequencies | Value |  | Test Statistics |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 |  |  |
| Influenced by marketing | 59 | 166 | Cochran's Q | 825.613 |
| Reputation or image of the brand | 17 | 208 | df | 8 |
| Influenced by imported technology | 33 | 192 | Asymp. Sig. | .000* |
| Influenced by good after sales service | 11 | 214 |  |  |
| Warranty / guarantee | 32 | 193 |  |  |
| Influenced by advanced technology | 44 | 181 |  |  |
| Promotion by dealers \& manufacturers | 78 | 147 |  |  |
| Relative / friend's suggestions | 123 | 102 |  |  |
| Satisfaction of earlier brand of car | 124 | 101 |  |  |
| Known dealer | 187 | 38 |  |  |
| Offers / discounts given by dealers \& manufacturers | 25 | 200 |  |  |
| Buy back scheme / resale value of car in the market | 118 | 107 |  |  |
| Pick up and drop facility / exclusive service for ladies | 149 | 76 |  |  |
| Easy and quick availability of spare parts | 132 | 93 |  |  |
| Best competitive pricing by dealers | 39 | 186 |  |  |

$\mathrm{Q}(8)=825.613, \mathrm{P}<0.05$

## Conclusion:

As value of P is lower than the point of significance the null hypothesis is rejected as it is concluded that variables that affects an individual while choosing a brand of car significantly differ in frequency of preference. To know where the difference lies the frequency statement table is referred. From the frequency table it can be seen that influenced by good after sales service have a frequency count of 214 , reputation or image of the brand have a frequency count of 208, offers / discounts given by dealers \& manufacturers have a frequency count of 200, warranty / guarantee have a frequency count of 193, influenced by imported technology have a frequency count of 192, best competitive pricing by dealers have a frequency count of 186 , influenced by advanced technology have a frequency count of 181, influenced by marketing have a frequency count of 166 , promotion by dealers \& manufacturers have a frequency count of 147, buy back schemes / resale value of cars in the market have a frequency count of 107, relative / friend's suggestions have a frequency count of 102, satisfaction of earlier brand of car have a frequency count of 101, easy and quick availability of spare parts have a frequency count of 93 , pick up and drop facility / exclusive service for ladies have a frequency count of 76 , known dealer have a frequency count of 38 . Hence there are top three variables that affects an individual
while choosing a brand of car. (Influenced by good after sales service, reputation or image of the brand and offers / discounts given by dealers and manufacturers while buying a new car.) Hence the alternative hypothesis is proved / accepted.

## Research Question - 4

Do parents affect the most in buying a car, followed by friends and well-wishers and your spouse?

Statistical Tests: Cochran's Test

## Variables and Measurement:

Respondents were offered the following factors which affects the most in making a car purchase decision.

Table 59: Factors which Affects the Most in Making a Car Purchase Decision

| 1$)$ | Your spouse |
| :--- | :--- |
| 2$)$ | Your children |
| 3$)$ | Your parents |
| 4$)$ | Your brothers /sisters |
| 5$)$ | Any opinion leaders |
| 6$)$ | Your friends and well wishers |
| 7$)$ | Your own decision |
| 8$)$ | Dealers |
| 9$)$ | Any other (specify) |

Further they were asked to choose the factors that affected the most in making a car purchase decision as applicable.

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : People who affect the most in making a car purchase decision do not differ in frequency of preference.
$\mathbf{H}_{1}$ : People who affect the most in making a car purchase decision significantly differ in frequency of preference.

Level of significance $\alpha=0.05$
Table 60: Shows Frequencies, Value and Test Statistics Derived from SPSS

| Frequencies | Value |  |  |  |
| :--- | ---: | ---: | :--- | :---: |
|  | 0 | 1 | Test Statistics |  |
| Your spouse | 85 | 140 | N | 225 |
| Your children | 122 | 103 | Cochran's Q | 825.613 |
| Your parents | 42 | 183 | df | 8 |
| Your brothers /sisters | 94 | 131 | Asymp. Sig. | $.000^{*}$ |
| Any opinion leaders | 152 | 73 |  |  |
| Your friends and well wishers | 80 | 145 |  |  |
| Your own decision | 201 | 24 |  |  |
| Dealers | 199 | 26 |  |  |
| Any other (specify) | 224 | 1 |  |  |

'*' $=3$ decimal places are reported since significance value is < $0.1 \%$
$\mathrm{Q}(8)=825.613, \mathrm{P}<0.05$

## Conclusion:

As value of P is lower than the point of significance the null hypothesis is rejected as it is concluded that people who affect the most in making a car purchase decision significantly differ in frequency of preference. To know where the difference lies the frequency statement table is referred. The table for frequency shows that parents have 183 as frequency count. Friends and well-wishers have a frequency count of 145 , spouse have 140 as frequency count, brother / sister have 131 as frequency count, children have 103 as frequency count, opinion leaders have 73 as frequency count, dealers have a frequency count of 26 , solely self (own decision) have a frequency count of 24 , and any other (specify) internet have a frequency count of 1 . Hence there are top three people who affect the most in making a car purchase decision. (Parents, friends / well-wishers and spouse.) Hence the alternative hypothesis is proved / accepted.

## Research Question - 5

Are major problems faced by car buyer's communication and servicing, followed by maintenance issues and availability of spares?

Statistical Tests: Cochran's Test
Variables and Measurement:
Respondents were offered the following list of problems that they may face in their present car.

Table 61: List of Problems Faced in their Present Car

| 1) | Communication and servicing |
| :--- | :--- |
| 2) | Maintenance issues |
| 3) | Availability of spare parts |
| 4) | Higher fuel consumption |
| 5) | Often breaks down |
| 6) | Old styling |
| 7) | Lacks in safety |
| 8) | Not easy to drive |

Further they were asked to choose the problems faced in their present car as applicable.

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Problems faced in their present car do not differ in frequency of preference.
$\mathbf{H}_{\mathbf{1}}$ : Problems faced in their present car significantly differ in frequency of preference.
Level of significance $\alpha=0.05$

Table 62: Shows Frequencies, Value and Test Statistics Derived from SPSS

| Frequencies | Value |  |  |  |
| :--- | ---: | :---: | :--- | :---: |
|  | 0 | 1 | Test Statistics |  |
| Communication and servicing | 188 | 37 | N | 225 |
| Maintenance issues | 189 | 36 | Cochran's Q | 825.613 |
| Availability of spares | 203 | 22 | df | 8 |
| Higher fuel consumption | 212 | 13 | Asymp. Sig. | $.000^{*}$ |
| Often breaks down | 217 | 8 |  |  |
| Old styling | 216 | 9 |  |  |
| Lacks in safety | 214 | 11 |  |  |
| Not easy to drive | 220 | 5 |  |  |

$'^{*}$ ' $=3$ decimal places are reported since significance value is $<0.1 \%$
$\mathrm{Q}(8)=825.613, \mathrm{P}<0.05$

## Conclusion:

As value of P is lower than the point of significance the null hypothesis is rejected as it is concluded that problems faced in their present car significantly differ in frequency of preference. To know where the difference lies the frequency statement table is referred. The table for frequency shows that communication and servicing have 37 as frequency count, maintenance issues have 36 as frequency count, availability of spare parts have a frequency count of 22 , higher fuel consumption have a frequency count of 13 , lacks in safety have a frequency count of 11 , old styling have a frequency count of 9 , often breaks down have a frequency count of 8 and not easy to drive have a frequency count of 5 . Hence there are top three problems faced by the respondents in their present cars. (Communication and servicing, maintenance issues and availability of spare parts.) Hence the alternative hypothesis is proved / accepted.

## Research Question - 6

Are customers who are content with the level of servicing provided by the dealers, more likely to buy the same car of the same brand / model?

Statistical Tests: Chi-Square Test

## Variables and Measurement:

Satisfaction level with regards to services offered by the dealer is measured using an ordinal scale $(1=$ excellent, $2=$ good, $3=$ satisfactory and $4=$ poor $)$ and repeat buying of a car of the same brand / model is measured using a dichotomous scale ( $1=$ yes, $2=$ no)

## Hypothesis:

$\mathbf{H}_{0}$ : Repeat buying of the same car and same brand is independent of the type of service provided by the dealers.
$\mathbf{H}_{1}$ : Repeat buying of same car and same brand depends upon the type of service provided by the dealers.
Level of significance $\alpha=0.05$
Table 63: Test Statistics Derived from SPSS

| Test Statistics | Value | df | Asymptotic Significance (2-sided) |
| :--- | ---: | :--- | :--- |
| Pearson Chi-Square | 109.147 | 3 | $.000^{*}$ |
| Likelihood Ratio | 91.249 | 3 | $.000^{*}$ |
| Linear-by-Linear Association | 104.709 | 1 | $.000^{*}$ |
| N of Valid Cases | 225 |  |  |

${ }^{\prime *}$ ' $=3$ decimal places are reported since significance value is $<0.1 \%$

## Conclusion:

Since the Chi-Square test is significant P value is $<0.05$. The null hypothesis is rejected as it is concluded that repeat buying of the same car and same brand depends upon level of services provided by the dealer. Hence the alternative hypothesis is proved / accepted.

The table for cross-tabulation is referred to understand more on this relationship.
Table 64: Shows Table for Cross Tabulation Derived from SPSS
State whether your future car can be of the same brand / model.

| Cross Tabulation Table: |  |  | Yes | No |
| :---: | :---: | :---: | :---: | :---: |
| State your satisfaction level for sales / servicing provided by the dealers. | Excellent | Count | 165 | 0 |
|  |  | \% within state your satisfaction level for sales / servicing provided by the dealer. | 100.0\% | 0.0\% |
|  | Good | Count | 35 | 17 |
|  |  | \% within state your satisfaction level for sales / servicing provided by the dealer. | 67.3\% | 32.7\% |
|  | Satisfactory | Count | 0 | 4 |
|  |  | \% within state your satisfaction level for sales / servicing provided by the dealer. | 0.0\% | 100.0\% |
|  | Poor | Count | 0 | 4 |
|  |  | \% within state your satisfaction level for sales / servicing provided by the dealer. | 0.0\% | 100.0\% |
| Total |  | Count | 200 | 25 |
|  |  | \% within state your satisfaction level for sales / servicing given by the dealer. | 88.9\% | 11.1\% |


| State your satisfaction level for sales / servicing provided by the dealers. | Excellent | Count | 165 |
| :---: | :---: | :---: | :---: |
|  |  | \% within state your satisfaction level for sales / servicing provided by the dealer. | 100.0\% |
|  | Good | Count | 52 |
|  |  | \% within state your satisfaction level for sales / servicing provided by the dealer. | 100.0\% |
|  | Satisfactory | Count | 4 |
|  |  | \% within state your satisfaction level for sales / servicing provided by the dealer. | 100.0\% |
|  | Poor | Count | 4 |
|  |  | \% within state your satisfaction level for sales / servicing provided by the dealer. | 100.0\% |
| Total |  | Count | 225 |
|  |  | \% within state your satisfaction level for sales / servicing provided by the dealer. | 100.0\% |

From the cross-tabulation table, it can be seen that all 165 customers who said dealer's services were excellent, all are willing to place a repeat order, out of the 52 customers who said the level of services is good, $67.3 \%$ are willing to place a repeat order, whereas $4 \%$ who said the services are satisfactory and $4 \%$ who said that the services are poor are not willing to place a repeat order.

## Conclusion:

Customers who are satisfied with the level of servicing provided by the dealers are more likely to buy the same car of the same brand / model. Hence the alternative hypothesis is proved / accepted.

## Research Question - 7

Do majority of the customers who are not satisfied with their present car, buy a Maruti Suzuki brand?

Statistical Tests: Sign (Binomial) Test

## Variables and Measurement:

Owners are questioned to tell if they are not satisfied with their present car would they prefer a Maruti Suzuki or Hyundai brand car. Since the question was a dichotomous question a sign (binomial) test was preferred to check whether majority of them would like a Maruti Suzuki brand.

Proportion for Test: Proportion for Test was selected as 0.5. As favourable responses exceed above $50 \%$ of a specific group it is recommended for major approval of this group.

So, $\mathrm{P}=0.5$

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Customers who are not satisfied with their present car majority of them do not buy a Maruti Suzuki brand.

H1: Customers who are not satisfied with their present car majority of them buy a Maruti Suzuki brand.

Level of significance $\alpha=0.05$
Table 65: Shows Test Statistics Derived from SPSS

| Test Statistics |  | Category | N | Observed Prop. | Test Prop. | $\begin{aligned} & \text { Exact Sig. } \\ & \text { (2-tailed) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| If your answer is "No" then which make of car you think of purchasing. | Group 1 | Maruti Suzuki | 138 | . 78 | . 5 | .000* |
|  | Group 2 | Hyundai | 38 | . 22 |  |  |
|  | Total |  | 176 | 1.00 |  |  |

## Conclusion:

Observed proportion for Maruti Suzuki is 0.78
Test proportion is 0.5
$P$ value is $<0.05$ Hence it can be concluded that majority of the customers would buy a Maruti Suzuki brand. Hence the alternative hypothesis is proved / accepted and the null hypothesis is rejected.

## Research Question - 8

Are customers satisfied with their present car?
Statistical Tests: Sign (Binomial) Test

## Variables and Measurement:

Respondents have said, they are satisfied with their present car. Since the question was a dichotomous question a sign (binomial) test was preferred to check whether majority of them were satisfied with their present car.

Test Proportion: Proportion for Test was selected as 0.5 . As favourable responses exceed above $50 \%$ of a specific group it is recommended for major approval of this group.

Hence $\mathrm{P}=0.5$

## Hypothesis:

$\mathbf{H}_{0}$ : Customers are not satisfied with their present car.
$H_{1}$ : Customers are satisfied with their present car.

Level of significance $\alpha=0.05$
Table 66: Shows Test Statistics Derived from SPSS

| Test Statistics |  | Category | N | Observed Prop. | Test Prop. | $\begin{aligned} & \text { Exact Sig. } \\ & \text { (2-tailed) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Customer | Group 1 | Satisfied | 222 | . 99 | 0.5 | .000* |
| Satisfaction | Group 2 | Dissatisfied | 3 | . 01 |  |  |
|  | Total |  | 225 | 1.00 |  |  |

${ }^{\prime} * \cdot=3$ decimal places are reported since significance value is $<0.1 \%$

## Conclusion:

Observed proportion for customers satisfied is 0.99
Test proportion is 0.5
P value is $<0.05$
Hence it can be concluded that customers are satisfied with their present car.
Hence the alternative hypothesis is proved / accepted and the null hypothesis is rejected.

## Research Question - 9

Are majority of the customers mode of payment by loan?
Statistical Tests: Sign (Binomial) Test

## Variables and Measurement:

Majority of the respondents have said their mode of payment is by loan. Since the question was a dichotomous question a sign (binomial) test was preferred to check whether majority of the respondent's mode of payment is by loan.

Proportion for Test: Proportion for Test was selected as 0.5 . As favourable responses exceed above $50 \%$ of a specific group it is recommended for major approval of this group.
Hence $\mathrm{P}=0.5$

## Hypothesis:

$\mathbf{H}_{0}$ : Majority of the customers mode of payment is not by loan.
$\mathbf{H}_{\mathbf{1}}$ : Majority of the customers mode of payment is by loan.
Level of significance $\alpha=0.05$
Table 67: Shows Test Statistics Derived from SPSS

| Test Statistics |  | Category | N | Observed Prop. | Test Prop. | Exact Sig. (2-tailed) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mode of payment | Group 1 | One time /cash down | 30 | . 13 | . 5 | .000* |
|  | Group 2 | Loan | 195 | . 87 |  |  |
|  | Total |  | 225 | 1.00 |  |  |

## Conclusion:

Observed proportion for loan is 0.87
Test proportion is 0.5
P value is $<0.05$

Hence it can be concluded that majority of the customers mode of payment is by loan. Hence the alternative hypothesis is proved / accepted and the null hypothesis is rejected.

## Research Question - 10

Do joint families own more cars than nuclear families?

## Statistical Tests: Chi-Square Test

## Variables and Measurement:

Number of cars owned by the respondents is measured using an ordinal scale ( $1=$ one car, $2=$ two cars, $3=$ three cars and $4=$ more than three cars) and respondents type of family is measured using a dichotomous scale ( $1=$ nuclear family, 2 = joint family $)$

## Hypothesis:

$\mathbf{H}_{0}$ : Number of cars owned is independent of type of family.
$\mathbf{H}_{1}$ : Number of cars owned depends on type of family.
Level of significance $\alpha=0.05$
Table 68: Shows Test Statistics Derived from SPSS

| Test Statistics | Value | df | Asymptotic Significance (2-sided) |
| :--- | :---: | :--- | :--- |
| Pearson Chi-Square | 18.367 | 3 | $.000^{*}$ |
| Likelihood Ratio | 24.094 | 3 | $.000^{*}$ |
| Linear-by-Linear Association | 15.361 | 1 | $.000^{*}$ |
| N of Valid Cases | 225 |  |  |
| $=3$ decimal places are reported since significance value is $<0.1 \%$ |  |  |  |

## Conclusion:

Since the Chi-Square test is significant P value is $<0.05$ The null hypothesis is rejected as it is concluded that joint families own more cars than nuclear families. Hence the alternative hypothesis is proved / accepted.

The table for cross-tabulation is referred to understand more on this relationship.

Table 69: Shows Cross Tabulation Table Derived from SPSS

| Cross Tabulation Table: |  |  | Number of vehicles owned in the family one Two Three |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Type family | of Nuclear | Count | 120 | 0 | 0 |
|  |  | \% within type of family | 100.0\% | 0.0\% | 0.0\% |
|  | Joint family | Count | 90 | 9 | 5 |
|  |  | \% within type of family | 85.7\% | 8.6\% | 4.8\% |
| Total |  | Count | 210 | 9 | 5 |
|  |  | \% within type of family | 93.3\% | 4.0\% | 2.2\% |


|  |  |  | Number <br> vehicles owned in <br> the family <br> More than three | Total |
| :--- | :--- | :--- | :--- | :--- |
| Type of family | Nuclear | Count | 0 | 120 |
|  | Joint family | Counthin type of family | $0.0 \%$ | $100.0 \%$ |
|  | $\%$ within type of family | $1.0 \%$ | 105 |  |
|  |  | Count | 1 | $100.0 \%$ |

From the cross-tabulation table, it can be seen that all 120 respondents who had a nuclear family had one vehicle in the family. Out of the 104 respondents only $85.7 \%$ had one vehicle in the family, whereas $8.6 \%$ had two vehicles in the family and $4.8 \%$ had three vehicles in the family.

## Conclusion:

Joint families own more cars than nuclear families. Hence the alternative hypothesis is proved / accepted.

## Research Question - 11

Do families with more members tend to own more cars?
Statistical Tests: Chi-Square Test

## Variables and Measurement:

Size of the family is measured by the number of members using an ordinal scale ( $1=$ up to three members, $2=$ three to six members, $3=$ above six members) and number of vehicles owned in the family is measured using an ordinal scale ( $1=$ one car, $2=$ two cars, $3=$ three cars and $4=$ more than three cars)

## Hypothesis:

$\mathbf{H}_{0}$ : Number of cars owned is independent of the number of members in the families.
$\mathbf{H}_{1}$ : Number of cars owned depends on the number of members in the families.
Level of significance $\alpha=0.05$
Table 70: Shows Test Statistics Derived from SPSS

| Test Statistics | Value | df | Asymptotic Significance (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | 182.21 | 6 | $.000^{*}$ |
| Likelihood Ratio | 64.742 | 6 | $.000^{*}$ |
| Linear-by-Linear Association | 45.216 | 1 | $.000^{*}$ |
| N of Valid Cases | 225 |  |  |

${ }^{\prime *}$ ' $=3$ decimal places are reported since significance value is $<0.1 \%$

## Conclusion:

Since the Chi-Square test is significant P value is $<0.05$. The null hypothesis is rejected as it is concluded that families with more members tend to own more cars. Hence the alternative hypothesis is proved / accepted.

The table for cross-tabulation is referred to understand more on this relationship.
Table 71: Shows Table for Cross Tabulation Derived from SPSS

| Cross Tabulation Table: |  |  | Number of vehicles owned in the family |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Size of family | Up to 3 members | Count | 66 | 0 | 0 |
|  |  | \% within size of family | 100.0\% | 0.0\% | 0.0\% |
|  | 3 to 6 members | Count | 144 | 7 | 0 |
|  |  | \% within size of family | 95.4\% | 4.6\% | 0.0\% |
|  | Above 6 members | Count | 0 | 2 | 5 |
|  |  | \% within size of family | 0.0\% | 25.0\% | 62.5\% |
| Total |  | Count | 210 | 9 | 5 |
|  |  | $\begin{aligned} & \hline \begin{array}{l} \text { \% within size of } \\ \text { family } \end{array} \\ & \hline \end{aligned}$ | 93.3\% | 4.0\% | 2.2\% |



The table for cross-tabulation shows that all 66 families who had up to 3 members in the family owned one vehicle in the family, whereas out of 151 families who had 3 to 6 members in the family $95.4 \%$ owned one vehicle in the family and $4.6 \%$ owned two vehicles in the family. 7 families who had more than 6 members in the family 25 \% owned two vehicles in the family, whereas $62.5 \%$ had three vehicles in the family.

## Conclusion:

Families with more members tend to own more cars. Hence the alternative hypothesis is proved / accepted.

## Research Question - 12

Are cars owned mostly by people in the age group of 26 to 35 years?
Statistical Tests: Chi-Square Test

## Variables and Measurement:

Age of the respondents is measured using an ordinal scale ( $1=$ Less than 25 years, $2=$ 26 to 35 years, $3=36$ to 50 years and $4=$ more than 50 years) and number of vehicles owned in the family is measured using an ordinal scale ( $1=$ one car, $2=$ two cars, $3=$ three cars and $4=$ more than three cars)

## Hypothesis:

$\mathbf{H}_{0}$ : Number of cars owned is independent of the age group.
$\mathbf{H}_{1}$ : Number of cars owned depends on the age group.
Level of significance $\alpha=0.05$
Table 72: Shows Test Statistics Derived from SPSS

| Test Statistics | Value | df | Asymptotic <br> Significance (2-sided) |  |
| :--- | :---: | :--- | :--- | :---: |
| Pearson Chi-Square | 52.156 | 9 | $.000^{*}$ |  |
| Likelihood Ratio | 47.066 | 9 | $.000^{*}$ |  |
| Linear-by-Linear <br> Association | 30.186 | 1 | $.000^{*}$ |  |
| N of Valid Cases | 225 |  |  |  |

'*' = 3 decimal places are reported since significance value is $<0.1 \%$

## Conclusion:

Since the Chi-Square test is significant P value is $<0.05$. The null hypothesis is rejected as it is concluded that cars are owned mostly by people in the age group of 26 to 35 years. Hence the alternative hypothesis is proved / accepted.

The table for cross-tabulation is referred to understand more on this relationship.

Table 73: Shows Cross Tabulation Table Derived from SPSS

| Cross Tabulation Table: |  |  | Number of vehicles owned in the family |  |  |  | than |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Two | Three | More three |  |
| Age | Less than 25 | Count | 9 | 0 | 0 | 0 |  |
|  |  | \% within age | 100.0\% | 0.0\% | 0.0\% | 0.0\% |  |
|  | 26 to 35 | Count | 105 | 0 | 0 | 0 |  |
|  |  | \% within age | 100.0\% | 0.0\% | 0.0\% | 0.0\% |  |
|  | 36 to 50 years | Count | 58 | 0 | 0 | 0 |  |
|  |  | \% within age | 100.0\% | 0.0\% | 0.0\% | 0.0\% |  |
|  | More than 50 years | Count | 38 | 9 | 5 | 1 |  |
|  |  | \% within age | 71.7\% | 17.0\% | 9.4\% | 1.9\% |  |
| Total |  | Count | 210 | 9 | 5 | 1 |  |
|  |  | \% within age | 93.3\% | 4.0\% | 2.2\% | 0.4\% |  |


| Age | Less than 25 | Count | 9 |
| :--- | :--- | :--- | :--- |
|  | 26 to 35 | \% within age | $100.0 \%$ |
|  | 36 to 50 years | Count | 105 |
|  | More than 50 years | Count | $100.0 \%$ |
|  |  | $\%$ within age | 58 |
| Total | $\frac{\text { Count }}{}$ | $100.0 \%$ |  |

The cross-tabulation table shows that all 9 respondents who were less than 25 years of age owned one vehicle in the family. All 105 respondents who were in the age group of 26 to 35 years owned one vehicle in the family. All 58 respondents who were in the age group of 36 to 50 years owned one vehicle in the family. Out of 53 respondents who were more than 50 years of age 71.7 \% owned one vehicle in the family, whereas $17 \%$ owned two vehicles in the family, $9.4 \%$ owned 3 vehicles in the family and only $1.9 \%$ had more than three vehicles in the family.

## Conclusion:

Cars are owned mostly by people in the age group of 26 to 35 years. Hence the alternative hypothesis is proved / accepted.

## Research Question - 13

Do professionals own more cars than any other category?
Statistical Tests: Chi-Square Test

## Variables and Measurement:

Occupation of the respondents is measured using an ordinal scale ( $1=$ service, $2=$ professionals, $3=$ business and $4=$ agriculturist) and number of vehicles owned in the family is measured using an ordinal scale $(1=$ one car, $2=$ two cars, $3=$ three cars and $4=$ more than three cars)

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Number of cars owned is independent of professionals.
$\mathbf{H}_{1}$ : Number of cars owned depends on professionals.
Level of significance $\alpha=0.05$
Table 74: Shows Test Statistics Derived from SPSS

|  | Value | df | Asymptotic Significance <br> (2-sided) |  |  |
| :--- | ---: | :--- | :--- | :---: | :---: |
| Pearson Chi-Square | 199.410 | 9 | $.000^{*}$ |  |  |
| Likelihood Ratio | 97.768 | 9 | $.000^{*}$ |  |  |
| Linear-by-Linear <br> Association | 77.072 | 1 | $.000^{*}$ |  |  |
| N of Valid Cases | 225 |  |  |  |  |
|  |  |  |  |  |  |

${ }^{\prime *}{ }^{\prime}=3$ decimal places are reported since significance value is $<0.1 \%$

## Conclusion:

Since the Chi-Square test is significant P value is $<0.05$. The null hypothesis is rejected as it is concluded that professionals own more cars than any other category. Hence the alternative hypothesis is proved / accepted.

The table for cross-tabulation is referred to understand more on this relationship.
Table 75: Shows Table for Cross Tabulation Derived from SPSS
Number of vehicles owned in the family

| Cross Tabulation Table: |  |  | one | Two | Three |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Occupation | Service | Count | 80 | 0 | 0 |
|  |  | \% within occupation | 100.0\% | 0.0\% | 0.0\% |
|  | Professional | Count | 102 | 0 | 0 |
|  |  | \% within occupation | 100.0\% | 0.0\% | 0.0\% |
|  | Business | Count | 28 | 2 | 0 |
|  |  | \% within occupation | 93.3\% | 6.7\% | 0.0\% |
|  | Agriculture | Count | 0 | 7 | 5 |
|  |  | \% within occupation | 0.0\% | 53.8\% | 38.5\% |
| Total |  | Count | 210 | 9 | 5 |
|  |  | \% within occupation | 93.3\% | 4.0\% | 2.2\% |


|  |  |  | Number of vehicles owned in the family <br> More than three | Total |
| :---: | :---: | :---: | :---: | :---: |
| Occupation | Service | Count | 0 | 80 |
|  |  | \% within occupation | 0.0\% | 100.0\% |
|  | Professional | Count | 0 | 102 |
|  |  | \% within occupation | 0.0\% | 100.0\% |
|  | Business | Count | 0 | 30 |
|  |  | \% within occupation | 0.0\% | 100.0\% |
|  | Agriculture | Count | 1 | 13 |
|  |  | \% within occupation | 7.7\% | 100.0\% |
| Total |  | Count | 1 | 225 |
|  |  | \% within occupation | 0.4\% | 100.0\% |

The table for cross-tabulation shows that all 80 respondents who had their occupation as service owned one vehicle in the family. All 102 respondents who had their occupation as professionals owned one vehicle in the family. Out of 30 respondents who had their occupation as business 93.3 \% owned one vehicle in the family, whereas $6.7 \%$ owned two vehicles in the family. Out of 12 respondents who had their occupation as agriculture 53.8 \% owned two vehicles in the family, whereas $38.5 \%$ owned three vehicles in the family.

## Conclusion:

Professionals own more cars than any other category. Hence the alternative hypothesis is proved / accepted.

## Research Question - 14

Do factors motivating purchase of a new car differ across gender?
Statistical Tests: MANOVA

## Variables and Measurement:

Independent Variable: Gender ( $1=$ Male, $2=$ Female )
Table 76: Shows Between Subject Factors Derived from SPSS

| Between-Subject Factors |  | Value Label | N |
| :--- | :--- | :--- | :---: |
| Gender | 1 | Male | 189 |
|  | 2 | Female | 36 |

## Dependent Variables:

"Factors motivating purchase of a new car" it is a symbol of social status.
"Factors motivating purchase of a new car" it is a time saving device.
"Factors motivating purchase of a new car" it is a source of entertainment.
"Factors motivating purchase of a new car" it's for the guarantee / warranty.
"Factors motivating purchase of a new car" it is an item of necessity.
"Factors motivating purchase of a new car" it is the marketing influence.
"Factors motivating purchase of a new car" it is a luxurious item.
"Factors motivating purchase of a new car" it is a family requirement.
"Factors motivating purchase of a new car" it is economical.

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Factors motivating purchase of a new car doesn't differ across gender.
$\mathbf{H}_{\mathbf{1}}$ : Factors motivating purchase of a new car differ across gender.
Level of significance $\alpha=0.05$
Table 77: Shows Mean, Std Deviation \& N Derived from SPSS

| Descriptive Statistics: | Gender | Mean | Std. Deviation | N |
| :---: | :---: | :---: | :---: | :---: |
| It is a symbol of social status | Male | 4.67 | . 643 | 189 |
|  | Female | 1.56 | . 504 | 36 |
|  | Total | 4.17 | 1.303 | 225 |
| It is a time saving device | Male | 4.63 | . 483 | 189 |
|  | Female | 2.08 | . 806 | 36 |
|  | Total | 4.23 | 1.084 | 225 |
| It is a source of entertainment | Male | 3.72 | . 898 | 189 |
|  | Female | 1.69 | . 525 | 36 |
|  | Total | 3.40 | 1.130 | 225 |
| Warranty / guarantee | Male | 5.00 | . 000 | 189 |
|  | Female | 4.67 | . 478 | 36 |
|  | Total | 4.95 | . 225 | 225 |
| It is an item of necessity | Male | 4.42 | . 668 | 189 |
|  | Female | 2.06 | . 860 | 36 |
|  | Total | 4.04 | 1.115 | 225 |
| Influenced by marketing | Male | 4.66 | . 476 | 189 |
|  | Female | 3.14 | . 762 | 36 |
|  | Total | 4.41 | . 769 | 225 |
| It is considered as a luxurious item | Male | 4.32 | . 782 | 189 |
|  | Female | 2.69 | . 624 | 36 |
|  | Total | 4.06 | . 964 | 225 |
| Requirement of the family | Male | 5.00 | . 000 | 189 |
|  | Female | 4.83 | . 507 | 36 |
|  | Total | 4.97 | . 210 | 225 |
| It is economical | Male | 5.00 | . 000 | 189 |
|  | Female | 4.67 | . 632 | 36 |
|  | Total | 4.95 | . 278 | 225 |

A two group between subjects MANOVA was performed on 9 dependent variables (It is a symbol of social status, it is a time saving device, it is a source of entertainment, warranty / guarantee, it is an item of necessity, influenced by marketing, it is considered as a luxurious item, requirement of the family, it is economical)

Table 78: Shows Bartlett's Test of Sphericity Derived from SPSS Bartlett's Test of Sphericity:

| Likelihood Ratio | $.000^{*}$ |
| :--- | :---: |
| Approx. Chi-Square | 2921.893 |
| df | 44 |
| Sig. | $.000^{*}$ |

${ }^{\prime *}{ }^{\prime}=3$ decimal places are reported since significance value is $<0.1 \%$
Bartlett's Test of Sphericity is significant statistically; value of P is lower than 0.001 signifying adequate correlation between dependent variable to continue with the analysis. Since no Box's Tests is produced Pillai's Trace was used to assess all multivariate effects. The Pillai's Trace was significant at $5 \%$ level of significance.

Table 79: Shows Multivariate Test Derived from SPSS

## Multivariate Tests:

| Effect | Value | F | Hypothesis <br> df | Error df | Sig. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | Pillai's Trace | 0.908 | 236.997 | 9.000 | 215.000 | $.000^{*}$ |
|  | Wilks' Lambda | 0.092 | 236.997 | 9.000 | 215.000 | $.000^{*}$ |
|  | Hoteling's Trace | 9.921 | 236.997 | 9.000 | 215.000 | $.000^{*}$ |
|  | Roy's Largest Root | 9.921 | 236.997 | 9.000 | 215.000 | $.000^{*}$ |

${ }^{\prime} *$ ' $=3$ decimal places are reported since significance value is $<0.1 \%$
Pillai's Trace $=0.908, \mathrm{f}(9,215)=236.997, \mathrm{P}$ value $=0.000$
As value of P is lower than 0.05 the null hypothesis is rejected, hence it is concluded that factors motivating purchasing of a new car differ across gender. As Pillai Trace was important. Univariate ANOVA was done on each dependent variable singly to establish the locus of statistically important multivariate effect. As effect of gender is assessed on each dependent variable singly we use Bonferroni corrected alpha level to avoid alpha inflation, so we divide alpha by number of dependent variables. Hence the new alpha $(0.05 / 9=0.005)$.

Table 80: Shows Sum of Squares, df, Mean Square, F \& Sig. Derived from SPSS

| Source | Dependent Variable | Type III Sum of Squares | df | Mean <br> Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected <br> Model | It is a symbol of social status | 293.690 | 1 | 293.690 | 756.703 | .000* |
|  | It is a time saving device | 196.880 | 1 | 196.880 | 659.625 | .000* |
|  | It is a source of entertainment | 124.668 | 1 | 124.668 | 172.321 | .000* |
|  | Warranty / guarantee | 3.360 | 1 | 3.360 | 93.660 | .000* |
|  | It is an item of necessity | 168.772 | 1 | 168.772 | 342.559 | .000* |
|  | Influenced by marketing | 69.609 | 1 | 69.609 | 246.585 | .000* |
|  | It is considered as a luxurious item | 79.658 | 1 | 79.658 | 138.140 | .000* |
|  | Requirement of the family | . 840 | 1 | 0.840 | 20.813 | .000* |
|  | It is economical | 3.360 | 1 | 3.360 | 53.520 | .000* |


| Intercept | It is a symbol of social status | 1172.765 | 1 | 1172.765 | 3021.674 | .000* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | It is a time saving device | 1364.880 | 1 | 1364.880 | 4572.874 | .000* |
|  | It is a source of entertainment | 888.117 | 1 | 888.117 | 1227.593 | .000* |
|  | Warranty / guarantee | 2825.760 | 1 | 2825.760 | 78768.060 | .000* |
|  | It is an item of necessity | 1267.261 | 1 | 1267.261 | 2572.177 | .000* |
|  | Influenced by marketing | 1837.431 | 1 | 1837.431 | 6508.980 | .000* |
|  | It is considered as a luxurious item | 1486.804 | 1 | 1486.804 | 2578.382 | .000* |
|  | Requirement of the family | 2924.040 | 1 | 2924.040 | 72451.213 | .000* |
|  | It is economical | 2825.760 | 1 | 2825.760 | 45010.320 | .000* |
| Factors motivating purchase of a new car. | It is a symbol of social status | 293.690 | 1 | 293.690 | 756.703 | .000* |
|  | It is a time saving device | 196.880 | 1 | 196.880 | 659.625 | .000* |
|  | It is a source of entertainment | 124.668 | 1 | 124.668 | 172.321 | .000* |
|  | Warranty / guarantee | 3.360 | 1 | 3.360 | 93.660 | .000* |
|  | It is an item of necessity | 168.772 | 1 | 168.772 | 342.559 | .000* |
|  | Influenced by marketing | 69.609 | 1 | 69.609 | 246.585 | .000* |
|  | It is considered as a luxurious item | 79.658 | 1 | 79.658 | 138.140 | .000* |
|  | Requirement of the family | . 840 | 1 | . 840 | 20.813 | .000* |
|  | It is economical | 3.360 | 1 | 3.360 | 53.520 | .000* |
| Error | It is a symbol of social status | 86.550 | 223 | . 388 |  |  |
|  | It is a time saving device | 66.560 | 223 | . 298 |  |  |
|  | It is a source of entertainment | 161.332 | 223 | . 723 |  |  |
|  | Warranty / guarantee | 8.000 | 223 | . 036 |  |  |
|  | It is an item of necessity | 109.868 | 223 | . 493 |  |  |
|  | Influenced by marketing | 62.951 | 223 | . 282 |  |  |
|  | It is considered as a luxurious item | 128.591 | 223 | . 577 |  |  |
|  | Requirement of the family | 9.000 | 223 | . 040 |  |  |
|  | It is economical | 14.000 | 223 | . 063 |  |  |

${ }^{\prime}{ }^{\prime}$ ' $=(* 3$ decimal places are reported since significance value is $<0.1 \%)$
It is a symbol of social status.
Male mean $=4.67 \quad$ Female mean $=1.56$
$\mathrm{F}(1,223)=756.703, \mathrm{P}=0.000^{*}$
Since $P$ value is $<0.005$ it is concluded that male and female differ in car being a symbol of social status. From the mean values it can be further concluded that car is a symbol of status more for males than females.
It is a time saving device.
Male mean $=4.63 \quad$ Female mean $=2.08$
$\mathrm{F}(1,223)=659.625, \mathrm{P}=0.000^{*}$
Since P value is $<0.005$ it is concluded that male and female differ in it as a time saving device. From the mean values it can be further concluded that it is a time saving device more for males than females.

It is a source of entertainment.
Male mean $=3.72 \quad$ Female mean $=1.69$
$\mathrm{F}(1,223)=172.321, \mathrm{P}=0.000^{*}$
Since P value is $<0.005$ it is concluded that male and female differ in it as a source of entertainment. From the mean values it can be further concluded that it is a source of entertainment more for males than females.

Warranty / guarantee
Male mean $=5.00$
Female mean $=4.67$
$\mathrm{F}(1,223)=93.660, \mathrm{P}=0.000^{*}$
Since P value is $<0.005$ it is concluded that male and female differ in Warranty /
Guarantee. From the mean values it can be further concluded that Warranty / Guarantee is more for males than females.

It is an item of necessity.
Male mean $=4.42$
Female mean $=2.06$
$\mathrm{F}(1,223)=342.559, \mathrm{P}=0.000^{*}$
Since $P$ value is $<0.005$ it is concluded that male and female differ it as an item of necessity. From the mean values it can be further concluded that it is an item of necessity more for males than females.

Influenced by marketing.
Male mean $=4.66 \quad$ Female mean $=3.14$
$\mathrm{F}(1,223)=246.585, \mathrm{P}=0.000^{*}$
Since P value is $<0.005$ it is concluded that male and female differ in influence from marketing. From the mean values it can be further concluded that influenced by marketing is more for males than females.

It is considered as a luxurious item.
Male mean $=4.32 \quad$ Female mean $=2.69$
$\mathrm{F}(1,223)=138.140, \mathrm{P}=0.000^{*}$
Since P value is $<0.005$ it is concluded that male and female differ in considering it as a luxurious item. From the mean values it can be further concluded that it is considered as a luxurious item more for males than females.

Requirement of the family.
Male mean $=5.00$
Female mean $=4.83$
$\mathrm{F}(1,223)=20.813, \mathrm{P}=0.000^{*}$

Since P value is $<0.005$ it is concluded that male and female differ in it as a requirement of the family. From the mean values it can be further concluded that it is a requirement of the family more for males than females.

It is economical.
Male mean $=5.00 \quad$ Female mean $=4.67$
$\mathrm{F}(1,223)=53.520, \mathrm{P}=0.000^{*}$
Since P value is $<0.005$ it is concluded that male and female differ in it as economical. From the mean values it can be further concluded that it is economical more for males than females.

Hence the alternative hypothesis is proved / accepted.

## Research Question - 15

Do factors motivating purchase of a new car differ across occupation?
Statistical Tests: MANOVA
Variables and Measurement:
Independent Variable: Occupation ( $1=$ Service, $2=$ Professionals, $3=$ Business and 4 = Agriculturist)

Table 81: Shows Between-Subjects Factors Derived from SPSS Between-Subjects Factors:

|  |  | Value Label | N |
| :--- | :--- | :--- | ---: |
| Occupation | 1 | Service | 80 |
|  | 2 | Professional | 102 |
|  | 3 | Business | 30 |
|  | 4 | Agriculturist | 13 |

## Dependent Variable:

"Factors motivating purchase of a new car" it is a symbol of social status.
"Factors motivating purchase of a new car" it is a time saving device.
"Factors motivating purchase of a new car" it is a source of entertainment.
"Factors motivating purchase of a new car" it's for the guarantee / warranty.
"Factors motivating purchase of a new car" it is an item of necessity.
"Factors motivating purchase of a new car" it is the marketing influence.
"Factors motivating purchase of a new car" it is a luxurious item.
"Factors motivating purchase of a new car" it is a family requirement.
"Factors motivating purchase of a new car" it is economical.

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Factors motivating purchase of a new car doesn't differ across occupation.
$\mathbf{H}_{1}$ : Factors motivating purchase of a new car differ across occupation.

Level of significance $\alpha=0.05$

Table 82: Shows Mean, Std. Deviation and N Derived from SPSS

| Descriptive Statistics: | Occupation | Mean | Std. Deviation | N |
| :---: | :---: | :---: | :---: | :---: |
| It is a symbol of social status | Service | 5.00 | . 000 | 80 |
|  | Professional | 4.53 | . 685 | 102 |
|  | Business | 2.13 | . 571 | 30 |
|  | Agriculturist | 1.00 | . 000 | 13 |
|  | Total | 4.17 | 1.303 | 225 |
| It is a time saving device | Service | 5.00 | . 000 | 80 |
|  | Professional | 4.39 | . 491 | 102 |
|  | Business | 2.83 | . 874 | 30 |
|  | Agriculturist | 1.38 | . 506 | 13 |
|  | Total | 4.23 | 1.084 | 225 |
| It is a source of entertainment | Service | 4.71 | . 455 | 80 |
|  | Professional | 3.00 | . 000 | 102 |
|  | Business | 2.27 | . 450 | 30 |
|  | Agriculturist | 1.08 | 0.277 | 13 |
|  | Total | 3.40 | 1.130 | 225 |
| Warranty / guarantee | Service | 5.00 | . 000 | 80 |
|  | Professional | 5.00 | . 000 | 102 |
|  | Business | 5.00 | . 000 | 30 |
|  | Agriculturist | 4.08 | . 277 | 13 |
|  | Total | 4.95 | 225 | 225 |
| It is an item of necessity | Service | 5.00 | . 000 | 80 |
|  | Professional | 4.06 | . 542 | 102 |
|  | Business | 2.70 | . 466 | 30 |
|  | Agriculturist | 1.08 | . 277 | 13 |
|  | Total | 4.04 | 1.115 | 225 |
| Influenced by marketing | Service | 5.00 | . 000 | 80 |
|  | Professional | 4.43 | . 498 | 102 |
|  | Business | 3.60 | . 498 | 30 |
|  | Agriculturist | 2.54 | . 776 | 13 |
|  | Total | 4.41 | . 769 | 225 |
| It is considered as a luxurious item | Service | 5.00 | . 000 | 80 |
|  | Professional | 3.87 | . 670 | 102 |
|  | Business | 3.00 | . 000 | 30 |
|  | Agriculturist | 2.15 | . 801 | 13 |
|  | Total | 4.06 | . 964 | 225 |
| Requirement of the family | Service | 5.00 | . 000 | 80 |
|  | Professional | 5.00 | . 000 | 102 |
|  | Business | 5.00 | . 000 | 30 |
|  | Agriculturist | 4.54 | . 776 | 13 |
|  | Total | 4.97 | . 210 | 225 |
| It is economical | Service | 5.00 | . 000 | 80 |
|  | Professional | 5.00 | . 000 | 102 |
|  | Business | 5.00 | . 000 | 30 |
|  | Agriculturist | 4.08 | . 760 | 13 |
|  | Total | 4.95 | . 278 | 225 |

A four group between subjects MANOVA was conducted on 9 dependent variables (It is a symbol of social status, it is a time saving device, it is a source of entertainment, warranty / guarantee, it is an item of necessity, influenced by marketing, it is considered as luxurious item, requirement of the family, it is economical)

Table 83: Shows Bartlett's Test of Sphericity Derived from SPSS
Bartlett's Test of Sphericity:

| Likelihood Ratio | $0.000^{*}$ |
| :--- | :---: |
| Approx. Chi-Square | 2094.488 |
| df | 44 |
| Sig. | $0.000^{*}$ |

'*' = 3 decimal places are reported since significance value is $<0.1 \%$
Bartlett's Test of Sphericity is significant statistically; value of P is lower than 0.001 signifying adequate correlation between dependent variables to continue with the analysis. Since no Box's Tests is produced Pillai's Trace was used to assess all multivariate effects. The Pillai's Trace was significant at $5 \%$ level of significance.

## Table 84: Shows Multivariate Tests Derived from SPSS

Multivariate Tests:

| Effect |  | Value | F | Hypothesis df | Error df | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Factors motivating purchase of a new car. | Pillai's Trace | 2.539 | 131.464 | 27.000 | 645.000 | 0.000* |
|  | Wilks' Lambda | 0.002 | 186.373 | 27.000 | 622.712 | 0.000* |
|  | Hotelling's Trace | 29.667 | 232.572 | 27.000 | 635.000 | 0.000* |
|  | Roy's Largest Root | 18.385 | 439.188 | 9.000 | 215.000 | 0.000* |

${ }^{\prime *}$ ' $=3$ decimal places are reported since significance value is $<0.1 \%$
Pillai's Trace $=2.539, \mathrm{f}(27,645)=131.464, \mathrm{P}$ value $=0.000$
As value of P is lower than 0.05 the null hypothesis is rejected, hence it can be concluded that factors motivating purchase of a new car differ across occupation. As Pillai Trace was important. Univariate ANOVA was done on each dependent variable singly to establish the locus of statistically important multivariate effect. As effect of occupation is assessed on each dependent variable singly we use Bonferroni corrected alpha level to avoid alpha inflation, we so divide alpha by number of dependent variables. Hence the new alpha $(0.05 / 9=0.005)$.

Table 85: Shows Sum of Squares, df, Mean Square, F \& Sig. Derived from SPSS

| Source | Dependent Variable | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected <br> Model | It is a symbol of social status | 323.362 | 3 | 107.787 | 418.805 | .000* |
|  | It is a time saving device | 213.883 | 3 | 71.294 | 317.935 | .000* |
|  | It is a source of entertainment | 262.823 | 3 | 87.608 | 835.357 | .000* |
|  | Warranty / guarantee | 10.437 | 3 | 3.479 | 832.924 | .000* |
|  | It is an item of necessity | 241.770 | 3 | 80.590 | 483.057 | .000* |
|  | Influenced by marketing | 93.110 | 3 | 31.037 | 173.866 | .000* |
|  | It is considered as a luxurious item | 155.213 | 3 | 51.738 | 215.593 | .000* |
|  | Requirement of the family | 2.609 | 3 | . 870 | 26.583 | .000* |
|  | It is economical | 10.437 | 3 | 3.479 | 111.057 | .000* |
| Intercept | It is a symbol of social status | 1209.601 | 1 | 1209.601 | 4699.880 | .000* |
|  | It is a time saving device | 1397.364 | 1 | 1397.364 | 6231.519 | .000* |
|  | It is a source of entertainment | 922.124 | 1 | 922.124 | 8792.655 | .000* |
|  | Warranty / guarantee | 2745.384 | 1 | 2745.384 | 657290.65 | .000* |
|  | It is an item of necessity | 1242.879 | 1 | 1242.879 | 7449.828 | .000* |
|  | Influenced by marketing | 1828.750 | 1 | 1828.750 | 10244.612 | .000* |
|  | It is considered as a luxurious item | 1484.153 | 1 | 1484.153 | 6184.500 | .000* |
|  | Requirement of the family | 2879.832 | 1 | 2879.832 | 88018.694 | .000* |
|  | It is economical | 2745.384 | 1 | 2745.384 | 87638.753 | .000* |
| Factors motivating purchase of a new car. | It is a symbol of social status | 323.362 | 3 | 107.787 | 418.805 | .000* |
|  | It is a time saving device | 213.883 | 3 | 71.294 | 317.935 | .000* |
|  | It is a source of entertainment | 262.823 | 3 | 87.608 | 835.357 | .000* |
|  | Warranty / guarantee | 10.437 | 3 | 3.479 | 832.924 | .000* |
|  | It is an item of necessity | 241.770 | 3 | 80.590 | 483.057 | .000* |
|  | Influenced by marketing | 93.110 | 3 | 31.037 | 173.866 | .000* |
|  | It is considered as a luxurious item | 155.213 | 3 | 51.738 | 215.593 | .000* |
|  | Requirement of the family | 2.609 | 3 | 0.870 | 26.583 | .000* |
|  | It is economical | 10.437 | 3 | 3.479 | 111.057 | .000* |
| Error | It is a symbol of social status | 56.878 | 221 | . 257 |  |  |
|  | It is a time saving device | 49.557 | 221 | . 224 |  |  |
|  | It is a source of entertainment | 23.177 | 221 | . 105 |  |  |
|  | Warranty / guarantee | . 923 | 221 | . 004 |  |  |
|  | It is an item of necessity | 36.870 | 221 | . 167 |  |  |
|  | Influenced by marketing | 39.450 | 221 | . 179 |  |  |
|  | It is considered as a luxurious item | 53.035 | 221 | . 240 |  |  |
|  | Requirement of the family | 7.231 | 221 | . 033 |  |  |
|  | It is economical | 6.923 | 221 | . 031 |  |  |

${ }^{\prime *}$ ' $=3$ decimal places are reported since significance value is < $0.1 \%$
It is a symbol of social status.

Service mean $=5$
Business mean $=2.13$
$\mathrm{F}(3,221)=418.805, \mathrm{P}=0.000$

Professional mean $=4.53$
Agriculturist mean $=1.0$

Since $P$ value is $<0.005$ it is concluded that factors motivating purchase of a new car differ across occupation. From the mean values it can be further concluded that car is a symbol of social status more for respondents with occupation as service.

It is a time saving device.
Service mean $=5 \quad$ Professional mean $=4.39$
Business mean $=2.83$
Agriculturist mean $=1.38$
$\mathrm{F}(3,221)=317.935, \mathrm{P}=0.000$
Since $P$ value is $<0.005$ it is concluded that factors motivating purchase of a new car differ across occupation. From the mean values it can be further concluded that car is a time saving device more for respondents with occupation as service.

It is a source of entertainment.
Service mean $=4.71 \quad$ Professional mean $=3.00$
Business mean $=2.27 \quad$ Agriculturist mean $=1.08$
$\mathrm{F}(3,221)=835.357, \mathrm{P}=0.000$
Since P value is $<0.005$ it is concluded that factors motivating purchase of a new car differ across occupation. From the mean values it can be further concluded that car is a source of entertainment more for respondents with occupation as service.

Warranty / Guarantee.
Service mean $=5.00 \quad$ Professional mean $=5.00$
Business mean $=5.00 \quad$ Agriculturist mean $=4.08$
$\mathrm{F}(3,221)=832.924, \mathrm{P}=0.000$
Since P value is $<0.005$ it is concluded that factors motivating purchase of a new car differ across occupation. From the mean values it can be further concluded that warranty / guarantee is more for respondents with occupation as service, professional and business.

It is an item of necessity.
Service mean $=5.00 \quad$ Professional mean $=4.06$
Business mean $=2.70 \quad$ Agriculturist mean $=1.08$
$\mathrm{F}(3,221)=483.057, \mathrm{P}=0.000$
Since P value is $<0.005$ it is concluded that factors motivating purchase of a new car differ across occupation. From the mean values it can be further concluded that it is an item of necessity is more for respondents with occupation as service.

Influenced by marketing.
Service mean $=5.00$
Professional mean $=4.43$

Business mean $=3.60 \quad$ Agriculturist mean $=2.54$
$\mathrm{F}(3,221)=173.866, \mathrm{P}=0.000$
Since P value is $<0.005$ it is concluded that factors motivating purchase of a new car differ across occupation. From the mean values it can be further concluded that it is influenced by marketing is more for respondents with occupation as service.

It is considered as a luxurious item.
Service mean $=5.00$
Professional mean $=3.87$
Business mean $=3.00$
Agriculturist mean $=2.15$
$\mathrm{F}(3,221)=215.593, \mathrm{P}=0.000$
Since P value is $<0.005$ it is concluded that factors motivating purchase of a new car differ across occupation. From the mean values it can be further concluded that it is considered as a luxurious item more for respondents with occupation as service.
Requirement of the family.
Service mean $=5.00 \quad$ Professional mean $=5.00$
Business mean $=5.00 \quad$ Agriculturist mean $=4.54$
$\mathrm{F}(3,221)=26.583, \mathrm{P}=0.000$
Since P value is $<0.005$ it is concluded that factors motivating purchase of a new car differ across occupation. From the mean values it can be further concluded that requirement of the family is more for respondents with occupation as service, professional and business.

It is economical.
Service mean $=5.00$
Professional mean $=5.00$
Business mean $=5.00$
Agriculturist mean $=4.08$
$\mathrm{F}(3,221)=111.057, \mathrm{P}=0.000$
Since P value is $<0.005$ it is concluded that factors motivating purchase of a new car differ across occupation. From the mean values it can be further concluded that requirement of the family is more for respondents with occupation as service, professional and business.
Hence the alternative hypothesis is proved / accepted.

## Research Question - 16

Is visiting dealer's showrooms, taking opinions from experts and communication with sales people the pre-purchasing approaches accepted by the respondents?

Statistical Tests: Friedman Test

## Variables and Measurement:

Respondents were offered the following pre-purchasing strategies.
Table 86: Pre-purchasing Strategies before Purchase of a Car

| 1$)$ | Communicate with sales persons |
| :--- | :--- |
| 2$)$ | Glancing through advertisement of cars |
| 3$)$ | Collect information from public |
| 4$)$ | Visit dealers showroom |
| 5) | Reading automobile magazines |
| 6$)$ | Internet websites |
| 7$)$ | Opinion from experts |
| 8) | Taking test drive of the car |

Further they were asked to choose from the pre-purchasing strategies as applicable.
Each factor was measured using a 5-point scale.

## Hypothesis:

$\mathbf{H}_{0}$ : Pre-purchasing strategies adopted by respondents do not differ in preference. (Means ranks are equal.)
$\mathbf{H}_{1}$ : Pre-purchasing strategies adopted by respondents differ in preference. (Means ranks are different)
Table 87: Shows Variables, Mean Rank and Test Statistics Derived from SPSS

| Variables | Mean Rank | Test Statistics |  |
| :--- | :--- | :--- | :---: |
| Communicate with sales persons | 5.68 | N | 225 |
| Glancing through advertisement of cars | 4.10 | Chi-Square | 1189.283 |
| Collect information from public | 4.30 | df | 7 |
| Visit dealers showroom | 6.35 | Asymp. Sig. | $.000^{*}$ |
| Reading automobile magazines | 1.84 |  |  |
| Internet websites | 2.02 |  |  |
| Opinion from experts | 5.70 |  |  |
| Taking test drive of the car | 6.00 |  |  |
| ${ }^{*}=(* 3$ decimal places are reported since significance value is $<0.1 \%)$ |  |  |  |
| $\chi^{2}(7)=1189.283, \mathrm{P}<0.05$ |  |  |  |

Conclusion: $(* 2$ decimal places are reported since significance value is $<0.1 \%$ )
As the P value is lower than the level of significance the null hypothesis is rejected as it is concluded that visiting dealers, taking test drive of the car and taking opinions from experts are the pre-purchasing strategies adopted by the respondents. To locate where the difference is the rank table is referred. On the ranks table it is observed that visit to dealer's showroom has mean rank of 6.35. Taking a test drive has 6.0 as mean.

Opinion from experts has 5.7 as mean rank. The top three pre-purchasing strategies adopted before purchase of a car are, 1) Visit to dealer's showroom. 2) Taking a test drive. 3) Opinion from experts. Hence the alternative hypothesis is proved / accepted.

## Research Question - 17

Are car buyers influenced by their family, promotions and conscious of their esteem in the society? (As per dealers.)

Statistical Tests: Friedman Test

## Variables and Measurement:

Dealers' Representatives were offered the following characteristics of a car buyer.
Table 88: Characteristics of a Car Buyer

| 1) | Higher income |
| :--- | :--- |
| 2) | Social status in the society |
| 3) | Conscious of their esteem in the society |
| 4$)$ | Lured by the promotional strategies of the auto industry |
| 5) | Influenced by family |

Further they were asked to choose the characteristics of a car buyer as applicable.
Each factor was measured using a 5-point scale.

## Hypothesis:

$\mathbf{H}_{0}$ : Factors influencing car buyers do not vary in size of influence. (Means ranks are equal.)
$\mathbf{H}_{1}$ : Factors influencing car buyers significantly vary in size of influence. (Means ranks are different.)
Level of significance $\alpha=0.05$
Table 89: Shows Variables, Mean Rank and Test Statistics Derived from SPSS

| Variables | Mean Rank | Test Statistics |  |
| :--- | :--- | :--- | :--- |
| Higher income | 3.02 | N | 54 |
| Social status in the society | 2.69 | Chi-Square | 19.942 |
| Conscious of their esteem in the society | 3.00 | df | 4 |
| Lured by the promotional strategies of the auto industry | 3.02 | Asymp. Sig. | $.000^{*}$ |
| Influenced by family | 3.28 |  |  |
| ${ }_{(*)}=(* 3$ decimal places are reported since significance value is $<0.1 \%)$ |  |  |  |

$\chi^{2}(4)=19.942, \mathrm{P}<0.05^{*}(* 2$ decimal places are reported since significance value is $<0.1 \%)$

## Conclusion:

As value of P is lower than the point of significance the null hypothesis is rejected as it is concluded that car buyers are influenced by their family, promotions and are also conscious of their esteem in the society. To locate where the difference is the rank table is referred. On the ranks table it is observed that influenced by family has a mean rank of 3.28 . Higher income and lured by the promotional strategies of the auto
industries have a mean rank of 3.02. Conscious of their esteem in the society has a mean rank of 3.0. The top three characteristics of a car buyer are, 1) Influenced by family. 2) Higher income and lured by the promotional strategies of the auto industries. 3) Conscious of their esteem in the society. Hence the alternative hypothesis is proved / accepted.

## Research Question - 18

Do car buyers give more importance to price compared to other parameters? (As per dealers.)

Statistical Tests: Cochran's Test
Variables and Measurement:
Dealers' representatives were offered the following characteristics that customers look for in a car.
Table 90: Characteristics that Customers Look for in a Car

| 1$)$ | Passenger carrying capacity |
| :--- | :--- |
| 2$)$ | Price range |
| 3$)$ | Technologically advanced car |
| 4$)$ | Brand of the car |

Further they were asked to choose the characteristics customers look for in a car as applicable.

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Car buyers give equal importance to all parameters.
$\mathbf{H}_{1}$ : Car buyers give more importance to price compared to other parameters.
Level of significance $\alpha=0.05$
Table 91: Shows Frequencies, Value and Test Statistics Derived from SPSS

| Frequencies | Value |  | Test Statistics |  |
| :--- | ---: | ---: | :--- | :---: |
|  | 0 | 1 | N | 54 |
| Passenger carrying capacity | 9 | 45 | Cochran's Q | 6 |
| Price range of the car | 11 | 43 | df | 3 |
| Technologically advanced car | 9 | 45 | Asymp. Sig. | .112 |
| Brand of the car | 9 | 45 |  |  |

$\mathrm{Q}(3)=54, \mathrm{P}>0.05$

## Conclusion:

As the P value is more than the level of significance $(0.05)$ the null hypothesis is retained as it is concluded that car buyers give equal importance to all parameters. To know where the difference lies the frequency statement table is referred. From the frequency table it can be seen that passenger carrying capacity, technologically advanced car and brand of the car have 45 as frequency count and price has 43 as frequency count. Hence car buyers give equal importance to all parameters. Hence the null hypothesis is retained / accepted and alternative hypothesis is rejected.

## Research Question - 19

Are the key selling features for cars, excellent customer sales plus after sales service, influenced by promotions and influenced by marketing strategies? (As per dealers.)
Statistical Tests:_Friedman Test

## Variables and Measurement:

Dealers' representatives were offered the following key selling features of a car buyer.

## Table 92: Key Selling Features of a Car Buyer

| 1) | Symbol of social status |
| :--- | :--- |
| 2) | Luxury |
| 3) | Comfortable driving |
| 4$)$ | Safety \& security |
| 5) | Family need |
| 6$)$ | Availability of credit |
| 7$)$ | Availability of discounts |
| 8) | Influenced by marketing strategies |
| 9) | Brand / model reputation |
| 10) | Advanced Technology |
| 11) | Influenced by promotions |
| 12) | Excellent customer sales and after sales service |
| 13) | Workshop location |

Further they were asked to choose the key selling features of a car buyer as applicable.

Each factor was measured using a 5-point scale.

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Key selling features of car buyers do not differ in magnitude. (Means ranks are equal.)
$\mathbf{H}_{\mathbf{1}}$ : Key selling features of car buyers significantly differ in magnitude. (Means ranks are different.)
Level of significance $\alpha=0.05$
Table 93: Shows Variables, Mean Rank and Test Statistics Derived from SPSS

| Variables | Mean Rank | Test Statistics |  |
| :--- | :--- | :--- | :---: |
| Social status in the society | 6.24 | N | 54 |
| Luxurious interiors of the car | 4.19 | Chi-Square | 176.175 |
| Good vision, driving comfort with air-conditioning | 6.02 | df | 12 |
| Latest advanced safety \& security features | 7.47 | Asymp. Sig. | $.000^{*}$ |
| Necessity of the family | 7.58 |  |  |
| Easy payment options with credit | 6.82 |  |  |
| Manufacturers and dealer's discounts | 6.98 |  |  |
| Influenced by marketing strategies | 8.13 |  |  |
| Reputation of the brand / model | 6.4 |  |  |
| Advanced technology | 6.88 |  |  |
| Influenced by promotions | 8.18 |  |  |
| Excellent customer sales and after sales service | 8.31 |  |  |
| Proximity of the workshop to the residence | 7.81 |  |  |

[^0]$\chi^{2}(12)=176.175, \mathrm{P}<0.05$

## Conclusion:

As the P value is lower than the point of significance the null hypothesis is rejected as it is concluded that key selling features for cars are excellent customer sales plus after sales service, influenced by promotions and marketing strategies.
To locate where the difference is the rank table is referred. On the ranks table it is observed that excellent customer sales and after sales service has a mean rank of 8.31. Influenced by promotions has a mean rank of 8.18. Influenced by marketing strategies has a mean rank of 8.13. The top three key selling features of car buyers are,

1) Excellent customer sales plus after sales service.
2) Influenced by promotions.
3) Influenced by marketing strategies.

Hence the alternative hypothesis is proved / accepted.

## Research Question - 20

Is the occupation of maximum car owners service? (As per dealers.)
Statistical Tests: Cochran's Test
Variables and Measurement:
Dealers' representatives were offered the following occupation of maximum car owners.

Table 94: Occupation of Maximum Car Owners

| 1) | Business |
| :--- | :--- |
| 2) | Service |
| 3$)$ | Professional |
| 4$)$ | Others |

Further they were asked to choose the occupation of maximum car owners as applicable.

## Hypothesis:

$\mathbf{H}_{0}$ : Occupation of car buyers do not differ in frequency.
$\mathbf{H}_{\mathbf{1}}$ : Occupation of car buyers differ in frequency.
Level of significance $\alpha=0.05$
Table 95: Shows Frequencies, Value and Test Statistics Derived from SPSS

| Frequencies | Value |  |  |  |
| :--- | :---: | :---: | :--- | :---: |
|  | 0 | 1 | Test Statistics |  |
| Business | 16 | 38 | N | 54 |
| Service | 9 | 45 | Cochran's Q | 69.923 |
| Professional | 21 | 33 | df | 3 |
| Other | 42 | 12 | Asymp. Sig. | $.000^{*}$ |

${ }^{\prime}{ }^{\prime}$ ' $=(* 3$ decimal places are reported since significance value is $<0.1 \%)$
$\mathrm{Q}(3)=69.923, \mathrm{P}<0.05$

## Conclusion:

As value of P is lower than the point of significance, the null hypothesis is rejected as it is concluded that the occupation of maximum car owners is service. To locate where the difference is, the rank table is referred. On the ranks table it is observed that service has 45 as frequency count, business has 38 as frequency count, professionals have a frequency of 33 and others have a frequency count of 12 . Hence service is the occupation of maximum car owners. Hence the alternative hypothesis is proved / accepted.

## Research Question - 21

Do majority of the dealers offer more than 10 lakhs as loan for the car buyers. (As per dealers.)

Statistical Tests: Cochran's Test
Variables and Measurement:
Dealers' representatives were offered the following table showing the extent of loan provided by dealers.
Table 96: Extent of Loan Provided from Dealers

| 1) | Less than two lacs |
| :--- | :--- |
| 2) | 2 lacs to 5 lacs |
| 3) | 5 lacs to 10 lacs |
| 4) | More than 10 Lacs |

Further they were asked to choose the extent of loan provided by the dealers as applicable.

## Hypothesis:

$\mathbf{H}_{0}$ : Loan of car buyers do not vary in frequency.
$\mathbf{H}_{1}$ : Loan of car buyers vary in frequency.
Level of significance $\alpha=0.05$
Table 97: Shows Frequencies, Value and Test Statistics Derived from SPSS

| Frequencies | Value |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | 0 | 1 | Test Statistics |  |  |
| Less than two lacs | 54 | 0 | N | 54 |  |
| 2 lacs to 5 lacs | 52 | 2 | Cochran's Q | 73.579 |  |
| 5 lacs to 10 lacs | 34 | 20 | df | 3 |  |
| More than 10 Lacs | 22 | 32 | Asymp. Sig. | $.000^{*}$ |  |

${ }^{\prime} *$ ' $=(* 3$ decimal places are reported since significance value is $<0.1 \%)$
$\mathrm{Q}(3)=73.579, \mathrm{P}<0.05$

## Conclusion:

As value of P is lower than the point of significance the null hypothesis is rejected as it is concluded that majority of the dealers offer more than 10 lakhs Rupees as loan for the car buyers. To know where the difference lies the frequency statement table is referred. From the frequency table it can be seen that more than 10 lakhs Rupees has a frequency count of 32,5 to 10 lakhs Rupees has a frequency of 20 and 2 to 5 lakhs of Rupees has a frequency of 2. Hence majority of the dealers offer more than 10 lakhs Rupees as loans for the car buyers. Hence the alternative hypothesis is proved / accepted.

## Research Question - 22

Will the number of walk-ins increase by more than $25 \%$ during festive seasons? (As per dealers.)

Statistical Tests: Cochran's Test

## Variables and Measurement:

Dealers' representatives were offered the following table showing the increase in walk-ins during the festive season.

Table 98: Increase in Walk-ins during the Festive Season

| 1$)$ | $<5 \%$ |
| :--- | :--- |
| 2$)$ | 5 to $15 \%$ |
| 3$)$ | 15 to $25 \%$ |
| 4$)$ | More than $25 \%$ |

Further they were asked to choose the increase in walk-ins during the festive season as applicable.

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Proportions in no of walk-ins do not differ in frequency.
$\mathbf{H}_{1}$ : Proportions in no of walk-ins differ in frequency.
Level of significance $\alpha=0.05$
Table 99: Shows Frequencies, Value and Test Statistics Derived from SPSS

| Frequencies | Value |  |  |  |
| :--- | :---: | ---: | :--- | :---: |
|  | 0 | 1 | Test Statistics |  |
| $<5 \%$ | 54 | 0 | N | 54 |
| 5 to $15 \%$ | 50 | 4 | Cochran's Q | 71.25 |
| 15 to $25 \%$ | 37 | 17 | df | 3 |
| More than $25 \%$ | 21 | 33 | Asymp. Sig. | $.000^{*}$ |

${ }^{\prime}{ }^{\prime}$ ' $=(* 3$ decimal places are reported since significance value is $<0.1 \%)$
$\mathrm{Q}(3)=71.250, \mathrm{P}<0.05$

## Conclusion:

As value of P is lower than the point of significance the null hypothesis is rejected as it is concluded that the number of walk-ins increase by more than $25 \%$ during festive seasons. To know where the difference lies the frequency statement table is referred. From the frequency table it can be seen that more than $25 \%$ of the walk-ins during festive season has a frequency of 33,15 to $25 \%$ of the walk-ins during festive season has a frequency of 17 and 5 to $15 \%$ of the walk-ins during festive season has a frequency of 4 . Hence the number of walk-ins increase by more than $25 \%$ during festive seasons. Hence the alternative hypothesis is proved / accepted.

## Research Question - 23

Are more than $15 \%$ walk-ins converted into a customer? (As per dealers.)
Statistical Tests: Cochran's Test

## Variables and Measurement:

Dealers' representatives were offered the following table showing customer conversion rate.

Table 100: Customer Conversion Rate

| 1$)$ | $<5 \%$ |
| :--- | :--- |
| 2$)$ | 5 to $10 \%$ |
| 3$)$ | 10 to $15 \%$ |
| 4$)$ | More than $15 \%$ |

Further they were asked to choose the customer conversion rate as applicable.

## Hypothesis:

$\mathbf{H}_{0}$ : Proportion of customers do not vary in frequency.
$\mathbf{H}_{\mathbf{1}}$ : Proportion of customers vary in frequency.
Level of significance $\alpha=0.05$
Table 101: Shows Frequencies, Value and Test Statistics Derived from SPSS

| Frequencies | Value |  | Test Statistics |  |
| :--- | ---: | ---: | :--- | :--- |
|  | 0 | 1 | N | 54 |
| $<5 \%$ | 51 | 3 | Cochran's Q | 57.857 |
| 5 to $10 \%$ | 45 | 9 | df | 3 |
| 10 to $15 \%$ | 42 | 12 | Asymp. Sig. | $.000^{*}$ |
| More than $15 \%$ | 24 | 30 |  |  |
|  |  |  |  |  |

${ }^{\prime} * \prime=(* 3$ decimal places are reported since significance value is $<0.1 \%)$
$\mathrm{Q}(3)=57.857, \mathrm{P}<0.05$

## Conclusion:

As value of P is lower than the point of significance the null hypothesis is rejected as it is concluded that more than $15 \%$ walk-ins are converted into a customer. To know where the difference lies the frequency statement table is referred. From the frequency
table it can be seen that more than $15 \%$ of the conversion rate of customers has a frequency of 30,10 to $15 \%$ of the conversion rate of customers has a frequency of 12,5 to $10 \%$ of the conversion rate of customers has a frequency of 9 and $<5 \%$ of the conversion rate of customers has a frequency of 3 . Hence more than $15 \%$ walkins are converted into a customer. Hence the alternative hypothesis is proved / accepted.

## Research Question - 24

Will increase in taxation by the government have an effect on sales of cars? (As per dealers.)

Statistical Tests: Sign (Binomial) Test

## Variables and Measurement:

Dealers' representatives were asked if there is an increase in taxation by the government does it have an effect on sales of cars. Since the question was a dichotomous question a sign (binomial) test was preferred to check whether increase in taxation by the government does have an effect on sales of cars.

Proportion for Test: Proportion for Test was selected as 0.5 . As favourable responses exceed above $50 \%$ of a specific group it is recommended for major approval of this group.
Hence $\mathrm{P}=0.5$

## Hypothesis:

$\mathbf{H}_{0}$ : Increase in taxation by the government doesn't have an effect on sales of cars.
$\mathbf{H}_{1}$ : Increase in taxation by the government has an effect on sales of cars.
Level of significance $\alpha=0.05$
Table 102: Shows Test Statistics Derived from SPSS

| Test Statistics |  | Category | N | Observed Prop. | Test Prop. | Exact Sig. (2-tailed) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State whether increase in | Group 1 | Yes | 54 | 1.00 | 0.5 | .000* |
| taxation by the government have an effect on the sales of cars | Group 2 | No |  |  |  |  |

## Conclusion:

Observed proportion for increase in taxation by the government is 1 .
Test proportion is 0.5
P value is $<0.05$

Hence it can be concluded that increase in taxation by the government has an effect on sales of cars. Hence the alternative hypothesis is proved / accepted and the null hypothesis is rejected.

## Research Question - 25

Will incentives offered by the government benefit in the increase of sales of cars? (As per dealers.)

Statistical Tests: Sign (Binomial) Test

## Variables and Measurement:

Dealers' representatives were asked if incentives are provided by the government does it help in the increase of sales of cars. Since the question was a dichotomous question a sign (binomial) test was preferred to check whether incentives provided by the government does help in the increase of sales of cars.

Proportion for Test: Proportion for Test was selected as 0.5 . As favourable responses exceed above $50 \%$ of a specific group it is recommended for major approval of this group.

Hence $\mathrm{P}=0.5$

## Hypothesis:

$\mathbf{H}_{\mathbf{0}}$ : Incentives offered by the government does not benefit in the increase of sales of cars.
$\mathbf{H}_{\mathbf{1}}$ : Incentives offered by the government benefits in the increase of sales of cars.
Level of significance $\alpha=0.05$
Table 103: Shows Test Statistics Derived from SPSS

| Test Statistics |  | Category | N | Observed Prop. | Test Prop. | Exact <br> Sig. (2tailed) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State does incentives | Group 1 | Yes | 49 | . 91 | . 5 | .000* |
| provided by the | Group 2 | No | 5 | . 09 |  |  |
| government help in the increase of sales of cars | Total |  | 54 | 1.00 |  |  |

${ }^{\prime *}{ }^{\prime}=(* 3$ decimal places are reported since significance value is $<0.1 \%)$

## Conclusion:

Observed proportion for incentives provided by the government is 0.91
Test proportion is 0.5
P value is $<0.05$
Hence it can be concluded that incentives offered by the government benefits in the increase of sales of cars. Hence the alternative hypothesis is proved / accepted and the null hypothesis is rejected.

# Chapter 5 -Findings, Conclusions, Recommendations, Scope for Further Studies and limitations of the Study 

This chapter consists of the following headings:
5.1 Linkage of hypotheses with process of purchasing a car
5.2 Major Findings
5.3 Conclusion
5.4 Recommendations
5.5 Scope for Further Studies
5.6 Limitations of the Study

Consumer satisfaction is a mental sense or trust that the professed performance surpasses the customers' prospects about a product. It is said that some products give more fulfilment than the others. For instance, a car and a house deliver more fulfilment than a pair of footwear. A car gratifies the want of possessors as a means of conveyance. They also get mental satisfaction from the ownership of goods like a car.

### 5.1 Linkage of hypotheses with process of purchasing a car

The researcher had formulated 25 hypotheses from the research questions. The researcher has linked all the hypotheses of the study with the various dimensions of the process of purchasing a car. This has been explained in Figure 33 below.

Hypotheses H1, H2, H16, H17 and H19 are directly linked to the preliminary process of buying a car.

H14 and H 20 are linked with looking for details for buying a car.

H3, H 7, H15 and H22 are linked with visiting dealers.

H4 and H6 are linked with finalization of the brand and the dealer.

H 18 and H 23 are linked with price negotiation and finalization of terms and conditions.

H9 and H21 show linkages with payment terms.
$\mathrm{H} 10, \mathrm{H} 11, \mathrm{H} 12, \mathrm{H} 13, \mathrm{H} 24$ and H 25 are linked with completion of sales procedures.

H5 and H8 are linked with servicing at authorized dealer's location.


Figure 37: Process of Purchase of a Car and Hypothesis of the Research
(Source: Created by the researcher for this specific study.)

### 5.2 Findings

Two sets of questionnaires were made. One for the consumers who were going to buy a car and the other for getting the dealers' perspective. The latter was answered by the dealer's representative.
It is found that most of the respondents had opted for a loan, whereas only very few opted for full cash payment.

It is seen that majority of the respondent's source of information regarding a car was from dealers. A large section depended on family / relatives /neighbours / colleagues / friends for information on the car.
$98 \%$ of the respondents were motivated to purchase a car because it was a requirement of the family. Many thought it was economical, and some thought it was an item of necessity and a time saving device.


Figure 38: Variables that Motivates a Consumer in Buying a New Car
(Source: Created by the researcher for this specific study.)

It is evident that most of the respondents' pre-purchasing strategies were visiting dealers showroom, taking a test drive and communicating with sales personnel, whereas in some large sections strategies were to collect information from public, reading auto magazines and going through internet / websites.


Figure 39: Pre-purchase Strategies Adopted by Consumers Before Buying a Car
(Source: Created by the researcher for this specific study.)

It is obvious that most of the respondents' car purchasing decisions were influenced by parents, whereas a large section was influenced by friends and well-wishers.

It clearly implies that majority of the respondents' satisfaction level for sales / servicing delivered by the dealers were excellent. A large section satisfaction level for sales / servicing delivered by the dealers were good.

It is apparent that most of the respondents' satisfaction level of the present car were very satisfied, whereas some were just satisfied.

Most of the respondents' said 'Yes' for buying the same brand of car in the future, whereas only few said 'No'.

It demonstrates that majority of the respondents were not going to buy the old brand of car in the future because it lacked in safety. A large section was not going to buy the same old brand of car in the future because it had got an old styling.

It was obvious that most of the respondent's problems in the present car were communication with servicing personnel, whereas few had maintenance issues.

Majority of the respondents were satisfied with their present car, whereas few had no problems.

As per dealers' representatives' majority of the car buyers were influenced by their family, higher income, promotional strategies and were conscious of their esteem in the society. A large section of the car buyers considered a car as a sign of societal standing in the society.


Figure 40: Characteristics of a Car Buyer from Dealers Perspective
(Source: Created by the researcher for this specific study.)
It was evident that most of the customers were looking for passenger carrying capacity, technologically advanced car and the strength of the brand of the car, whereas only some were looking for price range of the car.

As per dealers' representatives' majority of the cars were sold because of necessity of the family. A large section of the car was sold for latest advanced safety and security
features, influenced by marketing strategies, influenced by promotions, excellent customer sales and after sales service.


Figure 41: Key Selling Features for Cars
(Source: Created by the researcher for this specific study.)
It was found that majority of the car owner's occupations were service. A large section of the owners were business people.
$95 \%$ of the respondents' process of selecting a car was affected by good after sales service, whereas $92 \%$ process of selecting a car was affected by reputation or image of the brand.

All the dealers were ready to give a loan for purchase of a new car.
Most of the dealers provided loans above Rupees 10 lakhs. A large section provided loans between Rupees 5 to 10 Lakhs.

It was observed that majority of the dealers had an average no of walk-ins in a week between 51 to 100 numbers. A large section had an average no of walk-ins in a week between 101 to 150 numbers.

It was seen that most of the dealers had more than $25 \%$ increase in walk-ins during festive seasons. A large section had between 15 to $25 \%$ increase in walk-ins during festive seasons.

It was seen that majority of the dealers had a customer conversion rate more than $15 \%$. A large section had a customer conversion rate between 10 to $15 \%$.
$100 \%$ of the dealers said there will be an effect on sales of cars if there is an increase in taxes.
$91 \%$ of the dealers said 'yes' there would be an effect on sales of cars if the government provided incentives, whereas very few said 'No' there won't be any effect.

### 5.3 Conclusion

The conclusions of the entire study are being presented in context with the objectives.

The first objective of the research was to study the consumer buying behaviour with reference to four-wheeler auto brands. The consumers prefer dealers, family, relatives, neighbours, colleagues, friends for sources of information followed by newspapers and magazines over other sources of information before they buy a car. India's population is growing every day and hence the members in the families are also growing. Hence families with more members tend to own more cars. India has a tradition of joint families and the nuclear family is catching up slowly in India. It is relevant from this research that joint
families own more cars than nuclear families. Majority of the car buyers are professionals, who are between the age band of 26 to 35 years. The occupation of maximum car owners is service. As there are many attractive financial schemes available for car buyer's, majority of the consumers buy their cars by taking a loan. Majority of the dealers offer a loan more than Rupees 10 lakhs for cars.

The second objective of the research was to understand the attitudes, feelings, beliefs towards selecting an auto brand. The consumers are very much influenced by good after sales service and reputation of the brand. They are normally lured by offers and discounts offered by manufacturers and dealers. All these factors get shared with their friends very fast through word of mouth and hence the above is very important. As per dealer's, consumers are influenced to buy a car by their family, promotions from the dealers and are also conscious of their esteem in the society. Most of the consumers do not give more importance to price compared to other parameters when they buy a car.

The third objective of the research was to find and examine the causes prompting the buying of cars. The consumer is motivated to buy a new car as he / she considers that if they have a car it helps the family to move around, moreover being economical helps the family to save some money. The same is very much pertinent from Indian family's perspective. We can conclude that the above has an impact on the consumers to acquire information on the product. The Indian consumers are very much traditional and believes more in their parents followed by friends or well-wishers and brothers or sister's suggestions and the same is true in the case of buying a new car. It has been proved in this research that motivational factors don't differ across occupation but does differ across gender. As per dealers the key selling features are family needs, safety and security, promotions and excellent after sales service.

The fourth objective was to identify the difficulties faced by consumers in selecting a brand. The major problems faced by car buyers in India are communication with the dealer's representatives and servicing. This is followed by maintenance issues and availability of spares.

The fifth objective was to investigate the level of satisfaction amongst the respondents and to find the alternative brand choice, if any. It was found that in India if the consumers are content with the level of servicing delivered by the dealers then we can be sure that it is going to be a repeat customer for the dealers. This is true in the case of a car too. As per society of Indian automobile manufacturers association (2017-18) Maruti Suzuki India has a market share of 49.98 \% followed by Hyundai Motors India $16.3 \%$.

The sixth objective was to recommend suggestions on the buying behaviour of consumers. These are outlined under the heading Recommendations.

The last objective of the research was to study the impact of government policies on buying motive of consumers. As per dealers if government increases taxes, cars sales decreases and if government introduces incentives, it helps to increase the sales.

### 5.4 Recommendations

After testing the hypotheses, the recommendations that evolved from the study are given for different sections of people.

## 1. Manufacturers

1. The automobile manufacturers should categorise models to target specific customers at a micro level rather than focussing the brand on a macro level. If it is a family product the advertisements should be focused around the family and if it is for individuals or youth around them.
2. The automobile manufacturers human resource department should conduct regular communication training sessions for the sales and service advisors of the dealers, as they are the face of the manufacturers and dealers when they are dealing with existing and prospective customers. The service centres should have trained technicians with regular training. They should have a real time inventory system for spares.
3. The customers should never feel a difference between two service centres at a national level.
4. The automobile manufacturers should come up with innovative financing schemes for the consumers, as majority of them prefer financing.
5. The automobile manufacturers should have regular columns in magazines and newspapers contributed by the product experts, opinion leaders etc. as the consumers believe them.
6. Potential customers should be shown short movies which depicts the manufacturing, research \& development and range of products manufactured by the company and its uniqueness in comparison to competitors.

## 2. Dealers

1. As majority of the car buyers are professionals and are between the age group of 26 to 35 years the dealers should have some promotional schemes and follow up with them at their work place, malls, hotels etc. where they visit regularly.
2. The sales people should have kiosks at malls, IT \& ITES campuses etc. to educate the people, and also offer a test ride which will help the prospective customer to get a first-hand feel of the product.
3. The automobile dealers should have regular interaction with their customers, to get feedbacks to improve the services.
4. The automobile dealers should use their existing satisfied customers to lure their prospective customers, by introducing incentives / promotional schemes for the present and future customers.
5. The automobile dealers should have some activities for the consumers parents and relatives and friends, wherein they get actively involved in the selection process of the brand and model, as research as shown they help in the decision-making process.
6. The automobile dealers should work towards increasing the walk-ins during the festive seasons, by promoting innovative schemes, wherein more consumers are attracted towards the brand, as research proves more than $15 \%$ of the walk-ins are converted into potential customers.

## 3. Consumers

1. Consumers should look for new features, latest technologies, security, safety etc. before deciding a vehicle.
2. Consumers should compare the pricing with more dealers to check if the pricing is correct.
3. Consumers should check if there are offers from the company and from specific dealers etc.
4. Consumers should do regular servicing to enhance the fuel efficiency of the vehicle.
5. Consumers should get their vehicles serviced from company authorized service centers to get genuine spare parts and enhance the life of the vehicles.
6. Consumers should thoroughly read the manuals of the vehicles and adhere to all preventive maintenance schedules, driving technique's etc. to enhance the life of the vehicle
7. In the age of digitization consumers should try to get maximum information online before going to the showrooms of dealers.

## 4. Government

Government should think twice before increasing existing taxes and introducing new taxes for the automobile industry as this has a tremendous effect on the sales, whereas incentives from the government helps to boost the sales for the auto industry.

### 5.5 Scope for Further Studies

There is enough scope to take this research further on this subject, hence the researcher has suggested various avenues which may be considered depending upon one's interest.

1. This study has been done only for Pune region, and hence a research can be done for other parts of the country to get a generalized view from a national perspective.
2. A research can also be conducted to compare various parameters between states.
3. A research can also be conducted on various strategies which may help in understanding the buyer behaviour in various states and at a national level.

### 5.6 Limitations of the Study

1. Only Pune region has been considered for the study, hence this does not portray the situation of the entire state of Maharashtra.
2. The study has been restricted to the consumer buying behaviour of passenger cars manufactured by Indian automobile industries only.
3. Dynamic nature of consumers may make this study impractical over a period of time. Results of today may become invalid over sometime.
4. Only the selected list of brands as mentioned in Table - 6 of Chapter 3 of Research Methodology has been considered for the research.
5. A1 (Mini) to A2 (Compact) segments are only considered for the study.
6. A price range between 2 to 7 lakhs was considered as the ownership value of the vehicle for the interview of the consumers and dealers' representatives.
7. Premium and luxury vehicles are not considered for the study.

## Chapter 6 - References

Adithya, H.S. (2013). Consumer Perception and Behaviour of Car Owners - An Empirical Study in Bangalore City. Global Business Analysis International, 2(1), 104.
Anandh, K., \& Shyama, Sundar. K. (2014). Factors Affecting Consumer's Brand Preference of Small Cars. IOSR Journal of Business and Management, 16 (5), 43-47. Retrieved from http://iosrjournals.org/iosr-jbm/papers/Vol16-issue5/Version-3/G016534347.pdf
Andersen, Henrik., \& Ritter, Thomas. (2008). Inside the Customer Universe. NJ, USA: John Wiley \& Sons, Ltd.

Aradhana, Krishna. (1994). The Effects of Deal Knowledge on Consumer Purchase Behaviour, Journal of Marketing Research, Vol.31, 102-108.
Assael, Henry. (2001). Consumer Behaviour and marketing Action. Nashville, TIN, USA: South Western College Publishing.

Baker, M. (2006). Marketing. Scotland: Westburn Publishers Ltd.
Baker, T.L. (1994). Doing Social Research. New York: McGraw-Hill Inc.
Bakshi, Swarna. (2012). Impact of Gender on Consumer Purchase Behaviour. Abhinav National Monthly Refereed Journal of Research in Commerce \& Management, 1 (9), 1-8.

Banerjee, S. (2009). Effect of Product Category on Promotional Choice: Comparative Study of Discounts and Freebies. Management Research News 32, 120-131.

Barnes, B., Marshall, G.W., Mitchell, V., Solomon, M.R., \& Stuart, E.W. (2009). Marketing, Real People, Real Decisions. Essex: Pearson Education Limited.

Bhatia, Jeannie. (2013). Marketing Strategies of Car Manufacturers in India. (Ph.D. Dissertation). Retrieved from http://shodhganga.inflibnet.ac.in
Bhatt, Rajesh. (2010). Consumer Behaviour. New Delhi, India: Commonwealth Publishers Pvt. Ltd.
Bhatt, Shahir., \& Bhatt, Amola. (2015). Factors Influencing the Purchase of Hatchback Cars: An Empirical Study in Ahmedabad. WEshkar, XIX (1), 68-80.
Bijapurkar, Rama. (2008). Winning in the Indian Market, Singapore: John Willey and Sons Pvt Ltd.
Bikash, R.D., Pravat, S.K., \& Sreekumar. (2010). Factors Influencing Purchase of 'NANO' the Innovative Car from India-An Empirical Study. Asian Journal of Business Management, 2(3), 48-56. Retrieved from http://maxwellsci.com/print/ajbm/v2-48-56.pdf

Blackwell, R. D., \& Miniard, P. W. (2006). Consumer Behaviour. Fort Worth, TX, USA: Dryden Press. Blackwell, R. D., Miniard, P. W., \& Engel, J.F. (2001) Consumer Behaviour. Fort Worth, Dryden, TX, USA: Harcourt College Publishers.

Blackwell, Roger. D., Miniard, Paul W., \& Engel, James. F. (2002). Consumer Behaviour. OH, USA:

South-Western College Publishing.
Blattberg, R.C., \& Neslin, S.A. (1990). Sales Promotion: Concepts, Methods, and Strategies.
Englewood Cliffs, NJ: Prentice-Hall.
Brassington, F. Pettitt. S. (2000) Sales Promotion. In: Principles of Marketing. Harlow: FT Prentice Hall.

Chaudhuri, Arjun., \& Holbrook, Morris. B. (2001). The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. Journal of Marketing, 65(2), 81-93.

Chunnawala, S.A., \& Sethia, K.C. (1994). Foundation of Advertising Theory and Practice. Mumbai, India: Himalaya Publishing House.

Cohen, Arthur. R. (1964). Attitude Change and Social Influence. New York: Basic Books.
Cooper, Donald. R. (1999). Business Research Methods, New Delhi, India: Tata McGraw Hill.
Cuza, Alexandru. Ioan. (2011). Factors Influencing Passenger Car Consumer Behaviour and their use in the Environmental Public Policy. Journal of Euro Economics, London. Vol. 1, 20-26.

Retrieved from
https://www.researchgate.net/publication/227409976_Factors_Influencing_Passenger_Car_C onsumer_Behavior_and_their_Use_in_the_Environmental_Public_Policy
De Vaus, D.A. (1993). Surveys in Social Research. London: UCL Press.
Dharamaraj, C. (2011). Impact of Brand Preference Dimensions on Customer Satisfaction-A MetaAnalysis of Passenger Cars. Indian Journal of Marketing, 28-35.
Dongyan, Liu., \& Bai, Xuan. (2008). Car Purchasing Behaviour in Beijing: An Empirical Investigation. (Master Thesis) Retrieved from Umea School of Business and Economics, University of Umea.https://www.diva-portal.org/smash/get/diva2:142148/FULLTEXT01.pdf
Dua, Kavita., \& Savita. (2103). A Study of Customer Satisfaction with reference to Tata Motor Passenger Vehicles, International Journal of Advanced Research in Management and Social Sciences 2 (4).
Ducoffe, R.H. (1995). How Consumers Assess the Value of Advertising? Journal of Current Issues and Research in Advertising, Vol. 17,1-18.
East, Robert., Wright, Malcolm., \& Vanhuele, Marc. (2008) Consumer Behaviour Applications in Marketing. Delhi, India: Sage Publications India Pvt. Ltd.

Engel, J. F., Blackwell, R. D., \& Miniard, P. W. (1990). Consumer Behaviour. Forth Worth, TX, USA: The Dryden Press.
Evans, J. R., \& Berman, B. (1987). Principles of Marketing. New York, USA: Macmillan.
Evans, J., \& Berman, B. (1997). Marketing. New Jersey: Prentice Hall International.

Familmaleki, Mahsa., Aghighi, Alireza., \& Hamidi, Kambiz. (2015). Analysing the Influence of Sales Promotion on Customer Purchasing Behaviour. International Journal of Economics \& Management Sciences, 4 (4), 1-6.

Forsyth, P. (2000). How to Motivate People. United Kingdom: Kogan Page Limited.
Ganesh, M., \& Soundarapandiyan, K. (2011). I 10 Hyundai Chennai Customers: Satisfaction Level. SCMS Journal of Indian Management, 8(4), 78-90.
Girdhar, Amita., Ghalawat, Suman., \& Kavitha, C. (2015). A Study of Consumer Behaviour Considering Various Attributes towards Purchasing a Car. International Journal of Science Technology and Management, 290-299.

Gupta, Dr. S. L., \& Pal, Sumitra. (2010). Consumer Behaviour an Indian Perspective Text \& Cases. Delhi, India: Sultan Chand \& Sons Pvt Ltd.

Gupta, Sangeeta. (2013). A Study of Buying Decision Influencers for Passenger Car Segment in New Delhi. International Journal of Business and Management Invention, 2 (4), 64-71.
Gurleen, Kanwal., \& Sukhmani. (2011). A Study on Pre-\& Post Purchase Customer Behaviour for Various Car Brands in Punjab. Journal of Radix International Educational and Research Consortium, 1(2). Retrieved from http://www.rierc.org/marketing/paper6.pdf
Hall, E.T. (I960). The Silent Language in Overseas Business. Harvard Business Review, 38(3), 87-96.
Hoyer, Wayne. D., MacInnis, Deborah. J., \& Dasgupta, Pinaki. (2008). Consumer Behaviour. New Delhi, India: Biztantra.

Indu. (2016). Consumer Behaviour Towards Passenger Cars- A Study in Delhi-NCR. International Journal of Advanced Engineering, Management and Science, 2 (12), 2209-2214.
Indushri, N. (2011). Buying Roles in the Purchase Decision Making Process of Consumer Durables. (M. Phil Dissertation) Retrieved from www.bsauniv.ac.in

Jahanshahi, Asghar. Afshar., Gashti. Mohammad. Ali. Hajizadeh., Mirdamadi. Seyed. Abbas., Nawaser, Khaled., \& Khaksar, Seyed. Mohammad. Sadeq. (2011). Study the Effects of Customer Service and Product Quality on Customer Satisfaction and Loyalty. International Journal of Humanities and Social Science, 1 (7), 253-260.

Jain, Priyanka. (2015). A Study of Customer Satisfaction of Two Wheelers on Yamaha. IOSR Journal of Business and Management, 17 (8), 8-19.

Javed, Mohammad., Gupta, Parul., \& Saxena, Vishal. (2015). Role of Service Quality and Customer Satisfaction in Four-Wheeler Automobile Service Industry: A Review. International Journal of Engineering Trends and Technology, 28 (6), 287-290. Retrieved from http://www.ijettjournal.org

Jobber, D., \& Lancaster, G. (2006). Selling and Sales Management, Harlow: Pearson Education.

John, Beena., \& Pragadeeswaran, S. (2013). A Study of Small Car Consumer Preference in Pune City. TRANS Asian Journal of Marketing \& Management Research, 2 (3-4), 1-4.

Joseph, Ajoy. S., \& Kamble, H. Y. (2011). Buying Behaviour of Passenger Car Customers towards Auto Finance - An Empirical Study. Indian Journal of Commerce \& Management Studies, II (1), 66-74.

Joshi, Shiv. Prasad. (2013). Consumer Behaviour for Small Cars: An Empirical Study. Abhinav International Monthly Refereed Journal of Research in Management \& Technology, Volume 2, 47-52.

Khedkar, E. B. (2015). Effect of Customer Relationship Management on Customer Satisfaction and Loyalty. International Journal of Management, 6 (5), 1-7.

Khraim, Hamza. Salim. (2011). The Influence of Brand Loyalty on Cosmetics Buying Behaviour of UAE Female Consumers. International Journal of Marketing Studies, 3 (2), 123-133.

Kohli, C., \& Thakor, M. (1997). Branding Consumer Goods: Insights from Theory and Practice. Journal of Consumer Marketing, 14(3), 206-219.

Kothari, Atari. (2005). Maruti does a Different Jig and ends up Changing Itself and the Auto Market in Turn. Business World, 25(14), 14-17.

Kothari, C.R. (1985). Research Methodology- Methods and Techniques. New Delhi, India: Wiley Eastern Limited.

Kotler, P., \& Pfoertsch, W. (2006). B2B Brand Management. Heidelberg: Springer.
Kotler, P., Peter, C., Linden, B., \& Stewart, A. (2000). Marketing in Australia and New Zealand. Sydney-Australia: Prentice Hall Pty Ltd.

Kotler, P.J., \& Armstrong, G.M. (2010). Principle of Marketing, New York: Pearson.
Kotler, Philip. (1977). Marketing Management: Analysis, Planning, Implementation, and Control, Upper Saddle River, NJ: Prentice Hall.
Kotler, Philip. (1997). Marketing Management: Analysis, Planning, Implementation and Control. New Jersey, USA: Prentice Hall.
Kotler, Philip., \& Kotler, Kevin. (2008). Marketing Management, 13th Edition, New Delhi, India: Prentice Hall.

Kotler, Philip., Keller, Lacin. Lane., Koshy, Abraham., \& Jha, Methileshwar. (2009). Marketing Management - A South Asian Perspective, New Delhi, India: Pearson Education.

Krishna, Aradhna. (2013). Customer Sense. New York, USA: Palgrave Macmillan.
Krishnamurthy, Lakshman., \& Raj, S. P. (1991). An Empirical Analysis of the Relationship between Brand Loyalty and Consumer Price Elasticity. Marketing Science, 10(2), 172-183.

Kumar, Kapil. (2014). Measuring \& Mapping the Changing Indian Consumer Behaviour: Drivers of Change for the Marketers. Kaav International Journal of Economics, Commerce \& Business Management, 1(4), 109-122.

Kumar, R. (2005) Research Methodology-A Step-by-Step Guide for Beginners Singapore: Pearson Education.

Kurtkoti, A., \& Prabhu, S. (2011). A Study of Customer Satisfaction towards Nano Cars Customers in Pune City. Pravara Management Review, 10 (2), 28-32.

Lay-Yee, Karen. Lim., Kok-Siew, Han., \& Yin-Fah, Benjamin. Chan. (2013). Factors Affecting Smartphone Purchase Decision Among Malaysian Generation Y. International Journal of Asian Social Science, 3 (12), 2426-2440.

Lohana, S. R., \& Sharma, O. (2012). A Study on Customer Satisfaction Towards Hyundai Cars in Nanded City. International Journal of Marketing and Management Research, 3 (4), 118-138.

Louden, D. L., \& Delta, Bitha. A. J. (2002). Consumer Behaviour Concept and Application. New Delhi, India: Tata McGraw Hill Book Company.

Madikonda, Kishore. Babu., \& Raghunatha, Reddy. D., (2004). A Study on Passenger Car Industry in India. Indian Journal of Marketing, 34 (10), 30.
Mahapatra, S., Kumar, J., \& Chauhan. (2010). A Customer Satisfaction, Dissatisfaction and PostPurchase Evaluation: An Empirical Study on Small Size Passenger Cars in India. International Journal of Business and Society, 2 (2), 97-108.

Malhotra, Naresh. K. (2005). Marketing Research: An Applied Orientation, India: Pearson Education.
Manikandan, C., \& Asokan., P. (2016). A Study on Consumer Behaviour with Reference to Small Cars in Tiruvarur District. Indian Journal of Applied Research, 6 (8), 411-413.
Manoharan, N., \& Ganapathi, R. (2012). Customer Preferences and Attitudes Towards Maruti Cars in Pollachi Taluka. Indian Journal of Applied Research, 1(8), 41-45.
Martenson, R. (1987). Advertising Strategies and Information Content in American and Swedish Advertising. International Journal of Advertising, 6 (2), 133-144.
Menon, B. Jagathy., \& Raj, V. P. (2012). Model Development and Validation for Studying Consumer Preferences of Car Owners. International Journal of Marketing \& Technology, 2 (2), 148-170.

Menon, Balakrishnan., \& Raj, Jagathy. V.P. (2012). Dominant Partial Least Square Factors of Consumer Behaviour of Passenger Cars. Asian Journal of Management Research, 3 (1), 83-99.

Monga, Nikhil., Chaudhary, Bhuvnender., \& Tripathi, Saurabh. (2012). Car Market and Buying Behaviour- A Study of Consumer Perception. International Journal of Research in Management, Economics and Commerce, 2 (2), 44-63.

Mooij, M. De. (2010). Global Marketing and Advertising: Understanding Cultural Paradoxes. CA, USA: Sage Publications.

Mooij, M. De. (2011). Consumer Behaviour and Culture: Consequences for Global Marketing and Advertising. CA, USA: Sage Publications.

Mubarak, A. K. (2007). A Study of The Influence of Family Members and their Interaction in the Purchase Decision (With Special Reference to Durable Goods) (PhD Thesis) Retrieved from Bharathidasan University, Tiruchirappalli.

Mueller, Barbara. (1991). An Analysis of Information Content in Standardized Versus Specialized Multinational Advertisements. Journal of International Business Studies, 22 (1), 23-39.

Naik, C. N. Krishna., \& Reddy, L. Venugopal. (1999). Consumer Behaviour. New Delhi, India: Discovery Publishing House.
Najeemudeen, K.P., \& Panchanatham, N. (2014). A Study of Consumer Perception \& Behaviour Towards Passenger Cars in Tirur. International Journal of management Focus, 31-36. Retrieved from https://docslide.net/download/link/consumer-behaviour-towards-passengercars

Najeemudeen, K.P., \& Panchanatham, N. (2014). Buyer Behaviour Towards the Dealer Selection for Passenger Car Purchase in Malappuram District. Journal of Commerce and Management Research, 4(2), 64-73. Retrieved from https://www.scribd.com/document/257524236/Buyer-Behaviour-Towards-Passenger-Car-Dealers

Natarajan, P., \& Thiripurasundari, U. (2010). Local Brand V/s. Global Brand Syndrome -A Study with reference to Indian Car Industry. Advances in Management, 3(10).

Neslin, S.A. (2002). Sales Promotion. Cambridge, MA: Marketing Science Institute.
Parasuraman, A., Zeithaml, V.A., \& Berry, L. (1985). A Conceptual Model of Service Quality and its Implications for Future Research. Journal of Marketing 49 (4).

Parmar, Sushilkumar. M. (2014). A Study of Brand Loyalty for Cosmetic Products among Youth. RET Academy for International Journals of Multidisciplinary Research, 3(6) Retrieved from www.raijmr.com/wpcontent/uploads/2017/.../IJRMP_2014_vol03_issue_06_02.pdf

Pasricha, Dr. Seema. (2007). Consumer Psychology. New Delhi, India: Deep \& Deep Publications Pvt. Ltd.

Paswan, Audhesh. K., Spears, Nancy., \& Ganesh, Gopala. (2007). The Effects of Obtaining One's Preferred Service Brand on Consumer Satisfaction and Brand Loyalty. Journal of Services Marketing, 21(2), 75-87. Retrieved from https://doi.org/10.1108/08876040710737840

Pelsmacker, Patrick. De., Geuens, Maggie., \& Van, den. Bergh. Joeri. (2001). Marketing Communications. UK: Pearson Education Limited.

Peter, J. P., \& Olson. J. C. (2008). Consumer Behaviour and Marketing Strategy. Singapore: Mc Graw Hill.

Peter, J. Paul., \& Olson, Jerry. C. (2002). Consumer Behaviour and Marketing Strategy. Boston, USA: Irwin McGraw-Hill.

Pillai, S. (1990). Impact of Clutter on Advertising Viewership and Recall: An Indian Experiment, Journal of the Marketing Research Society, 32 (2), 187-196.

Polit, D.F., Beck, C.T., \& Hungler, B.P. (2001). Essentials of Nursing Research: Methods, Appraisal and Utilization. Philadelphia: Lippincott Williams \& Wilkins

Pollay, Richard. W. (1984). Twentieth-Century Magazine Advertising: Determinants of Informativeness, Written Communication, 1(1), 56-77.

Pune District: Census 2011 data http://www.census2011.co.in/census/district/359-pune.html
Punj, Girish. N., \& Richard, Stalin. (1983). A Model of Consumer Information Search Behaviour for New Automobiles. Journal of Consumer Research, 9(5).

Purohit, H. C., (2009), Developing Brand Loyalty through Customer Relationship Management. The Journal of Commerce, 62(2), 86-93.

Raj, M. Prasanna. Mohan., Sasikumar, Jishnu., \& Sriram, S. (2013). A Study on Customers Brand Preference in SUV's And MUV's: Effect of Marketing Mix Variables. Researchers WorldJournal of Arts, Science \& Commerce, 4 (1), 48-58. Retrieved from http://www.researchersworld.com/vol4/vol4_issue1_1/Paper_06.pdf

Rajaratnam, D., Hunt, James. B., \& Madden, Charles. S. (1995). Content Analysis of US and Indian Magazine Advertising, Journal of International Consumer Marketing, Vol. 8 (1), p. 93-109.

Rajasekar, T., \& Rameshkumar, S. (2015). Determinants of Preference towards Passenger Cars - The Case of Madurai City in Tamilnadu. IOSR Journal of Business and Management, 17(7), 84-88. Retrieved from http://www.iosrjournals.org/iosr-jbm/papers/Vol17-issue7/Version3/M017738488.pdf

Raju, M. S., Xaerdel, Dominique., \& Agrawal, Mohan Lal. (2004). Consumer Behaviour Concepts, Applications and Cases. New Delhi, India: Vikas Publishing House Pvt. Ltd.

Rana. Vishal. S., \& Lokhande, M. A. (2015). A Study of Consumer Preferences \& Attitude Towards Passenger Cars of Maruti Suzuki \& Hyundai Motors in Marathwada Region of Maharashtra. Pratibha: International Journal of Science, Spirituality, Business and Technology (IJSSBT), 3 (2), 37-42.

Rao, V. R., \& Kumar, R. V. (2012). Customer Satisfaction towards Tata Motors. South Asian Journal of Marketing and Management Research, 2(4), 127-150.

Renganathan, R. (2005). Consumer Markets and Buyer Behaviour of Cars. Indian Journal of Marketing, New Delhi, 35 (4), 27-33.

Sahay, Arvind., \& Sharma, Nivedita. (2010). Brand Relationships and Switching Behaviour for Highly Used Products in Young Consumers. Vikalpa, 35 (1), 15-30.

Sahu, Rumit. Kumar. (2017). A Study on Factor Influencing Customer Preference for Purchasing a Car with Respect to Maruti Suzuki in Bhilai-Durg, India. Research Journal of Management Sciences, 6 (7), 5-8.

Sakthivel, Rani. (2008). Passenger Car Industry in India. Indian Journal of Marketing, 38(11), 36-42.
Sambanandam, R., \& Lord, K. R. (1995). Switching Behaviour in Automobile Markets: A Consideration - Sets Model. Journal of the Academy of Marketing Science, 23(1), 57-65.

Sankaranarayanan, K. G., \& Mekoth, Nandakumar. (2014). Cosmetic Consumption Pattern among Male College Students: A Cluster Analytic Segmentation Approach, International Journal of Research in Commerce and Management, 5(6) (June) 5-10.

Saqib, Natasha. (2016). Repositioning-A Case Study of Tata Nano. Abhinav National Monthly Refereed Journal of Research in Commerce \& Management, 5(11), 37.45. Retrieved from http://abhinavjournal.com/journal/index.php/ISSN-2277-1166/article/view/1206/pdf_252

Sardar, Ramesh. (2012). Brand Preference of Passenger Cars in Aurangabad District. International Journal of Multidisciplinary Research, 2 (3), 431-442. Retrieved from http://www.zenithresearch.org.in

Sarwade, W. K., (2011). Consumer Behaviour and Marketing Trends of Consumer Durables in Aurangabad District. Pacific Publication, New Delhi, 240-259.

Sathish, M., \& Pughazhendi, A. (2011). A Study on Consumer Behaviour of Automobile Products with Special Reference to Two- Wheeler in Tirunelveli City Tamil Nadu, India. Indian Journal of Applied Research, 1 (3), 161-163.

Saunders, Mark., Lewis, Philip., \& Thornhill, Adrian. (2007). Research Methods for Business Students. New Delhi, India: Prentice Hall.

Schiffman, L. G., \& Kanuk, L. L. (2002). Consumer Behaviour. New Delhi, India: Pearson Education, PHI Private Limited.

Schiffman, L. G., \& Kanuk, L. L. (2004). Consumer Behaviour. New Delhi, India: Pearson Education, PHI Private Limited.

Schiffman, Leon. G., \& Kanuk, Leslie. Lazar. (2007). Consumer Behaviour. Delhi, India: Pearson Education Asia.

Schultz, D.E., Robinson, W.A. (1998). Sales Promotion Management. Chicago: Crain Books.
Schutte, H., \& Ciarlante, D. (1998). Consumer Behaviour in Asia. Great Britain: Macmillan.

Senthilkumar, V. (2012). A Study on The Effects of Customer Service and Product Quality on Customer Satisfaction and Loyalty. Namex International Journal of Management Research, 2 (2), 124-129.

Sharma, Anjali et al. (2013). Impact of Brand Loyalty on Buying Behaviour of Women Consumers for Beauty Care Products- Delhi Region, Global Journal of Management and Business Studies, 3(7), 817-824.

Sharma, N., \& Patterson, P.G. (1999). The Impact of Communication Effectiveness and Service Quality on Relationship Commitment in Consumer, Professional Services. Journal of Services Marketing, 13 (2), 151-70.

Sharma, N., \& Patterson, P.G., (1999). The Impact of Communication Effectiveness and Service Quality on Relationship Commitment in Consumer, Professional Services. Journal of Services Marketing, 13(2), 151-170.

Sharma, S. K., Sharma, K., \& Khan, M. A (2011). Study and Analysis of Customer Satisfaction of Tata Motors in Jaipur. International Journal of Business Management and Economics Research, 2(4), 250-257.

Sheetal. (2014) A Study of Consumer Behaviour Towards Premium Passenger Car Segment in U. P. in Post-Liberalization Era (A Case Study of KAVAL Towns). (Ph.D. Dissertation). Retrieved from http://hdl.handle.net/10603/104230
Shende, Vikram. (2014). Analysis of Research in Consumer Behaviour of Automobile Passenger Car Customer. International Journal of Scientific and Research Publications, 4 (2), 1-8.
Shimp, T.A. (2003). Advertising Promotion and Supplemental Aspects of Integrated Marketing Communications. USA: Thomson South-Western.
Shimpi, Shriram. (2014). A Study on Consumer Buying Behaviour for Used Cars in Pune City. Abhinav National Monthly Refereed Journal of Research in Commerce \& Management, 1(9), 29-34.
Shukla, Pratima., \& Barada, Kishor. (2015). Study of Customer Loyalty and Satisfaction Towards Sales in Ahmedabad City, India. Asia Pacific Journal of Marketing \& Management Review, 4 (4), 54-65.

Singh, Laxmi., \& Mani, Ronald. V. (2016). The Impact of Mileage on Car Price in Low Segment Car. International Journal of Engineering Research \& Management Technology, 3(4), 60-63. Retrieved from https://www.researchgate.net/publication/308516704

Singh, Swati., \& Srivastava, Pallavi. (2012). The Turnaround of Tata Nano: Reinventing the Wheel, Vision: The Journal of Business Perspective 16 (1), 45-52.

Srivastava, Arpita., \& Matta, Mitu. (2014) Consumer Behaviour towards Passenger’s Cars - A Study in Delhi NCR. Global Journal of Finance and Management, 6 (6), pp. 589-598.

Srivastava, Manish. Kumar., \& Tiwari. A.K. (2011). A Study of Behaviour of Maruti SX4 and Honda City Customers in Jaipur. Pacific Business Review - A Quarterly Refereed Journal, 1-10. Retrieved from https://www.researchgate.net/publication/272705212_A_Study_of_Behaviour_of_Maruti_SX 4_and_Honda_City_Customers_in_Jaipur

Stem, B.L; Krugman, D.M., \& Resnik, Alan. (1981). Magazine Advertising: An Analysis of its Information Content. Journal of Advertising Research, 21 (2), 39-44.

Stern, B.L., \& Resnik, A. (1991). Information Content in Television Advertising: A Replication and Extension. Journal of Advertising Research, Vol. 31, 36-46.

Sternthal, Brian., \& Craig, Samuel. (1982). Consumer Behaviour- an Information Processing Perspective. New Delhi, India: Prentice Hall of India Private Limited.

Subhadra, S., Murugesan, K.M., \& Ganapathi, R. (2010). Consumer Perception and Behaviour: A Study with Special Reference to Car Owners in Namakkal District. Asia Pacific Journal of Research Business Management, 1(3), 37-60.

Suganya, R. (2012). Effect of Brand Equity on Consumer Purchasing Behaviour on Car: Evidence from Car Owners in Madurai District. Indian Journal of Applied Research, 1(4), 167-169.
Thiripurasundari, U., \& Natarajan, P. (2011). Determinants of Brand Equity in Indian Car Manufacturing Firms. International Journal of Trade, Economics and Finance, 2(4). 346-350. Retrieved from http://www.ijtef.org/papers/129-F540.pdf
Trehan, Ruche., \& Singh, Harman. Deep. (2003). A Comparative Study on Urban and Rural Consumer Behaviour. Indian Journal of Marketing, XXXIII (8), 7-11.
Veerakumar, K. (2017). Consumer Behaviour and Factors Influencing Purchase Decision of Durable Goods. International Journal of Computational Research and Development, 2 (2), 7-10.
Venkateswara, M., \& Reddy, B. (1997). Marketing of TV sets - A Study of External and Internal Influence on Consumer Behaviour. Indian Journal of Marketing, 27 (8), 20-24.

Venkateswaran, P.S. (2012). A Study on Brand Loyalty Behaviour among Consumers in FMCG Market. (Ph.D. Dissertation). Retrieved from http://shodhganga.inflibnet.ac.in/browse?type=keyword\&rpp=20\&value=Consumer
Victor, Charles., Kathiravan, C., \& Velaudham, C. (2016). Consumer Expectation Towards C Segment Cars in Chennai City. Journal of Exclusive Management Science, 5 (9), 1-9.

Vidyavathi. K. (2012). Customer Life Style Influence of Consumer Behaviour with reference to Automobile Industry in Chennai. Zenith International Journal of Multi-Disciplinary Research, 2 (4), 37-50.

Vyas, Hitesh. D. (2010). Consumer Purchase of Consumer Durables: A Factorial Study. International Journal of Management \& Strategy, 1(1), 1-13.

Vyas, Nirav. R. (2013). The Effect of Profession Over Buying Behaviour Towards Cars. Paripex -
Indian Journal of Research, 2(1), 92-93.
https://www.slideserve.com/ally/an-early-model-of-consumer-behavior
https://www.ukessays.com/essays/marketing/environmental-factors-which-influence marketing-
decisions-marketing-essay.php (Dekel et al, 2007: 251)
https://slideplayer.com/slide/1435122/
https://businessjargons.com/marketing-communication.html
https://www.slideshare.net/PranavKumarOjha/buying-roles-family-influences
https://slideplayer.com/slide/10772526/
https://generalassemb.ly/blog/loyalty-loop-replacing-marketing-funnel/
https://info.bsquared-consulting.com/blog-and-news/customer-loyalty-is-a-better-measure-of-future-behaviour-than-customer-satisfaction
https://cdn.business2community.com/wp-content/uploads/2014/03/The-Consumer-Buying-
Process.jpg
https://slideplayer.com/slide/8531411/
https://www.slideshare.net/raghavenugopal/rm-1-15436247
https://www.langhammer.de/en/services.html
https://blog.inkjetwholesale.com.au/marketing-advertising/build-awesome-brand-loyalty-6-tricks/ https://slideplayer.com/slide/6259001/
https://www.slideshare.net/StudyToolboxAuthors/literature-review-27039179
http://www.siamindia.com/statistics.aspx?mpgid=8\&pgidtrail=10
http://www.autopunditz.com/uncategorized/list-of-automotive-plants-in-india
http://www.team-bhp.com/forum/attachments/indian-car scene/1626960d1491418210-ibef-report-indian-automotive-industry-fy-2015-16-4.jpg
https://www.team-bhp.com/forum/indian-car-scene/178868-city-wise-car-sales-india-april-2015-march-2016-a.html
https://en.wikipedia.org/wiki/Cochran\'s_Q_test
https://en.wikipedia.org/wiki/Friedman_test
https://en.wikipedia.org/wiki/Chi-squared_test
https://en.wikipedia.org/wiki/Sign_test
https://en.wikipedia.org/wiki/Multivariate_analysis_of_variance
https://en.wikipedia.org/wiki/Bartlett\'s_test
https://www.bing.com/search?q=Multivariate+Tests\&qs=n\&form=QBRE\&sp=-
1\&pq=multivariate+tests\&sc=818\&sk=\&cvid=A55A33FA8DE341D28F907FE32F01E1A1
https://www.bing.com/search?q=Test-Retest+Method\&qs=n\&form=QBRE\&sp=-1\&pq=test-retest+method\&sc=6-18\&sk=\&cvid=3E194C458B 104643879D04CE70255584
https://www.bing.com/search?q=Spearman\�\�\�s+Rank+Order+Correlation+\&qs=n\&form= QBRE\&sp=1\&pq=spearman\%E2\% $80 \% 99$ s+rank+order+correlation+\&sc= https://en.wikipedia.org/wiki/Cramér\'s_V

## Chapter 7 - Appendices

This chapter consists of the following appendices.

Appendix 'A' - Questionnaire to Elicit Information from Consumers regarding the Buying Behavior in the 4- Wheeler Car Industry

Appendix 'B' - Questionnaire to Elicit Information about Consumers regarding the Buying Behavior in the 4- Wheeler Car Industry as perceived by Dealers Representatives

Appendix 'C' - Nonparametric Correlations for Reliability and Validity
Appendix 'D'

1. Certificate for participation in conference - 1 No.
2. Certificate for participation in conference / presentation of research paper - 5 Nos.
3. Certificate for publishing research papers in journals -4 Nos
4. List of research papers published in journals -6 Nos.

## Appendix ' A '

## Questionnaire to Elicit Information from Consumers

Dear Friends,
I request your co-operation in filling this Questionnaire for my Research Work on the topic Consumer Buying Behavior in the 4- Wheeler Car Industry. I would be thankful if you can spend some of your precious time in answering these questions. I can assure you, all information's given by you will be confidential and used for academic purpose only.

## Name: Simon Thomas - Research student TMV, Pune.

## Demographic details of consumer Kindly mark whichever is applicable

1. Age
a) Less than 25 years
b) 26 to 35 years
c) 36 to 50 years
d) More than 50 years
2. Gender
a) Male
b) Female
3. Marital Status
a) Married
b) Unmarried
4. Family Size
a) Up to 3 members
b) 3 to 6 members
c) Above 6 members
5. Type of Family
a) Nuclear family
b) Joint family
6. Occupation
a) Service
b) Professional
c) Business
d) Agriculturist
7. Education
a) Non- Graduate $\quad \square \quad$ b) Graduate
c) Post Graduate
d) Professional *
e) If any other qualifications (specify) $\qquad$ ....

* Engineers / Doctors / Lawyers / Chartered Accountant

8. Family Income (Rupees / Month)
a) Less than 50,000
b) 50,000 to $2,00,000$

## Specific Information about Consumer

9. Number of vehicles owned in your family.
a) 1
b) 2
c) 3
d) More than 3
10. Price range of the car owned by you in Rupees.
a) Less than 2,00,000
b) $2,00,000$ to $5,00,000$
c) $5,00,000$ to $7,00,000$
d) $7,00,000$ to $10,00,000$
c) Any other price (specify) $\qquad$
11. State the brand of cars owned by you.
a)
b)
d)
12. State the brand and model of the cars owned by you.

## Brand

## Model

a)
b)
c)
d) $\qquad$
13. If this is not your first car, then what was the brand and model of the previous cars owned by you.

## Brand

a)
b)
14. State the mode of payment made by you for buying your car.
a) Full cash paymentb) Loan
15. Mark all sources of information obtained by you before you purchased your car.

| SNo | Source of information |  |
| :--- | :--- | :--- |
| a) | Advertisements on T.V. |  |
| b) | Magazines / Newspapers etc. |  |
| c) | Family / Relatives / Neighbors / Colleagues / Friends |  |
| d) | Emails / Internet / SMS |  |
| e) | FM / Radio / Public address system etc. |  |
| f) | Printed displays / Brochures / Pamphlets etc. |  |
| g) | Wall posters / Wall writing / Bill board / Banners etc. |  |
| h) | From Dealers |  |
| i) | Your own decision |  |
| j) | If any other source (specify) |  |

16. Mark all variables that may inspire you to buy a brand-new car. (MI - Most Important, I - Important, N - Neutral, LI - Least Important, NI - Not Important)

| SNo | Variables | MI | I | N | LI | NI |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) | It is a symbol of social status |  |  |  |  |  |
| b) | It is a time saving device |  |  |  |  |  |
| c) | It is a source of entertainment |  |  |  |  |  |
| d) | Warranty / Guarantee |  |  |  |  |  |
| e) | It is an item of necessity |  |  |  |  |  |
| f) | Influenced by marketing |  |  |  |  |  |
| g) | It is considered as a luxurious item |  |  |  |  |  |
| h) | Requirement of the family |  |  |  |  |  |
| i) | It is economical |  |  |  |  |  |

17. Mark all variables that influenced you, when you purchased your car.

| SNo | Variables |  |
| :--- | :--- | :--- |
| a) | Influenced by marketing |  |
| b) | Reputation or image of the brand |  |
| c) | Influenced by imported technology |  |
| d) | Influenced by good after sales service |  |
| e) | Warranty / guarantee |  |
| f) | Influenced by advanced technology |  |
| g) | Promotion by dealers \& manufacturers |  |
| h) | Relative / friend's suggestions |  |
| i) | Satisfaction of earlier brand of car |  |
| j) | Known dealer |  |
| k) | Offers / discounts given by dealers \& manufacturers |  |
| l) | Buy back scheme / Resale value of car in the market |  |
| m) | Pick up and drop facility / exclusive service for ladies |  |
| n) | Easy and quick availability of spare parts |  |
| o) | Best competitive pricing by dealer |  |

18. Mark all pre-purchase strategies adopted by you before you purchased your car. (SA - Strongly Agree, A - Agree, N - Neutral, DA - Disagree, SDA - Strongly Disagree.)

| SNo | Variables | SA | A | N | DA | SDA |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) | Communicate with sales persons |  |  |  |  |  |
| b) | Glancing through advertisement of cars |  |  |  |  |  |
| c) | Collect information from public |  |  |  |  |  |
| d) | Visit dealers showroom |  |  |  |  |  |
| e) | Reading automobile magazines |  |  |  |  |  |
| f) | Internet websites |  |  |  |  |  |
| g) | Opinion from experts |  |  |  |  |  |
| h) | Taking test drive of the car |  |  |  |  |  |

19. Mark maximum 3 persons, who affected the most in making a decision to purchase your car.

| SNo | Persons |  |
| :--- | :--- | :--- |
| a) | Your spouse |  |
| b) | Your children |  |
| c) | Your parents |  |
| d) | Your brothers / sisters |  |
| e) | Any opinion leaders |  |
| f) | Your friends and well wishers |  |
| g) | Your own decision |  |
| h) | Dealers |  |
| i) | Any other (specify) |  |

20. State your satisfaction level for sales / servicing provided by the dealer.
a) Excellentb) Good
c) Satisfactory
d) Poor
21. How satisfied are you with your present car.
a) Very satisfied
b) Satisfied
c) Dissatisfied
d) Very Dissatisfied
22. In future would you buy a car of the same brand / model.
a) Yes
b) No
23. If your answer is "No", then which brand of car other than yours comes to your mind.
24. State the reasons for the above question $\qquad$
25. State the problems faced by you in your present car.

| SNo | Problems |  |
| :--- | :--- | :--- |
| a) | Communication and Servicing |  |
| b) | Maintenance issues |  |
| c) | Availability of Spares |  |
| d) | Higher fuel Consumption |  |
| e) | Often breaks down |  |
| f) | Old styling |  |
| g) | Lacks in Safety |  |
| h) | Not easy to Drive |  |
| i) | Any other problems |  |

26. Please comment, if there is any other information you would like to share about your present car.
$\qquad$
$\qquad$

## Signature of Respondent

Thank You!

## Appendix 'B'

## Questionnaire to Elicit Information from Dealers' Representatives' perspective regarding Consumer Buying Behavior in the 4-Wheeler Car Industry.

Dear Friends,
I request your co-operation in filling this Questionnaire for my Research Work on the topic Consumer Buying Behavior in the 4- Wheeler Car Industry. I would be thankful if you can spend some of your precious time in answering these questions. I can assure you, all information's given by you will be confidential and used for academic purpose only.

Name: Simon Thomas - Research student TMV, Pune.

## Demographic details of Dealers Representatives Kindly mark whichever is applicable

1. Age
a) Less than 25 years
b) 26 to 35 years
c) 36 to 50 years
d) More than 50 years
2. Gender
a) Maleb) Female
3. Experience
a) $0-5$ years
b) 5-10 years
c) $10-15$ years
d) More than 15 years

## Dealers' Representatives views on Consumers

4. Characteristics of a Car Buyer as perceived by Dealers' Representative. (SA - Strongly Agree, A - Agree, N - Neutral, DA - Disagree, SDA - Strongly Disagree)

| SNo | Characteristics | SA | A | N | DA | SDA |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) | Higher Income |  |  |  |  |  |
| b) | Social status in the society |  |  |  |  |  |
| c) | Conscious of their esteem in the society |  |  |  |  |  |
| d) | Lured by the Promotional strategies |  |  |  |  |  |
| e) | Influenced by family |  |  |  |  |  |

5. Characteristics that Customers look for in a Car as perceived by Dealers' Representative.

| SNo | Characteristics |  |
| :--- | :--- | :--- |
| a) | Passenger carrying capacity |  |
| b) | Price range of the car |  |
| c) | Technologically advanced Car |  |
| d) | Strength of the brand of the car |  |

6. Key Selling Features for Cars as perceived by Dealers' Representative. (SA - Strongly Agree, A - Agree, N - Neutral, DA - Disagree, SDA - Strongly Disagree)

| SNo | Features | SA | A | N | DA | SDA |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) | Social status in the society |  |  |  |  |  |
| b) | Luxurious interiors of the car |  |  |  |  |  |
| c) | Good vision, driving comfort with a/c |  |  |  |  |  |
| d) | Latest advanced safety \& security features |  |  |  |  |  |
| e) | Necessity of the Family |  |  |  |  |  |
| f) | Easy payment options with credit |  |  |  |  |  |
| g) | Manufacturers and dealer's discounts |  |  |  |  |  |
| h) | Influenced by marketing strategies |  |  |  |  |  |
| i) | Reputation of the brand / model |  |  |  |  |  |
| j) | Advanced Technology |  |  |  |  |  |
| k) | Influenced by promotions |  |  |  |  |  |
| l) | Excellent customer sales and after sales service |  |  |  |  |  |
| m) | Proximity of the workshop to the residence |  |  |  |  |  |

7. Occupation of maximum Car Owners as perceived by Dealers' Representative.
a) Business
b) Service
c) Professional
d) Others
8. State if loan is available from Dealers.a) Yes
b) No
9. If yes, then state the extent of Loan provided to Customers in Rupees.
a) <2 Lakhs
b) 2-5 Lakhs
c) 5-10 Lakhs
d) More than 10 Lakhs
10. Average number of Walk-ins in a week as perceived by Dealers' Representative.
11. Walk-ins in percentage in the following segments of Cars as perceived by Dealers'

Representative. (Specify as $25 \%$ or $50 \%$ or $75 \%$ or $100 \%$ )
a) Micro length $<3.2 \mathrm{M}$
[
b) Mini 3.2 to 3.6 M
c) Compact 3.6 to 4 M
e) Mid-Size 4.25 to 4.5 M
[ ]
d) Super compact 4.0 to 4.25 M
[ ] f) Others
12. Percentage increase in Walk-ins during Festive Season as perceived by Dealers'

Representative.
a) $<5 \%$
b) 5 to $15 \%$
c) 15 to $25 \%$
d) More than $25 \%$
13. Walk-in customers conversion rate as perceived by Dealers' Representative.
a) $<5 \%$
b) 5 to $10 \%$
c) 10 to $15 \%$
d) More than $15 \%$
14. Does Increase in Taxation by the Government have an effect on Car Sales as perceived by Dealers' Representative. a) Yes $\quad \square \quad$ b) No
15. Does Incentives offered by the Government benefit in the increase of Sales of Cars as perceived by Dealers' Representative.
a) Yes
b) No

## Signature of Respondent

Thank You!

## Appendix 'C'

## Nonparametric Correlations for Reliability \& Validity

**. Correlation is significant at the 0.01 level (2-tailed).


| Spearman's rho |  |  | Economical | Economical |
| :---: | :---: | :---: | :---: | :---: |
|  | Economical | Correlation Coefficient | 1.000 | . $952^{* *}$ |
|  |  | Sig. (2-tailed) |  | . 000 |
|  |  | N | 18 | 18 |
|  | Economical | Correlation Coefficient | . $952^{* *}$ | 1.000 |
|  |  | Sig. (2-tailed) | . 000 |  |
|  |  | N | 18 | 18 |




## Buy same car * Buy same car Crosstabulation

|  | Buy same car |  |  |  |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 |  |  |  |
| Buy same car | 1 | 10 | 0 | 0 | 1 | 11 |  |
|  |  |  |  |  |  |  |  |
|  | 2 | 0 | 5 | 1 | 0 | 6 |  |
|  | 3 | 1 | 0 | 0 | 0 | 1 |  |
| Total | 11 | 5 | 1 | 1 | 18 |  |  |

Symmetric Measures

|  |  | Value | Approximate <br> Significance |
| :--- | :--- | :---: | :---: |
| Nominal by Nominal | Phi | 1.004 | .006 |
|  | Cramer's V | .710 | .006 |
| N of Valid Cases |  | 18 |  |

Future Car Brand * Future Car Brand Cross Tabulation

|  | Future car brand |  |  |  | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Future car brand | 2 | 3 | 4 | 2 |  |
|  | 2 | 2 | 0 | 0 | 6 |
|  | 3 | 1 | 5 | 0 | 9 |
| Total | 4 | 0 | 1 | 8 | 17 |

## Symmetric Measures

|  |  | Value | Approximate <br> Significance |
| :--- | :--- | :---: | :---: |
| Nominal by Nominal | Phi | 1.151 | .000 |
|  | Cramer's V | .814 | .000 |
| N of Valid Cases |  | 17 |  |

## Appendix ' $\mathbf{D}$ '

1. Certificate for participation in conference - 1 No.
a) International conference on 'Automation and Employability - A Futuristic Perspective' held at TMV, Pune on $5^{\text {th }} \& 6^{\text {th }}$ January 2018.
2. Certificate for participation / presenting a research paper -1 No.
a) 'Consumers Buying Behaviour in the Challenging Global Competitive Landscape for Cars in Pune' at $10^{\text {th }}$ International Management Conference on Changing Competitive Landscape and Emerging Business Strategies held at AIMS, Pune on $23^{\text {rd }}$ and $24^{\text {th }}$ February, 2018.
3. Certificate for participation in conference, presentation and publishing research papers in journals - 4 Nos.
a) 'Major Motivating Factors of Commuters who Buy Cars in Pune' at International Conference on Applied Science, Technology and Management held on $10^{\text {th }}$ February, 2018 at Mahratta Chamber of Commerce, Industries and Agriculture, Senapati Bapat Road, Pune.
b) 'Car Buying Decision Influencers for Consumers in Pune' at International Conference on New Frontiers of Engineering, Management, Social Science and Humanities held on $25^{\text {th }}$ February, 2018 at Mahratta Chamber of Commerce, Industries and Agriculture, Tilak Road, Pune.
c) 'Problems faced by Consumers in their present Cars in Pune' at XVI International Conference on Recent Trends in Engineering, Applied Science and Management held on $19^{\text {th }}$ May, 2018 at Osmania University Centre for International Program, Osmania University Campus, Hyderabad.
d) 'Consumers who are Satisfied with the Dealers Service Buys the same Brand of Cars' at XVI International Conference on Recent Trends in Engineering, Applied Science and Management held on $19^{\text {th }}$ May, 2018 at Osmania University Centre for International Program, Osmania University Campus, Hyderabad.
4. List of research papers published in journals - 6 Nos.
a) Thomas, Simon. (2018). Information collection for the purchase of cars in the digital world. Mahratta Peer Review Journal Tilak Maharashtra Vidyapeeth, 1(1).
b) Thomas, Simon. (2018). Consumers Buying Behaviour in the Challenging Global Competitive Landscape for Cars in Pune. Allana Management Journal of Research, 7(2), 1-8.
c) Thomas, Simon. (2018). Major Motivating Factor of Commuters who Buy Cars in Pune. International Journal of Enhanced Research in Management \& Computer Applications, 7(2), 101-105.
d) Thomas, Simon. (2018). Car Buying Decision Influencers for Consumers in Pune. AGU International Journal of Management Studies and Research, 6(1), 116-122.
e) Thomas, Simon., \& Nagendra, Asha. (2018). Problems faced by Consumers in their present Cars in Pune. International Journal of Science Technology and Management, 7(5), 61 - 66.
f) Thomas, Simon., \& Nagendra, Asha. (2018). Consumers who are Satisfied with the Dealers Service Buys the same Brand of Cars. International Journal of Science Technology and Management, 7(5), 67 - 74.



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## Consumer Buying Behaviour In the Changing Global Competitive Landscape for Cars in Pune.

Author: Simon Thomas - Research Scholar, Tilak Maharashtra Vidyapeeth, Pune. \& Faculty - St. Vincent's College of Commerce, Pune.

Category: Human Resource Management

## Abstract:

The automobile industries future is bright in India. Digitization has become a buzz word these days and many industries are already in the race. The consumer is already experiencing digitization in every way of life. It isn't different for the automobile industry and has joined the digitization era in a big way. Hence, it is very important to know the consumers behaviour for the success of any auto industry. There are various factors that influence people to behave in a certain manner. In this paper an attempt is made to study various variables that affects an individual while choosing a brand of car.

Keywords: Consumer behaviour, brand, sales and service

## Full Text:

## Introduction:

Consumers today use their cars as multipurpose vehicles for commuting alone on one day and taking the whole family to the beach on another day. In the future they may want the flexibility to choose the best solution for a specific purpose. Understanding the consumers buying behaviour has become important for the marketing / sales people of the automobile industry as their success only lies if they cater to their needs fully. Consumer behaviour is the study of why, when, how, and where people buy or don't buy a product or services or goods. It tries to understand the consumers buying process, decision making process and the characteristics of the buyer. It also studies the wants and needs of the individual and groups all the factors to some meaningful conclusion.

## Indian car industry:

As per Society of Indian Automobile Manufacturers (SIAM) the industry has produced a total $25,316,044$ vehicles including passenger vehicles, commercial vehicles, three wheelers, two wheelers and quadricycle in April-March 2017 as against 24,016,599 in April-March 2016, registering a growth of 5.41 percent over the same period last year. The sales of Passenger Vehicles grew by 9.23 percent in April-March 2017 over the same period last year. Within the Passenger Vehicles, Passenger Cars, Utility Vehicles and Vans grew by 3.85 percent, 29.91 percent and 2.37 percent respectively during April-March 2017 over the same period last year.

## Automobile Domestic Sales Trends

| Category 2011-12 2016-17 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2012-13 | $2013-14$ | $2014-15$ | 2015-16 |  |
| Passenger Vehicles 26,29,839 | $26,65,015$ | $25,03,509$ | $26,01,236$ | $27,89,208$ | $30,46,727$ |


| Commercial Vehicles | 8,09,499 | 7,93,211 | 6,32,851 | 6,14,948 | 6,85,704 | 7,14,232 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Three Wheelers | 5,13,281 | 5,38,290 | 4,80,085 | 5,32,626 | 5,38,208 | 5,11,658 |
| Two Wheelers | 1,34,09,150 | 1,37,97,185 | 1,48,06,778 | 1,59,75,561 | 1,64,55,851 | 1,75,89,511 |
| Grand Total | 1,73,61,769 | 1,77,93,701 | 1,84,23,223 | 1,97,24,371 | 2,04,68,971 | 2,18,62,128 |

## Automobile Export Trends:

| Category | $2011-12$ | $2012-13$ | $2013-14$ | $2014-15$ | $2015-16$ | $2016-17$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Passenger <br> Vehicles | $5,08,783$ | $5,59,414$ | $5,96,142$ | $6,21,341$ | $6,53,053$ | $7,58,830$ |
| Commercial <br> Vehicles | 92,258 | 80,027 | 77,050 | 86,939 | $1,03,124$ | $1,08,271$ |


| Three <br> Wheelers | $3,61,753$ | $3,03,088$ | $3,53,392$ | $4,07,600$ | $4,04,441$ | $2,71,894$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Two Wheelers | $19,75,111$ | $19,56,378$ | $20,84,000$ | $24,57,466$ | $24,82,876$ | $23,39,273$ |
| Grand Total | $29,37,905$ | $28,98,907$ | $31,10,584$ | $35,73,346$ | $36,43,494$ | $34,78,268$ |

(Source: SIAM)

## Need of the study:

The Indian car market has a huge potential for growth domestically and internationally. The study is valuable for both marketers and car manufacturers to have a few insights into the factors influencing consumer preference as the cost of vehicle ownership is high.

## Review of literature:

Bakshi (2012) suggested in her research impact of gender on consumer purchase behaviour through literature survey that gender is not only a biological concept as being a male or female, but beyond. Gender with different dimensions is not only a market segmentation variable but it is a variable that has a strong impact on the decisions. To satisfy the customers, marketers need to understand gender-based tendencies. It has been noted that there is a large difference between both the genders due to psychological and physiological differences. The purchasing behaviour of the genders are different the women seem to be more open and talks to more people internally to inform connect and network with others whereas the men are externally focused and tend to talk more often and still doesn't pass on information. Men try to gather more information whereas women go into the depth of the information. Women are more subjective and intuitive in nature but men are more analytical and logical and opines based on others purchases than by themselves. Men value for quality and efficiency and immediate needs whereas women are emotional and look for long term needs.

Sagar et. al. (2004) suggested that Indian car industry has leaped forward technologically with intensified technological capabilities. The industry is driven by a confluence of factors such as strong competition, changing consumer preferences, government policies especially with tightening of emission standards, and the global strategies of the various players. They detailed about cars manufactured in India with better designs and incorporating advanced technologies that are often comparable with those available globally and also commented Indian car exports are also growing in leaps and bounds.

Mandeep et. al. (2006) attempted to find out the important features a customer might consider while purchasing a new car. The study covered the owners of passenger cars residing in the major cities of Punjab and the Chandigarh. The respondents recognized that safety and comfort were the most important features of the passenger car followed by luxury.

A study on consumer behaviour and factors influencing the purchase decision of durable goods with reference to Salem district was attempted by Rajeswari (2014). The objectives of the study were to know the socio-economic profile of the selected consumers, identify the factors influencing the consumers in the selection and use of particular products and summarize the key findings and offer suggestions. Primary data was collected from 50 respondents from the residents of Salem city. Various statistical tools were used to rank the findings. The findings from the study were that brands, price, quality, quantity, mode of purchase etc. does influence the consumer in purchasing consumer durable goods. It can be concluded that the consumer behavior is vital for success of any marketing activity and the business. It has been also observed that the customers may say their needs etc. but the final buying decision may be different. The consumer market in India is at its boom as the income has gone up and there is enough disposal able income to spend. In this context we can say that the young are the beneficiaries of this trend. The consumers behaviour is well noticed in their buying behaviour. The growth in economy and the easy availability of finance plays a great role in the purchasing decision. Consumer durable usage has gone up in this current era as there are many varieties in the market and this ultimately helps to satisfy the changing taste of the consumer.

Anjali Sharma et al. (2013), made an attempt to investigate the impact of brand loyalty on consumer buying behaviour for beauty products and aspects involved while purchasing cosmetic products. Majority of respondents opined that quality is the most important factor at the time of purchasing of the beauty products followed by brand and price. However, small group of women feel packaging is the key factor for decision making. Researchers concluded that these factors are generally responsible for switching to other brands and friends are the most powerful reference group.

Schiffman et. al. (1997) has said that consumer behavior focuses on how people build their preferences to spend their resources like time, money, effort on consumption-related things. Consumer behavior is a study of process wherein when people choose, purchase, use, or eliminate products, services, ideas, or experiences to satisfy wants and needs. Consumer Behavior occurs either for the individual, or within the context of a group. The usage of product is of interest to the marketer, as this might influence the products positioning or will inspire increased consumption.

## Research Methodology:

The data for the purpose of the present study have been collected through primary and secondary data. In order to realize the aforementioned research objectives, following research methodology was adopted by the researcher.

## Objectives of the study:

Consumer buying behaviour in the changing global competitive landscape for cars in Pune.

## Research Hypotheses:

Car buyers are influenced by good after sales service, reputation or image of the brand and offers / discounts given by dealers \& manufacturers while buying a new car.

## Primary data collection:

Primary data has been collected through structured questionnaire. The study was undertaken for Pune and Pimpri Chinchwad of Pune region. A total of 225 respondents residing in Pune and Pimpri Chinchwad form the sample. Convenience sampling technique was followed for collecting response from the respondents.

## Secondary data collection:

The sources of secondary data include published data such as data from books, journals, periodicals, reports, etc.

## Tools for Analysis:

1. The statistical tools used for the purpose of this study are simple percentages and graphs.
2. Cochran's Test was done using SPSS version 21 to prove the hypothesis.

## Data Analysis and Interpretation:

Variables that affect the respondents in the process of selecting a car

| SNo | Variables | N = 225 | Percentage |
| :--- | :--- | :--- | :--- |
| 1$)$ | Influenced by marketing | 166 | 73.78 |
| 2$)$ | Reputation or image of the brand | 208 | 92.44 |
| 3$)$ | Influenced by imported technology | 192 | 85.33 |
| 4$)$ | Influenced by good after sales service | 214 | 95.11 |
| 5$)$ | Warranty / guarantee | 193 | 85.78 |
| 6$)$ | Influenced by advanced technology | 181 | 80.44 |
| 7$)$ | Promotion by dealers \& manufacturers | 147 | 65.33 |
| 8$)$ | Relative / friends suggestions | 102 | 45.33 |
| 9$)$ | Satisfaction of earlier brand of car | 101 | 44.89 |
| 10$)$ | Known dealer | 38 | 16.89 |
| 11$)$ | Offers / discounts given by dealers \& manufacturers | 200 | 88.89 |
| 12$)$ | Buy back scheme / resale value of car in the market | 107 | 47.56 |
| 13$)$ | Pick up and drop facility/exclusive service for ladies | 76 | 33.78 |
| 14$)$ | Easy and quick availability of spare parts | 93 | 41.33 |
| 15$)$ | Best competitive pricing by dealer | 186 | 82.67 |

Figure: Variables that affect an individual in the process of selecting a car

Majority ( $95 \%$ ) of the respondent's process of selecting a car was affected by good after sales service. A large section (92 \%) process of selecting a car was affected by reputation or image of the brand. Only $17 \%$ process of selecting a car was affected by a known dealer.

## Hypothesis Testing:

HO: Variables that affects an individual while choosing a brand of car do not differ in frequency of preference.
in frequency of preference.
Statistical Tests: Cochran's Test
Level of significance $\alpha=0.05$
Test Statistics:

| Cochran's Q | 825.613 |
| :--- | :--- |
| df | 8 |
| Asymp. Sig. | .000 |
| $\mathrm{Q}(8)=825.613, \mathrm{P}<0.05$ |  |

Q (8) $=825.613, \mathrm{P}<0.05$

## Conclusion:

Since the $P$ value is less than level of significance ( 0.05 ) the null hypothesis is rejected hence it is concluded that variables that affects an individual while choosing a brand of car differ in frequency of preference. To know where the difference lye the frequency statement table is referred. From the frequency table it can be seen that influenced by good after sales service have a frequency count of 214, reputation or image of the brand have a frequency count of 208, offers / discounts given by dealers \& manufacturers have a frequency count of 200, warranty / guarantee have a frequency count of 193, influenced by imported technology have a frequency count of 192, best competitive pricing by dealer have a frequency count of 186, influenced by advanced technology have a frequency count of 181 , influenced by marketing have a frequency count of 166, promotion by dealers \& manufacturers have a frequency count of 147 , buy back scheme / resale value of car in the market have a frequency count of 107, relative / friends suggestions have a frequency count of 102, satisfaction of earlier brand of car have a frequency count of 101, easy and quick availability of spare parts have a frequency count of 93 , pick up and drop facility / exclusive service for ladies have a frequency count of 76 , known dealer have a frequency count of 38 . Hence there are top three variables that affects an individual while choosing a brand of car. (Influenced by good after sales service, reputation or image of the brand and offers / discounts given by dealers \& manufacturers while buying a new car.)

## Findings:

Majority of the respondent's process of selecting a car was affected by good after sales service. A large section process of selecting a car was affected by reputation or image of the brand and for few the process of selecting a car was affected by a known dealer.

## Recommendation and Conclusion:

Globalization has brought in remarkable changes in the marketplace and this has affected the lifestyle patterns of present day consumers. Time tested concepts of marketing, are being turned down as they fail to measure the behavior of new generation customers. In this complex and fast-growing world, the companies cannot predict but have to concentrate and analyze the consumer preference to satisfy and retain the consumers in the long run through consumer research in this competitive industry. The Indian companies have to adapt to the inevitable fast changes that are happening in this industry and must learn from the west to identify new competencies and respond to the same efficiently and effectively. Marketers should monitor the sectors movement and review the motivational factors that help a consumer hold on to a brand for a long term to increase their market share.

## References:

1. Sontakki, C.N. (2006). Marketing Research. New Delhi, India: Himalaya Publishing House.
2. Kothari, C.R. (2004). Research Methodology Methods and Techniques. New Delhi, India: New Age International (Pvt.) Ltd.
3. Kotler, Philip., \& Kotler, Kevin. (2009). Marketing Management (13th ed.). New Delhi, India: Prentice Hall of India.
4. Schiffman, Leon. G., \& Kanuk, Lazar. Leslie. (1997). Consumer behavior (6th ed.). NJ, USA: Prentice Hall.
5. Glass, Gene. V., \& Hopkins, Kenneth. D. (1996). Statistical methods in education and psychology. Volume 1(3 ${ }^{\text {rd }}$ ed.) Boston, USA: Allyn and Bacon.
6. Kaur, Mandeep., \& Sandhu, H.S. (2006). A Study on Factors Influencing Buying Behaviour of Passenger Car Market. Paradigm, Vol. 8 (2), pp. 24-30.
7. Bakshi, Swarna. (2012). Impact of gender on consumer purchase behaviour. Abhinav national monthly refereed journal of research in commerce \& management, Volume 1 (9), pp. 1 - 8. Retrieved from www.abhinavjournal.com/images/Commerce_\&_Management/Sep12/1.pdf PDF file
8. Rajeswari, R. \& Pirakatheeswar, P. (2014). A study on consumer behaviour and factors influencing the purchase decision of durable goods with reference to Salem district. International Journal of Business and Management, Volume VII (11), pp. 10-18. Retrieved from https://www.scribd.com/document/168863020/Srm-Digest-2011
9. Nagaraj, R. (2008). India's Recent Economic Growth: A Closer Look. Economic \& Political Weekly, Vol 43 (15), pp. 55 - 61. Retrieved from file:///D:/Thesis\%20on\%20consumers/New\%20folder/India's\%20Recent\%20Economic\%20Growth.pdf
10. Sagar, Ambuj. D. \& Chandra, Pankaj. (2004). Technological Change in the Indian Passenger Car Industry. Energy Technology Policy, BCSIA Discussion Paper 2004-05, Energy Technology Innovation Project, Kennedy School of Government, Harvard University. Retrieved from file:///D:/Thesis\%20on\%20consumers/New\%20folder/Technological\%20Change\%20in\%20the\%20Indian\%20Pas senger\%20Car\%20Industry.pdf
11. Sharma, Anjali et al. (2013). Impact of Brand Loyalty on Buying Behavior of Women Consumers for Beauty Care Products- Delhi Region, Global Journal of Management and Business Studies, Volume 3, Number 7 (2013), pp. 817-824
12. Society of Indian Automobile Manufacturers (SIAM) Retrieved from http://siamindia.com/statistics.aspx?mpgid=8\&pgidtrail=13

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# Major Motivating Factors of Consumers who Buy Cars in Pune 

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#### Abstract

Consumers today use their cars as multipurpose vehicles for commuting alone on one day and taking the whole family to the beach on another day. This clearly implies that the Indian consumer is very much attached to the family. Hence the family is a motivator in all his buying decisions. The present study consists of the various factors that motivate the consumer in the buying process. A study was undertaken for Pune and Pimpri Chinchwad of Pune region. A total of 225 respondents residing in Pune and Pimpri Chinchwad form the sample. SPSS 21 was used for the statistical analysis of the study along with some graphs and percentage. Understanding the consumers buying behaviour has become important for the marketing / sales people of the automobile industry as their success only lies if they cater to their needs fully. Consumer behaviour is the study of why, when, how, and where people buy or don't buy a product or services or goods. It tries to understand the consumers buying process, decision making process and the characteristics of the buyer. It also studies the wants and needs of the individual and groups all the factors to some meaningful conclusion.


Key Words Buying, consumer behaviour, motivation, marketing / sales.

## I.INTRODUCTION

India's ambition will only grow as the 2017-18 period closes, writes Abdul Majeed, Partner at Price Waterhouse, but incoming emission and safety standards will challenge OEMs of all types. The automobile sector of India is one of the largest in the world, and accounts for over $7.1 \%$ of India's gross domestic product (GDP). It also contributes to nearly $22 \%$ of the country's manufacturing GDP. The industry employs 29 million people, directly and indirectly, and contributes to $13 \%$ of the nation's excise revenue. (Source: automotiveworld.com) [1] Consumer buying behaviour has become vital for the manufacturers and the marketing personnel of this industry. The consumer is the king of the market and is the one who dominates the market and the market trends. He is the one who also pays a sum for the goods and services produced by the organization. The demand and supply chain of every economic system of every nation is controlled by the consumers. So, we can say that without them there cannot be any demand for the goods and services produced. Consumer behaviour is a physiological process it is all related to the emotions of the consumer. In this process the consumer starts with recognizing the need of the product, and then finds a way or a medium of solving these needs, makes purchase decisions like planning whether he should buy or not buy a certain product, and then he confirms the information, jots down a plan and then implements the plan of making the purchase. Consumer behaviour is a physiological human behaviour, it can change with the slightest change in the market, the atmosphere and the trend. Studying consumer behaviour is a challenge for the marketer.

## II.NEED OF THE STUDY

The Indian car market has a huge potential for growth domestically and internationally. The study is valuable for both marketers and car manufacturers to understand the motivating factors of the Indian car buyer.

## III.REVIEW OF LITERATURE

Veerakumar (2017) [2] studied on consumer behavior and factors influencing purchase decision of durable goods. The objective was to study the socio-economic profile and the factors influencing purchase decision of the consumers. A questionnaire was used to collect data from 150 respondents from Pollachi city. Simple statistical tools were used to analyze the study. The findings of the study were that $50 \%$ of the respondents were under the age of 20 years. All the respondents were females. $60 \%$ of the respondents were singles and under graduates. $40 \%$ were employed in both public and private sectors. $80 \%$ were from joint families. $50 \%$ had 3 to 6 members in the family and had an income of Rs 15001 to Rs 20000 . 18 \% felt that brand is important to make a purchasing decision. The researcher has concluded saying that consumer durables market has become very competitive and hence the interest of the consumer has a bigger role in the success and higher sales of the product. Marketers should communicate with their customers through every available media to educate and convince them. Thus, a marketer who understands the behaviour of the consumers and

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plans his marketing strategies to suit the needs and aspirations of the target market will definitely have an advantage over his competitors.

Indushri (2011) [3] researched on buying roles in the purchase decision making process of consumer durables. Primary data was collected from Chennai city, Tamil Nadu from 210 respondents out of 300 respondents to whom questionnaires were given. The questionnaires were given to women only because they were the primary users of the consumer durables. Microwave oven, washing machine, Television, Refrigerator and Air conditioners were included in the study. Later major roles on the purchase decision was decided such as Initiator, Influencer, Decider and Purchaser. The role of each of them was measured statistically. The findings were that family consisted of individuals of varied cognitive, emotional, and behavioral characteristics and abilities that can greatly affect family decision making process. There is more than one-persons involvement in the decision-making process. The temperament of each individual is different and hence influences the discussion in a dynamic manner especially when parents and siblings are involved in the process. Most of the respondents have said the males in the family are the deciders and purchasers. The women in the house are only initiators for kitchen items as their role is weak and the male is the decider and purchaser. It was found that less women were working and hence their role was less of a decider and purchaser. It was also revealed that fathers make decision before marriage and husbands after marriage. There are also social and cultural factors that doesn't allow women to be deciders and purchasers. In the study it was found that except for washing machine the remaining four consumer durable initiator and influencer were the same family members of the family. The initiator feels strongly about it and hence influences the final decision and purchase. This shows that the need is felt and hence the purchaser persuades the other family members in the purchase decision.

Bakshi (2012) [4] suggested in her research impact of gender on consumer purchase behaviour through literature survey that gender is not only a biological concept as being a male or female, but beyond. Gender with different dimensions is not only a market segmentation variable but it is a variable that has a strong impact on the decisions. To satisfy the customers, marketers need to understand gender-based tendencies. It has been noted that there is a large difference between both the genders due to psychological and physiological differences. The purchasing behaviour of the genders are different the women seem to be more open and talks to more people internally to inform connect and network with others whereas the men are externally focused and tend to talk more often and still doesn't pass on information. Men try to gather more information whereas women go into the depth of the information. Women are more subjective and intuitive in nature but men are more analytical and logical and opines based on others purchases than by themselves. Men value for quality and efficiency and immediate needs whereas women are emotional and look for long term needs.

Schiffman et. al. (1997) [5] has said that consumer behavior focuses on how people build their preferences to spend their resources like time, money, effort on consumption-related things. Consumer behavior is a study of process wherein when people choose, purchase, use, or eliminate products, services, ideas, or experiences to satisfy wants and needs. Consumer Behavior occurs either for the individual, or within the context of a group. The usage of product is of interest to the marketer, as this might influence the products positioning or will inspire increased consumption.

## IV.RESEARCH METHODOLOGY

The data for the purpose of the present study have been collected through primary and secondary data. In order to realize the aforementioned research objectives, following research methodology was adopted by the researcher.

## V.OBJECTIVES OF THE STUDY

To study the major motivating factors of consumers who buy cars in Pune.

1. Research Hypotheses

Family requirement and economy (budgets) are the major motivating factors while buying a new car

## 2. Primary data collection

Structured questionnaires were used to collect primary data. The study was undertaken for Pune and Pimpri Chinchwad of Pune region. A total of 225 respondents residing in Pune and Pimpri Chinchwad were considered for the study. Convenience sampling technique was followed for collecting responses from the respondents.

## 3. Secondary data collection

The sources of secondary data include published data such as data from books, journals, periodicals, reports, etc.
4. Tools for Analysis

1. The statistical tools used for the purpose of this study are simple percentages and graphs.
2. 2. Friedman's Test was done using SPSS version 21 to prove the hypothesis.
1. Data Analysis and Interpretation

Variables that motivate the Respondents in the purchase of a new car
(MI - Most Important, I - Important, N - Neutral, L - Least Important, N - Not Important, \% - Percentage)

| SNo | Variables | MI \% | $\mathrm{I} \%$ | $\mathrm{~N} \%$ | $\mathrm{LI} \%$ | $\mathrm{NI} \%$ | Mean | Standard <br> Deviation |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1) | It is a symbol of social status | 64 | 12 | 8 | 9 | 7 | 4.17 | 1.303 |
| 2) | It is a time saving device | 53 | 32 | 3 | 8 | 4 | 4.23 | 1.084 |
| 3) | It is a source of <br> entertainment | 25 | 10 | 49 | 10 | 5 | 3.4 | 1.13 |
| 4) | Warranty / Guarantee | 95 | 5 | 0 | 0 | 0 | 4.95 | 0.225 |
| 5) | It is an item of necessity | 44 | 32 | 15 | 4 | 5 | 4.04 | 1.115 |
| 6) | Influenced by marketing | 55 | 34 | 9 | 1 | 1 | 4.41 | 0.769 |
|  | It is considered as a | 43 | 24 | 29 | 2 | 1 | 4.06 | 0.964 |
| 7) | luxurious item |  |  |  |  |  |  |  |
| 8) | Requirement of the family | 98 | 1 | 1 | 0 | 0 | 4.97 | 0.21 |
| 9) | It is economical | 96 | 3 | 1 | 0 | 0 | 4.95 | 0.278 |

Variables that motivate the Respondents
100
90
80
80
70
60
50
40
30
20
10

$$
\sqrt{2}
$$

MI \% I \% Variables
N \% LI \% NI \%
Figure.

## Variables that motivate the Respondents in the purchase of a car

Under most important option since the mean is 4.97 and standard deviation is 0.210 it can be concluded that most of the respondents' $(98 \%)$ were motivated to purchase a car because it was a requirement of the family whereas since mean is 4.95 and standard deviation is 0.278 it can be concluded that $96 \%$ were motivated because it was economical. As mean was 3.40 and standard deviation is 1.130 it can be concluded that only $25 \%$ were motivated in purchasing a car as a source of entertainment.

Under important option since the mean is 4.41 and standard deviation is 0.769 it can be concluded that most of the respondents' ( $34 \%$ ) were motivated to purchase a car because they were influenced by marketing whereas since the mean is 4.04 and 4.23 respectively and standard deviation is 1.115 and 1.084 respectively it can be concluded that 32 \% each were motivated because they felt it was an item of necessity and a time saving device. As mean is 4.97 and standard deviation is 0.21 it can be concluded that only $1 \%$ were motivated in purchasing the car because it was a requirement of the family.

Under neutral option since mean is 3.40 and standard deviation is 1.130 it can be concluded that most of the respondents' (49 \%) were motivated to purchase a car as a source of entertainment whereas since mean is 4.06 and standard deviation is 0.964 it can be concluded that $29 \%$ were motivated because they considered it as a luxurious
item. As mean is 4.95 and 4.97 respectively and standard deviation is 0.278 and 0.210 respectively it can be concluded that only $1 \%$ each were motivated in purchasing a car because it was economical and requirement of the family.
Under least important option since mean is 3.40 and standard deviation is 1.130 it can be concluded that most of the respondents ( $10 \%$ ) were motivated to purchase a car because it was a source of entertainment whereas since mean is 4.17 and standard deviation is 1.303 it can be concluded that $9 \%$ because it was a symbol of social status. As mean is 4.41 and standard deviation is 0.769 it can be concluded that only $1 \%$ were motivated in purchasing a car because they were influenced by marketing.

Under not important option since mean is 4.17 and standard deviation is 1.303 it can be concluded that most of the respondents ( $7 \%$ ) were motivated to purchase a car because it was a symbol of social status whereas since mean is 3.40 and 4.04 respectively and standard deviation is 1.130 and 1.115 respectively it can be concluded that $5 \%$ each were motivated because it was a source of entertainment and an item of necessity. As mean is 4.41 and 4.06 respectively and standard deviation is 0.769 and 0.964 respectively it can be concluded that only $1 \%$ each were motivated in purchasing a car because they were influenced by marketing and also considered it as luxurious item.

Each factor was measured using a 5-point scale.

## VI.HYPOTHESIS TESTING

H0: Factors motivating purchase of a new car do not differ in magnitude of importance.
(Means are equal.)
H1: Factors motivating purchase of a new car significantly differ in magnitude of importance. (Means are different.)

Level of significance $\alpha=0.05$
VII.TEST STATISTICS

| N | 225 |
| :--- | :--- |
| Chi-Square | 911.923 |
| df | 8 |
| Asymp. Sig. | .000 |

$$
\chi(8)=911.923, \mathrm{P}<0.05
$$

## VIII.CONCLUSION

Since the P value is less than the level of significance the null hypothesis is rejected as it is concluded that factors motivating the purchase of new cars significantly differ in magnitude of importance. To find out where the difference lye the table is referred. From the table it can be seen that requirement of family has mean of 4.97 . It is economical (budget) and warranty \& guarantee has a mean of 4.95 respectively. And the top three motivating factors for purchase of a new car are requirement of the family, economics (budget) and warranty \& guarantee.

## IX.FINDINGS

Majority of the respondents were motivated in buying a car as it was a family requirement. This was followed by economics i.e. budget of the respondents and warranty \& guarantee factor.

## X.RECOMMENDATION AND CONCLUSION

The life style of present day consumers has changed due to globalization, liberalization, growing income level, disposable income and easy availability of cheap loans and this has brought in remarkable changes in the marketplace. The Indian consumers behaviour is difficult to predict hence research is the best methodology to come to conclusions. The present research brings out very clearly three motivating factors for purchase of a new car. They are requirement of the family, the budget / economics and warranty \& guarantee.

## REFERENCES

[1]. https://www.automotiveworld.com/analysis/auto-industry-integral-indias-great-leap-forward-2018/
[2]. K. Veerakumar, Consumer behavior and factors influencing purchase decision of durable goods, International Journal of Computational Research and Development, 2 (2), 2017, 7 - 10.
[3]. N, Indushri, Buying roles in the purchase decision making process of consumer durables, m. phil diss B.S. Abdur Rahman Crescent Institute of Science \& Technology, Chennai, 2011.
[4]. Swarna, Bakshi, Impact of gender on consumer purchase behaviour, Abhinav national monthly refereed journal of research in commerce \& management, 1 (9), 2012, 1-8.
[5]. Schiffman, Leon. G., \& Kanuk, Lazar. Leslie, consumer behavior (NJ: Prentice Hall, 1997).

# Car Buying Decision Influencers for Consumers in Pune 

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#### Abstract

It is said that no two individuals have same buying preferences. The buying behaviour of individuals differ as per their age, need, income, lifestyle, geographical location, willingness to spend, family status and so on. In India an individual's immediate family members, friends and experts play an essential role in influencing his/her buying behaviour. Normally individuals have a habit of discussing with his / her immediate family members, friends and experts before purchasing a particular product or service. Family members, friends and experts might support an individual's decision to buy a particular product, or stop h im / her from purchasing it or suggest few other options. The present study consists of the various influencers in the car buying process. A study was undertaken for Pune and Pimpri Chinchwad of Pune region. A total of 225 respondents residing in Pune and Pimpri Chinchwad form the sample. SPSS 21 was used for the statistical analysis of the study along with some graphs and percentage. Consumer behaviour is the study of why, when, how, and where people buy or don't buy a product or services or goods. It tries to understand the consumers buying process, decision making process and the characteristics of the buyer. It also studies the wants and needs of the individual and groups all the factors to some meaningful conclusion.


## Key Words: Buying, consumerbehaviour, decision, family, friends.

## INTRODUCTION

Maruti Suzuki India Ltd, India's largest car maker, said that the local car market will reach 5 million units in annual sales by 2020, making the country the fourth-largest market in the world. (Source: Live mint) [1] Hence in this scenario it has become very important to understand the consumer car buying behaviour and the influencers who help in the decision-making process of buying a car. What an individual imbibes from his parents becomes his/her culture. In countries like India, where children are supposed to stay with their parents till the time they get married, the influence of parents on an individual's buying decisions cannot be ignored. What he sees from his childhood becomes his habit or in other words lifestyle. Consumer behaviour is a physiological process it is all related to the emotions of the consumer. In this process the consumer starts with recognizing the need of the product, and then finds a way or a medium of solving these needs, makes purchase decisions like planning whether he should buy or not buy a certain product, and then he confirms the information, jots down a plan and then implements the plan of making the purchase. Consumer behaviour is a physiological human behaviour, it can
change with the slightest change in the market, the atmosphere and the trend. Studying consumer behaviour is a challenge for the marketer.

## II.NEED OF THE STUDY

The Indian car market is booming and it also has a huge potential for the international market. The study is vital for both marketers and car manufacturers to understand the influencers who help in the decision-making process while buying a car.

## III.REVIEW OF LITERATURE

Najeemudeen. et. al. (2014) [2] discussed buyer behaviour towards the dealer selection for passenger car purchase in Malappuram district. The objective of the study was to ascertain the socio-economic profile, rating the dealer and reasons for choosing a particular dealer for the purchase of cars in Tirur of Malappuram district of Kerala. A questionnaire was used to collect data from the respondents. 250 questionnaires were distributed and 201 valid filled questionnaires were received from the respondents. The findings of the study were that respondents went to a particular dealer because of good earlier experience, good after sales service and easy availability of spares, ready availability of desired color and model of car, and high resale value for exchange of cars. Very few respondents went to a particular dealer due to discounts and offers. Word of mouth and friends and dealers also played a key role in deciding a particular dealer. The author has concluded that the dealer is the link between manufacturers and customers. Hence good sales / service and customer relations matters in getting future business from the same customers or their friends and relatives.

Dheeraj (2014) [3] attempted to study the impact of advertising on customer purchase behaviour in pharmaceuticals. The objective of the study was to develop a simple framework for finding out the impact of different kinds of advertisement and promotional tools offered by pharmaceutical industry on the consumer purchase behavior and prescribing behavior of doctors. A questionnaire was used to collect data from Allahabad, Lucknow and Kanpur districts of U. P. 200 doctors and 400 consumers responded to the questionnaire. Various statistical analysis using SPSS was done on the data received for the study. The study concluded saying that consumers paid more attention to television advertisements and these advertisements were more effective for the purchase of common medicines. The advertisements for OTC medicines were persuasive but was not that impactful for the consumers to go and ask for those medicines. Visual advertisements also have a role as an influencer to buy medicines for common diseases. Medical representative plays a role in advertising the medicines to the doctors and getting their feedback and this in turn helps in marketing and advertising and creating a brand. Once a brand has been created it is easier for the doctor to remember and prescribe the brand. On the contrary these manufacturers also have seminars and publish papers and also fund the education of the doctors to motivate them to give feedback to the manufacturers after using the medicines on their patients. Hence, this is also a form of indirect advertisement which helps in the marketing and sales of pharma companies.

Consumer behavior towards passengers' cars - a study in Delhi NCR was examined by Srivastava et. al. (2014). [4] The objective of the study was to identify the different sources of information used by the buyers and their role while making a purchase decision. The authors finally collected 50 questionnaires from Delhi NCR region which were duly filled was used for the study.The findings in this study brings out that consumers in this region are influenced by various factor such as culture, family, reference, age and life style. The most important factor that influences the consumer to use passenger car is the price of the cars, social status and durability.The author has concluded saying that consumer behaviour consists of all human behaviour that goes in making purchase decisions. An understanding of the consumer behaviour enables a marketer to take marketing decisions which are compatible with its consumer needs. There are four major classes of consumer behaviour determinants and expectations, namely, cultural, socio-economic, personal and psychological. Growing income has improved the purchasing power and more and more people are able to afford a car. Customer demands are dynamic, but its consideration is necessary for every company to make existence in to the market. In places like Delhi NCR car has become a symbol of social status. Customers are purchasing the cars not only as a means of transport but also as a status symbol.

Veerakumar (2017) [5] studied on consumer behavior and factors influencing purchase decision of durable goods. The objective was to study the socio-economic profile and the factors influencing purchase decision of the consumers. A questionnaire was used to collect data from 150 respondents from Pollachi city. Simple statistical tools were used to analyze the study. The findings of the study were that $50 \%$ of the respondents were under the age of 20 years. All the respondents were females. $60 \%$ of the respondents were singles and under graduates. $40 \%$ were employed in both public and private sectors. $80 \%$ were from joint families. $50 \%$ had 3 to 6 members in the family and had an income of Rs 15001 to Rs $20000.18 \%$ felt that brand is important to make a purchasing decision. The researcher has concluded saying that consumer durables market has become very competitive and hence the interest of the consumer has a bigger role in the success and higher sales of the product. Marketers should communicate with their customers through every available media to educate and convince them. Thus, a marketer who understands the behaviour of the consumers and plans his marketing strategies to suit the needs and aspirations of the target market will definitely have an advantage over his competitors.

Schiffman et. al. (1997) [6] has said that consumer behavior focuses on how people build their preferences to spend their resources like time, money, effort on consumption-related things. Consumer behavior is a study of process wherein when people choose, purchase, use, or eliminate products, services, ideas, or experiences to satisfy wants and needs. Consumer Behavior occurs either for the individual, or within the context of a group. The usage of product is of interest to the marketer, as this might influence the products positioning or will inspire increased consumption.

## IV.RESEARCH METHODOLOGY

The data for the purpose of the present study have been collected through primary and secondary data. In order to realize the aforementioned research objectives, following research methodology was adopted by the researcher.

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## V.OBJECTIVES OF THE STUDY

To study the major influencers who help in the process of making a decision for individuals who buy cars in Pune.

## 1. Research Hypotheses

Parents affect the most in buying a car followed by friends and brothers / sisters.

## 2. Primary data collection

Structured questionnaires were used to collect primary data. The study was undertaken for Pune and Pimpri Chinchwad of Pune region. A total of 225 respondents residing in Pune and Pimpri Chinchwad were considered for the study. Convenience sampling technique was followed for collecting responses from the respondents.

## 3. Secondary data collection

The sources of secondary data include published data such as data from books, journals, periodicals, reports, etc.

## 4. Tools for Analysis

1. The statistical tools used for the purpose of this study are simple percentages and graphs.
2. Cochran's Test was done using SPSS version 21 to prove the hypothesis.
3. Data Analysis and Interpretation

Factors affecting the car purchasing decision

| SN $\mathbf{0}$ | Factors | N = 225 | Percentage |
| :---: | :---: | :---: | :---: |
| 1) | Your spouse | 140 | 62.22 |
| $2)$ | Your children | 103 | 45.78 |
| 3) | Your parents | 183 | 81.33 |
| $4)$ | Your brother /sister | 131 | 58.22 |
| 5) | Any opinion leaders | 73 | 32.44 |
| 6) | Your friends and well wishers | 145 | 64.44 |
| $7)$ | Your own decision | 24 | 10.67 |
| $8)$ | Dealers | 26 | 11.56 |
| 9) | Any other (specify) internet / websites | 1 | 0.44 |

## Factors affecting car purchasing descision

## Factors

## Figure. Factors affecting Car purchasing decision

Most of the respondents' ( $81 \%$ ) car purchasing decisions were influenced by parents whereas $64 \%$ were influenced by friends and well-wishers. Only $0.44 \%$ were influenced by internet / websites

## VI.HYPOTHESIS TESTING

$\mathbf{H 0}$ : People who affect the most in making a car purchase decision do not differ in frequency of preference.
H1: People who affect the most in making a car purchase decision significantly differ in frequency of preference. Level of significance $\alpha=0.05$

| Frequencies | Value |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 0 | 1 | Test Statistics |  |
| Your Spouse | 85 | 140 | N | 225 |
| Your Children | 122 | 103 | Cochran's Q | 825.613 |
| Your Parents | 42 | 183 | df | 8 |
| Your Brothers /Sisters | 94 | 131 | Asymp. Sig. | 0.000 |
| Any opinion leaders | 152 | 73 |  |  |
| Your friends and well wishers | 80 | 145 |  |  |
| Your own decision | 201 | 24 |  |  |
| Dealers | 199 | 26 |  |  |
| Any other (specify) internet/ websites | 224 | 1 |  |  |

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$Q(8)=825.613, P<0.05$

## VII. CONCLUSION

Since the P value is less than level of significance ( 0.05 ) the null hypothesis is rejected hence it is concluded that people who affect the most in making a car purchase decision differ in frequency of preference. To know where the difference lye the frequency statement table is referred. From the frequency table it can be seen that parents have a frequency count of 183 , Friends have a frequency count of 145 , spouse have a frequency count of 140 , brother / sister have a frequency count of 131 , children have a frequency count of 103 , opinion leaders have a frequency count of 73 , dealers have a frequency count of 26 , solely self (own decision) have a frequency count of 24 , and any other (specify) internet have a frequency count of 1 . Hence there are top three people who affect the most in making a car purchase decision. (Parents, friends and spouse.) Hence the hypothesis is proved.

## VIII.FINDINGS

Majority of the respondent's car buying / purchasing decision was influenced by parents followed by friends and well-wishers and the least by internet and websites.

## IX.RECOMMENDATION AND CONCLUSION

It can be concluded that buying behaviour of individuals differ as per their age, need, income, lifestyle, geographical location, willingness to spend, family status and so on. In India an individual's immediate family members, friends and experts play an essential role in influencing his/her buying behaviour. Normally individuals have a habit of discussing with his / her immediate family members, friends and experts before purchasing a particular product or service. Family members, friends and experts might support an i ndividual's decision to buy a particular product, or stop him / her from purchasing it or suggest few other options. In India, where children are supposed to stay with their parents till the time they get married, the influence of parents on an individual's buying decisions cannot be ignored. What he sees from his childhood becomes his habit or in other words lifestyle. Consumer behaviour is a physiological process it is all related to the emotions of the consumer. Hence the marketer has a very crucial role to play as he has to take a key role in facilitating the decision of buying a car especially for first time buyers.

## REFERENCES

[1] http://www.livemint.com/Industry/AAc3ZjIMCk4CrVsnuTUBdI/India-to-be-a-five-million-car-market-by-2020-Maruti-Suzuki.html
[2] Najeemudeen, K.P. \& Panchanatham, N. (2014) A study of consumer perception \& behaviour towards passenger cars in Tirur.International Journal of management Focus. pp. 31-36. Retrieved from https://docslide.net/download/link/consumer-behaviour-towards-passenger-cars

AGU International Journal of Management Studies \& Research (AGUIJMSR) 2018, Vol. No. 6, Jan-Jun
http://www.aguijmsr.com e-ISSN: 2455-1562; p-ISSN: 2455-6092
[3] Dheeraj. Ram. (2014). Impact of advertising on customer purchase behaviour in Pharmaceuticals (Ph.D. Dissertation) Retrieved from http: //shodhganga.inflibnet.ac.in
[4] Srivastava, Arpita. \& Matta, Mitu. (2014) Consumer behavior towards passenger's cars - a study in Delhi NCR. Global Journal of Finance and Management, 6 (6), pp. 589-598.
[5] K. Veerakumar, Consumer behavior and factors influencing purchase decision of durable goods, International Journal of Computational Research and Development, 2 (2), 2017, 7 - 10.
[6] Schiffman, Leon. G., \& Kanuk, Lazar. Leslie, consumer behavior (NJ: Prentice Hall, 1997).

# International Journal of Science Technology and Management Vol. No.7, Issue No. 05, May 2018 

# Problems faced by Consumers in their present cars in Pune 

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#### Abstract

Consumer service reformation is taking place in every industry these days due to intense competition. The story isn't different for the automobile industry. It's essential, it's across-the-board and it's being determined by consumers.

On the face of it, it seems a worrying development for businesses. But there's a happy side to these changes. New networks and technologies open up fresh prospects that can make a company prominent from the rest of the crowd. Building an ongoing dialogue with prospective consumers. Occasions to learn from consumers and to increase the significance of the products and services. So, it's time for every business to start looking for and nurturinglastingassociation with their consumers, an association that goes far past the initial sale. This call for action may not be new for some. Even so, finding the depth and breadth of this reformation and determining how to confront it is a massivetask. And that's why this research brings out the major problems faced by the consumers who buy cars. The present study lists out various problems faced by consumers who buy cars in Pune. A study was undertaken for Pune and Pimpri Chinchwad of Pune region. A total of 225 respondents residing in Pune and Pimpri Chinchwad form the sample. SPSS 21 was used for the statistical analysis of the study along with some graphs and percentage.


Key Words:Buying, consumer, problems, service, car.

## I. INTRODUCTION

Consumer service has conventionally been dependent on 'what now' rather than 'what next'. Why should consumer service be different? Recognizingpertinentproblems and apprising consumers through ideal touchpoints achieves consumer expectations and trust grows when things do go wrong. Capitalizing in up-front service notices will lessen the amount of incoming calls and distinguishone from the competition. In today's, digital world, organizations must comprehend the complete customer journey and productively apply the right skill at the right time to shape greater consumer engagement.Conventionally, maintenance has followed a remedial or preventivemethod. In the remedialmethod, maintenance is done when failure occurs. This leads to unexpected activities and a high stock of spare parts. In the preventivemethod, maintenance is done periodically to reduceunforeseen failures. However, over-maintenance and cost of spare parts leads to extra costs. Today's technology advances in both data analytics and connected devices that present the opportunity to improve upon

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outdated methods and apply a predictive maintenance method. Maintenance is done based on the condition of the asset compared to the dependability model. Monitoring should be usefulfor the root causes of failures rather than on the signs when failure has previously begun. This means maintenance is only done when essential, therefore evading over-maintenance. This methodpreciselyplanseconomical maintenance and leads to improvedhandiness of the asset, prolonged asset life and better engineer competence.

## II.NEED OF THE STUDY

The Indian automobile market is growing and it also has a huge potential for the international market. The study is vital for both marketers and car manufacturers to understand the problems faced by consumers in their present cars.

## III.REVIEW OF LITERATURE

Naik et al., (1999) [1] has expressed that the financial, emotional and sociological features of the customers and their drives, viewpoints, perceptions, traits etc. can aid to realize new marketplace openings, to deliver a sharper division of the marketplace and a significant product diversification and to frame selling policies based on consumer response as a major variable. A customer gives much significance to the contributions offered by the company to the product than what the product contributed him / her. Therefore, the knowledge of consumer behaviour makes it simple to analyse the marketplace with suitable policies

Pasricha (2007) [4] states that customers no longer reply to mass marketplace requests; they have more specific tastes and they are looking for a more specific style. When faced with similar products they may select the brand towards which they have an emotional bonding and which accomplishes their emotional needs.

A research was conducted on customer life style effect of customer behaviour with respect to auto industry in Chennai by Vidyavathi (2012). [2] A questionnaire was distributed to 350 respondents randomly and only 327 actual interviews were possible in Chennai town of Tamil Nadu. Interviews were held to ascertain insight of the respondents on the use of automobiles. The purpose of the research was to evaluate the automobile owner's insight and behaviour relating to the acquisition of automobiles and to identify and analyse the issues inducing the buying of the automobiles. Most of the respondents in the investigation faced technical problems with their present cars and some were going to change over to a new brand as they wanted to buy a car with the modern knowhow. The researcher feels that the government should promote research and development to make world class quality car in India. He has concluded saying that the rising middle-class populace of India has fascinated the automobile industry. Hence, sellers who learn the behaviour of customers and provide to their desires will be victorious in the future in the coming LPG era.

A review on features inducing customer preference for procuring a car with respect to Maruti Suzuki in BhilaiDurg, India was brought out by Sahu (2017) [3] to analyse the main issues which are accountable for inducing the preference of customers to acquire the car. Primary data was collected through a questionnaire from 90

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respondents in Bhilai Durg district. He found that most of the customers were servicemen, non-service class and students. Most of them 55
\% looked for comfort and mileage in a car of their preference. The researcher suggests that as self-esteem and social status are the major factors for the customers the company should work on the external and internal looks of the cars in various models. They should also work on the fuel consumption of their cars as the fuel prices are increasing and they should also increase free servicing for their customers and come up with more new models. The author concludes saying that market is very competitive and hence the complex understanding of the consumer behaviour is very vital for marketing success and taking the right decisions. The customers are satisfied by the performance and promotions of Maruti Suzuki cars and feel they can increase the market share if they act on the other factors discussed above.

## IV.RESEARCH METHODOLOGY

The data for the purpose of the present study have been collected through primary and secondary data. In order to realize the aforementioned research objectives, following research methodology was adopted by the researcher.

## V.OBJECTIVES OF THE STUDY

To study the major problems faced by car buyers in Pune.

## 1. Research Hypotheses

Major problems faced by car buyers were communication and servicing followed by maintenance issues and availability of spares.

Structured questionnaires were used to collect primary data. The study was undertaken for Pune and Pimpri Chinchwad of Pune region. A total of 225 respondents residing in Pune and Pimpri Chinchwad were considered for the study. Convenience sampling technique was followed for collecting responses from the respondents.

## 2. Secondary data collection

The sources of secondary data include published data such as data from books, journals, periodicals, reports, etc.

## 3. Tools for Analysis

1. The statistical tools used for the purpose of this study are simple percentages and graphs.
2. Cochran's Test was done using SPSS version 21 to prove the hypothesis.

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4. Data Analysis and Interpretation

Problems faced by the respondents in the present car

| SNo | Problems faced by the respondents in the present car | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :--- | :--- |
| 1) | Communication and servicing | 37 | 16.44 |
| 2) | Maintenance issues | 36 | 16.00 |
| 3$)$ | Availability of spare parts | 22 | 9.78 |
| 4$)$ | Higher fuel consumption | 13 | 5.78 |
| 5) | Often breaks down | 8 | 3.56 |
| 6$)$ | Old styling | 9 | 4.00 |
| 7$)$ | Lacks in safety | 11 | 4.89 |
| 8$)$ | Not easy to drive | 5 | 2.22 |

Problems faced by respondents


Figur e. Respondents' pr oblems in the pr esent car

Most of the respondents' $(16.44 \%)$ problems in the present car were communication and servicing whereas 16 $\%$ had maintenance issues. Only $2 \%$ problems in the present car were 'not easy to drive'.

## VI.HYPOTHESIS TESTING

H0: Problems faced in their present car do not differ in frequency of preference.
H1: Problems faced in their present car significantly differ in frequency of preference.
Level of significance $\alpha=0.05$

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| Frequencies | Value |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | 0 | 1 | Test Statistics |  |  |
| Communication and Servicing | 188 | 37 | N | 225 |  |
| Maintenance issues | 189 | 36 | Cochran's Q | 825.613 |  |
| Availability of Spares | 203 | 22 | df | 8 |  |
| Higher fuel Consumption | 212 | 13 | Asymp. Sig. | 0.000 |  |
| Often breaks down | 217 | 8 |  |  |  |
| Old styling | 216 | 9 |  |  |  |
| Lacks in Safety | 214 | 11 |  |  |  |
| Not easy to Drive | 220 | 5 |  |  |  |

$\mathrm{Q}(8)=825.613, \mathrm{P}<0.05$

## VII. CONCLUSION

Since the P value is less than level of significance ( 0.05 ) the null hypothesis is rejected hence it is concluded that problems faced in their present car differ in frequency of preference. To know where the difference lies the frequency statement table is referred. From the frequency table it can be seen that communication and servicing have a frequency count of 37 , maintenance issues have a frequency count of 36 , availability of spare parts have a frequency count of 22 , higher fuel consumption have a frequency count of 13 , lacks in safety have a frequency count of 11 , old styling have a frequency count of 9 , often breaks down have a frequency count of 8 and not easy to drive have a frequency count of 5 . Hence there are top three problems faced by the respondents in their present cars. (Communication and servicing, maintenance issues and availability of spare parts.) Hence the hypothesis is proved.

## VIII.FINDINGS

Majority of the problems faced by the respondents were communication and servicing followed by maintenance issues and availability of spares.

## IX.RECOMMENDATION AND CONCLUSION

Inter-departmental communication is very important as this affects consumer serviceif the consumer is not updated with the latest updates. The HR department should provide additional training to all people within the organization and specially the service advisor who is the face of the dealer and the company when one deals with the consumers. To retain existing consumers and getting potential consumers the management should aim for high level of customer service. The service advisor should have an attitude for selling, should have sufficient knowledge of the product to give sufficient technical feedback to the consumers. Should maintain a proper inventory system based on past and present consumption trends. The spare parts business can be increased by short term promotions to increase sales or invest in the service one offers. The consumer should be given better

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value, faster delivery, for a product that is difficult to obtain from elsewhere as this can help in maintaining and building a stronger relationship. The prospective consumer should be educated with the value of quality spare parts and service in comparison to low cost alternatives that may fail earlier and cause safety issues, as this will help to increase the business. Further consumers should be offered long warranties, express service, separate delivery options to improve convenience and same day delivery. Increase short-term sales by running promotions on popular, high-volume parts such as car-servicing kits that include filters, spark plugs and oil at a promotional price. Offer discounts on seasonal products such as windshield wipers etc. Set up incentive schemes for regular customers to encourage repeat sales by offering rewards for customers who exceed a purchase target that one sets.

## REFERENCES

[1] Naik, C. N. Krishna., \& Reddy, L. Venugopal. (1999). Consumer Behaviour. New Delhi, India: DiscoveryPublishing House.
[2] Vidyavathi. K. (2012). Customer Life Style Influence of Consumer Behaviour with reference to Automobile Industry in Chennai. Zenith International Journal of Multi-Disciplinary Research, 2 (4), 37-50.
[3] Sahu, Rumit. Kumar. (2017). A Study on Factor Influencing Customer Preference for Purchasing a Car with Respect to Maruti Suzuki in Bhilai-Durg, India. Research Journal of Management Sciences, 6 (7), 5-8.
[4] Pasricha, Dr. Seema. (2007). Consumer Psychology. New Delhi, India: Deep \& Deep Publications Pvt. Ltd.

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# Consumerswho are Satisfied with the Dealers Service Buys the Same Brandof car 

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#### Abstract

The act of finding, directing and locating new customers is at all times going to be among the top prioritiesfor any corporate that delivers a product or service to their clienteles.Corporates should think there is more to be done in the client'srelationship after the first purchase is made by the purchaser which are not adhered by most of the sellers and they tend to forget this.Clever business housesknow that the first purchase is actually just the start, and that the tangible business value lies in holding that customer.lt appearsobvious that corporations should try to please their consumers. Consumerswho are content generallycome back and purchaseextra, they communicate their experiencesto other people, and they might pay a premium to the supplier they trust. It is said that acquiring a new customer is very difficult but holding on to the existing customer cost only one tenth of the expenses incurred in getting a new customer. So, it is said that if we are fortunate to get a new customer we should hold on to them. We can survey and find out the customer satisfaction level to ascertain where one is on the loyalty as far as the customers are concerned. So, it's time for every business to start looking for and nurturinglastingassociation with their consumers, an association that goes far past the initial sale.And that's why this research brings out that consumers who are satisfied with the dealer's service buys the same brand of car.A study was undertaken for Pune and Pimpri Chinchwad of Pune region. A total of 225 respondents residing in Pune and Pimpri Chinchwad form the sample. SPSS 21 was used for the statistical analysis of the study along with some percentages.


Key Words:Satisfaction, service, dealer,brand, car.

## I. INTRODUCTION

A trader in the market is constantly checking the pulse of his / her customer to determine the customer satisfaction level. It is said that a direct interaction with the customers helpsone to understand are they on the right or wrong path.But we can say it is easy to implement this practice when the organization is small but difficult as it grows larger but such informal feedback is vital for any organization. Hence it is necessary to have a survey to get the first-hand feedback from the customers and work on customer satisfaction programs if it is required. Such surveys help the organization to track and measure the satisfaction level of the customers. This

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also helps in understanding the lacunas within the organization. May be the people who interact with the customers require special training along with the inter departmental staff. For key long, lasting improvements fundamental along with cultural changes are required within the whole company right from the senior level management to the lower levels who are at the operating end. But it is important to see that such trainings are beneficial to get higher market shares, premium pricing, stronger brands, reputation and happier staff with all these changes. It is a time-consuming process and may incur cost and time butthe benefits will be in many folds with better business income due to new customers who come due to the references given by the existing customers how delighted they are with a particular business house.

## II.NEED OF THE STUDY

The growing Indian automobile industry has a huge market for domestic and international market. The study is crucial for both car manufacturers and marketers to understand what makes the consumer buy again the same brand of car.

## III.REVIEW OF LITERATURE

Engel et al., (1990) [4] has expressed that the wide literature on character / mindset and other behavioural sciences has convinced marketing investigators to imagine the character of the personality. Features should foresee brand or liking of store and other kinds of consumer action. They said that Evans was initially an investigator who tried to foresee auto brand rights. He commenced this education using 12 objective variables, such as age of car, revenue, and other demographics, to assess the supposition that 'automobile buyers differ in personality structure'. Though Evans was able to forecast properly a Ford or Chevrolet possessor in 70 percent of the cases, he resolved that, 'personality is of comparatively little value in forecasting automobile brand possession'.

Assael (2001) [5] has said that one of the most significant behaviour is the face-to-face group. A deliberation on the influence of groups is based on the reference group, that is, a cluster that aids as a reference point for the individual in forming his or her principles, attitudes and behaviour. Marketers also use celebrities as spokespersons to try to mirror group influence. The celebrity represents a member of a group the consumer admires at a distance rather than an actual member of the consumer's reference group. The assumption is tha t consumers are expected to be influenced by these individuals because they want to identify with the celebrity.

Influence of commercial on purchasing behaviours of the consumers with reference to cosmetic business in Karachi city was described by Samar and Lodhi (2015) [1]. The objective of the study was to identify the influence of commercial on consumer awareness, the role of commercial on building customer insight and the impact of consumer awareness and perception on buying behaviour. Main information was got from 200 respondents of Karachi city through a questionnaire. Data was collected from various chunks of the city from users of cosmetic. SPSS software was used to do statistical analysis of the data. The findings of the research revealed that advertisements were useful in making consciousness amongst the consumers. Advertisements were

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displayed on billboards and telecast through TV which were the main source for information for the masses. It was found that there is an association among advertisements and consumer awareness. There wasn't any relationship between consumer perception and advertisements as advertisements cannot create insights in the minds of the consumers. There was loyalty of the consumers for the brands used by them and was difficult to change them. There is an association among consumer consciousness and insight with that of purchasing behaviour. The researcher concludes saying that use of beautiful and enlightening content is more important to create consciousness in the customers than advertisements to change their perceptions towards a particular brand.

Jahanshahi et al., (2011) [2] studied the outcomes of customer service and product quality on customer satisfaction and loyalty. The objective of the existing study was to clarify the relationship between four variables of service quality, product quality, customer satisfaction and customer loyalty. The research was done based on 53 questions mainly created on numerous items measurement scales taken from preceding investigations. 24 questions were used to evaluate customer service quality and product quality. 13 questions were planned to assess customer faithfulness and 11 queries were planned to assess customer satisfaction. Satisfaction was measured by a seven-point Likert scale. Various SPSS statistical tools were used to examine the information. It has been noticed from the research that customer satisfaction increases their loyalty, but there are also many satisfied customers who are not loyal to that particular brand. Hence, the critical and challenging task for the company is to maintain the satisfaction and loyalty of the customers. The findings from the research highlights that quality of customer service and the quality of products promotes customer satisfaction, and also there is a positive association among customer contentment and customer loyalty in the perspective of the Indian automotive industry.

Najeemudeen and Panchanatham (2014) [3] discussed customer behaviour towards the dealer choice for passenger car buying in Malappuram district. The intention of the learning was to ascertain the socio-economic profile, rating the dealer and reasons for choosing a particular dealer for the purchase of cars in Tirur of district Malappuram from Kerala. A surveyform was used to get data from the respondents. 250 feedback forms were circulated and 201 effective filled questionnaires were received from the respondents. The findings of the study were that respondents went to a particular dealer because of good earlier experience, decent after sales service and easy availability of spares, ready availability of desired colour and model of car, and high resale value for exchange of cars. Very few respondents went to a particular dealer due to discounts and offers. Informal oral communication and friends and dealers also played a key role in deciding a particular dealer. The author has concluded that the dealer is the link between manufacturers and customers. Hence good sales / service and customers relations matters in getting future business from the same customers or their friends and relatives.

## IV.RESEARCH METHODOLOGY

The data for the purpose of the present study have been collected through primary and secondary data. In order to realize the aforementioned research objectives, following research methodology was adopted by the researcher.

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## V.OBJECTIVES OF THE STUDY

To study what makes the consumer buy again the same brand of car.

## 1. Research Hypotheses

Customers who are satisfied with the level of servicing provided by the dealers are more likely to buy the same car of the same brand / model.Structured questionnaires were used to collect primary data. The study was undertaken for Pune and Pimpri Chinchwad of Pune region. A total of 225 respondents residing in Pune and Pimpri Chinchwad were considered for the study. Convenience sampling technique was followed for collecting responses from the respondents.

## 2. Secondary data collection

The sources of secondary data include published data such as data from books, journals, periodicals, reports, etc.

## 3. Tools for Analysis

1. The statistical tools used for the purpose of this study are simple percentages.
2. Chi-Square Test was done using SPSS version 21 to prove the hypothesis.
3. Data Analysis and Interpretation

Table: Respondents' satisfaction level of sales / servicing provided by dealers

| SNo | Respondents satisfaction level for sales/servicing | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :--- | :--- |
| 1$)$ | Excellent | 165 | 73.33 |
| $2)$ | Good | 52 | 23.11 |
| 3$)$ | Satisfactory | 4 | 1.78 |
| 4$)$ | Poor | 4 | 1.78 |

Majority ( $73 \%$ ) of the respondents' satisfaction level for sales / servicing provided by the dealers were excellent. A large section ( $23 \%$ ) satisfaction level for sales / servicing provided by the dealers were good. Only $2 \%$ each satisfaction level for sales / servicing provided by the dealers were satisfactory and poor.

Table: Respondents' who will buy the same br and and model of car in the futur e

| SNo | Respondents who will buy the same brand/model of car | $\mathbf{N}=\mathbf{2 2 5}$ | Percentage |
| :--- | :--- | :--- | :--- |
| 1) | Yes | 200 | 88.89 |
| 2$)$ | No | 25 | 11.11 |

Most of the respondents' (89 \%) said 'Yes' for buying the same brand of car in the future whereas only $11 \%$ said 'No'.

# International Journal of Science Technology and Management Vol. No.7, Issue No. 05, May 2018 www.ijstm.com <br> <br> VI.HYPOTHESIS TESTING 

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Statistical Tests: Chi-Square Test

## Variables and measurement:

Level of satisfaction with regards to services provided by the dealer is measured using an ordinal scale ( $1=$ excellent, $2=$ good, $3=$ satisfactory and $4=$ poor) and repeat buying of a car of the same brand $/$ model is measured using a dichotomous scale ( $1=$ yes, $2=$ no $)$

H0: Repeat buying of same car and same brand is independent of the type of service provided by the dealers.
H1: Repeat buying of same car and same brand depends upon the type of service provided by the dealers.

Level of significance $\alpha=0.0$

| Test Statistics | Value | df | Asymptotic Significance (2-sided) |  |
| :--- | :--- | :--- | :--- | :---: |
| Pearson Chi-Square | 109.147 | 3 | 0.000 |  |
| Likelihood Ratio | 91.249 | 3 | 0.000 |  |
| Linear-by-Linear Association | 104.709 | 1 | 0.000 |  |
| N of Valid Cases | 225 |  |  |  |

## VII.CONCLUSION

Since the Chi-Square test is significant P value is $<0.05$. The null hypothesis is rejected as it is concluded that repeat buying of the same car and same brand depends upon level of satisfaction with services provided by the dealer. To know more about this relationship, we refer the cross-tabulation table.

|  |  | State in future if you wish to buy <br> another car, would you like to buy <br> the same car of the same brand / <br> model. |  |
| :--- | :--- | :--- | :--- | :--- |
| Cross Tabulation Table: |  | Yes | No |


|  |  |  |  |
| :--- | :--- | :--- | :--- |



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$\qquad$
From the cross-tabulation table, it can be seen that all 165 customers who said dealer's services were excellent all are willing to place a repeat order, out of the 52 customers who said the level of services is good $67.3 \%$ are willing to place a repeat order whereas out of $4 \%$ who said the services are poor are not willing to place a repeat order.

## VII. CONCLUSION

Customers who are satisfied with the level of servicing provided by the dealers are more likely to buy the same car of the same brand / model. Hence the hypothesis is proved.

## VIII.FINDINGS

Customers who are satisfied with the level of servicing provided by the dealers are more likely to buy the same car of the same brand / model. The research highlights that value of consumer service and the value of products encourages consumer satisfaction, and this in turn generates positivity among the consumers which will make them a loyal consumer for that brand.

The sales representatives and the service advisors have a key role in satisfying the consumer as they are the key people who are always in touch with the consumers. They are the face of the manufacturers and the dealers hence should handle the consumer tactfully withoutantagonizing them. Hence good sales / service and customers relations matters in getting future business from the same customers or their friends and relatives.

## IX.RECOMMENDATION AND CONCLUSION

Measuring satisfaction is only half the story. It is also essential to regulate customers' outlooks or the ranks they assign to the diversequalities, elsefundswould be used to raise satisfaction levels of things that do not matter.

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The extent of hope or importance is furthertough than the measurement of satisfaction. Customers do not devote their time
rationalizingwhy certain things are done, their interpretations change and they may not be able to effortlesslyconnect or acknowledge to the intricate issues in the buying dispute.

Consumerscommunicate their satisfaction level with numerousbehaviours. They normally don't say anything when they are happy and come again to the same seller to buy more. These consumers only speak if we ask them open ended questions to understand their satisfaction level. They normally say they are delighted, or dissatisfied. It is difficult to make them speak with real issues hence researches ask them to express their feelings on a numeric scale which can be later measured to ascertain their attitudes/ feelings towards the brand.

## REFERENCES

[1] Samar, Fatima., \& Lodhi, Samreen. (2015). Impact of Advertisement on Buying Behaviours of the consumers: Study of Cosmetic Industry in Karachi City. International Journal of Management Sciences and Business Research, 4 (10), 125-37. Retrieved from http://www.ijmsbr.com
[2] Jahanshahi, Asghar. Afshar., Gashti. Mohammad. Ali. Hajizadeh., Mirdamadi. Seyed. Abbas., Nawaser, Khaled., \& Khaksar, Seyed. Mohammad. Sadeq. (2011). Study the Effects of Customer Service and Product Quality on Customer Satisfaction and Loyalty. International Journal of Humanities and Social Science, 1 (7), 253-260.
[3] Najeemudeen, K.P., \& Panchanatham, N. (2014). Buyer Behaviour Towards the Dealer Selection for Passenger Car Purchase in Malappuram District. Journal of Commerce and Management Research, 4(2), 64-73. Retrieved from https://www.scribd.com/document/257524236/Buyer-Behaviour-Towards-Passenger-Car-Dealers
[4] Engel, J. F., Blackwell, R. D., \& Miniard, P. W. (1990). Consumer Behaviour. Forth Worth, TX, USA: The DrydenPress.
[5] Assael, Henry. (2001). Consumer Behaviour and marketing Action. Nashville, TIN, USA: South -Western College Publishing.


[^0]:    ${ }^{\prime *}{ }^{\prime}=(* 3$ decimal places are reported since significance value is $<0.1 \%)$

